

Board of Governors of the Federal Reserve System

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# Regulation ZZ Regulations Implementing the Adjustable Interest Rate (LIBOR) Act

12 CFR 253; effective February 27, 2023



# Regulation ZZ

## Regulations Implementing the Adjustable Interest Rate (LIBOR) Act

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Section	
253.1	Authority, purpose, and scope
253.2	Definitions
253.3	Applicability
253.4	Board-selected benchmark replacements
253.5	Benchmark replacement conforming changes
253.6	Preemption
253.7	Continuity of contract and safe harbor

Appendix A—ISDA protocol

AUTHORITY: 12 U.S.C. 5801 *et seq.*

### 3-4200

#### SECTION 253.1—Authority, Purpose, and Scope

(a) *Authority.* The Board of Governors of the Federal Reserve System (Board) has issued this part (Regulation ZZ) under the authority of Public Law 117-103, division U (the “Adjustable Interest Rate (LIBOR) Act”), codified at 12 U.S.C. 5801 *et seq.*

(b) *Purpose.* The purposes of the Adjustable Interest Rate (LIBOR) Act are to establish a clear and uniform process, on a nationwide basis, for replacing the overnight and one-, three-, six-, and 12-month tenors of U.S. dollar LIBOR in existing contracts that do not provide for the use of a clearly defined or practicable replacement benchmark rate; to preclude litigation related to such existing contracts; to allow existing contracts that reference LIBOR but provide for the use of a clearly defined and practicable replacement rate to operate according to their terms; and to address LIBOR references in federal law.<sup>1</sup> This part implements the statute by defining terms used in the statute and identifying Board-selected benchmark replacements for LIBOR contracts.

(c) *Scope.* As described in section 253.3, the

<sup>1</sup> The act does not affect the ability of parties to use any appropriate benchmark rate in new contracts.

Adjustable Interest Rate (LIBOR) Act and this part apply by their terms to existing contracts governed by federal law or the law of any state that reference the overnight and one-, three-, six-, and 12-month tenors of U.S. dollar LIBOR and do not have fallback provisions providing for the use of a clearly defined and practicable replacement benchmark rate following the LIBOR replacement date, unless the parties to that contract agree in writing that the contract is not subject to the Adjustable Interest Rate (LIBOR) Act. This part does not apply to or affect existing or prospective contracts that do not reference the overnight or one-, three-, six-, or 12-month tenors of U.S. dollar LIBOR, and except as provided in section 253.3(a)(1)(iii) and (c), generally does not apply to or affect LIBOR contracts that have fallback provisions providing for the use of a clearly defined and practicable replacement benchmark for LIBOR (either directly or through selection by a determining person), even if that rate differs from the otherwise applicable Board-selected benchmark replacement. Any determining person’s selection of the applicable Board-selected benchmark replacement pursuant to section 253.3(c) is subject to sections 253.4, 253.5 (including any benchmark replacement conforming changes made by a calculating person), 253.6, and 253.7.

### 3-4201

#### SECTION 253.2—Definitions

*30-day Average SOFR* means the 30-calendar-day compounded average of SOFR, as published by the Federal Reserve Bank of New York or any successor administrator.

*90-day Average SOFR* means the 90-calendar-day compounded average of SOFR, as published by the Federal Reserve Bank of New York or any successor administrator.

*Benchmark* means an index of interest rates or dividend rates that is used, in whole or in part, as the basis of or as a reference for

calculating or determining any valuation, payment, or other measurement.

*Benchmark administrator* means a person that publishes a benchmark for use by third parties.

*Benchmark replacement* means a benchmark, or an interest rate or dividend rate (which may or may not be based in whole or in part on a prior setting of LIBOR) to replace LIBOR or any interest rate or dividend rate based on LIBOR, whether on a temporary, permanent, or indefinite basis, under or with respect to a LIBOR contract.

*Benchmark replacement conforming change* means any technical, administrative, or operational change, alteration, or modification that:

- (1) The Board determines, in its discretion, would address one or more issues affecting the implementation, administration, and calculation of the Board-selected benchmark replacement in LIBOR contracts; or
- (2) Solely with respect to a LIBOR contract that is not a consumer loan, in the reasonable judgment of a calculating person, are otherwise necessary or appropriate to permit the implementation, administration, and calculation of the Board-selected benchmark replacement under or with respect to a LIBOR contract after giving due consideration to any benchmark replacement conforming changes determined by the Board under paragraph (1) of this definition.

*Board-selected benchmark replacement* means the benchmark replacements identified in section 253.4.

*Business day* means any day except for:

- (1) A Saturday;
- (2) A Sunday;
- (3) A day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States Government securities; or
- (4) A day on which the Federal Reserve Bank of New York, with advance notice, chooses not to publish its Treasury repurchase agreement reference rates if partici-

pants in the Treasury repurchase agreement market broadly expect to treat that day as a holiday.

*Calculating person* means, with respect to any LIBOR contract, any person, including the determining person, responsible for calculating or determining any valuation, payment, or other measurement based on a benchmark.

*CME Term SOFR* means the CME Term SOFR Reference Rates published for one-, three-, six-, and 12-month tenors as administered by CME Group Benchmark Administration, Ltd. (or any successor administrator thereof).

*Consumer* has the same meaning as in section 103 of the Truth in Lending Act (15 U.S.C. 1602).

*Consumer loan* means a consumer credit transaction.

*Credit* has the same meaning as in section 103 of the Truth in Lending Act (15 U.S.C. 1602).

*Derivative transaction* means a contract that would satisfy the criteria to be a “Protocol Covered Document” under the International Swaps and Derivatives Association (ISDA) protocol (*see* appendix A to this part) but for the fact that one or more parties to such contract is not an “Adhering Party” as such term is used in the ISDA protocol, provided that, for purposes of this definition, “Protocol Effective Date” as such term is used in the ISDA protocol means the LIBOR replacement date for the relevant LIBOR contract.

*Derivative transaction fallback observation day* means the day that is two payment business days prior to the payment date for the relevant calculation period.

*Determining person* means, with respect to any LIBOR contract, any person with the sole authority, right, or obligation, including on a temporary basis (as identified by the LIBOR contract or by the governing law of the LIBOR contract, as appropriate) to determine a benchmark replacement, whether or not the person’s authority, right, or obligation is subject to any contingencies specified in the

LIBOR contract or by the governing law of the LIBOR contract.

*Fallback provisions* means terms in a LIBOR contract for determining a benchmark replacement, including any terms relating to the date on which the benchmark replacement becomes effective.

*Federal Housing Finance Agency (FHFA)-regulated entity* has the same meaning as “regulated entity” in 12 U.S.C. 4502(20).

*Federal Family Education Loan Program (FFELP) asset-backed securitization (ABS)* means an asset-backed security for which more than 50 percent of the collateral pool consists of FFELP loans, as reported in the most recent servicer report available on the LIBOR replacement date.

*FHFA-regulated-entity contract* means a LIBOR contract that is a commercial or multifamily mortgage loan that has been purchased or guaranteed, in whole or in part, by an FHFA-regulated entity, or for which an FHFA-regulated entity is identified as a party in the transaction documents, and that is:

- (1) A commercial or multifamily mortgage-backed security (other than a security backed by consumer loans);
- (2) A collateralized mortgage obligation;
- (3) A credit risk transfer transaction; or
- (4) A Federal Home Loan Bank advance.

*ISDA protocol* means the ISDA 2020 IBOR Fallbacks Protocol published by the International Swaps and Derivatives Association, Inc., on October 23, 2020, and minor or technical amendments thereto (*see* appendix A to this part).

*LIBOR*, as used in this part:

- (1) Means the overnight and one-, three-, six-, and 12-month tenors of U.S. dollar LIBOR (formerly known as the London interbank offered rate) as administered by ICE Benchmark Administration Limited (or any predecessor or successor administrator thereof); and
- (2) Does not include the one-week or two-month tenors of U.S. dollar LIBOR.

*LIBOR contract* means any contract, agreement, indenture, organizational document,

guarantee, mortgage, deed of trust, lease, security (whether representing debt or equity, including any interest in a corporation, a partnership, or a limited liability company), instrument, or other obligation or asset that, by its terms, uses LIBOR as a benchmark.

*LIBOR replacement date* means the first London banking day after June 30, 2023, unless the Board determines that any LIBOR tenor will cease to be published or cease to be representative on a different date.

*Relevant benchmark administrator* means:

- (1) Bloomberg Index Services Limited with respect to Fallback Rate (SOFR);
- (2) CME Group Benchmark Administration, Ltd. with respect to CME Term SOFR;
- (3) Refinitiv Limited with respect to the Board-selected benchmark replacement for a LIBOR contract that is a consumer loan; and
- (4) The Federal Reserve Bank of New York with respect to 30-day Average SOFR and 90-day Average SOFR.

*Security* has the same meaning as in section 2(a) of the Securities Act of 1933 (15 U.S.C. 77b(a)).

*SOFR* means the Secured Overnight Financing Rate published by the Federal Reserve Bank of New York or any successor administrator.

*State* means any state, commonwealth, territory, or possession of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, or the United States Virgin Islands.

### 3-4202

#### SECTION 253.3—Applicability

(a) *General requirement.* On and after the LIBOR replacement date, the applicable Board-selected benchmark replacement shall be the benchmark replacement for the following LIBOR contracts, except to the extent that an exception in paragraph (b) of this section applies:

- (1) A LIBOR contract with one of the following characteristics as of the LIBOR re-

placement date, after giving effect to paragraph (a)(2) of this section:

- (i) The LIBOR contract contains no fallback provisions;
- (ii) The LIBOR contract contains fallback provisions that identify neither—
  - (A) A specific benchmark replacement; nor
  - (B) A determining person; or
- (iii) The LIBOR contract contains fallback provisions that identify a determining person, but the determining person has not selected a benchmark replacement by the earlier of the LIBOR replacement date and the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract, for any reason.

(2) For purposes of this part, on the LIBOR replacement date, any reference in any fallback provisions of a LIBOR contract to the following shall be disregarded as if not included in the fallback provisions of such LIBOR contract and shall be deemed null and void and without any force or effect:

- (i) A benchmark replacement that is based in any way on any LIBOR value, except to account for the difference between LIBOR and the benchmark replacement; or
- (ii) A requirement that a person (other than a benchmark administrator) conduct a poll, survey, or inquiries for quotes or information concerning interbank lending or deposit rates (including, but not limited to, Eurodollar deposit or lending rates).

(b) *Exceptions.* Notwithstanding paragraph (a) of this section, this part shall not apply to—

- (1) Any LIBOR contract that the parties have agreed in writing shall not be subject to the Adjustable Interest Rate (LIBOR) Act;
- (2) Any LIBOR contract that contains fallback provisions that identify a benchmark replacement that is not based in any way on any LIBOR value (including the prime rate or the effective federal funds rate) after application of paragraph (a)(2) of this section; or

(3) Except as provided in paragraph (a)(2) or (a)(1)(iii) of this section, any LIBOR contract subject to paragraph (c) of this section as to which a determining person does not elect to use a Board-selected benchmark replacement pursuant to paragraph (c).

(c) *Selection of Board-selected benchmark replacement by determining person.* Except for any LIBOR contract described in paragraph (b)(2) of this section, a determining person may select the Board-selected benchmark replacement specified in section 253.4 as the benchmark replacement for a LIBOR contract. Any such selection shall be—

- (1) Irrevocable;
- (2) Made by the earlier of the LIBOR replacement date and the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract; and
- (3) Used in any determinations of the benchmark under or with respect to the LIBOR contract occurring on and after the LIBOR replacement date.

