ARRC CONSULTATION
REGARDING MORE ROBUST LIBOR FALLBACK CONTRACT LANGUAGE FOR NEW ORIGINATIONS OF LIBOR SYNDICATED BUSINESS LOANS September 24, 2018

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Part I: ARRC Consultation Overview

A. Background

The Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee ("ARRC") in 2014 to identify alternative reference rates for U.S. dollar (USD) LIBOR ("LIBOR"), identify best practices for contract robustness in the interest rate market, and create an implementation plan to support an orderly adoption of new reference rates. After accomplishing its initial set of objectives by selecting an alternative reference rate (which is the Secured Overnight Financing Rate or "SOFR") and setting out a Paced Transition Plan with respect to derivatives, the ARRC was reconstituted in 2018 with an expanded membership to help ensure the successful implementation of the Paced Transition Plan and to serve as a forum to coordinate cash and derivatives markets as they address the risk that LIBOR may not exist beyond 2021. The ARRC now serves as a forum to address the impact of a possible LIBOR cessation on market participants currently using LIBOR and the development of SOFR-based products across cash and derivatives markets. A brief summary of the Paced Transition Plan is set forth in Appendix III.

The ARRC's Second Report noted that most contracts for cash (non-derivative) products referencing LIBOR do not appear to have envisioned the permanent or indefinite cessation of LIBOR and have fallbacks that would not be economically appropriate if this event occurred. The ARRC formed several working groups to focus on various markets and published its Guiding Principles for More Robust LIBOR Fallback Contract Language to create a framework for fallback language in cash products. In furtherance of these objectives, the ARRC will publish one or more sets of recommended fallback language for market participants to consider for new issuances of various types of cash products referencing LIBOR. These proposals are intended to set forth robust fallback provisions that define the trigger events[1], and allow for the selection of a successor rate[2] and a spread adjustment between LIBOR and the successor rate to account for differences between these two benchmarks. These proposals are also intended to address timing and operational mechanics so that the fallbacks function effectively.

It is important to note that the suggested fallback language proposed by each of the working groups includes some terms that do not yet exist but are anticipated to exist at a future date. For example, the proposals reference a forward-looking term SOFR selected, endorsed or recommended as the replacement by the Relevant Governmental Body[3], as well as other potential fallback rates that do not currently exist. Similarly, the "Replacement Benchmark Spread" referenced in the hardwired approach proposal would default first to a spread or spread methodology selected, endorsed or recommended by the Relevant Governmental Body, in addition to other potential spread methodologies if such a spread does not exist. The hardwired approach proposal also references spreads and other technical aspects of

[1] A trigger event is an occurrence that precipitates the conversion from LIBOR to a new reference rate.

[2] The successor rate is the reference rate that would replace LIBOR in contracts. The ARRC has recommended SOFR as the successor rate for U.S. dollar contracts.

[3] "Relevant Governmental Body" is defined as the Federal Reserve Board ("Federal Reserve"), the Federal Reserve Bank of New York ("FRBNY") or a committee established by the Federal Reserve or FRBNY such as the ARRC.

fallbacks for derivatives that the International Swaps and Derivatives Association, Inc. ("ISDA") intends to include in its standard documentation. While ISDA expects to include SOFR as the successor rate for USD LIBOR in anticipated revisions to its standard documentation for derivatives and anticipates that SOFR will be adopted as the successor rate for USD LIBOR as part of a "protocol" to amend existing derivatives contracts, it has not finalized those proposals and is in the process of consulting market participants with respect to the spreads and other technical aspects that would apply to the fallbacks in other currencies.

The extent to which any market participant decides to implement or adopt any suggested contract language is completely voluntary. Therefore, each market participant should make its own independent evaluation and decision about whether or to what extent any suggested contract language is adopted.

B. An Explanation of SOFR and Differences between SOFR and LIBOR

On June 22, 2017, the ARRC identified SOFR as its recommended alternative to LIBOR after considering a comprehensive list of potential alternatives, including other term unsecured rates, overnight unsecured rates such as the Effective Federal Funds Rate ("EFFR") and the Overnight Bank Funding Rate ("OBFR"), other secured repurchase agreements ("repo") rates, U.S. Treasury bill and bond rates, and overnight index swap rates linked to EFFR. After extensive discussion, the ARRC preliminarily narrowed this list to two rates that it considered to be the strongest potential alternatives: OBFR and some form of overnight Treasury repo rate. The ARRC discussed the merits of and sought feedback on both rates in its 2016 Interim Report and Consultation and in a public roundtable. The ARRC made its final choice of SOFR after evaluating and incorporating feedback from the consultation and from the broad set of end users on its Advisory Group.

SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. SOFR is determined based on transaction data composed of: (i) tri-party repo, (ii) General Collateral Finance (GCF) repo, and (iii) bilateral Treasury repo transactions cleared through Fixed Income Clearing Corporation (FICC). In terms of the transactions underpinning SOFR, SOFR has the widest coverage of any Treasury repo rate available. Averaging nearly $800 billion of daily trading since it began publication, transaction volumes underlying SOFR are far larger than the transactions in any other U.S. money market and dwarf the volumes underlying LIBOR. Additional information about SOFR and other Treasury repo reference rates is available at https://www.newyorkfed.org/markets/treasury-repo-reference-rates-information. As the administrator and producer of SOFR, the FRBNY began publishing SOFR on April 3, 2018. SOFR is published on a daily basis on the FRBNY's website at approximately 8:00 a.m. eastern time. To view the rate, visit: https://apps.newyorkfed.org/markets/autorates/sofr.

SOFR is representative of general funding conditions in the overnight Treasury repo market. As such, it will reflect an economic cost of lending and borrowing relevant to the wide array of market participants active in the financial markets. However, SOFR is fundamentally different from LIBOR. SOFR is an overnight, secured nearly risk-free rate, while LIBOR is an unsecured rate published at several different maturities (overnight/spot next, one week, one month, two months, three months, six months and one year). As described in the Paced Transition Plan, the ARRC has set the goal of the development of forward-looking term rates based on SOFR derivatives markets.[4]

Because LIBOR is unsecured and therefore includes an element of bank credit risk, it is likely to be higher than SOFR and prone to widen when there is severe credit market stress. In contrast, because SOFR is secured and nearly risk-free, it is expected to be lower than LIBOR and may stay flat (or potentially even tighten) in periods of severe credit stress. Market participants are considering certain adjustments, referenced in the fallback proposals as the applicable "Replacement Benchmark Spread", which would be intended to mitigate some of the differences between LIBOR and SOFR.

C. Differences between Proposed Fallback Provisions for Cash Products and Derivatives

As described in the ARRC's guiding principles, there are several benefits to consistency across cash and derivatives products. Specifically, if fallbacks are aligned across the derivatives, loan, bond and securitization markets such that products operate in a consistent fashion upon a LIBOR cessation, then operational, legal and basis risk (particularly where derivatives are used to hedge interest rate risk in cash products) will be reduced. Therefore, the hardwired approach fallback language developed by the ARRC working groups for cash products is intended to be generally consistent with the approach ISDA intends to take for derivatives. However, ISDA has not analyzed the appropriateness of its proposed fallbacks for non-derivatives, and therefore it may be appropriate in certain instances for the fallback language for cash products to differ from the approach that ISDA intends to take for derivatives. A brief summary of ISDA's approach to the fallbacks for derivatives is set forth in Appendix IV hereto.

It may, however, be the view of market participants that cash product fallbacks should differ in some respects from derivative fallback provisions. For example, ISDA fallback triggers will require a permanent cessation of LIBOR while market participants in cash products may wish to use fallback provisions to transition from LIBOR prior to its permanent discontinuance.[5] Also, derivatives will not use a forward-looking term rate as a fallback. Instead, several versions of fallbacks based on the overnight rate are being considered for derivatives, including a compounded average of the daily rate, a spot overnight rate, and a convexity-adjusted overnight rate.[6] Therefore, the spread adjustment for cash products may not be the same as the spread for derivatives, especially if the fallback rate in the cash markets is not to an overnight version of SOFR.

Finally, certain cash products or markets may have unique needs. For instance, unlike many cash products, business loans are a flexible product which may be amended over their lifetime. The

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[4] The ARRC has also set plans to produce indicative term rates that could help market participants understand how these rates are likely to behave before it is possible to produce a set of robust, IOSCO-compliant term reference rates that could be used in financial contracts. Preliminary data can be found in slide 6 of the presentation by the Chair of the ARRC at its July 2018 roundtable (www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/OConnor-Slides-ARRC-Roundtable.pdf).

[5] Both cash product and derivatives market participants may wish to transition transactions prior to the cessation of LIBOR and may do so by amending contracts rather than relying on fallback provisions.

[6] See the ISDA consultation on fallbacks for derivatives FAQ, "Why do the choices for calculating the "adjusted RFR" not include a forward-looking term rate?"

fundamental flexibility may mean market participants prefer to negotiate the specifics of a replacement rate at a future date when more is known about term SOFR rates and credit spread methodologies; this is the philosophical foundation of the amendment approach. Request for feedback regarding these questions, and the approaches taken in the two proposals of fallback language covered by this consultation, are highlighted in the feedback requested in **Part II** below.