(d) *Other provisions of LIBOR contracts unchanged.* Except as provided in paragraph (a)(2) of this section and in section 253.5, where the applicable Board-selected benchmark replacement becomes the benchmark replacement for a LIBOR contract on and after the LIBOR replacement date pursuant to paragraph (a) or (c) of this section, all other provisions of such contract shall not be altered or impaired and shall apply to such contract using the Board-selected benchmark replacement, including but not limited to:

- (1) Any provision specifying the date for determining a benchmark, except in the case of derivative transactions, which are subject to section 253.4(a)(2), and Federal Home Loan Bank advances, which are subject to section 253.4(b)(3)(ii)(B);
- (2) Any provision specifying rounding conventions for a benchmark;
- (3) Any provision referencing LIBOR or any LIBOR value prior to the LIBOR replacement date (including any provision requiring a person to look back to a LIBOR value as of a date preceding the LIBOR replacement date);
- (4) Any provision applying any cap, floor, modifier, or spread adjustment to which

LIBOR had been subject pursuant to the terms of a LIBOR contract;

(5) Any provision of federal consumer financial law that—

(i) Requires creditors to notify borrowers regarding a change-in-terms; or

(ii) Governs the reevaluation of rate increases on credit card accounts under open-ended (not home-secured) consumer credit plans; or

(6) Except as provided in 12 U.S.C. 5804(c), the rights or obligations of any person, or the authorities of any agency, under federal consumer financial law, as defined in 12 U.S.C. 5481.

the requirements of this part that is not a derivative transaction shall use the following benchmark replacements:

(1) For a LIBOR contract that is not a consumer loan, an FHFA-regulated-entity contract, or a FFELP ABS—

(i) In place of overnight LIBOR, the benchmark replacement shall be SOFR plus the tenor spread adjustment identified in paragraph (c)(1) of this section; and

(ii) In place of one-, three-, six-, or 12-month tenors of LIBOR, the benchmark replacement shall be the corresponding one-, three-, six-, or 12-month CME Term SOFR plus the applicable tenor spread adjustment identified in paragraph (c) of this section.

(2) For a LIBOR contract that is a consumer loan—

(i) During the one-year period beginning on the LIBOR replacement date:

(A) In place of overnight LIBOR, the benchmark replacement shall be SOFR plus an amount that transitions linearly for each business day during that period from:

(1) The difference between SOFR and overnight LIBOR determined as of the day immediately before the LIBOR replacement date; to

(2) The tenor spread adjustment identified in paragraph (c)(1) of this section; or

(B) In place of the one-, three-, six-, or 12-month tenors of LIBOR, the benchmark replacement shall be the corresponding one-, three-, six-, or 12-month CME Term SOFR plus an amount that transitions linearly for each business day during that period from:

(1) The difference between the relevant CME Term SOFR and the relevant LIBOR tenor determined as of the day immediately before the LIBOR replacement date; to

(2) The applicable tenor spread adjustment identified in paragraph (c) of this section.

(ii) On the date one year after the LIBOR replacement date and thereafter:

### 3-4203

#### SECTION 253.4—Board-Selected Benchmark Replacements

(a) *Derivative transactions.*

(1) A LIBOR contract subject to the requirements of this part that is a derivative transaction shall use the benchmark replacement identified as the “Fallback Rate (SOFR)” in the ISDA protocol (*see* appendix A to this part) for each day on which LIBOR would ordinarily be observed occurring on or after the LIBOR replacement date. For clarity, the reference to “spread relating to U.S. dollar LIBOR” in the definition of “Fallback Rate (SOFR)” in the ISDA protocol is equal to the applicable tenor spread adjustment identified in paragraph (c) of this section.

(2) The benchmark replacement used to calculate the payment due for the relevant calculation period shall be determined on the derivative transaction fallback observation day in respect of the day that, under the LIBOR contract, would have been used to determine the LIBOR-based rate that is being replaced or, if the Board-selected benchmark replacement in respect of that day is not available on the derivative transaction fallback observation day, the most recently available publication on the derivative transaction fallback observation day shall be used.

(b) *All other transactions.* On the LIBOR replacement date, a LIBOR contract subject to

- (A) In place of overnight LIBOR, the benchmark replacement shall be SOFR plus the tenor spread adjustment identified in paragraph (c)(1) of this section; and
- (B) In place of one-, three-, six-, or 12-month tenors of LIBOR, the benchmark replacement shall be the corresponding one-, three-, six-, or 12-month CME Term SOFR plus the applicable tenor spread adjustment identified in paragraph (c) of this section.
- (iii) The rates published or provided by Refinitiv Limited as “USD IBOR Cash Fallbacks” for “Consumer” products shall be deemed equal to the rates identified in paragraphs (b)(2)(i) and (ii) of this section.
- (3) For a LIBOR contract that is an FHFA-regulated-entity contract—
- (i) For an FHFA-regulated-entity contract that is not a Federal Home Loan Bank advance—
- (A) In place of overnight LIBOR, the benchmark replacement shall be SOFR plus the tenor spread adjustment identified in paragraph (c)(1) of this section; and
- (B) In place of one-, three-, six-, or 12-month tenors of LIBOR, the benchmark replacement shall be the 30-day Average SOFR plus the applicable tenor spread adjustment identified in paragraph (c) of this section.
- (ii) For an FHFA-regulated-entity contract that is a Federal Home Loan Bank advance—
- (A) The benchmark replacement shall be the “Fallback Rate (SOFR)” in the ISDA protocol (*see* appendix A to this part) for each day on which LIBOR would ordinarily be observed occurring on or after the LIBOR replacement date. For clarity, the reference to “spread relating to U.S. dollar LIBOR” in the definition of “Fallback Rate (SOFR)” in the ISDA protocol is equal to the applicable tenor spread adjustment identified in paragraph (c) of this section.
- (B) The benchmark replacement used to calculate the payment due for the relevant calculation period shall be determined on the derivative transaction fallback observation day in respect of the day that, under the LIBOR contract, would have been used to determine the LIBOR-based rate that is being replaced or, if the Board-selected benchmark replacement in respect of that day is not available on the derivative transaction fallback observation day, the most recently available publication on the derivative transaction fallback observation day shall be used.
- (4) For a LIBOR contract that is a FFELP ABS—
- (i) In place of one-month LIBOR, the benchmark replacement shall be 30-day Average SOFR plus the tenor spread adjustment identified in paragraph (c)(2) of this section;
- (ii) In place of three-month LIBOR, the benchmark shall be 90-day Average SOFR plus the tenor spread adjustment identified in paragraph (c)(3) of this section; and
- (iii) In place of six- or 12-month tenors of LIBOR, the benchmark replacement shall be 30-day Average SOFR plus the tenor spread adjustment identified in paragraph (c)(4) or (5) of this section, as applicable.
- (c) *Tenor spread adjustments.* The following tenor spread adjustments shall be included as part of the Board-selected benchmark replacements as indicated in paragraphs (a) and (b) of this section:
- (1) 0.00644 percent for overnight LIBOR;
  - (2) 0.11448 percent for one-month LIBOR;
  - (3) 0.26161 percent for three-month LIBOR;
  - (4) 0.42826 percent for six-month LIBOR; and
  - (5) 0.71513 percent for 12-month LIBOR.

3-4204

### SECTION 253.5—Benchmark Replacement Conforming Changes

- (a) *Benchmark replacement conforming changes generally.*

(1) If the Board-selected benchmark replacement becomes the benchmark replacement for a LIBOR contract pursuant to section 253.3(a) or (c), all applicable benchmark replacement conforming changes shall become an integral part of the LIBOR contract.

(2) Paragraph (b) of this section establishes specific benchmark replacement conforming changes. The Board may, in its discretion, publish additional benchmark replacement conforming changes by regulation or order.

(3) Solely with respect to any LIBOR contract that is not a consumer loan, a calculating person may make any additional technical, administrative, or operational changes, alterations, or modifications that, in that person's reasonable judgment, would be necessary or appropriate to permit the implementation, administration, and calculation of the Board-selected benchmark replacement under or with respect to a LIBOR contract after giving due consideration to any changes, alterations, or modifications otherwise required by the Board, without any requirement to obtain consent from any other person prior to the adoption of such benchmark replacement conforming changes.

*(b) Specified benchmark replacement conforming changes.*

(1) Any reference to a specified source for LIBOR (such as a particular newspaper, website, or screen) shall be replaced with the publication of the applicable Board-selected benchmark replacement (inclusive or exclusive of the relevant tenor spread adjustment identified in section 253.4(c)) by either the relevant benchmark administrator for the applicable Board-selected benchmark replacement or any third party authorized by the relevant benchmark administrator to publish the applicable Board-selected benchmark replacement.

(2) Any reference to a particular time of day for determining LIBOR (such as 11:00 a.m. London time) shall be replaced with the standard publication time for the applicable Board-selected benchmark replacement (inclusive or exclusive of the relevant tenor spread adjustment identified in section

253.4(c)), as established by the relevant benchmark administrator.

(3) Any provision of a LIBOR contract requiring use of a combination (such as an average) of LIBOR values over a period of time that spans the LIBOR replacement date shall be modified to provide that the combination shall be calculated consistent with that contractual provision using:

- (i) The applicable LIBOR for any date prior to the LIBOR replacement date; and
- (ii) The applicable Board-selected benchmark replacement rate for any date on or following the LIBOR replacement date, respectively.

(4) Subject to section 253.4(a) and (b)(3)(ii), to the extent a Board-selected benchmark replacement is not available or published on a particular day indicated in the LIBOR contract as the determination date, the most recently available publication of the Board-selected benchmark replacement will apply.

**3-4205**

**SECTION 253.6—Preemption**

Pursuant to section 107 of the Adjustable Interest Rate (LIBOR) Act, 12 U.S.C. 5806, this part supersedes any provision of any state or local law, statute, rule, regulation, or standard—

(a) Relating to the selection or use of a benchmark replacement or related conforming changes; or

(b) Expressly limiting the manner of calculating interest, including the compounding of interest, as that provision applies to the selection or use of a Board-selected benchmark replacement or benchmark replacement conforming changes.

**3-4206**

**SECTION 253.7—Continuity of Contract and Safe Harbor**

(a) The provisions of section 105(a)-(d) of the Adjustable Interest Rate (LIBOR) Act, 12 U.S.C. 5804(a)-(d), shall apply to any LIBOR contract for which the Board-selected bench-



mark replacement becomes the benchmark replacement pursuant to section 253.3(a) or (c).

(b) Nothing in this part is intended to alter or modify the availability or effect of the provisions of section 105(e) of the Adjustable Interest Rate (LIBOR) Act, 12 U.S.C. 5804(e).

### 3-4220

#### APPENDIX A—ISDA Protocol

For ease of reference, the Board is republishing, with permission, the full text of the ISDA 2020 IBOR Fallbacks Protocol (ISDA protocol), published on October 23, 2020, by the International Swaps and Derivatives Association, Inc. The full text of the ISDA protocol follows:

##### **ISDA 2020 IBOR Fallbacks Protocol**

*Published on October 23, 2020*

By the International Swaps and Derivatives Association, Inc.

The International Swaps and Derivatives Association, Inc. (ISDA) has published this ISDA 2020 IBOR Fallbacks Protocol (this Protocol) to enable parties to Protocol Covered Documents to amend the terms of each such Protocol Covered Document to (i) in respect of a Protocol Covered Document which incorporates, or references a rate as defined in, a Covered ISDA Definitions Booklet, include in the terms of such Protocol Covered Document either the terms of, or a particular defined term included in, the Supplement to the 2006 ISDA Definitions, finalized on October 23, 2020 and to be published by ISDA and effective on January 25, 2021 (the IBOR Fallbacks Supplement) and (ii) in respect of a Protocol Covered Document which otherwise references a Relevant IBOR, include in the terms of such Protocol Covered Document new fallbacks for that Relevant IBOR.

Accordingly, a party may adhere to this Protocol and be bound by its terms by completing and delivering a letter substantially in the form of Exhibit 1 to this Protocol (an Adherence Letter) to ISDA, as agent, as described below (each such party, an Adhering Party).

##### **1. Adherence to and Effectiveness of the Protocol**

(a) By adhering to this Protocol in the manner set forth in this paragraph 1, each Adhering Party agrees, in consideration of the mutual promises and covenants contained herein, that the terms of each Protocol Covered Document between such Adhering Party and any other Adhering Party will be amended in accordance with the terms and subject to the conditions set forth in the Attachment hereto.

(b) Adherence to this Protocol will be evidenced by the execution and online delivery, in accordance with this paragraph, to ISDA, as agent, of an Adherence Letter (in accordance with subparagraphs 1(b)(i) to 1(b)(iii) below). ISDA shall have the right, in its sole and absolute discretion, upon at least thirty calendar days' notice on the "ISDA 2020 IBOR Fallbacks Protocol" section of its website at [www.isda.org](http://www.isda.org) (or by other suitable means), to designate a closing date of this Protocol (such closing date, the Cut-off Date). After the Cut-off Date, ISDA will not accept any further Adherence Letters to this Protocol.

(i) Each Adhering Party will access the "Protocols" section of the ISDA website at [www.isda.org](http://www.isda.org) to enter information online that is required to generate its form of Adherence Letter and will submit payment of any applicable fee. Either by directly downloading the populated Adherence Letter from the Protocol system or upon receipt via email of the populated Adherence Letter, each Adhering Party will sign and upload the signed Adherence Letter as a PDF (portable document format) attachment into the Protocol system. Once the signed Adherence Letter has been approved and accepted by ISDA, such Adhering Party will receive an email confirmation of the Adhering Party's adherence to this Protocol.

(ii) A conformed copy of each Adherence Letter containing, in place of each signature, the printed or typewritten name of each signatory will be published by ISDA so that it may be viewed by all Adhering Parties. Each Adhering Party agrees that, for evidentiary purposes, a conformed copy of an Adherence Letter certified by the

General Counsel (or other appropriate officer) of ISDA will be deemed to be an original.

(iii) Each Adhering Party agrees that the determination of the date and time of acceptance of any Adherence Letter will be determined by ISDA in its absolute discretion. Any Adherence Letter which is dated and delivered to ISDA before the date on which this Protocol is published will be deemed to have been delivered on the date on which this Protocol is published.

(c) As between two Adhering Parties, the agreement to make the amendments contemplated by this Protocol, on the terms and conditions set forth in this Protocol, will be effective on the Implementation Date and that agreement will form part of each Protocol Covered Document from the later of the Implementation Date and the related Protocol Covered Document Date. The amendments contemplated by this Protocol shall be made on the later of (i) the Implementation Date and (ii) the Protocol Effective Date.

(A) The Protocol Effective Date with respect to a Protocol Covered Document shall be January 25, 2021.

(B) The Implementation Date with respect to any two Adhering Parties shall be the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of such two Adhering Parties to adhere except that:

(I) In respect of any Protocol Covered Document into which an Agent has entered on behalf of a Client, subject to paragraph 3(m) below, the Implementation Date shall be the date specified in subparagraph 3(g)(i)(A), subparagraph 3(g)(i)(B), subparagraph 3(g)(i)(C), paragraph 3(h), paragraph 3(i) or paragraph 3(j) below, as applicable; and

(II) In respect of any Non-Agent Executed Protocol Covered Document, subject to paragraph 3(m) below, the Implementation Date shall be the day specified in paragraph 3(l) below.

Acceptance by ISDA of a subsequent or revised Adherence Letter from either

such Adhering Party will not have the effect of changing such Implementation Date.

(d) This Protocol is intended for use without negotiation, but without prejudice to any amendment, modification or waiver in respect of a Protocol Covered Document that the parties may otherwise effect in accordance with the terms of that Protocol Covered Document.

(i) In adhering to this Protocol, an Adhering Party may not specify additional provisions, conditions or limitations in its Adherence Letter.

(ii) Any purported adherence that ISDA, as agent, determines in good faith is not in compliance with this Protocol will be void and ISDA will inform the relevant party of such fact as soon as reasonably possible after making such determination.

(e) Each Adhering Party acknowledges and agrees that adherence to this Protocol is irrevocable, except that an Adhering Party may, after the Protocol Effective Date, deliver to ISDA, as agent, a notice substantially in the form of Exhibit 2 to this Protocol that is effective (determined pursuant to paragraph 3(f) below) on any Protocol Business Day (a Revocation Notice) to designate the next Revocation Date as the last date on which an Implementation Date can occur in respect of any Protocol Covered Document between the counterparty and such Adhering Party. Following the effective delivery of a Revocation Notice by an Adhering Party, this Protocol will not amend any Protocol Covered Document between that Adhering Party and another Adhering Party for which the Implementation Date would occur after the related Revocation Date.

(i) If an Agent adheres to this Protocol on behalf of a Client, then, if the Client effectively delivers a Revocation Notice in accordance with this paragraph 1(e), this Protocol will not amend any Protocol Covered Document between another Adhering Party and that Client entered into by that Client itself or by the Agent on behalf of that Client or any Non-Agent Executed Protocol Covered Document (if applicable), in each case, for which the Implementation Date would occur after the Revocation Date des-

igned as the last date on which an Implementation Date can occur in the Client's Revocation Notice.

(ii) If an Agent delivers a Revocation Notice in accordance with this paragraph 1(e) on behalf of a Client and the Client separately adheres to this Protocol directly rather than through the agency of an Agent, then the Revocation Notice delivered by the Agent will not prevent an Implementation Date from occurring after the Revocation Date in respect of any Protocol Covered Document into which the Client has entered with another Adhering Party (including through the Agent).

(iii) Subparagraph 1(e)(i), subparagraph 1(e)(ii) and subparagraph 1(e)(iii) are without prejudice to any amendment effected pursuant to this Protocol to any Protocol Covered Document between two Adhering Parties for which the Implementation Date occurred on or before the day on which that Revocation Date occurs or is deemed to occur, regardless of the date on which such Protocol Covered Document is entered into, and any such amendment shall be effective notwithstanding the occurrence or deemed occurrence of such Revocation Date.

(iv) Each Revocation Notice must be delivered by the means specified in paragraph 3(f) below.

(v) Each Adhering Party agrees that, for evidentiary purposes, a conformed copy of a Revocation Notice certified by the General Counsel or an appropriate officer of ISDA will be deemed to be an original.

(vi) Any purported revocation that ISDA, as agent, determines in good faith is not in compliance with this paragraph 1(e) will be void and ISDA will inform the relevant party of such fact as soon as reasonably possible after making such determination.

## 2. Representations and Undertakings

(a) As of the later of (i) the date on which an Adhering Party adheres to this Protocol in accordance with paragraph 1 above (which will be the date of acceptance by ISDA of an Adherence Letter from that Adhering Party (in accordance with paragraph 1(b) above)) and (ii) the Protocol Covered Document Date, such Adhering Party represents to each other

Adhering Party with which it has entered into a Protocol Covered Document (which representations will be deemed to be repeated on the Protocol Effective Date and the Implementation Date if one or both such dates are later than the date on which such Adhering Party adheres to this Protocol) each of the following matters:

(A) *Status*. It is, if relevant, duly organized and validly existing under the laws of the jurisdiction of its organization or incorporation and, if relevant under such laws, in good standing or, if it otherwise represents its status in or pursuant to the Protocol Covered Document, has such status.

(B) *Powers*. It has the power to execute and deliver the Adherence Letter and to perform its obligations under the Adherence Letter and the Protocol Covered Document as amended by the Adherence Letter and this Protocol (including the Attachment hereto), and has taken all necessary action to authorize such execution, delivery and performance.

(C) *No Violation or Conflict*. Such execution, delivery and performance do not violate or conflict with any law applicable to it, any provision of its constitutional documents, any order or judgment of any court or other agency of government applicable to it or any of its assets or any contractual restriction binding on or affecting it or any of its assets.

(D) *Consents*. All governmental and other consents that are required to have been obtained by it with respect to the Adherence Letter and the Protocol Covered Document, as amended by the Adherence Letter and this Protocol (including the Attachment hereto), have been obtained and are in full force and effect and all conditions of any such consents have been complied with.

(E) *Obligations Binding*. Its obligations under the Adherence Letter and the Protocol Covered Document, as amended by the Adherence Letter and this Protocol (including the Attachment hereto), constitute its legal, valid and binding obligations, enforceable in accordance with their respective terms (subject to appli-

cable bankruptcy, reorganization, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law)).

(F) *Credit Support*. Its adherence to this Protocol and any amendment contemplated by this Protocol (including the Attachment hereto) will not, in and of itself, adversely affect the enforceability, effectiveness or validity of any obligations owed, whether by it or by any third party, under any Credit Support Document or Third Party Credit Support Document in respect of its obligations relating to any Protocol Covered Document as amended by the Adherence Letter and this Protocol (including the Attachment hereto).

(b) Each Adhering Party agrees with each other Adhering Party with which it has entered into a Protocol Covered Document that each of the foregoing representations will be deemed, in the case of a Protocol Covered Document that is an ISDA Master Agreement, to be a representation for purposes of Section 5(a)(iv) and in the case of any other Protocol Covered Document, to be a representation for purposes of any analogous provisions of each such Protocol Covered Document, that is made by each Adhering Party as of the later of (i) the date on which such Adhering Party adheres to this Protocol in accordance with paragraph 1 above and (ii) the Protocol Covered Document Date and which is deemed repeated on the Protocol Effective Date and the Implementation Date if one or both such dates are later than the date on which such Adhering Party adheres to this Protocol.

(c) *Undertakings in respect of Protocol Covered Documents with Third Party Credit Support Documents*. With respect to Protocol Covered Documents with Third Party Credit Support Documents that expressly require the consent, approval, agreement, authorization or other action of a Third Party to be obtained, each Adhering Party whose obligations under such arrangements are secured, guaranteed or otherwise supported by such Third Party un-

dertakes to each other Adhering Party with which it has entered into such arrangements that it has obtained the consent (including by way of paragraph 2(d) below), approval, agreement, authorization or other action of such Third Party and that it will, upon demand, deliver evidence of such consent, approval, agreement, authorization or other action to such other Adhering Party.

(d) *Deemed Third Party Consent*. Each Adhering Party which is also a Third Party in relation to a Third Party Credit Support Document is hereby deemed to have consented to the amendments imposed by this Protocol on the Protocol Covered Document supported by such Third Party Credit Support Document.

### 3. Miscellaneous

(a) *Entire Agreement; Restatement; Survival*.

(i) This Protocol constitutes the entire agreement and understanding of the Adhering Parties with respect to its subject matter and supersedes all oral communication and prior writings (except as otherwise provided herein) with respect thereto. Each Adhering Party acknowledges that in adhering to this Protocol it has not relied on any oral or written representation, warranty or other assurance (except as provided for or referred to elsewhere in this Protocol or in the Attachment) and waives all rights and remedies which might otherwise be available to it in respect thereof, except that nothing in this Protocol will limit or exclude any liability of an Adhering Party for fraud.

(ii) Except for any amendment deemed to be made pursuant to this Protocol in respect of any Protocol Covered Document, all terms and conditions of each Protocol Covered Document will continue in full force and effect in accordance with its provisions as in effect immediately prior to the date on which it first becomes subject to this Protocol. Except as explicitly stated in this Protocol, nothing herein shall constitute a waiver or release of any rights of any Adhering Party under any Protocol Covered Document to which such Adhering Party is a party or a provider or recipient of credit support. This Protocol will, with respect to its subject matter, survive, and any amend-

ments made or deemed to be made pursuant to this Protocol will form a part of each Protocol Covered Document between the Adhering Parties, notwithstanding any statements in a Protocol Covered Document to the effect that such Protocol Covered Document constitutes the entire agreement and understanding between the parties to such Protocol Covered Document with respect to the subject of such Protocol Covered Document.

(b) *Exclusion of Agreements.* Notwithstanding anything in paragraph 1(a) above, with respect to any agreement between Adhering Parties, if the parties to such agreement have expressly stated in such agreement or otherwise agreed in writing that this Protocol shall not apply, then such agreement shall not be a Protocol Covered Document.

(c) *Amendments.* An amendment, modification or waiver in respect of the matters contemplated by this Protocol (including, for the avoidance of doubt, any amendment, modification or waiver relating to the alignment of a Protocol Covered Document with an instrument for which such Protocol Covered Document is intended to serve as a hedge (or vice versa)) will only be effective in respect of a Protocol Covered Document if made in accordance with the terms of the Protocol Covered Document and then only with effect between the parties to that Protocol Covered Document.

(d) *Headings.* The headings used in this Protocol and any Adherence Letter are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Protocol or any Adherence Letter.

(e) *Governing Law.* This Protocol and each Adherence Letter will, as between two Adhering Parties and in respect of each Protocol Covered Document between them, be governed by and construed in accordance with the laws of England and Wales, without reference to choice of law doctrine, provided that the amendments to each Protocol Covered Document shall be governed by and construed in accordance with the law specified to govern that Protocol Covered Document and other-

wise in accordance with the applicable choice of law doctrine.