<u>Part II: Syndicated Business Loans Consultation Questions</u>

A. <u>General Approach of the Two Fallback Proposals</u>

Based on recommendations by the ARRC Business Loans & CLOs Working Group, the ARRC has proposed two different approaches to develop more robust syndicated loan fallback language which are covered in this consultation and on which feedback is requested below. The first is an "amendment approach", which would provide a streamlined amendment mechanism for negotiating a replacement benchmark in the future and could serve as an initial step towards adopting a hardwired approach (see Appendix I). Second is a "hardwired approach", which would provide market participants with more clarity as to a how a potential replacement rate will be identified and implemented (see Appendix II).

The amendment approach and the hardwired approach each have their pros and cons, and they may behave differently in different market environments. The amendment approach uses loans' flexibility to create a simpler, streamlined amendment process. It is similar to the "LIBOR replacement" language that has developed in the syndicated loan market in the past year, it maximizes flexibility and it also does not rely on a rate (term SOFR) and spread adjustment methodology that does not yet exist. However, it may simply not be feasible to use the amendment approach if thousands of loans must be amended simultaneously due to an unexpected LIBOR cessation. This could create the very real possibility of disruption in the loan market. Additionally, the amendment approach is likely to create winners and losers in different market cycles. In a borrower-friendly market, a borrower may be able to extract value from the lenders by refusing to include a compensatory spread adjustment when transitioning to SOFR. Non-consenting lenders still would be subject to the lower rate. In a lender- friendly market, lenders might block a new proposed rate, forcing the borrower to pay a higher interest rate, such as the alternate base rate[7] for a period of time. For these reasons, working group members who are proponents of use of the amendment approach at the current time generally believe that eventually some version of a hardwired approach will be more appropriate. Market participants who choose to adopt the proposed amendment approach should therefore expect that future amendments to those provisions, if possible, may be desirable prior to any LIBOR cessation.

In contrast, the hardwired approach provides clarity upfront. Lenders and borrowers know that they will receive a version of SOFR plus a Replacement Benchmark Spread upon LIBOR discontinuance. Upon a LIBOR cessation event, neither borrowers nor lenders will be able to take advantage of the then-current market environment to capture economic value. However, Term SOFR and the Replacement Benchmark Spread do not yet exist, so it may be hard to determine today what the ultimate replacement rate would look like. That said, other products may determine that this is an acceptable risk, for instance, the hardwired approach proposal is closely aligned with the ARRC's fallback proposal for floating rate notes currently under consultation.

[7] The "Alternate Base Rate" or ABR is typically defined in credit agreements as the highest of (x) Prime Rate, (y) Fed Funds + .50% and (z) 1 month LIBOR + 1% (prong (z) would be disregarded if LIBOR is no longer available).

Appendix I provides proposed contractual language for the “amendment” approach, while Appendix II provides proposed contractual language for the “hardwired” approach. It is recommended that respondents read both Appendices prior to answering the consultation questions. However, for ease of use, a high-level comparison of the amendment approach and hardwired approach is provided below. This grid illustrates the major differences in the trigger events, replacement reference rates, replacement benchmark spreads and amendment mechanisms. In addition, a glossary of terms used in this consultation is set forth in Appendix V.

	Trigger	**Replacement Reference Rate**	**Replacement Benchmark Spread (adjustment)**	**Mechanism to Amend Credit Agreement**
Amendment Approach	A) Benchmark Discontinuance Event or B) Determination by Agent or Required Lenders that new or amended loans are incorporating a new benchmark interest rate to replace LIBOR	1) Alternate benchmark rate agreed between Borrower and Administrative Agent (which may include Term SOFR, to the extent publicly available quotes of Term SOFR exist at relevant time), giving due consideration to i) market convention or ii) selection, endorsement or recommendation by Relevant Governmental Body	A spread adjustment or method of calculating a spread adjustment as may be agreed between Administrative Agent and Borrower, giving due consideration to i) market convention or ii) selection, endorsement or recommendation by Relevant Governmental Body	For Trigger A, negative consent by Required Lenders (a majority). For Trigger B, affirmative consent by Required Lenders.
Hardwired Approach	A) Benchmark Discontinuance Event or B) [at least two] outstanding publicly filed syndicated loans are priced over Term SOFR plus a Replacement Benchmark Spread	A waterfall approach: 1) First, term SOFR or, if not available for the appropriate tenor, interpolated SOFR. If not available, then: 2) Compounded SOFR. If not available, then 3) Overnight SOFR. If not available, then 4) Admin Agent and Borrower endeavor to establish an alternate rate giving due consideration to i) prevailing market convention or ii) selection, endorsement or recommendation by Relevant Governmental Body.	A spread adjustment or method of calculating a spread adjustment that has been selected, endorsed or recommended by the Relevant Governmental Body. If not available, the spread adjustment or method for calculating the spread adjustment selected by ISDA.	In the event of a Benchmark Discontinuance Event, no amendment is required for waterfall steps 1-3; negative consent by Required Lenders for step 4. In the event that [at least two] syndicated loans are priced over Term SOFR plus a Replacement Benchmark Spread, affirmative consent by Required or Supermajority Lenders

The consultation requests information on a series of issues, but clearly not every issue is addressed herein. For example, recognizing that changes to interest rates would typically require the consent of all lenders, it is the assumption of the working group that changes to either proposal once adopted would require the consent of all lenders. Additionally, it is also important to keep in mind that the current LIBOR-based lending model is a “cost-plus” funding model and SOFR may or may not be reflective of a bank's internal funding costs. There are a number of customary credit agreement provisions that have developed around the historical construct of LIBOR and such provisions, e.g. break-funding, increased costs, and illegality may need to be reconsidered if LIBOR is not the reference rate. While the proposals contained in this consultation offer complete fallback solutions, such changes to other operative provisions are outside the scope of the proposals.

Question 1. *If the ARRC were to adopt one or more sets of business loan fallback language, which one or both of the recommended provisions (i.e., amendment approach and/or hardwired approach), in your view, is an appropriate policy? If you believe the amendment approach is more appropriate at present, what specific information (for instance, existence of term SOFR) would you need in order to get comfortable eventually adopting a hard-wired approach? Why?*

MetLife Response: ***We believe that the hardwired approach is the most efficient and straight forward. The Amendment approach would be too contentious and time consuming to affect an amendment. Moreover, the time required to implement the amendment approach increases the potential for basis risk with the derivatives market.***

B. Triggers

A "trigger" is an event that signals the conversion from LIBOR to a new reference rate. Examples of proposed triggers include LIBOR cessation (or statement of LIBOR cessation), LIBOR not being published for a period of time, or the announcement that LIBOR is no longer representative. The triggers (other than the early "opt-in trigger") are set out in the "Benchmark Discontinuance Event" definition in each proposal (see Appendices I and II).

ISDA Triggers

The first and second triggers in the proposals ("Benchmark Discontinuance Event" clauses (1) and (2)) are intended to match the fallback triggers that ISDA anticipates incorporating into the definition (or "floating rate option") for USD LIBOR in the 2006 ISDA Definitions. Cleared and uncleared over-the-counter derivatives typically incorporate these or other ISDA definitions and therefore include the terms of the relevant floating rate option(s). These two triggers will not apply until the actual discontinuation of LIBOR (although in some cases the spreads proposed by ISDA in its consultation would be fixed at the time of a statement/publication that occurs in advance of actual cessation). If there are any adjustments to the ISDA triggers, those adjustments will be incorporated in the final ARRC recommendation.

Pre-cessation Triggers

Market participants may want to include one or more of the additional proposed "pre-cessation" triggers ("Benchmark Discontinuance Event" clauses (3), (4) and (5) in square brackets in Appendices I and II) in order to transition to a SOFR-based alternative rate in the absence of a permanent discontinuation of LIBOR and prior to the derivatives market. These pre-cessation triggers are intended to describe events that signal an unannounced stop to LIBOR (trigger 3), a material change in LIBOR (trigger 4), or a shift in the regulatory judgment of the quality of LIBOR that would likely have a significant negative impact on its liquidity and usefulness to market participants (trigger 5). While the third trigger would only be invoked if LIBOR was unavailable, the fourth and fifth triggers would apply in situations in which LIBOR was still available but its quality had materially deteriorated in objectively measurable ways. Note that any of these three triggers could result in “basis risk” with interest rate hedges associated with a credit agreement, meaning if the LIBOR-based interest rate was hedged, the hedge may no longer match the new SOFR-based interest rate, unless parties bilaterally agree to include the same pre-cessation triggers in the hedge. (ISDA has indicated that it would offer templates or other tools to derivatives market participants who wish to take this latter approach.)

Question 2. *(a) Should fallback language for business loans include any of the pre- cessation triggers (triggers 3, 4 or 5)? If so, which ones?*

MetLife Response: ***We believe that Pre-cessation triggers 3 (Failure to publish for 5 days) and 5 (Not representative or prohibition on use) should both be included.***

(b) Please indicate whether any concerns you have about these pre- cessation triggers relate to differences between these triggers and those for standard derivatives or relate specifically to the pre-cessation triggers themselves.

MetLife Response: ***We believe that pre-cessation trigger number 4 (Insufficient Number of Submissions) should be excluded since there is no correlation between the number of banks providing LIBOR submissions and the objectivity of a particular LIBOR submission. If trigger number 4 is to be included there needs to be some weighting criteria in addition to the number of banks providing submissions; for example, fewer than 4 banks which have executed less than a threshold amount of LIBOR financing over the last 90 day period.***

(c) If pre-cessation triggers are not included, what options would be available to market participants to manage the potential risks involved in continuing to reference a Benchmark whose regulator has publicly determined that it is not representative of the underlying market or a Benchmark permanently or indefinitely based on a number of submissions that the Benchmark’s administrator acknowledges to be insufficient to allow for production in a standard manner?

MetLife Response: ***We support the inclusion of pre-cessation triggers 3 and 5 as written and the inclusion of pre-cessation trigger to the extent modified to provide some form of weighting mechanism.***

Early “ Opt -in” Triggers

The amendment approach proposal includes an “opt-in” trigger (see clause (B) of the definition of “Benchmark Transition Determination” in Appendix I) that allows the administrative agent or Required Lenders (typically a majority), at their election, to determine that syndicated loans in the market are being executed or amended to incorporate or adopt a LIBOR replacement (which need not be Term SOFR). Some market participants believe that this “opt-in” trigger will reduce risk by helping to reduce the inventory of LIBOR-based loans prior to a LIBOR discontinuance event and that some borrowers may wish to convert prior to LIBOR cessation. This opt-in trigger is subject to an affirmative majority lender vote.

The hardwired approach proposal also has a pre-cessation early “opt-in” feature that either the borrower or the administrative agent can initiate, but with a different trigger (see clause (B) of the definition of "Benchmark Transition Determination" in Appendix II). The hardwired trigger is based on the existence at that time of at least two identifiable and publicly available new or amended syndicated loan facilities referring to Term SOFR plus a Replacement Benchmark Spread (despite LIBOR still being published and none of the other listed triggers having been met). If the relevant parties elect to transition, the replacement rate and applicable spread adjustment will be determined as they would be under any of the cessation and pre-cessation triggers. This opt-in trigger is subject to an affirmative majority or supermajority lender vote.

Question 3. *(a) Is an "opt-in" trigger appropriate to include? Why or why not?*
(b) If you do believe an "opt-in" trigger should be included, do you prefer the approach in the hardwired proposal or the amendment proposal? Please explain.

MetLife Response: ***No, an opt-in trigger is not appropriate to include. An opt-in trigger would create uncertainty in the market since it is determined randomly by the lenders or the administrative agent of a particular loan without a consistent objective basis for triggering the opt-in. An opt-in trigger also creates potential basis risk requiring borrowers to re-hedge positions at random intervals.***

Other Triggers

Question 4. *Are there any other trigger events that you believe should be included for consideration? If yes, please explain.*

MetLife Response: ***No.***

C. The Replacement Benchmark

In the proposed contract language in this consultation, on the "Benchmark Replacement Date", which may be on or after the occurrence of one of the triggers, references to LIBOR will be replaced by references to an alternative rate. As described below, the proposed hardwired fallback provisions contain a waterfall within the defined term "Replacement Benchmark" (see Appendix II) to select the particular successor rate to be used. (Note that the defined term "Replacement Benchmark" in the hardwired proposal encompasses the spread adjustment, which is discussed separately below.)

The table below displays the hardwired fallback Replacement Benchmark waterfall:

Hardwired Approach Replacement Benchmark Waterfall
***Step 1*:** Term SOFR + Spread
***Step 2*:** Compounded SOFR + Spread
***Step 3*:** Overnight SOFR[8] + Spread (in brackets for consideration)
Step 4: Streamlined amendment process to select a Replacement Benchmark

By contrast, the amendment approach proposal does not contain any replacement rate waterfall. The borrower and administrative agent will propose a successor rate, which may or may not be Term SOFR, plus an applicable spread adjustment.

Under both proposals, if a trigger event has occurred then the loan would fallback to the Alternate Base Rate until a replacement rate is established. If no replacement rate is established, then the loans would continue to accrue interest at the ABR rate (an overnight rate) until a replacement rate is determined or agreed.

Step 1: Forward-Looking Term SOFR

In the hardwired approach, the first priority replacement rate is a forward-looking term SOFR (e.g. 1-month SOFR, 3-month SOFR) that is selected, endorsed or recommended by the Relevant Governmental Body. While there is currently no commitment by a regulatory authority or third party to publish forward-looking term SOFR rates, the ARRC intends to endorse forward-looking term SOFR rates provided that a consensus among its members can be reached that a robust, IOSCO-compliant[9] term benchmark that meets appropriate criteria set by the ARRC can be produced. It is reasonable to believe that if such term rates have been endorsed by the ARRC, either the public sector or a third party (or both) would publish them. As described in Appendix IV, derivatives are expected to reference overnight versions of SOFR (*e.g.*, a spot overnight rate, a convexity-adjusted overnight rate or a compounded average of the overnight rate) rather than a forward-looking term rate. Market participants that execute interest rate hedges should be aware that loans based on forward-looking term SOFR will not be perfectly hedged.

[8] As described below, Overnight SOFR (not an average) would remain in effect for the duration of the interest period.

[9] Prior to 2016, global groups focusing on benchmark reform had noted the need for more robust fallback provisions in derivatives and other financial instruments. Principle 13 of the *IOSCO Principles for Financial Benchmarks* provides that users should be encouraged by administrators to "take steps to make sure that

Question 5. *If the ARRC has recommended a forward-looking term rate, should that rate be the primary fallback for syndicated loans referencing LIBOR even though derivatives are expected to reference overnight versions of SOFR? Please explain.*

MetLife Response: ***We are cautiously optimistic regarding the evolution of forward looking term SOFR rates and support the use of such forward looking term rate as the primary fallback for floating rate notes to the extent such rates exist; however in the absence of any term rate the fallback should be consistent with the fallback utilized in the derivative market.***

In the event that a trigger occurs and at the time of the replacement, forward-looking term SOFR rates exist, but not for a maturity matching the existing LIBOR maturity, then the hardwired approach attempts to identify an interpolated SOFR term rate, using the available SOFR term periods (e.g. create a three-month SOFR from one-month and six-month SOFR). However, it is possible in these circumstances that other SOFR term periods may also be unavailable which would make interpolation impossible.

Question 6. *Should the administrative agent (by itself or with some other party) be able to eliminate certain interest period options if there are no equivalent SOFR terms available? If so, consider the following options: (i) the administrative agent (and/or some other party) may remove all interest periods for which there is not a published term rate or (ii) the administrative agent (and/or some other party) may remove only the interest periods for which there is not a published term rate and a term rate cannot be interpolated. Which of the options do you support? Why?*

<u>MetLife Response:</u> ***We believe that the Administrative Agent should only have the ability to eliminate certain interest period options as set forth in option (ii) above when there is not a published term rate and a term rate cannot be interpolated.***

<u>Step 2: " Compounded SOFR"</u>

If the replacement rate cannot be determined under the first step, then the second priority replacement rate is "Compounded SOFR". The FRN Consultation includes a proposal that Compounded SOFR may be either: (i) calculated at the start of the interest period using the historical Compounded SOFR rate for the period that ends immediately prior to that date (this payment structure is often termed "in advance" since the payment obligation is determined in advance) or (ii) calculated over the relevant interest period for the FRN with a lock up period prior to the end of the interest period, in which case the rate will not be known at the start of the interest period (this structure is often termed "in arrears"). Some market participants have expressed concern that there may be operational issues that arise in connection with the "in arrears" approach because this rate would not be known until the end of the interest period. Other market participants, however, have expressed concerns with the inherent backward-looking nature of the "in advance" approach as this rate is likely to deviate from the forward-looking term rate.

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contracts or other financial instruments that reference a benchmark have robust fallback provisions in the event of [cessation of] the referenced benchmark." See https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf, page 24.

Question 7. *Should "Compounded SOFR" be included as the second step in the waterfall? Why or why not? Would this preference be influenced by whether ISDA implements fallbacks referencing compounded SOFR or overnight SOFR?*

<u>MetLife Response:</u> ***We take the position that Compounded SOFR in arrears should be implemented as the second step in the waterfall. We further believe that consistency between the cash and derivatives markets is an essential component of the fallback provisions.***

Question 8. *If you believe that Compounded SOFR should be included, would a Compounded SOFR in advance* or *Compounded SOFR in arrears be preferable for syndicated loans? Please explain.*

<u>MetLife Response:</u> ***Our response to ISDA in its consultation regarding this issue was to utilize compounded SOFR in arrears which is consistent with how Risk Free Rate swaps are constructed and correlates well with term OIS, and that it is less volatile that either the Spot Overnight Rate or the Convexity Adjusted Overnight Rate. However, we believe that it is important that the cash and derivatives markets utilize the same convention for determining the fall back rate. Consequently, compound setting in advance is acceptable for the cash market to the extent the same is adopted by***

the derivatives market.

Step 3: Overnight SOFR

If Compounded SOFR cannot be determined, Overnight SOFR is the third step for determining the replacement rate. In this step of the waterfall, the Overnight SOFR rate would be set once, at the beginning of the interest period, and remain in effect for the duration of the interest period (e.g., one-month, three-months, etc.). The benefit of including Overnight SOFR is that it already exists and is published, however, some market participants have expressed concern that using an overnight rate for an extended period would expose borrowers and lenders to unnecessary risk. Rather than averaging the rate over a particular period, the use of an overnight rate could deviate from the typical rate or the average rate over the prior or successive period. In particular, historical SOFR rates have typically spiked on the last business day of the quarter. For example, during 2017, the SOFR rate increased an average of 10 basis points on the last business day of the quarter.[10] Many credit facilities provide borrowers the ability to select various interest term periods, including six-months and one-year, and if the Replacement Benchmark were Overnight SOFR, that overnight rate could apply over that extended time period. However, because it is possible that ISDA could select a version of overnight SOFR in the fallback for derivatives, the ARRC believes that it was important to include overnight SOFR in the proposed waterfall in order to consult on this inclusion and seek market opinions.