(f) *Notices.* Any Revocation Notice must be in writing and delivered as a locked PDF (portable document format) attachment to an email to ISDA at [isda@isda.org](mailto:isda@isda.org) and will be deemed effectively delivered on the date it is delivered unless, on the date of that delivery, ISDA's London office is closed or that communication is delivered after 5:00 p.m., London time, in which case that communication will be deemed effectively delivered on the next day ISDA's London office is open.

(g) *Ability of an Agent to Adhere to the Protocol on Behalf of a Client.*

(i) An Agent may adhere to this Protocol:

(A) On behalf of all Clients represented by such Agent (in which case, such Agent need not identify each Client through an online platform available generally to the industry, including, for example, the ISDA Amend platform provided by IHS Markit (a Platform) and, in respect of any Protocol Covered Document into which the Agent has entered on behalf of those Clients, the Implementation Date shall be the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere);

(B) On behalf of only those Clients represented by such Agent that such Agent specifically names or identifies through a Platform and, in respect of any Protocol Covered Document into which the Agent has entered on behalf of any such Client, the Implementation Date shall be the date shown on the Platform as the date on which the Agent communicates the name or identity of that Client to the other Adhering Party (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from the other Adhering Party); or

(C) On behalf of all Clients represented by such Agent, excluding any Clients whose name or identity the Agent communicates to the other Adhering Party through a Platform as a Client excluded from adherence, subject to subparagraph

3(h)(i) below, on or before the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere (in which case, such Agent need not identify each Client on whose behalf it adheres through a Platform). In respect of any Protocol Covered Document into which the Agent has entered on behalf of any Client whose name or identity has not been communicated to the other Adhering Party through a Platform as a Client excluded from adherence, the Implementation Date shall (subject to subparagraph 3(h)(i) below) be the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere. If the Agent has not communicated the name or identity of any Clients excluded from adherence to the other Adhering Party through a Platform on or before the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere, then (subject to subparagraph 3(h)(i) below) in respect of any Protocol Covered Document into which the Agent has entered on behalf of any Client, the Implementation Date shall be the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere, and, in each case, if the Agent elects for Option 2 in its Adherence Letter, on behalf of those Clients whose name or identity the Agent communicates to the other Adhering Party through a Platform as being a Client in respect of which subparagraph 3(g)(ii)(B)(II) below applies (in which case, the Implementation Date in respect of any Non-Agent Executed Protocol Covered Document shall be as specified in subparagraph 3(l) below).

(ii) In each case, the Agent can elect to apply the amendments in this Protocol to either:

(A) In respect of all those Clients on whose behalf the Agent adheres pursuant to subparagraph 3(g)(i)(A), subparagraph

3(g)(i)(B) or subparagraph 3(g)(i)(C) above, each Protocol Covered Document into which the Agent has entered on behalf of those Clients (Option 1); or

(B) In respect of all those Clients on whose behalf the Agent adheres pursuant to subparagraph 3(g)(i)(A), subparagraph 3(g)(i)(B) or subparagraph 3(g)(i)(C) above, each Protocol Covered Document into which the Agent has entered on behalf of those Clients and (II) in respect of those Clients on whose behalf the Agent adheres whose name or identity the Agent communicates to the other Adhering Party through a Platform as being a Client in respect of which this subparagraph 3(g)(ii)(B)(II) applies, each Protocol Covered Document into which the Agent did not enter on behalf of those Clients but which the Agent has the authority from the relevant Client to amend (for the purpose of this Protocol, documents described in this subparagraph 3(g)(ii)(B)(II) being *Non-Agent Executed Protocol Covered Documents* and the date shown on the Platform as the date on which the Agent communicates the name or identity of the Client to the other Adhering Party for the purposes of this subparagraph 3(g)(ii)(B)(II) being the *Identification Date*) (Option 2). If an Agent adheres to this Protocol and elects for Option 2, in respect of any Client on whose behalf the Agent adheres pursuant to subparagraph 3(g)(i)(A), subparagraph 3(g)(i)(B) or subparagraph 3(g)(i)(C) above whose name or identity is communicated to the other Adhering Party as being a Client in respect of which subparagraph 3(g)(ii)(B)(II) above applies, Protocol Covered Documents referred to in both subparagraph 3(g)(ii)(B)(I) and subparagraph 3(g)(ii)(B)(II) above will be amended in accordance with the terms of this Protocol. For the avoidance of doubt, any Protocol Covered Document into which the Agent did not enter on behalf of a Client and which the Agent does not have the authority from the relevant Client to amend will not constitute a Non-Agent Executed Protocol Covered Document.

(iii) The election for Option 1 or Option 2 shall be made in the Adherence Letter. Adherence by the Agent shall only be effective with respect to those Protocol Covered Documents described in Option 1 or Option 2, as applicable, and as elected in the Adherence Letter (subject to, if the Agent elects for Option 2 and with respect to Non-Agent Executed Protocol Covered Documents,

(A) Subparagraph 3(g)(iv) and paragraph 3(l) below and (B) the Agent communicating the name or identity of those Clients on behalf of which it is amending Non-Agent Executed Protocol Covered Documents to the other Adhering Party, in accordance with subparagraph 3(g)(ii)(B)(II) above (regardless of whether the Agent adheres to this Protocol using the approach described in subparagraph 3(g)(i)(A), subparagraph 3(g)(i)(B) or subparagraph 3(g)(i)(C) above)).

(iv) If an Agent adheres to this Protocol and elects for Option 2 in its Adherence Letter, then, in respect of any Non-Agent Executed Protocol Covered Document only, the Agent shall, as soon as reasonably practicable following a written request (including by email) from the other Adhering Party, and in any event by no later than the end of the fifteenth calendar day following such request, provide reasonable evidence satisfactory to the other Adhering Party in its sole discretion supporting the Agent's authority to amend such documents, provided that:

(A) If, prior to the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the Agent and the other Adhering Party to adhere, the Agent has delivered to the other Adhering Party a copy, or relevant extracts, of the agreement (such as an investment management agreement) pursuant to which the relevant Client appoints the Agent to act on its behalf and authorizes the Agent to make the amendments contemplated by this Protocol to the Non-Agent Executed Protocol Covered Document (whether or not such authority expressly refers to this

Protocol), then, subject to the other Adhering Party's right to request (which request must be in writing (which includes by email)) an additional copy of that agreement or those relevant extracts (which request shall be made no later than the end of the fifteenth calendar day following the later of the Identification Date and the date of acceptance by ISDA, as agent, of an Adherence Letter from that other Adhering Party), the Agent need not provide any further evidence supporting its authority to amend that Non-Agent Executed Protocol Covered Document on behalf of that Client for the purposes of this Protocol and, in respect of that Non-Agent Executed Protocol Covered Document, shall be deemed to have provided reasonable evidence satisfactory to the other Adhering Party on (I) if the other Adhering Party does not request an additional copy of that agreement or those relevant extracts, the end of the fifteenth calendar day following the later of the Identification Date and the date of acceptance by ISDA, as agent, of an Adherence Letter from that other Adhering Party or (II) If the other Adhering Party does request an additional copy of that agreement or those relevant extracts, the day on which that additional copy is delivered to the other Adhering Party;

(B) If the other Adhering Party does not request such evidence by the end of the fifteenth calendar day following the later of the Identification Date and the date of acceptance by ISDA, as agent, of an Adherence Letter from that other Adhering Party, then the Agent shall be deemed to have provided reasonable evidence satisfactory to the other Adhering Party at the end of that fifteenth calendar day;

(C) Subject to subparagraph 3(g)(iv)(A) above, following the delivery of any such evidence by the Agent to the other Adhering Party, unless the other Adhering Party notifies the Agent to the contrary by the end of the fifteenth calendar day following the day on which such evidence is delivered, the Agent shall be deemed to have provided reasonable evi-

dence satisfactory to the other Adhering Party at the end of that fifteenth calendar day;

(D) If:

(I) following written request from the other Adhering Party, the Agent does not provide the other Adhering Party with any evidence supporting its authority to amend such documents or, if subparagraph 3(g)(iv)(A) above applies, with an additional copy of the relevant agreement or extracts, by the end of the fifteenth calendar day following such written request; or

(II) subject to subparagraph 3(g)(iv)(A) above, the other Adhering Party determines that the evidence provided by the Agent is not satisfactory and notifies the Agent accordingly by the end of the fifteenth calendar day following the day on which such evidence is delivered, Then request for evidence and the Agent's right to provide such evidence and, in respect of any such evidence, subject to subparagraph 3(g)(iv)(C) above, the Non-Agent Executed Protocol Covered Document shall not be amended by this Protocol; and

(E) Any failure by the Agent to provide the other Adhering Party with such evidence shall not give rise to a Potential Event of Default or an Event of Default (each as defined in the ISDA Master Agreement), or any similar event, under that Non-Agent Executed Protocol Covered Document or other contractual right of action under this Protocol or that Non-Agent Executed Protocol Covered Document.

(v) If an Agent adheres to this Protocol and specifically names or identifies one or more Clients

(A) On whose behalf it is adhering (as contemplated in subparagraph 3(g)(i)(B) above), (B) which are excluded from adherence (as contemplated in subparagraph 3(g)(i)(C) above), and/or (C) on whose behalf it is amending Non-Agent Executed Protocol Covered Documents (as contemplated in subparagraph 3(g)(ii)(B)(II) above), as applicable,

through a Platform, that Agent shall provide the legal entity identifier (LEI) of each such Client through such Platform.

(vi) If an Agent adheres to this Protocol on behalf of a Client by executing and delivering an Adherence Letter on behalf of such Client in accordance with paragraph 1 above and this paragraph 3(g), references to the Adhering Party for purposes of this Protocol (including the Attachment hereto) and the Adherence Letter shall be interpreted to refer to such Client. If, in respect of a Client, more than one Adherence Letter is accepted by ISDA in accordance with paragraph 1(b) above (by virtue of the Client adhering on its own behalf and one or more Agents adhering on behalf of that Client), then:

(A) If ISDA accepts an Adherence Letter from an Agent on behalf of a Client after it accepts an Adherence Letter from that Client, any document entered into by:

(I) That Agent acting on behalf of that Client; or

(II) If the Agent elects for Option 2 in its Adherence Letter, that Client on its own behalf but which the Agent has the authority from the relevant Client to amend, in each case, which has a Protocol Covered Document Date prior to:

- (1) The Protocol Effective Date; or
- (2) If later, the date of acceptance by ISDA, as agent, of an Adherence Letter from that Agent (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from the other Adhering Party),

will be deemed to have "a Protocol Covered Document Date prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere)" for the purposes of the definitions of Protocol Covered Confirmation, Protocol Covered Credit Support Document and Protocol Covered Master Agreement below; and

(B) If ISDA accepts an Adherence Letter from a Client after it accepts an Adherence Letter from an Agent on behalf of



that Client, any document entered into by the Client, whether directly or through the agency of an Agent, which has a Protocol Covered Document Date prior to:

(I) The Protocol Effective Date; or if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from that Client (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from the other Adhering Party), will be deemed to have “a Protocol Covered Document Date prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere)” for the purposes of the definitions of Protocol Covered Confirmation, Protocol Covered Credit Support Document and Protocol Covered Master Agreement below.

(vii) If an Agent adheres to this Protocol on behalf of a Client, then as of the later of (A) the date on which such Agent adheres to this Protocol in accordance with paragraph 1 above and (B) the Protocol Covered Document Date, such Agent represents to each Adhering Party (I) with which it has entered into a Protocol Covered Document on behalf of such Client or (II) which is a party to any Non-Agent Executed Protocol Covered Document (which representation will be deemed to be repeated on the Protocol Effective Date and on the Implementation Date if one or both such dates are later than the date on which such Agent adheres to this Protocol) that it has, as at the relevant Implementation Date, all necessary authority to enter into the Adherence Letter on behalf of such Client. In respect of any Client referred to in paragraph 3(h), paragraph 3(i), paragraph 3(j) or paragraph 3(k) below, the Agent represents that it has, as at the relevant Implementation Date, all necessary authority to apply the terms of the Adherence Letter to such Client.