Question 9. *Is Overnight SOFR an appropriate fallback reference rate for syndicated loans or should the final step in the replacement rate waterfall be Compounded SOFR (after which the hardwired approach defaults to a streamlined amendment process)? Would this preference be influenced by whether ISDA implements fallbacks referencing compounded SOFR or overnight SOFR? Please explain.*

MetLife Response: ***Yes, this would be an acceptable option however, due to volatility in the Overnight Rate, this is the least viable option***

Question 10. *Is it acceptable to fix one observation of Overnight SOFR as the reference rate for a loan lasting three months (or longer)? Would lenders refuse to offer longer-duration loans if they were priced over one Overnight SOFR observation? Please explain.*

MetLife Response: ***No, fixing one observation of Overnight SOFR is not an acceptable reference rate for loans with maturities greater than 3 months. Some form of enhancement would be necessary to Overnight SOFR for loans with maturities of 3 months or longer.***

Other Fallback Rates

Question 11. *Is there any another replacement rate that should be added to the hardwired approach waterfall before parties move to the streamlined amendment process? If so, what is the appropriate rate or rates and at which stage in the waterfall should they be applied?*

MetLife Response: ***No.***

[10] See data available at https://apps.newyorkfed.org/markets/autorates/sofr.

D. Spread adjustments

As described above in ***Part I: ARRC Consultation Overview***, LIBOR and SOFR are different rates and thus the transition to SOFR will require a "spread adjustment" to make the rate levels more comparable. The hardwired approach proposal provides for a spread adjustment (which may be a positive or negative value or zero) to be included in the determination of any Replacement Benchmark. The particular spread adjustment to be used is selected according to a waterfall in the definition of "Replacement Benchmark Spread." Note that the proposal uses static adjustments selected at each time the Replacement Benchmark is selected in order to encompass all credit, term and other adjustments that may be appropriate for a given tenor. The methodology for calculating these spread adjustments has not been determined, however it is anticipated that the spread will be different for any given tenor.

The table below displays the spread waterfall in the hardwired approach:

Hardwired Approach Replacement Benchmark Spread
Step 1: Spread recommended by Relevant Governmental Body
Step 2: Spread in fallbacks for derivatives in ISDA definitions
Step 3: Streamlined amendment process to select a Replacement Benchmark

Step 1: ARRC Spread Adjustment

The first priority of the proposed hardwired approach waterfall is a spread adjustment (or its methodology) as selected, endorsed or recommended by the Relevant Governmental Body, i.e. the Fed or ARRC. If participants in cash markets conclude that it is useful to market functioning for the ARRC to recommend one or more spread adjustments for selected cash products, the ARRC could elect to recommend a spread adjustment. Under the hardwired approach waterfall, if the ARRC does recommend a spread adjustment, it is this adjustment that would be incorporated.

Question 12. *Do you believe that the ARRC should consider recommending a spread adjustment that could apply to cash products, including syndicated business loans?*

MetLife Response: ***Yes. Endorsement by a Relevant Government Body reduces the potential of market participants employing divergent spread adjustment methodologies which could result in value transfers on the trigger date.***

Step 2: ISDA Spread Adjustment

If there is no such spread adjustment selected, endorsed, or recommended by the Relevant Governmental Body available, the second priority in the waterfall is a spread adjustment (or its methodology) applicable to fallbacks for derivatives that ISDA anticipates implementing in its definitions. Because derivatives are generally expected to reference overnight versions of SOFR[11] and

[11] See the ISDA consultation on fallbacks for derivatives FAQ, "Why do the choices for calculating the "adjusted RFR" not include a forward-looking term rate?"

not forward-looking term SOFR, the ISDA spread adjustment for SOFR derivatives will be intended for use with a version of the overnight rate or a compounded overnight rate. While users of cash products could determine that the spread adjustment selected by ISDA to be incorporated in its definitions is also appropriate for their cash instruments, it is important to note that ISDA's definitions are intended for derivatives. It is important to note that ISDA has not analyzed, and will not analyze, whether the fallbacks it anticipates implementing, including spread adjustments in the fallbacks, would be appropriate for non-derivatives.

As discussed in ***Part I: ARRC Consultation Overview***, any spread adjustment for derivative fallbacks in the ISDA definitions will become effective only upon a permanent discontinuance of USD LIBOR (although in some cases the spreads proposed by ISDA in its consultation would be fixed at the time of the occurrence of the trigger, which could be much earlier). This spread adjustment could, however, be utilized in connection with a syndicated loan "pre-cessation" trigger prior to the transition of the derivatives market because ISDA anticipates that a third party vendor will eventually publish the spread adjustment on a daily basis up until the time an ISDA trigger event has occurred. Note that the spread adjustments for syndicated business loans determined based upon the spread methodology for derivatives in the ISDA definitions would result in different spreads than those used for standard derivatives if such calculations are performed at a time prior to the permanent cessation of LIBOR (i.e. in connection with one of the "pre-cessation" triggers).

Question 13. *Is a spread adjustment applicable to fallbacks for derivatives under the ISDA definitions appropriate as the second priority in the spread waterfall even if syndicated business loans may fall back at a different time or to a different rate from derivatives? Please explain.*

MetLife Response: ***Utilizing the same spread adjustment methodology for derivatives and syndicated loans is an acceptable approach, notwithstanding a difference in timing or base rates. Consistency in applying the same methodology is an important component to avoid value transfers.***

Other Spread Adjustments

Question 14. *Is there any another spread adjustment that should be added to the hardwired approach spread waterfall before parties move to the streamlined amendment process? If so, what is the appropriate spread and at which stage in the waterfall should it be applied?*

MetLife Response: ***No.***

E. Lender vote

As used in the fallback proposals, a class vote means that for an objection or an affirmative consent to be valid, each class of loans in the credit agreement (e.g. revolver lenders may be one class, term loan B lenders another class) must give their objection or consent, respectively. Class voting can make, for instance, an objection more difficult because each class must object for the objection to be effective, however it can also preclude majority lenders from overriding the wishes of minority lenders. For example, in a facility where there is a small revolving loan and a large term loan B tranche, then both classes would have to consent for an amendment to be effective or object for an amendment not to be effective. Market participants should keep in mind that during an amendment process and until a replacement rate is selected, the fallback rate continues to be the ABR.

Question 15. *(a) Under the amendment approach proposal, if parties are selecting a replacement rate through the amendment process, should the objection of the Required Lenders be by class (if applicable) (see clause (b) of the section titled "Effect of Benchmark Discontinuance Event" in Appendix I)? Why or why not?*

MetLife Response: ***No. We do not support application of the amendment approach.***

(b) Under the amendment approach proposal, if parties choose to select a replacement rate through the "opt-in" amendment process, should the affirmative consent of the Required Lenders be by class (if applicable) (see clause (b) of the section titled "Effect of Benchmark Discontinuance Event" in Appendix I)? Is affirmative consent appropriate or should negative consent be considered instead? Please explain.

MetLife Response: ***No. We do not support the application of the amendment approach.***

Question 16. *(a) Under the hardwired approach proposal, if parties must fallback to selecting a replacement rate through the amendment process because none of the options in the replacement rate waterfall are available, is the objection of the Required Lenders by a class appropriate (if applicable) (see clause (d) of the section titled "Effect of Benchmark Discontinuance Event" in Appendix II)? Why or why not?*

MetLife Response: ***Yes, objection of the required lenders by class, split between revolver and term loan banks, is appropriate as a matter of fundamental fairness.***

(b) The hardwired approach proposal provides two bracketed options for a successful declaration of the "opt-in" amendment process - Required Lenders (typically a majority) vs. supermajority (2/3) of lenders (see clause (B) of the definition of "Benchmark Transition Determination" in Appendix II). What should be the standard affirmative lender voting threshold for consenting to the "opt-in"? Please explain.

MetLife Response***: We support the Required Lenders approach for consenting to an Opt-in. This approach is the most equitable, lessens the ability for holdup value in distressed situations and makes assembling lenders easier.***

F. The role of the administrative agent

Under both proposals, the administrative agent is involved in selecting and administering the replacement rate.

Question 17. *For respondents that act as administrative agents in the syndicated business loan market,* *would your institution be willing to (i) work with the borrower to identify a new reference rate or spread adjustment, (ii) determine whether triggers have occurred, (iii) select screen rates where reference rates are to be found, (iv) interpolate term SOFR if there is a missing middle maturity and, (v) execute one-time or periodic technical or operational amendments to allow the administrative agent to appropriately administer the replacement benchmark? Please respond to each and explain.*

MetLife Response: ***Not Applicable.***

Question 18. *Is it necessary that any replacement rate and/or applicable spread adjustment be published on a screen by a third party? Why or why not?*

MetLife Response: ***Not Applicable***.

The current proposals provide for the administrative agent's ability to execute certain technical or conforming changes in order to appropriately administer the replacement rate. An example of such a change may be moving from months to day count (1 month vs. 30 days) or perhaps an adjustment to the definition of "Interest Period" (see the definitions of "Replacement Benchmark Conforming Changes" in Appendices I and II).