(h) *Clients Added to an Agent Protocol Covered Document after the date of acceptance by ISDA of an Adherence Letter from the later*

*of the Agent and the other Adhering Party to adhere.*

(i) Subject to subparagraph 3(h)(ii) below, in respect of any Client added to an Agent Protocol Covered Document between an Agent and an Adhering Party after the date of acceptance by ISDA of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the Agent and the other Adhering Party to adhere (a New Client), the Agent and such Adhering Party agree that the terms of such Agent Protocol Covered Document as between such Adhering Party and any New Client will be subject to the amendments effected by this Protocol and as between the Adhering Party and the New Client the Implementation Date shall be the date on which the New Client is added to the Agent Protocol Covered Document, unless otherwise agreed between such Agent and such Adhering Party (which agreement may, if the Agent adheres to this Protocol using the approach in subparagraph 3(g)(i)(C) above, be reached by the Agent communicating to the other Adhering Party through a Platform, at the time the New Client is added to the Agent Protocol Covered Document, that the New Client is excluded from adherence).

(ii) If an Agent adheres to this Protocol using the approach described in subparagraph 3(g)(i)(B) above and therefore specifically names or identifies one or more Clients on whose behalf it is adhering, then in order for the terms of an Agent Protocol Covered Document as between an Adhering Party and any New Client to be subject to the amendments effected by this Protocol, the Agent shall communicate the identity of each New Client (including the legal entity identifier (LEI)) to the other Adhering Party which is a party to the Agent Protocol Covered Document to which the New Client is added through a Platform and, as between the other Adhering Party and that New Client, the Implementation Date shall be the date shown on the Platform as the date on which the Agent communicates the identity of that New Client to the other Adhering Party through that Platform.

(i) *Clients Added to an Agent’s List of Identi-*

*fied In-Scope Clients after the date of Acceptance by ISDA of the Agent's Adherence Letter.* If an Agent adheres to this Protocol using the approach described in subparagraph 3(g)(i)(B) above and therefore specifically names or identifies one or more Clients on whose behalf it is adhering, then for the purposes of subparagraph 3(g)(ii)(A) or 3(g)(ii)(B)(I) above, as applicable, it may communicate the name or identity of additional Clients on whose behalf it is adhering (through a Platform) to another Adhering Party after the date of acceptance by ISDA, as agent, of its Adherence Letter and, as between that other Adhering Party and the additional Client, the Implementation Date shall be the date shown on the Platform as the date on which the Agent communicates the identity of that additional Client to the other Adhering Party through that Platform for those purposes (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from that other Adhering Party), unless otherwise agreed between such Agent and such Adhering Party.

*(j) Clients Removed from an Agent's List of Excluded Clients after the date of Acceptance by ISDA of the Agent's Adherence Letter.* If an Agent adheres to this Protocol using the approach described in subparagraph 3(g)(i)(C) above and therefore specifically names or identifies one or more Clients as excluded from adherence, then for the purposes of subparagraph 3(g)(ii)(A) or 3(g)(ii)(B)(I) above, as applicable, the Agent may, after the date of acceptance by ISDA, as agent, of its Adherence Letter, remove one or more of those Clients from its list of excluded Clients through a Platform and, as between any other Adhering Party and that Client, the Implementation Date shall be the date shown on the Platform as the date on which the Agent communicates to the other Adhering Party that the Client is removed from the list of excluded Clients (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter from that other Adhering Party), unless otherwise agreed between such Agent and such Adhering Party.

*(k) Clients Added to an Agent's List of Clients in respect of which subparagraph 3(g)(ii)(B)(II) above applies.* If an Agent ad-

heres to this Protocol, elects for Option 2 in its Adherence Letter and therefore specifically names or identifies one or more Clients in respect of which subparagraph 3(g)(ii)(B)(II) above applies, then it may name or identify additional Clients in respect of which subparagraph 3(g)(ii)(B)(II) above applies (through a Platform) after the date of acceptance by ISDA, as agent, of its Adherence Letter.

*(l) Authority to amend Non-Agent Executed Protocol Covered Documents.* If an Agent adheres to this Protocol and elects for Option 2 (as described in subparagraph 3(g)(ii) above), then, in respect of each Non-Agent Executed Protocol Covered Document, the Implementation Date shall be the day on which the Agent is deemed to have provided evidence supporting the Agent's authority to amend such Non-Agent Executed Protocol Covered Document to the other Adhering Party pursuant to subparagraph 3(g)(iv) above and, for the purposes of subparagraph 3(g)(iii) above, with respect to such Non-Agent Executed Protocol Covered Documents only, the Agent's adherence will be deemed effective on that day.

*(m) Implementation Date if both an Agent and a Client adhere to this Protocol or if more than one Agent adheres for a Client.* If an Agent adheres to this Protocol and, in respect of a particular Client and a Protocol Covered Document into which the Agent has entered on behalf of that Client or a Non-Agent Executed Protocol Covered Document, there is, pursuant to the terms of this Protocol, more than one Implementation Date, then, notwithstanding any provision to the contrary in this Protocol, the Implementation Date shall be the first of those dates to occur.

*(n) Adhering Party that is an Agent with respect to a Protocol Covered Document.* An Adhering Party that executes a Protocol Covered Document (including an annex thereto) as agent with respect to that Protocol Covered Document, shall not for purposes of this Protocol be considered to be a party to or to have entered into such Protocol Covered Document solely by acting as agent with respect to that Protocol Covered Document except as expressly provided therein.

#### 4. Definitions

References in this Protocol and the Attachment to the following terms shall have the following meanings:

*Additional Credit Support Document* means the documents (which, for the avoidance of doubt, shall be deemed to include any annexes or appendices thereto) set out in Part 2 of the Additional Documents Annex to this Protocol.

*Additional Master Agreement* means the documents (which, for the avoidance of doubt, shall be deemed to include any annexes or appendices thereto) set out in Part 1 of the Additional Documents Annex to this Protocol.

*Adherence Letter* has the meaning given to such term in the introductory paragraphs hereof.

*Adhering Party* has the meaning given to such term in the introductory paragraphs hereof, as construed in accordance with subparagraph 3(g)(vi) above where relevant.

*Agent* means an entity that enters into a Protocol Covered Document (or which has the authority to amend a Non-Agent Executed Protocol Covered Document) and executes and delivers an Adherence Letter with respect to this Protocol on behalf of, and as agent for, one or more Clients. With respect to paragraph 3(h) above, Agent also means an entity that enters into a Protocol Covered Document and executes and delivers an Adherence Letter pursuant to subparagraph 3(g)(i) above solely for purposes of amending such agreements to which New Clients may be added under paragraph 3(h) above.

*Agent Protocol Covered Document* means any Protocol Covered Document signed by the Agent on behalf of one or more Clients prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the Agent and the other Adhering Party to adhere), including any agreement that is signed as an umbrella agreement by an Agent and an Adhering Party prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in

accordance with paragraph 1(b) above) from the later of the Agent and the other Adhering Party to adhere) which would be a Protocol Covered Document but for the absence of any underlying Client which is an Adhering Party.

*Client* means, with respect to an Agent, a client, investor, fund, account and/or other principal on whose behalf the Agent acts.

*Confirmation* means, in respect of a transaction, one or more documents or other confirming evidence exchanged between the parties or otherwise effective for the purpose of confirming or evidencing the transaction.

*Covered ISDA Definitions Booklet* means each of the 2006 ISDA Definitions, the 2000 ISDA Definitions, the 1998 ISDA Euro Definitions, the 1998 Supplement to the 1991 ISDA Definitions and the 1991 ISDA Definitions, each as published by ISDA.

*Credit Support Document* means, in respect of an Adhering Party and a Protocol Covered Document, any document in effect on the Implementation Date, which by its terms secures, guarantees or otherwise supports such Adhering Party's obligations under such Protocol Covered Document from time to time, whether or not such document is specified as such therein or in the Protocol Covered Document.

*Cut-off Date* has the meaning given to such term in paragraph 1(b) above.

*IBOR Fallbacks Supplement* has the meaning given to such term in the introductory paragraphs hereof.

*Identification Date* has the meaning given to such term in subparagraph 3(g)(ii)(B)(II) above.

*Implementation Date* has the meaning given to such term in subparagraph 1(c)(B) above.

*ISDA* has the meaning given to such term in the introductory paragraphs hereof.

*ISDA Credit Support Document* means each of the following documents:

- (a) 1994 ISDA Credit Support Annex (Bilateral Form; ISDA Agreements Subject to New York Law Only);

(b) 1995 ISDA Credit Support Annex (Bilateral Form—Transfer; ISDA Agreements Subject to English law);

(c) 1995 ISDA Credit Support Deed (Bilateral Form—Security Interest; ISDA Agreements Subject to English Law);

(d) 1995 ISDA Credit Support Annex (Bilateral Form—Loan and Pledge; Security Interest Subject to Japanese Law);

(e) 1995 ISDA Credit Support Annex (Bilateral Form—Transfer; ISDA Agreement Subject to French Law);

(f) 1995 ISDA Credit Support Annex (Bilateral Form—Transfer; ISDA Agreement Subject to Irish Law);

(g) 2008 ISDA Credit Support Annex (Loan/Japanese Pledge);

(h) 2013 Standard Credit Support Annex (New York Law);

(i) 2013 Standard Credit Support Annex (English Law);

(j) 2014 Standard Credit Support Annex (New York Law—Multicurrency Settlement);

(k) 2014 Standard Credit Support Annex (English Law—Multicurrency Settlement);

(l) 2014 ISDA Korean Law Credit Support Annex (Bilateral Form—Loan and Pledge; Credit Support Annex Subject to Korean Law);

(m) 2016 Credit Support Annex for Variation Margin (VM) (Bilateral Form; ISDA Agreements Subject to New York Law Only), including any such form entered into between the Parties pursuant to the ISDA 2016 Variation Margin Protocol;

(n) 2016 Credit Support Annex for Variation Margin (VM) (Bilateral Form—Transfer; ISDA Agreements Subject to English Law), including any such form entered into between the Parties pursuant to the ISDA 2016 Variation Margin Protocol;

(o) 2016 Credit Support Annex for Variation Margin (VM) (Bilateral Form—Loan; ISDA Agreements Subject to Japanese Law), including any such form entered into between the Parties pursuant to the ISDA 2016 Variation Margin Protocol;

(p) 2016 Credit Support Annex for Variation Margin (VM) (Bilateral Form—Transfer; ISDA Agreements Subject to French Law); or

(q) 2016 Credit Support Annex for Variation Margin (VM) (Bilateral Form—Transfer; ISDA Agreements Subject to Irish Law).

*ISDA Master Agreement* means an ISDA 2002 Master Agreement, an ISDA 2002 Master Agreement (French law), an ISDA 2002 Master Agreement (Irish law), a 1992 ISDA Master Agreement (Multicurrency—Cross Border), a 1992 ISDA Master Agreement (Local Currency—Single Jurisdiction), a 1987 ISDA Interest Rate Swap Agreement or a 1987 ISDA Interest Rate and Currency Exchange Agreement, in each case as published by ISDA.

*Master Agreement* means an agreement which may be an ISDA Master Agreement or an Additional Master Agreement that has been entered into (a) by execution by the parties thereto (whether directly or through the agency of an Agent) or (b) by execution by the parties thereto (whether directly or through the agency of an Agent) of a Confirmation pursuant to which a party is deemed to have entered into an ISDA Master Agreement or an Additional Master Agreement with the other party.

*New Client* has the meaning given to such term in paragraph 3(h)(i) above.

*Non-Agent Executed Protocol Covered Documents* has the meaning given to such term in subparagraph 3(g)(ii)(B)(II) above.

*Platform* has the meaning given to such term in paragraph 3(g)(i)(A) above.

*Protocol* has the meaning given to such term in the introductory paragraphs hereof.

*Protocol Business Day* means a day following the Protocol Effective Date on which commercial banks and foreign exchange markets are generally open to settle payments in both London and New York.

*Protocol Covered Confirmation* means, subject to subparagraph 3(g)(vi) above, a Confirmation which is entered into between two Adhering Parties (whether directly or through the agency of an Agent and, if through the agency of an Agent, whether executed by that Agent or by an entity on behalf of that Agent), has a

Protocol Covered Document Date prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere) and:

- (a) supplements, forms part of and is subject to, or is otherwise governed by, a Master Agreement and incorporates a Covered ISDA Definitions Booklet;
- (b) supplements, forms part of and is subject to, or is otherwise governed by, a Master Agreement and references a Relevant IBOR “as defined” in, or otherwise provides that the Relevant IBOR has the meaning given in, a Covered ISDA Definitions Booklet (regardless of whether such Covered ISDA Definitions Booklet is incorporated in full in that Confirmation); and/or
- (c) supplements, forms part of and is subject to, or is otherwise governed by, a Master Agreement and references a Relevant IBOR, howsoever defined.

*Protocol Covered Credit Support Document*<sup>1</sup> means, subject to subparagraph 3(g)(vi) above, any ISDA Credit Support Document or Additional Credit Support Document which is entered into between two Adhering Parties (whether directly or through the agency of an Agent and, if through the agency of an Agent, whether executed by that Agent or by an entity on behalf of that Agent), has a Protocol Covered Document Date prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere) and:

- (a) Incorporates a Covered ISDA Definitions Booklet;
- (b) References a Relevant IBOR “as defined” in, or otherwise provides that the Relevant IBOR has the meaning given in, a Covered ISDA Definitions Booklet (regardless of whether such Covered ISDA Definitions Booklet is incorporated in full in that

ISDA Credit Support Document or Additional Credit Support Document); and/or

- (c) References a Relevant IBOR, howsoever defined.

*Protocol Covered Document Date* means, in respect of any document, the date of such document, howsoever described therein, provided that (a) if such document has different dates specified therein, one of which includes a date specified as an “as of” date, such date shall be the Protocol Covered Document Date, and (b) if such document is a Confirmation (other than a master confirmation agreement, including any related general terms confirmation), the Protocol Covered Document Date shall be the Trade Date.

*Protocol Covered Documents* means Protocol Covered Confirmations, Protocol Covered Master Agreements and Protocol Covered Credit Support Documents, other than any such documentation governing cleared transactions (including any transactions that are “Client Transactions” (or in substance equivalent) under a 2016 ISDA/FIA Client Cleared OTC Derivatives Addendum or any agreement that in substance relates to the same matters as those contemplated by the 2016 ISDA/FIA Client Cleared OTC Derivatives Addendum between a clearing member and its client).

*Protocol Covered Master Agreement* means, subject to subparagraph 3(g)(vi) above, a Master Agreement which is entered into (or deemed entered into) between two Adhering Parties (whether directly or through the agency of an Agent and, if through the agency of an Agent, whether executed by that Agent or by an entity on behalf of that Agent), has a Protocol Covered Document Date prior to the Protocol Effective Date (or, if later, the date of acceptance by ISDA, as agent, of an Adherence Letter (in accordance with paragraph 1(b) above) from the later of the two Adhering Parties to adhere) and:

- (a) Incorporates a Covered ISDA Definitions Booklet;
- (b) References a Relevant IBOR “as defined” in, or otherwise provides that the Relevant IBOR has the meaning given in, a Covered ISDA Definitions Booklet (regardless of whether such Covered ISDA Defini-

<sup>1</sup>Note that the parties to any credit support document that is amended by the Protocol should consider whether they need to take any steps to reconfirm or retake any security or otherwise satisfy any formalities under or in connection with the relevant credit support document as a result of the amendment made by the Protocol.

tions Booklet is incorporated in full in that Master Agreement); and/or

(c) References a Relevant IBOR, howsoever defined.

*Protocol Effective Date* has the meaning given to such term in subparagraph 1(c)(A) above.

*Relevant IBOR* means:

(a) Any of sterling LIBOR (London interbank offered rate), Swiss franc LIBOR (London interbank offered rate), U.S. dollar LIBOR (London interbank offered rate), euro LIBOR (London interbank offered rate), the euro interbank offered rate, Japanese yen LIBOR (London interbank offered rate), the Japanese yen Tokyo interbank offered rate, the euroyen Tokyo interbank offered rate, the bank bill swap rate, the Canadian dollar offered rate, the Hong Kong interbank offered rate, the Singapore dollar swap offer rate and the Thai baht interest rate fixing; and

(b) LIBOR (London interbank offered rate) with no reference to, or indication of, the currency of the relevant LIBOR (London interbank offered rate) (including, for the avoidance of doubt, the reference in Section 7.3 (*Corrections to Published Prices*) of the 2005 ISDA Commodity Definitions to “the spot offered rate for deposits in the payment currency in the London interbank market as at approximately 11:00 a.m., London time”), in each case, howsoever defined or described (whether in English or in any other language) in the relevant Protocol Covered Document.

*Revocation Date* means, with respect to a Revocation Notice and an Adhering Party, the last Protocol Business Day of the calendar month following the calendar month in which that Revocation Notice is effectively delivered by that Adhering Party to ISDA.

*Revocation Notice* has the meaning given to such term in paragraph 1(e) above.

*Third Party* means, in relation to an agreement supported by a Third Party Credit Support Document, any party to such Third Party Credit Support Document other than either of the Adhering Parties which are parties to the agreement.

*Third Party Credit Support Document* means, with respect to an Adhering Party and a Protocol Covered Document, any Credit Support Document which is executed by one or more Third Parties (whether or not an Adhering Party is a party thereto), whether or not such document is specified as a Third Party Support Document or as a Credit Support Document therein or in the Protocol Covered Document.

*Trade Date* means, in respect of a Protocol Covered Confirmation (other than a master confirmation agreement, including any related general terms confirmation), the date on which the parties enter into the related transaction.

### **Exhibit 1 to the ISDA 2020 IBOR Fallbacks Protocol**

Form of Adherence Letter

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[Letterhead of Adhering Party]

[Date]

International Swaps and Derivatives Association, Inc.

Ladies and Gentlemen,

#### **ISDA 2020 IBOR Fallbacks Protocol**

The purpose of this letter is to confirm our adherence to the ISDA 2020 IBOR Fallbacks Protocol as published by the International Swaps and Derivatives Association, Inc. (ISDA) on October 23, 2020 (the Protocol). By submitting this Adherence Letter, we confirm that we are an Adhering Party to the Protocol. This letter constitutes, as between each other Adhering Party and us, an Adherence Letter as referred to in the Protocol. The definitions and provisions contained in the Protocol are incorporated into this Adherence Letter, which will supplement and form part of each Protocol Covered Document between us and each other Adhering Party.

#### *1. Specified Terms for Adhering Party as Principal*

As between each Adhering Party and us, we acknowledge and agree that the amendments in the Attachment to the Protocol shall apply to each Protocol Covered Document to which we are a party in accordance with the terms of the Protocol and this Adherence Letter.

### 2. *Appointment as Agent and Release*

We hereby appoint ISDA as our agent for the limited purposes of the Protocol and accordingly we waive any rights and hereby release ISDA from any claims, actions or causes of action whatsoever (whether in contract, tort or otherwise) arising out of or in any way relating to this Adherence Letter or our adherence to the Protocol or any actions contemplated as being required by ISDA.

### 3. *Arbitration Agreement and Class Action Waiver*

By adhering to the Protocol, we agree that all claims or disputes arising out of or in connection with adherence to the Protocol shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce (the Rules) by three arbitrators, and hereby waive any right to assert any such claims or disputes against ISDA as a representative or member in any class or representative action. The claimant(s) (as defined in the Rules) shall nominate one arbitrator in the 'Request for Arbitration'. The respondent(s) (as defined in the Rules) shall nominate one arbitrator in the 'Answer to the Request'. The two party-nominated arbitrators shall then have 30 days to agree, in consultation with the parties to the arbitration, upon the nomination of a third arbitrator to act as president of the tribunal, barring which the International Chamber of Commerce Court shall select the third arbitrator (or any arbitrator that claimant(s) or respondent(s) shall fail to nominate in accordance with the foregoing). This agreement to arbitrate shall not be affected by the Revocation Notice as described in the Protocol.

### 4. *Payment*

Each Adhering Party or, if such Adhering Party is a Client on whose behalf an Agent adheres to this Protocol, each Agent, that is classified by ISDA for purposes of membership of ISDA as an "ISDA Primary Member" must submit a one-time fee of U.S. \$500 to ISDA at or before the submission of this Adherence Letter. Each Adhering Party or, if such Adhering Party is a Client on whose behalf an Agent adheres to this Protocol, each Agent, which is not an "ISDA Primary Member" is not required to submit a fee to ISDA if this Adherence Letter is submitted prior to

the Protocol Effective Date. If an Adhering Party or, if such Adhering Party is a Client on whose behalf an Agent adheres to this Protocol, an Agent, which is not an "ISDA Primary Member" submits this Adherence Letter on or after the Protocol Effective Date, such Adhering Party or Agent (as applicable) must submit a onetime fee of U.S. \$500 to ISDA at or before the submission of this Adherence Letter.

### 5. *Contact Details*

Our contact details for purposes of this Adherence Letter are:

Name:

Company Name:

Address:

Phone:

Fax:

Email:

We consent to the publication of a conformed copy of this letter by ISDA and to the disclosure by ISDA of the contents of this letter.

Yours faithfully,

[ADHERING PARTY]<sup>2</sup>

<sup>2</sup> Specify legal name of Adhering Party.

If you are an Agent, you may sign the Adherence Letter using one of the options below. Please note that, if you would like to adhere on behalf of yourself, as principal, and also on behalf of your Clients, as Agent, you must submit one adherence letter for yourself, as principal, and a second adherence letter on behalf of your Clients, as Agent, in the latter case, in accordance with one of the options set out below.

First, if you have the authority to adhere to this Protocol as Agent on behalf of all Clients, you may indicate the following in the signature block: "acting on behalf of [(a)] each fund, account or other principal (each, a "Client") on whose behalf we have entered, or will enter, into a Protocol Covered Document and any New Clients added to an Agent Protocol Covered Document in the future [and (b) in respect of any Non-Agent Executed Protocol Covered Documents, each Client which we name or identify through a Platform as being a Client in respect of which subparagraph 3(g)(ii)(B)(II) of the Protocol applies]". If such a signature block is used, a separate Adherence Letter for each Client does not need to be submitted to ISDA and no specific names of Clients must be identified through a Platform (except if you elect for Option 2 in this Adherence Letter, in which case the Clients on whose behalf you are amending Non-Agent Executed Protocol Covered Documents should be identified through such Platform; you will be responsible for identifying such Clients and providing their LEIs. If you cannot or do not wish to name such Clients, then provided that you can identify the Clients by way of LEIs, you may identify such Clients using LEIs and without including any names). If you do not elect for

Continued

By:  
Name:  
Title:

### Specified Terms for Adhering Party as Agent<sup>3</sup>

Continued

Option 2 in this Adherence Letter, you should delete the wording in square brackets in the signature block.

Second, if you adhere to this Protocol as an agent on behalf of certain Clients only by specifically identifying such Clients, you may indicate the following in the signature block: “acting on behalf of [(a)] each fund, account or other principal (each a “Client”) which we name or identify through a Platform as being a Client on whose behalf we have entered, or will enter, into a Protocol Covered Document and any New Clients added to an Agent Protocol Covered Document and identified through a Platform as a New Client [and (b) in respect of any Non-Agent Executed Protocol Covered Documents, each Client which we name or identify through a Platform as being a Client in respect of which subparagraph 3(g)(ii)(B)(II) of the Protocol applies]”. You will be responsible for identifying any Clients on whose behalf you have entered into, or will enter into, a Protocol Covered Document, any New Clients and any Clients on whose behalf you amend Non-Agent Executed Protocol Covered Documents and, in each case, providing their LEIs. If you cannot or do not wish to name such Clients, then provided that you can identify the Clients by way of LEIs, you may identify such Clients using LEIs and without including any names. If you do not elect for Option 2 in this Adherence Letter, you should delete the wording in square brackets in the signature block.

Third, if you adhere to this Protocol as an agent on behalf of certain Clients only by excluding certain Clients, you may indicate the following in the signature block: “acting on behalf of [(a)] each fund, account or other principal (each, a “Client”) on whose behalf we have entered, or will enter, into a Protocol Covered Document (except for those Clients which we identify through a Platform as excluded from adherence) and any New Clients added to an Agent Protocol Covered Document (except for any New Clients which we identify through a Platform as excluded from adherence) [and (b) in respect of any Non-Agent Executed Protocol Covered Documents, each Client which we name or identify through a Platform as being a Client in respect of which subparagraph 3(g)(ii)(B)(II) of the Protocol applies]”. You will be responsible for identifying any excluded Clients and any Clients on whose behalf you amend Non-Agent Executed Protocol Covered Documents and, in each case, for providing their LEIs. If you cannot or do not wish to name those excluded Clients or those Clients on whose behalf you are amending Non-Agent Executed Protocol Covered Documents, then provided that you can identify them by way of LEIs, you may identify those Clients using LEIs and without including any names. If you do not elect for Option 2 in this Adherence Letter, you should delete the wording in square brackets in the signature block.