Question 19. *Given that market practices and conventions may change over time, should the administrative agent's limited ability to make conforming changes be available only at the point of transition or on a periodic, ongoing basis? Why or why not?*

MetLife Response: ***No, the Administrative Agents ability to make conforming changes should be available only at the point of transition. Granting the Administrative Agent wider latitude to make conforming changes creates uncertainty and potential illiquidity in the market.***

G. Operational considerations

Market participants will necessarily face a number of operational challenges as they plan to transition away from LIBOR. Some of the potential issues are raised below.

Question 20.*H ow important is it for the fallback rate to be available prior to making a borrowing/advancing funds? For instance, if the rate was a compounded three-month rate calculated at the* ***end*** *of the interest period, would that be problematic? Please explain.*

Question 21. *Are there operational concerns about having the ability to convert many loans over a very short period of time? Please explain.*

Question 22. *Do you see other operational challenges that fallback language should acknowledge or of which the ARRC should be aware? Please explain.*

H. Bilateral loans

Bilateral loans are not covered in this consultation and will be the subject of a separate consultation in the future. However, it would be helpful to receive some preliminary feedback from market participants.

Question 23. *What modifications to the syndicated loan consultative language may be helpful to market participants as they consider more robust fallback language in a bilateral or single-bank business loan context, if any? Please explain. Specifically, what modifications to the language may be appropriate in instances in which the bilateral loan is fully or partially hedged? Please explain.*

I. General feedback

Question 24. *Are there any provisions in the fallback language proposals that would significantly impede syndicated loan originations? If so, please provide a specific and detailed explanation.*

Question 25. *Please provide any additional feedback on any aspect of the proposals.*

MetLife Response: 1. ***We would favor a "grandfathering" or opt-out provision for legacy LIBOR transactions to the extent that LIBOR still exists subsequent to a trigger event.***

2. ***With respect to any amendments following a Benchmark Transition Determination, we would favor changing the effective date from 5 to 15 days following the posting of such amendment by the Administrative Agent.***

J. Response Procedures / Next Steps

Market participants may submit responses to the consultation questions by email to arrc@ny.frb.org until November 8, 2018. Please attach your responses in a Word or PDF document and clearly indicate "Consultation Response – Syndicated Business Loans" in the subject line of your email. Please coordinate internally and provide only one response per institution. Responses will be posted on the ARRC's website, but may be anonymized upon request.

Following this market-wide consultation, the ARRC plans to recommend fallback language for syndicated business loans for voluntary adoption in the marketplace. The expectation is that market participants will choose whether and when to begin using the syndicated business loans fallback language in new LIBOR transactions as they deem appropriate. (A simultaneous consultation is being issued for Floating Rate Notes. Future ARRC consultations on other cash products, including bilateral business loans, can be expected to be released as well.)

Appendix I

DRAFT AMENDMENT APPROACH FALLBACK LANGUAGE FOR NEW ORIGINATIONS OF LIBOR SYNDICATED BUSINESS LOANS[12]

Effect of Benchmark Discontinuance Event

(a) Notwithstanding anything to the contrary in this Agreement[13] or any other Loan Document, at or promptly after a Benchmark Transition Determination, the Administrative Agent and the Borrower may amend this Agreement to replace LIBOR with an alternate benchmark rate (which may include Term SOFR, to the extent publicly available quotes of Term SOFR exist at the relevant time), including any Replacement Benchmark Spread, in each case giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated syndicated credit facilities for such alternative benchmarks and adjustments or any selection, endorsement or recommendation by the Relevant Governmental Body with respect to such facilities (any such proposed rate, together with the Replacement Benchmark Spread, a "Replacement Benchmark"), together with any proposed Replacement Benchmark Conforming Changes. Such Replacement Benchmark shall be applied in a manner consistent with market practice or, to the extent such market practice is not administratively feasible for the Administrative Agent, in a manner as otherwise reasonably determined by the Administrative Agent; provided that in no event shall such Replacement Benchmark be less than zero for purposes of this Agreement.

(b) Any such amendment with respect to an event under clause (A) of the definition of "Benchmark Transition Determination" shall become effective at 5:00 p.m. on the fifth (5^{th}) Business Day after the Administrative Agent shall have posted such proposed amendment to all Lenders and the Borrower unless, prior to such time, Lenders comprising the Required Lenders [of each Class][14] have delivered to the Administrative Agent written notice that such Required Lenders do not accept such amendment. Any such amendment with respect to an event under clause (B) of the definition of "Benchmark Transition Determination" shall become effective on the date that Lenders comprising the Required Lenders [of each Class] have delivered to the Administrative Agent written notice that such Required Lenders accept such amendment. No replacement of LIBOR with a Replacement Benchmark pursuant to this Section titled "Effect of Benchmark Discontinuance Event" shall occur (i) prior to the applicable Benchmark Transition Start Date or (ii) prior to the effective date for such replacement, if any, specified in such amendment.

(c) The Administrative Agent will promptly notify the Borrower and each Lender of the occurrence of any Benchmark Unavailability Period. The Borrower may revoke any request for a Eurodollar Borrowing of, conversion to or continuation of Eurodollar Loans to be made, converted or continued during any Benchmark Unavailability Period and, if no such revocation is timely sent by the Borrower, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to

[12] This language assumes a U.S. Dollar only facility. Adjustments to these provisions will need to be made for multicurrency facilities.
[13] Capitalized terms used herein but not defined shall have the meanings ascribed in the relevant credit agreement. Such terms are included herein for illustrative purposes only and should be coordinated with definitions in the relevant credit agreement.
[14] Include if applicable.

ABR Loans (subject to the next sentence). During any Benchmark Unavailability Period, the LIBO Rate component shall not be used in any determination of ABR.

(d) As used in this Section titled "Effect of Benchmark Discontinuance Event":

"***Benchmark Discontinuance Event***" means the occurrence of one or more of the following events with respect to LIBOR:

(1) a public statement or publication of information by or on behalf of the administrator of LIBOR announcing that such administrator has ceased or will cease to provide LIBOR, permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide LIBOR;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of LIBOR, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for LIBOR, a resolution authority with jurisdiction over the administrator for LIBOR or a court or an entity with similar insolvency or resolution authority over the administrator for LIBOR, which states that the administrator of LIBOR has ceased or will cease to provide LIBOR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide LIBOR;

(3) [a LIBOR rate is not published by the administrator of LIBOR for five consecutive Business Days and such failure is not the result of a temporary moratorium, embargo or disruption declared by the administrator of LIBOR or by the regulatory supervisor for the administrator of LIBOR;]

(4) [a public statement or publication of information by the administrator of LIBOR that it has invoked or will invoke, permanently or indefinitely, its insufficient submissions policy; or]

(5) [a public statement by the regulatory supervisor for the administrator of LIBOR or any Governmental Authority having jurisdiction over the Administrative Agent announcing that LIBOR is no longer representative or may no longer be used.]

"***Benchmark Replacement Date***" means (a) for purposes of clauses (1) and (2) of the definition of "Benchmark Discontinuance Event," the later of (i) the date of such public statement or publication of information and (ii) the date on which the administrator of LIBOR permanently or indefinitely ceases to provide LIBOR, (b) for purposes of clause (3) of the definition of "Benchmark Discontinuance Event," the first Business Day following such five consecutive Business Days, (c) for purposes of clause (4) of the definition of "Benchmark Discontinuance Event," the later of (i) the date of such public statement or publication of information and (ii) the date such insufficient submissions policy is invoked, and (d) for purposes of clause (5) of the definition of "Benchmark Discontinuance Event," the later of (i) the date of such public statement and (ii) the date as of which LIBOR may no longer be used (or, if applicable, is no longer representative).

"***Benchmark Transition Determination***" means:

(A) (i) the determination of the Administrative Agent (which determination shall be conclusive absent manifest error) or (ii) the notification by the Borrower or Required Lenders of the Administrative Agent (with, in the case of the Required Lenders, a copy to the Borrower) that the Borrower or Required Lenders, as applicable, have determined that one or more Benchmark Discontinuance Events has occurred with respect to LIBOR; or

(B) (i) the determination of the Administrative Agent (which determination shall be conclusive absent manifest error) or (ii) the notification by the Required Lenders of the Administrative Agent (with a copy to the Borrower) that the Required Lenders have determined that syndicated loans [being executed at such time, or] that include language similar to that contained in this Section titled "Effect of Benchmark Discontinuance Event", are being [executed or] amended [(as applicable)] to incorporate or adopt a new benchmark interest rate to replace LIBOR, and the Administrative Agent has, or the Required Lenders have, as applicable, elected in its or their discretion to make a Benchmark Transition Determination by written notice to the Borrower and the Lenders or to the Administrative Agent, Borrower and Lenders, respectively.

"***Benchmark Transition Start Date***" means (a) for purposes of a Benchmark Discontinuance Event pursuant to clause (A) of the definition of "Benchmark Transition Determination", the earlier of (i) the applicable Benchmark Replacement Date and (ii) if such Benchmark Discontinuance Event is a statement or publication of a prospective event, the [90th] day prior to the expected date of such event as of such statement or publication (or if the expected date of such prospective event is fewer than [90] days after such statement or publication of information, the date of such statement or publication of information) and (b) for purposes of clause (B) of the definition of "Benchmark Transition Determination", the date specified by the Administrative Agent or the Required Lenders, as applicable, by notice to the Borrower, the Administrative Agent (in the case of such notice by the Required Lenders) and the Lenders.