Fourth, if you adhere to this Protocol as an agent on behalf of no current Clients, you may indicate the following in the signature block: “acting to amend each Protocol Covered Document (or other agreement which deems a Protocol Covered Document to have been created) between it (as agent) and each Adhering Party, with respect to New Clients.”

<sup>3</sup> The descriptions of Option 1 and Option 2 in this  
Continued

*The election for Option 1 or Option 2 below should only be made by an Agent. Any entity which adheres to the Protocol and which is not acting as an Agent should not complete the election below.*

As between each Adhering Party and us, we acknowledge and agree that the amendments in the Attachment to the Protocol shall apply to each:

#### Option 1

Protocol Covered Document into which we have entered on behalf of one or more Clients covered in accordance with the terms of the Protocol and this Adherence Letter (as contemplated by Option 1 in the Protocol); or

#### Option 2

Protocol Covered Document into (i) which we have entered on behalf of one or more Clients covered in accordance with the terms of the Protocol and this Adherence Letter and (ii) which we did not enter on behalf of one or more Clients but which we otherwise have the authority from the relevant Client to amend in accordance with and subject to the terms of the Protocol and this Adherence Letter (as contemplated by Option 2 in the Protocol).

We agree, in our capacity as Agent for the relevant Client(s), to provide each other Adhering Party, as soon as reasonably practicable following such other Adhering Party’s written request (including by email), and in any event by no later than the end of the fifteenth calendar day following such request (and as required by and in accordance with subparagraph 3(g)(iv) of the Protocol), with reasonable evidence satisfactory to such other Adhering Party in its sole discretion supporting our authority to amend any Protocol Covered Document into which we did not enter on behalf of one or more Clients (whose name or identity we communicate to the other Adhering Party through a Platform as being a

Continued

Adherence Letter and of related provisions within the Protocol are intended for convenience of reference only. Adhering Parties should read the provisions of the Protocol before submitting an Adherence Letter. In the event of any inconsistency between the descriptions of Option 1 and Option 2 and related provisions in this Adherence Letter and the provisions of the Protocol, the provisions of the Protocol shall take precedence.



Client in respect of which subparagraph 3(g)(ii)(B)(II) of the Protocol applies).

Failure to provide an Adhering Party with such evidence shall (unless the Agent is deemed to have provided such evidence, pursuant to subparagraph 3(g)(iv) of the Protocol), only in respect of those Non-Agent Executed Protocol Covered Documents between the relevant Client(s) and such Adhering Party, result in this Adherence Letter being ineffective unless and until we, in our capacity as Agent for the relevant Client(s), are deemed to have provided that Adhering Party with such evidence pursuant to subparagraph 3(g)(iv) of the Protocol. Failure to provide an Adhering Party with such evidence shall not give rise to a Potential Event of Default or an Event of Default (each as defined in the ISDA Master Agreement), or any similar event, under those Protocol Covered Documents or other contractual right of action under this Protocol or those Protocol Covered Documents.

**Exhibit 2 to the ISDA 2020 IBOR Fallbacks Protocol**

Form of Revocation Notice

[Letterhead of Adhering Party]

[Date]

International Swaps and Derivatives Association, Inc.

Send to: isda@isda.org

Ladies and Gentlemen,

**ISDA 2020 IBOR Fallbacks Protocol—  
Designation of a Revocation Date**

The purpose of this letter is to notify you that we wish to designate a Revocation Date as the last date on which an Implementation Date can occur pursuant to the terms of the ISDA 2020 IBOR Fallbacks Protocol as published by the International Swaps and Derivatives Association, Inc. (ISDA) on October 23, 2020 (the Protocol) in respect of any Protocol Covered Document between us and any other Adhering Party.

This letter constitutes a Revocation Notice as referred to in the Protocol.

We consent to the publication of the conformed copy of this notice by ISDA on and

after the Revocation Date and to the disclosure by ISDA of the contents of this letter.

Yours faithfully,

[ADHERING PARTY]<sup>4</sup>

By:

Name:

Title:

Signature:

**ANNEX to the ISDA 2020 IBOR Fallbacks Protocol: Additional Documents**

*Part 1: Additional Master Agreements*

- (a) 2001 FBF Master Agreement relating to Transactions on Forward Financial Instruments.
- (b) 2007 FBF Master Agreement relating to Transactions on Forward Financial Instruments.
- (c) 2013 FBF Master Agreement relating to Transactions on Forward Financial Instruments.
- (d) 1994 AFB Master Agreement for Foreign Exchange and Derivatives Transactions.

<sup>4</sup> Specify legal name of Adhering Party.

If you are an Agent and act on behalf of multiple Clients, you may sign a Revocation Notice using one of the methods below. Alternatively, you may submit one Revocation Notice per Client.

First, if you have the authority to deliver a Revocation Notice for this Protocol as Agent on behalf of all Clients, you may indicate the following in the signature block: “acting on behalf of each fund, account or other principal (each, a “Client”) represented by us (as agent)” or such other language which indicates the Clients to which this letter is applicable. If such a signature block is used, a separate Revocation Notice for each Client does not need to be submitted to ISDA and no specific names of Clients must be identified in the Revocation Notice.

Second, if you have the authority to deliver a Revocation Notice for this Protocol as Agent on behalf of certain Clients only, you may indicate the following in the signature block: “acting on behalf of each fund, account or other principal (each, a “Client”) represented by us (as agent) identified in the Revocation Notice or an appendix thereto”. If you cannot or do not wish to name such Clients, then provided that you can identify the revoking Clients by way of specific identifiers which will be known and recognized by all Adhering Parties with which the relevant Clients have entered into Confirmations, Master Agreements and/or credit support documents, you may identify such revoking Clients using specific identifiers and without including any names.

Paragraph 1(e) of the Protocol sets out the consequences of a Revocation Notice where an Agent adheres to the Protocol on behalf of a Client.

- (e) 1997 AFTI/FBF Master Agreement for Loans of Securities.
- (f) 2007 AFTI/FBF Master Agreement for Loans of Securities.
- (g) 2007 FBF Master Agreement for Repurchase Transactions.
- (h) 1994 AFTB Master Agreement for Repurchase Transactions with Delivery of Securities.
- (i) Execution Annex with respect to the AFB/FBF 1994/2001/2007/2013 Master Agreements.
- (j) 1997 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (k) Annex III to the 1997 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (l) 2009 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (m) Annex III to the 2009 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (n) 2013 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (o) Annex III to the 2013 Spanish Master Agreement (Contrato Marco de Operaciones Financieras or CMOF) published by Asociación Española de Banca (Spanish Banking Association) and Confederación Española de Cajas de Ahorros (Spanish Confederation of Savings Banks).
- (p) 2003 Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association.
- (q) 2013 Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association (for use in connection with certain ISDA definitions).
- (r) 2013 Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association (non-ISDA version not for use in connection with any ISDA definitions).
- (s) 1999 Bilateral Swiss Master Agreement for Repo Transactions published by the Swiss Bankers Association.
- (t) 1999 Multilateral Swiss Master Agreement for Repo Transactions published by the Swiss Bankers Association.
- (u) 2011 Swiss Master Agreement for Securities Lending and Borrowing prepared by the Swiss Bankers Association.
- (v) 2001 Master Agreement for Financial Transactions sponsored by the Banking Federation of the European Union (EBF or FBE) in cooperation with the European Savings Banks Group (ESBG) and the European Association of Cooperative Banks (EACB).
- (w) 2004 Master Agreement for Financial Transactions sponsored by the Banking Federation of the European Union (EBF or FBE) in cooperation with the European Savings Banks Group (ESBG) and the European Association of Cooperative Banks (EACB).
- (x) 2020 Master Agreement for Financial Transactions sponsored by the Banking Federation of the European Union (EBF or FBE) in cooperation with the European Savings Banks Group (ESBG) and the European Association of Cooperative Banks (EACB).
- (y) Austrian Master Agreement for Financial Transactions (Österreichischer Rahmenvertrag für Finanztermingeschäfte or ÖRV).

- (z) 1997 International Foreign Exchange and Options Master Agreement (FEOMA).
- (aa) 1993 International Foreign Exchange Master Agreement (IFEMA).
- (bb) 1997 International Foreign Exchange Master Agreement (IFEMA).
- (cc) 1997 International Currency Options Market (ICOM) Master Agreement.
- (dd) 2005 International Foreign Exchange and Currency Option Master Agreement (IFXCO).
- (ee) 1992 PSA/ISMA Global Master Repurchase Agreement (GMRA).
- (ff) 1995 PSA/ISMA Global Master Repurchase Agreement (GMRA).
- (gg) 2000 TBMA/ISMA Global Master Repurchase Agreement (GMRA).
- (hh) 2011 SIFMA/ICMA Global Master Repurchase Agreement (GMRA).
- (ii) 2000 ISLA Global Master Securities Lending Agreement (GMSLA).
- (jj) 2010 ISLA Global Master Securities Lending Agreement (GMSLA).
- (kk) 2018 ISLA Global Master Securities Lending Agreement (GMSLA)—Security Interest over Collateral.
- (ll) 1993 TBMA/SIA Master Securities Loan Agreement (MSLA).
- (mm) 2000 TBMA/SIA Master Securities Loan Agreement (MSLA).
- (nn) 2017 SIFMA Master Securities Loan Agreement (MSLA).
- (oo) 1987 PSA Master Repurchase Agreement (MRA).
- (pp) 1996 TBMA Master Repurchase Agreement (MRA).
- (qq) 2000 SIFMA Master OTC Options Agreement.
- (rr) 1989 TBMA Master Dealer Agreement, OTC Option Transaction—U.S. Treasury Securities.
- (ss) Emissions Master LF-IETA Master Agreement.
- (tt) WSPP Agreement.
- (uu) 2004 FIA Grid Trade Master Agreement.
- (vv) EEI Master Power Purchase & Sale Agreement.
- (ww) EL Master—Electricity Power Master Agreement.
- (xx) 1994 LBMA/FEC International Bullion Master Agreement (English law version).
- (yy) 1994 LBMA/FEC International Bullion Master Agreement (New York law version).
- (zz) 1997 ASLA Australian Master Securities Lending Agreement (AMSLA).
- (aaa) 2002 ASLA Australian Master Securities Lending Agreement (AMSLA).
- (bbb) 2003 ASLA Australian Master Securities Lending Agreement (AMSLA).
- (ccc) GISB Base Short-Term Contract for Sale and Purchase of Natural Gas.
- (ddd) NAESB Base Contract for Sale and Purchase of Natural Gas.
- (eee) 1996 Master Gilt Edged Stock Lending Agreement (GESLA).
- (fff) 1996 Master Equity and Fixed Interest Stock Lending Agreement (MEFISLA).
- (ggg) 1994 Equity and Fixed Interest Stock Lending (Agency) Agreement.
- (hhh) 1994 Overseas Securities Lender's Agreement (OSLA).
- (iii) 1995 Overseas Securities Lender's Agreement (OSLA).
- (jjj) globalCOAL Standard Coal Trading Agreement (SCoTA).
- (kkk) KOFIA Agreement on Margin Transactions.
- (lll) KOFIA Agreement on Foreign Exchange Margin Trading.
- (mmm) KOFIA Agreement on Securities Lending and Borrowing.
- (nnn) KOFIA Agreement on Repurchase Agreement (Repo) between Institutions.

(ooo) KOFIA Agreement on Repurchase Agreement (Repo) with Customers.

(ppp) KOFIA best practice Korean language agreement template for OTC derivatives.

(qqq) Investment Industry Regulatory Organization of Canada (IIROC) Repurchase/Reverse Repurchase Transaction Agreement.

(rrr) Master Agreement Concerning Stock Lending Transactions (*kabuken tou taishaku torihiki ni kansuru kihon keiyakusho*) (including without limitation separate agreements to be executed pursuant to or in connection with that Master Agreement such as Supplemental Memorandum of Understanding (*kabuken tou taishaku torihiki ni kansuru kihon keiyakusho fuzoku oboegaki*)) published by Japan Securities Dealers Association.