"***Benchmark Unavailability Period***" means the period (x) beginning at the time that either (A) a Benchmark Replacement Date has occurred or (B) a LIBOR rate is not published by the administrator of LIBOR, if, at any such time, either (i) no amendment to this Agreement setting forth a Replacement Benchmark has been made effective or (ii) in the determination of the Administrative Agent, adequate and reasonable means do not exist for determining the Replacement Benchmark that has replaced LIBOR pursuant to a then-effective amendment to this Agreement and (y) ending at the time that either (A) both (i) an amendment to this Agreement setting forth a Replacement Benchmark has been made effective and (ii) in the determination of the Administrative Agent, adequate and reasonable means exist for determining the Replacement Benchmark that has replaced LIBOR pursuant to a then-effective amendment to this Agreement or (B) solely with respect to a period beginning pursuant to clause (x)(B) of this definition, a LIBOR rate is published by the administrator of LIBOR.

"***Federal Reserve Bank of New York's Website***" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.gov/, or any successor source.

"***Governmental Authority***" means the government of the United States of America, any other nation or any political subdivision or any thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.

"***Relevant Governmental Body***" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"***Replacement Benchmark Conforming Changes***" means, with respect to any proposed Replacement Benchmark, any conforming changes to the definition of "Base Rate", the definition of "Interest Period", timing and frequency of determining rates and making payments of interest and other administrative matters as may be appropriate, in the discretion of the Administrative Agent in consultation with the Borrower, to reflect the adoption of such Replacement Benchmark and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of the Replacement Benchmark exists, in such other manner of administration as the Administrative Agent determines is reasonably necessary in connection with the administration of this Agreement).

"***Replacement Benchmark Spread***" means, with respect to any replacement of LIBOR with an alternate benchmark rate for each applicable Interest Period, a spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) as may be agreed between the Administrative Agent and the Borrower, in each case giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated syndicated credit facilities for such adjustments, which may include any selection, endorsement or recommendation by the Relevant Governmental Body with respect to such facilities for the applicable alternate benchmark rate.

"***SOFR***" means the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"***Term SOFR***" means the forward-looking term SOFR rate, for a term equal to the applicable Interest Period, that is selected, endorsed or recommended as the replacement for LIBOR by the Relevant Governmental Body [in each case as displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion].

Appendix II

DRAFT HARDWIRED APPROACH FALLBACK LANGUAGE FOR NEW ORIGINATIONS OF LIBOR SYNDICATED BUSINESS LOANS[15]

<u>Effect of Benchmark Discontinuance Event</u>

(a) Notwithstanding anything to the contrary in this Agreement[16] or any other Loan Document, following a Benchmark Transition Determination, on any Benchmark Reset Date the base rate for determining interest for any Eurodollar Borrowing in accordance with *[Section relating to Interest]* shall be the Replacement Benchmark.

(b) The Administrative Agent will promptly notify the Borrower and each Lender of the occurrence of any Benchmark Unavailability Period. The Borrower may revoke any request for a Eurodollar Borrowing of, conversion to or continuation of Eurodollar Loans to be made, converted or continued during any Benchmark Unavailability Period and, if no such revocation is timely sent by the Borrower, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to ABR Loans (subject to the next sentence). During any Benchmark Unavailability Period, the LIBO Rate component shall not be used in any determination of ABR.

(c) If the Benchmark is determined in accordance with clause (1), (2) or (3) of the definition of "Replacement Benchmark," the Administrative Agent shall have the right [upon making a Benchmark Transition Determination] [and] [from time to time] to make any Replacement Benchmark Conforming Changes and, notwithstanding any other provision of this Agreement to the contrary, any amendment[s] implementing such Replacement Benchmark Conforming Changes shall become effective without any further action or consent of any other party to this Agreement.

(d) If the Benchmark is determined in accordance with clause (4) of the definition of "Replacement Benchmark," the Administrative Agent and the Borrower shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable (but for the avoidance of doubt, such related changes shall not include a reduction of the Applicable Rate). Notwithstanding anything to the contrary in *[Section relating to Waivers and Amendments]*, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within [five] Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Required Lenders [of each Class][17] stating that such Required Lenders object to such amendment.

(e) As used in this Section titled "Effect of Benchmark Discontinuance Event":

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[15] This language assumes a U.S. Dollar only facility. Adjustments to these provisions will need to be made for multicurrency facilities.

[16] Capitalized terms not defined herein shall have the meanings ascribed in the relevant credit agreement. Such terms are included herein for illustrative purposes only and should be coordinated with definitions in the relevant credit agreement.

[17] Include if applicable.

"***Benchmark***" means the LIBO Rate, provided that if a Benchmark Replacement Date shall have occurred with respect to such LIBO Rate, then the term "Benchmark" shall mean the applicable Replacement Benchmark.

"***Benchmark Discontinuance Event***" means the occurrence of one or more of the following events with respect to a Benchmark:

(1) a public statement or publication of information by or on behalf of the administrator of such Benchmark announcing that such administrator has ceased or will cease to provide such Benchmark, permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide such Benchmark;

(2) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark, the central bank for the currency of such Benchmark, an insolvency official with jurisdiction over the administrator for such Benchmark, a resolution authority with jurisdiction over the administrator for such Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark, which states that the administrator of such Benchmark has ceased or will cease to provide such Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide such Benchmark;

(3) [a Benchmark rate is not published by the administrator of such Benchmark for five consecutive business days and such failure is not the result of a temporary moratorium, embargo or disruption declared by the administrator of such Benchmark;]

(4) [a public statement or publication of information by the administrator of such Benchmark that it has invoked or will invoke, permanently or indefinitely, its insufficient submissions policy;]

(5) [a public statement by the regulatory supervisor for the administrator of the Benchmark or any Governmental Authority having jurisdiction over the Administrative Agent stating that such Benchmark is no longer representative or may no longer be used.]

"***Benchmark Replacement Date***" shall mean:

(1) for purposes of clauses (1) and (2) of the definition of "Benchmark Discontinuance Event," the later of (a) the date of such public statement or publication of information and (b) the date on which the administrator of the relevant Benchmark permanently or indefinitely ceases to provide such Benchmark,

(2) for purposes of clause (3) of the definition of "Benchmark Discontinuance Event," the first business day following such five consecutive business days,

(3) for purposes of clause (4) of the definition of "Benchmark Discontinuance Event," the later of (a) the date of such public statement or publication of information and (b) the date such insufficient submissions policy is invoked,

(4) for purposes of clause (5) of the definition of "Benchmark Discontinuance Event," the later of (a) the date of such public statement and (b) the date as of which the Benchmark may no longer be used (or, if applicable, is no longer representative), and

(5) for purposes of clause (B) of the definition of "Benchmark Transition Determination," the [first] Business Day after the Rate Election Notice is provided to each of the other parties hereto.

*"**Benchmark Reset Date**"* means, in respect of any Eurodollar Borrowing, upon the occurrence of a Benchmark Replacement Date, the next interest reset date and all subsequent interest reset dates for which the LIBO Rate would have to be determined.

*"**Benchmark Transition Determination**"* means:

(A) the determination of the Administrative Agent (which determination shall be conclusive absent manifest error) that one or more Benchmark Discontinuance Events has occurred with respect to a Benchmark[; or

(B)(i) the Administrative Agent notifies (or the Administrative Agent is advised by Borrower to notify) each of the other parties hereto that [at least two] currently outstanding syndicated loans in the United States at such time contain (as a result of amendment or as originally executed) as a base rate, in lieu of the LIBO Rate, Term SOFR plus a Replacement Benchmark Spread (and such syndicated loans are identified in such notice and are publicly available for review), and (ii) the Administrative Agent, the Borrower and the [Required Lenders][Supermajority Lenders] have jointly elected by affirmative vote to declare that a Benchmark Transition Determination under this clause (B) has occurred and have provided written notice of such election to each of the other parties hereto (the "***Rate Election Notice***")].

*"**Benchmark Unavailability Period**"* means the period (x) beginning at the time that either (A) a Benchmark Replacement Date pursuant to clauses (1) through (4) of the definition thereof has occurred or (B) a Benchmark rate is not published by the administrator of such Benchmark, if, at such time, no Replacement Benchmark has been determined in accordance with the Section titled "Effect of Benchmark Discontinuance Event" for which, in the determination of the Administrative Agent, adequate and reasonable means exist for determination thereof and (y) ending at the time that (A) a Replacement Benchmark has been determined in accordance with the Section titled "Effect of Benchmark Discontinuance Event" for which, in the determination of the Administrative Agent, adequate and reasonable means exist for determination thereof or (B) solely with respect to a period beginning pursuant to clause (x)(B) of this definition, a Benchmark rate is published by the administrator of such Benchmark.

*"**Compounded SOFR**"* means, for the applicable Interest Period, a compounded average of daily SOFR calculated in advance as published by the Federal Reserve Bank of New York or any entity that assumes responsibility for publishing such rate.

"***Corresponding Period***" with respect to a Replacement Benchmark means a period or maturity (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable term period of maturity for LIBOR.

"***Federal Reserve Bank of New York's Website***" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.gov/, or any successor source.

"***Governmental Authority***" means the government of the United States of America, any other nation or any political subdivision or any thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.

*"**Impacted SOFR Interest Period**"* means an Interest Period for which the Administrative Agent has determined (which determination shall be conclusive and binding absent manifest error) that Term SOFR for a term equal to the applicable Interest Period cannot be determined, unless Interpolated SOFR has been determined for such Interest Period.

"***Interest Period***" means with respect to any Eurodollar Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, two, three or six months [(or, with the consent of each Lender, twelve months)] thereafter, as the Borrower may elect; provided, that (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless, in the case of a Eurodollar Borrowing only, such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day and (ii) any Interest Period pertaining to a Eurodollar Borrowing that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and, in the case of a Revolving Borrowing, thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"***Interpolated LIBO Rate***" means, at any time, for any Interest Period, the rate per annum (rounded to the same number of decimal places as the LIBO Screen Rate) determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) the LIBO Screen Rate for the longest period (for which the LIBO Screen Rate is available) that is shorter than the Impacted LIBO Rate Interest Period; and (b) the LIBO Screen Rate for the shortest period (for which that LIBO Screen Rate is available) that exceeds the Impacted LIBO Rate Interest Period, in each case, at such time.

"***Interpolated SOFR***" means, at any time, for any Interest Period, the rate per annum determined by the Administrative Agent (which determination shall be conclusive and binding absent manifest error) to be equal to the rate that results from interpolating on a linear basis between: (a) Term SOFR for the longest period (for which Term SOFR is available) that is shorter than the Impacted SOFR Interest Period; and (b) Term SOFR for the shortest period (for which Term SOFR is available) that exceeds the Impacted SOFR Interest Period, in each case, at such time.

"***ISDA***" means the International Swaps and Derivatives Association, Inc. or any successor thereto.

"***LIBO Rate***" means, with respect to any Eurodollar Borrowing for any Interest Period, the LIBO Screen Rate at approximately 11:00 a.m., London time, two Business Days prior to the commencement of such Interest Period; provided that if the LIBO Screen Rate shall not be available at such time for such Interest Period (an "***Impacted LIBO Rate Interest Period***") then the LIBO Rate shall be the Interpolated LIBO Rate; provided, further, that if a Benchmark Replacement Date occurs with respect to the LIBO Rate, then the LIBO Rate shall be determined in accordance with the Section titled "Effect of Benchmark Discontinuance Event".

"***LIBO Screen Rate***" means, for any day and time, with respect to any Eurodollar Borrowing for any Interest Period, the London interbank offered rate as administered by ICE Benchmark Administration (or any other Person that takes over the administration of such rate) for a period equal in length to such Interest Period ("***LIBOR***") as displayed on such day and time on pages LIBOR01 or LIBOR02 of the Reuters screen that displays such rate (or, in the event such rate does not appear on a Reuters page or screen, on any successor or substitute page on such screen that displays such rate, or on the appropriate page of such other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion); provided that if the LIBO Screen Rate as so determined would be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

"Reference Time" with respect to any determination of a Benchmark means (1) in the case of LIBOR, 11:00 a.m. (London time) on the day that is two London banking days preceding the date of such determination, (2) in the case of a forward-looking term SOFR, [as published at approximately 8 a.m. (New York time)] on the day that is [two New York] business days preceding the date of such determination, and (3) in the case of any other Replacement Benchmark, [as of approximately 8 a.m. (New York time)] on the day that is [two New York] business days preceding the date of such determination.

"***Relevant Governmental Body***" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"***Replacement Benchmark***" means:

(1) Term SOFR for the applicable Interest Period (or, if an Impacted SOFR Interest Period, the Interpolated SOFR Rate) as of the applicable Reference Time, plus the Replacement Benchmark Spread for the applicable Interest Period; provided that:

(2) if the Administrative Agent determines on such Benchmark Reset Date (which determination shall be conclusive and binding absent manifest error) that the Replacement Benchmark cannot be determined in accordance with clause (1) above, then Compounded SOFR for the applicable Interest Period as of the applicable Reference Time, plus the Replacement Benchmark Spread for the applicable Interest Period[; provided, further, that:

(3) if the Administrative Agent determines on such Benchmark Reset Date (which determination shall be conclusive and binding absent manifest error) that the Replacement Benchmark cannot be determined in accordance with clauses (1) or (2) above, then SOFR determined as of the applicable Reference Time, and which will remain in effect for the duration of the applicable Interest Period, plus the applicable Replacement Benchmark Spread; provided, further, that]:

(4) if the Administrative Agent determines on such Benchmark Reset Date (which determination shall be conclusive and binding absent manifest error) that the Replacement Benchmark

cannot be determined in accordance with clause (1), (2) or (3) above, then the Administrative Agent and the Borrower shall endeavor to establish an alternate rate of interest to the Benchmark that gives due consideration (i) to any then prevailing market convention for determining a rate of interest as a replacement to the Benchmark for syndicated loans in the United States at such time or (ii) to any selection, endorsement or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body at such time.

If the Replacement Benchmark as determined pursuant to clause (1), (2) or (3) above would be less than zero, such Replacement Benchmark shall be deemed to be zero for the purposes of this Agreement.

*"**Replacement Benchmark Conforming Changes**"* means, with respect to any proposed Replacement Benchmark, any technical or operational changes [(including, for the avoidance of doubt, changes to the definition of "Interest Period")], in the discretion of the Administrative Agent, to reflect the adoption of such Replacement Benchmark and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of the Replacement Benchmark exists, in such other manner of administration as the Administrative Agent determines is reasonably necessary in connection with the administration of this Agreement).

*"**Replacement Benchmark Spread**"* means, on any day,

(1) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that shall have been selected, endorsed or recommended by the Relevant Governmental Body, to be added to the applicable replacement rate to account for the effects of the transition to the Replacement Benchmark for the applicable Interest Period and corresponding to the Corresponding Period, as of the applicable Reference Time, provided that:

(2) if the Replacement Benchmark Spread cannot be determined in accordance with clause (1) above as of the applicable Reference Time, then the Replacement Benchmark Spread shall be the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that shall have been selected by ISDA as the spread adjustment for the fallback to [USD LIBOR in the 2006 ISDA Definitions][such Benchmark], for the applicable Interest Period and corresponding to the Corresponding Period, as of the applicable Reference Time;

[in each case as displayed on a screen or other information service that publishes such Replacement Benchmark Spread from time to time as selected by the Administrative Agent in its reasonable discretion]. If the Replacement Benchmark Spread cannot be determined in accordance with clauses (1) or (2) above then it cannot be determined for purposes of clauses (1), (2) or (3) of the definition of "Replacement Benchmark".

"***SOFR***" means the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"***Term SOFR***" means the forward-looking term SOFR rate, for a term equal to the applicable Interest Period, that is selected, endorsed or recommended as the replacement for such LIBO Rate by the Relevant Governmental Body [in each case as displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion].

Appendix III

SUMMARY OF THE PACED TRANSITION PLAN

To facilitate a smooth and orderly transition from USD LIBOR to SOFR, the ARRC published a plan (the Paced Transition Plan), which outlines the key milestones until the end of 2021.

The first step in the Paced Transition Plan, targeted for 2018 and early 2019, is focused on creating a baseline level of liquidity for derivatives contracts referencing SOFR. End users cannot be expected to choose or transition cash products to a benchmark that does not have at least a threshold level of liquidity in derivatives markets required for hedging of interest rate risk.

The second step planned for over the course of the year 2019 is increased trading activity in futures and overnight index swap ("OIS") markets which should foster accumulation of price histories that will help market participants develop an understanding of the term-structure dynamics of longer-dated exposures in SOFR. This would allow central counterparty clearing houses ("CCPs") to provide their members with a choice of clearing some instruments with discounting and price alignment interest based on SOFR by the first quarter of 2020. CCPs would then gradually lengthen the maturity of contracts allowed to clear into the new environment as liquidity in longer-term SOFR derivatives developed.

Finally, in 2021, once the initial steps of the Paced Transition Plan are successfully accomplished and liquid derivative markets referencing SOFR have developed, the final step in the Paced Transition Plan is the creation of forward-looking term reference rates based on SOFR-linked derivative markets. (While it is the last step in the Paced Transition Plan, it is very possible that the term reference rates will be developed well earlier than the end of 2021.) Availability of a forward-looking term structure for SOFR may be necessary to transition cash products from USD LIBOR to SOFR to ensure certainty of cashflows for retail and corporate end users. With the availability of SOFR term rates and liquid derivative markets, it is expected it will be possible to use SOFR for cash products before the end of 2021.

Subsequent to the publication of SOFR on April 3, 2018, a number of notable steps in line with the Paced Transition Plan have already been made by the industry. These include CME Group successfully launching 1-month and 3-month SOFR futures on May 7, 2018, clearing of SOFR OIS and basis swaps at LCH beginning July 18, 2018, the release of an "indicative" 3-month SOFR on July 19, 2018, the announcement that CME Group would clear SOFR swaps in the third quarter of 2018, and several SOFR bond issuances in July and August of 2018.

Appendix IV

SUMMARY OF ISDA'S APPROACH TO FALLBACKS FOR DERIVATIVES

At the request of the Financial Stability Board ("FSB") Official Sector Steering Group ("OSSG") ISDA intends to amend certain "floating rate options" in the 2006 ISDA Definitions to include fallbacks that would apply upon the permanent discontinuation of certain key IBORs, including USD LIBOR. As it has done previously, ISDA plans to amend the 2006 ISDA Definitions by publishing a "Supplement" (or "Supplements"). Upon publication of the Supplement for the relevant IBOR, transactions incorporating the 2006 ISDA Definitions that are entered into on or after the date of the Supplement (*i.e.,* the date that the 2006 ISDA Definitions are amended) will include the amended floating rate option (*i.e.,* the floating rate option with the fallback). Transactions entered into prior to the date of the Supplement (so called "legacy derivative contracts") will continue to be based on the 2006 ISDA Definitions as they existed before they were amended pursuant to the Supplement, and therefore will not include the amended floating rate option with the fallback.

ISDA also expects to publish a protocol (or protocols) to facilitate multilateral amendments to include the amended floating rate options, and therefore the fallbacks, in legacy derivative contracts for adhering parties. The fallbacks included in legacy derivative contracts by adherence to the protocol will be exactly the same as the fallbacks included in new transactions that incorporate the 2006 ISDA Definitions.

ISDA hopes to implement fallbacks for derivatives as described above in 2019. Exact timing is still uncertain and implementation timing may not be the same for all IBORs.

In July of 2018, ISDA launched a global consultation on certain aspects of fallbacks for derivatives referencing key IBORs. The purpose of the ISDA consultation is to determine the technical approach for calculating adjustments to the underlying fallback rates and spread adjustments that would apply if an IBOR is permanently discontinued and derivatives fallbacks are triggered. While the ISDA consultation pertains to GBP, JPY and CHF LIBOR derivatives, it will inform a subsequent consultation for USD LIBOR-based derivatives. In its outstanding consultation, ISDA has also encouraged market participants to give preliminary feedback on USD LIBOR in their responses, which will be accepted until October 12th.

As explained in ISDA's FAQs on the pending consultation, it is intended that the same fallback rate will apply to all tenors of a particular IBOR even though the fallback rates are overnight rates and the IBORs have a variety of terms. However, to account for the move from a "term" rate (*i.e.*, the IBOR) to an overnight "risk-free" rate (*i.e.,* the overnight RFRs), the fallbacks ISDA implements will apply an adjustment to the relevant overnight RFR so that the "adjusted RFR" is more comparable to the relevant IBOR. Based on the approaches under consideration, the adjusted RFR will be calculated based on an overnight version of the rate (*e.g.*, a rate compounded in arrears or advance for the relevant period, a spot overnight rate, or a convexity-adjusted overnight rate). Therefore derivatives fallbacks will not be to forward-looking term rates, irrespective of whether the ARRC recommends a forward-looking term rate for SOFR or any of the other risk-free rate working groups recommend forward-looking term rates for the identified alternative risk-free rates in other currencies.

The ISDA consultation also requests feedback on the approach for calculating the spread adjustment that would apply to the adjusted RFR if the derivatives fallbacks are triggered. ISDA anticipates that a third party vendor will eventually publish the spread adjustment. This spread adjustment will generally be "static" and will become set at the time of the trigger. However, it is important to note that the fallbacks will not apply (and the spread adjustment will therefore not be applicable) until the actual IBOR cessation date (if later than the time of the announcement or publication of information triggering the fallbacks).

The three methods under consideration in the ISDA consultation for calculating the spread adjustment include: (i) a forward approach that takes the difference between the forward curve for the IBOR and the forward curve for the relevant RFR; (ii) a historical mean or median approach that takes the historical difference between the IBOR and the relevant RFR over a long period; and (iii) a simple spot spread approach that would take the difference between the two rates at the time the fallback is triggered. The ISDA consultation sets out the details of each approach.

As noted above, ISDA is amending the 2006 ISDA Definitions to include fallbacks that would apply upon a *permanent discontinuation* of the relevant IBOR. Market participants that reference IBORs in derivatives and other financial contracts may decide to include contractual triggers pursuant to which their contracts would move to different rates prior to such time. Additionally, regulation in the European Union (and potentially in other jurisdictions) gives certain regulators the right to prohibit use of IBORs by market participants subject to such regulation, even if the IBORs continue to be published. Any such voluntary or mandatory amendments that occur prior to a permanent discontinuation are beyond the scope of the fallbacks that ISDA is implementing in the 2006 ISDA Definitions and therefore beyond the scope of ISDA's work to identify an approach for calculating spread adjustments for derivatives fallbacks.

For more information about the ISDA Consultation, including specific descriptions of the approaches under consideration, see the consultation and related FAQs.

Appendix V

GLOSSARY OF TERMS

Definitions Pertaining to Fallback Approaches

"*Fallback*" is the contractual provisions that set forth the means by which a financial contract would transition from LIBOR to a new benchmark rate. A fallback typically contains four components: A trigger (which defines the event that starts the transition process), a new benchmark reference rate (such as SOFR), a replacement benchmark spread (which is meant to approximately compensate the difference between LIBOR and the new benchmark reference rate) and, in certain approaches, an amendment protocol.

"*Amendment Approach*" is a fallback approach that would uses loans' flexibility to provide a streamlined amendment mechanism for negotiating a replacement benchmark. It is similar to the "LIBOR replacement" language that has developed in the syndicated loan market in the past year, but offers additional specificity with respect to potential replacement benchmark rates, replacement benchmark spreads and lender votes. It maximizes flexibility and it also does not rely on a rate (such as term SOFR) and spread adjustment methodology that does not yet exist. However, it may not be feasible to use the amendment approach if thousands of loans must be amended simultaneously due to LIBOR cessation. Additionally, the amendment approach may create the opportunity for different market participants to game the outcome in in different market environments.

"*Hardwired Approach*" is a fallback approach that defines all terms at the inception of a credit agreement. The trigger events, fallback rate and replacement benchmark spread are all defined upfront, creating clarity of outcome in the event of LIBOR cessation. Because the hardwired approach does not rely on amendments, it should be possible to transition thousands of loans simultaneously. Additionally, because terms are agreed upfront, there should be limited ability for participants to game the outcome. However, the hardwired approach relies on components – such as Term SOFR and Replacement Floating Rate Spread – which do not currently exist. In the event that certain components do not exist, the hardwired approach falls back to an amendment process.

Definitions Pertaining to Reference Rates and Spreads

"***SOFR***" means the daily Secured Overnight Financing Rate provided by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website. It is the combination of three overnight repo rates that use U.S. Treasuries as collateral. SOFR differs from LIBOR in that LIBOR contains an element of bank credit risk, whereas SOFR is presumed to be relatively risk-free.

"*Term SOFR*" means the forward-looking term SOFR rate, for a term equal to the applicable Interest Period, that is selected, endorsed or recommended as the replacement for such LIBO Rate by the Relevant Governmental Body. Term SOFR does not currently exist, but is scheduled to be implemented no later than 2021 and there is the potential that it will exist much earlier.

"***Interpolated SOFR***" means, at any time, for any Interest Period, the rate per annum determined by the Administrative Agent to be equal to the rate that results from interpolating on a linear basis between: (a) Term SOFR for the longest period (for which Term SOFR is available) that is shorter than the Impacted SOFR Interest Period; and (b) Term SOFR for the shortest period (for which Term SOFR is available) that exceeds the Impacted SOFR Interest Period.

"*Compounded SOFR*" means, for the applicable Interest Period, a compounded average of daily SOFR as published by the Federal Reserve Bank of New York or any entity that assumes responsibility for publishing such rate. Compounded SOFR may be either: (i) calculated at the start of the interest period using the historical Compounded SOFR rate for the period that ends immediately prior to that date (this payment structure is often termed "in advance" since the payment obligation is determined in advance) or (ii) calculated over the relevant interest period with a lock up period prior to the end of the interest period, in which case the rate will not be known at the start of the interest period (this structure is often termed "in arrears").

"*LIBOR*" means the London Interbank Offered Rate, a proxy for the rate at which banks theoretically could lend unsecured to each other. LIBOR differs from SOFR in that LIBOR contains an element of bank credit risk, whereas SOFR is considered to be relatively credit risk free.

"*Replacement Benchmark Spread*" means a spread adjustment meant to approximately compensate for the difference between LIBOR and a replacement benchmark rate. This spread is ***not*** intended to be an ongoing, dynamic spread adjustment.

"*Basis Risk*" means the financial risk that offsetting hedges or arbitraged investments will not move in lockstep with each other. This imperfect correlation between the two positions creates the potential for excess gains or losses in a hedging strategy, thus adding risk to the position.

<u>Definitions Pertaining to Transition</u>

"***Trigger***" means an event that signals the transition from LIBOR to a new reference rate. Examples of proposed triggers include LIBOR cessation (or statement of LIBOR cessation), LIBOR not being published for a period of time, or the announcement that LIBOR is no longer representative. In addition to cessation- or discontinuance-related triggers, the consultation considers "pre-cessation" triggers and "opt-in" triggers, whereby parties can initiate a transition to a new reference rate, even if LIBOR continues to exist and be representative.

*"**Benchmark Discontinuance Event**"* indicates the current or upcoming discontinuance of a benchmark. This can include an announcement that the benchmark has or will cease, the insolvency of the administrator, the cessation of publishing of the benchmark, the statement that such benchmark has or will invoke an insufficient submissions policy or a statement by a relevant regulator that a benchmark is no longer representative.