(sss) Master Agreement Concerning Bond Lending Transactions (*saiken taishaku torihiki ni kansuru kihon keiyakusho*) (including without limitation separate agreements to be executed pursuant to or in connection with that Master Agreement such as Supplemental Memorandum of Understanding (*saiken taishaku torihiki ni kansuru kihon keiyakusho fuzoku oboegaki*)) published by Japan Securities Dealers Association.

(ttt) Master Agreement Concerning Bond Repo Transactions (*saiken tou no gensaki torihiki ni kansuru kihon keiyakusho*) (including without limitation separate agreements to be executed pursuant to or in connection with that Master Agreement such as Supplemental Memorandum of Understanding (*saiken tou no gensaki torihiki ni kansuru kihon keiyakusho fuzoku oboegaki*)) published by Japan Securities Dealers Association.

(uuu) Mexican Master Derivatives Agreement (Contrato Marco para Operaciones Financieras Derivadas) published by Asociación de Bancos de Mexico (ABM) y Asociación Mexicana de Instituciones Bursátiles (AMIB).

(vvv) Mexican Master Securities Purchase and Sale/Repo Agreement (Contrato Marco para Operaciones de Compraventa de Valores y Reporto) published by Asociación de Bancos de Mexico (ABM) y Asociación Mexicana de Instituciones Bursátiles (AMIB).

*Part 2: Additional Credit Support Documents*

(a) 2007 FBF Collateral Annex.

(b) 1997 ABF Collateral Annex.

(c) AFB/BBF Addendum to the ISDA 2016 Credit Support Annex for Variation Margin (VM).

(d) 2008 Credit Support Appendix to the Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association.

(e) 2015 Credit Support Appendix to the Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association.

(f) Credit Support Appendix for Variation Margin to the Swiss Master Agreement for OTC Derivative Instruments published by the Swiss Bankers Association.

(g) Mexican Credit Support Agreement related to Derivatives (Contrato Global para Otorgar Garantías respecto de Operaciones Financieras Derivadas) published by Asociación de Bancos de Mexico (ABM) y Asociación Mexicana de Instituciones Bursátiles (AMIB).

**ATTACHMENT to the ISDA 2020 IBOR Fallbacks Protocol**

*1. Amendments to Protocol Covered Documents Incorporating the 2006 ISDA Definitions*

If a Protocol Covered Document incorporates the 2006 ISDA Definitions, the version of the 2006 ISDA Definitions so incorporated shall be amended in accordance with the terms of the IBOR Fallbacks Supplement (and, if that Protocol Covered Document is a Protocol Covered Master Agreement, any reference to a term defined in the 2006 ISDA Definitions in a Confirmation which supplements, forms part of and is subject to that Protocol Covered Master Agreement will be a reference to the term as defined in the 2006 ISDA Definitions as amended in accordance with the IBOR Fallbacks Supplement).

*2. Amendments to Protocol Covered Documents Incorporating the 2000 ISDA Definitions*

If a Protocol Covered Document incorporates the 2000 ISDA Definitions, the version of the 2000 ISDA Definitions so incorporated shall be amended in accordance with the terms of the IBOR Fallbacks Supplement (and, if that Protocol Covered Document is a Protocol Covered Master Agreement, any reference to a term defined in the 2000 ISDA Definitions in a Confirmation which supplements, forms part of and is subject to that Protocol Covered Master Agreement will be a reference to the term as defined in the 2000 ISDA Definitions as amended in accordance with the IBOR Fallbacks Supplement), provided that the IBOR Fallbacks Supplement shall be deemed amended as follows:

(a) Each of the following sections shall be deleted:

- (i) “GBP-LIBOR-BBA-Bloomberg”;
- (ii) “CHF-LIBOR-BBA-Bloomberg”;
- (iii) “USD-LIBOR-BBA-Bloomberg”;
- (iv) “EUR-LIBOR-BBA-Bloomberg”;
- (v) “JPY-LIBOR-FRASET”;
- (vi) “JPY-LIBOR-BBA-Bloomberg”;
- (vii) “JPY-TIBOR-TIBM-(All Banks)-Bloomberg”;
- (viii) “AUD-BBR-BBSW-Bloomberg”;
- (ix) “CAD-BA-CDOR-Bloomberg”;
- (x) “HKD-HIBOR-HKAB-Bloomberg”;

(b) The section titled “EUR-EURIBOR-Reuters” will be re-titled “EUR-EURIBOR-Telerate” and references in such section (or in related sections) to “EUR-EURIBOR-Reuters” will be deleted and replaced with “EUR-EURIBOR-Telerate”;

(c) The section titled “AUD-BBR-AUBBSW” will be re-titled “AUD-BBR-ISDC” and references in such section (or in related sections) to “AUD-BBR-AUBBSW” will be deleted and replaced with “AUD-BBR-ISDC”;

(d) The section titled “SGD-SOR-VWAP” will be re-titled “SGD-SOR-Telerate” and references in such section (or in related sections) to “SGD-SOR-VWAP” will be deleted and replaced with “SGD-SOR-Telerate”;

(e) In the section titled “THB-THBFIX-Reuters”, the paragraph entitled “No Index

Cessation Effective Date” shall be deemed amended as follows:

(i) The words ““THB-THBFIX-Reference Banks” as the applicable Floating Rate Option” will be deleted and replaced with the words ““THB-SOR-Reference Banks” as the applicable Floating Rate Option, but with the following variations:” and subparagraphs (a), (b) and (c) of Section 7.1(z)(iii) of the 2000 ISDA Definitions will be inserted immediately thereafter; and

(ii) The last sentence in that paragraph will be deleted; and

(f) All references to section numbers within the 2006 ISDA Definitions will be deemed to be references to the equivalent sections within the 2000 ISDA Definitions.

### *3. Amendments to Protocol Covered Documents Incorporating the 1991 ISDA Definitions and/or the 1998 Supplement to the 1991 ISDA Definitions*

If a Protocol Covered Document incorporates the 1991 ISDA Definitions and/or the 1998 Supplement to the 1991 ISDA Definitions, the version of the 1991 ISDA Definitions and/or the 1998 Supplement to the 1991 ISDA Definitions (as applicable) so incorporated shall be amended in accordance with the terms of the IBOR Fallbacks Supplement (and, if that Protocol Covered Document is a Protocol Covered Master Agreement, any reference to a term defined in the 1991 ISDA Definitions and/or the 1998 Supplement to the 1991 ISDA Definitions in a Confirmation which supplements, forms part of and is subject to that Protocol Covered Master Agreement will be a reference to the term as defined in the 1991 ISDA Definitions and/or the 1998 Supplement to the 1991 ISDA Definitions as amended in accordance with the IBOR Fallbacks Supplement), provided that the IBOR Fallbacks Supplement shall be deemed amended as follows:

(a) If the Protocol Covered Document incorporates the 1991 ISDA Definitions only, the 1991 ISDA Definitions as supplemented by the 1998 Supplement to the 1991 ISDA Definitions or the 1998 Supplement to the 1991 ISDA Definitions only, each of the following sections shall be deleted:

- (i) “GBP-LIBOR-BBA-Bloomberg”;
- (ii) “CHF-LIBOR-BBA-Bloomberg”;
- (iii) “USD-LIBOR-BBA-Bloomberg”;
- (iv) “EUR-LIBOR-BBA-Bloomberg”;
- (v) “EUR-EURIBOR-Reuters”;
- (vi) “JPY-LIBOR-FRASETT”;
- (vii) “JPY-LIBOR-BBA-Bloomberg”;
- (viii) “JPY-TIBOR-17097”;
- (ix) “JPY-TIBOR-TIBM-(All Banks)-Bloomberg”;
- (x) “AUD-BBR-BBSW-Bloomberg”;
- (xi) “CAD-BA-CDOR-Bloomberg”;
- (xii) “HKD-HIBOR-HKAB-Bloomberg”;
- and
- (xiii) “THB-THBFIX-Reuters”;

(b) If the Protocol Covered Document incorporates the 1991 ISDA Definitions only, each of the following sections shall be deleted:

- (i) “JPY-TIBOR-ZTIBOR”;
- and
- (ii) “SGD-SOR-VWAP”;

(c) If the Protocol Covered Document incorporates the 1991 ISDA Definitions as supplemented by the 1998 Supplement to the 1991 ISDA Definitions or the 1998 Supplement to the 1991 ISDA Definitions only, the section titled “SGD-SOR-VWAP” will be re-titled “SGD-SOR-Telerate” and references in such section (or in related sections) to “SGD-SOR-VWAP” will be deleted and replaced with “SGD-SOR-Telerate”;

(d) The section titled “EUR-LIBOR-BBA” will be re-titled “XEU-LIBOR-BBA” and references in such section (or in related sections) to “EUR-LIBOR-BBA” will be deleted and replaced with “XEU-LIBOR-BBA”;

(e) The section titled “AUD-BBR-AUBBSW” will be re-titled “AUD-BBR-ISDC” and references in such section (or in related sections) to “AUD-BBR-AUBBSW” will be deleted and replaced with “AUD-BBR-ISDC”;

(f) All references to section numbers within the 2006 ISDA Definitions will be deemed to be references to the equivalent sections within the 1991 ISDA Definitions or the 1998 Supplement to the 1991 ISDA Definitions (as applicable).

#### 4. Amendments to Protocol Covered Docu-

30

#### *ments Incorporating the 1998 ISDA Euro Definitions*

If a Protocol Covered Document incorporates the 1998 ISDA Euro Definitions:

(a) the version of the 1998 ISDA Euro Definitions so incorporated shall be amended in accordance with the terms of the IBOR Fallbacks Supplement (and, if that Protocol Covered Document is a Protocol Covered Master Agreement, any reference to a term defined in the 1998 ISDA Euro Definitions in a Confirmation which supplements, forms part of and is subject to that Protocol Covered Master Agreement will be a reference to the term as defined in the 1998 ISDA Euro Definitions as amended in accordance with the IBOR Fallbacks Supplement), provided that the IBOR Fallbacks Supplement shall be deemed amended as follows:

(i) Each of the following sections shall be deleted:

- (A) “GBP-LIBOR-BBA”;
- (B) “GBP-LIBOR-BBA-Bloomberg”;
- (C) “CHF-LIBOR-BBA”;
- (D) “CHF-LIBOR-BBA-Bloomberg”;
- (E) “USD-LIBOR-BBA”;
- (F) “USD-LIBOR-BBA-Bloomberg”;
- (G) “EUR-LIBOR-BBA-Bloomberg”;
- (H) “JPY-LIBOR-FRASETT”;
- (I) “JPY-LIBOR-BBA”;
- (J) “JPY-LIBOR-BBA-Bloomberg”;
- (K) “JPY-TIBOR-17097”;
- (L) “JPY-TIBOR-TIBM-(All Banks)-Bloomberg”;
- (M) “JPY-TIBOR-ZTIBOR”;
- (N) “AUD-BBR-AUBBSW”;
- (O) “AUD-BBR-BBSW”;
- (P) “AUD-BBR-BBSW-Bloomberg”;
- (Q) “CAD-BA-CDOR”;
- (R) “CAD-BA-CDOR-Bloomberg”;
- (S) “HKD-HIBOR-HKAB”;
- (T) “HKD-HIBOR-HKAB-Bloomberg”;
- (U) “SGD-SOR-VWAP”;
- and
- (V) “THB-THBFIX-Reuters”;

(ii) the section titled “EUR-EURIBOR-Reuters” will be re-titled “EUR-EURIBOR-Telerate” and references in such section (or in related sections) to “EUR-EURIBOR-Reuters” will be deleted and replaced with “EUR-EURIBOR-Telerate”;

and (iii) all references to section numbers within the

2006 ISDA Definitions will be deemed to be references to the equivalent sections within the 1998 ISDA Euro Definitions.

(b) If a Relevant Rate (as defined in the 1991 ISDA Definitions) is to be determined pursuant to Section 4.3(b) (*Price Source Fallbacks*) of the 1998 ISDA Euro Definitions and “rates for deposits in euros” referred to in that section are required for any determination but are not available, they shall be deemed to be references to a Relevant IBOR (and, in particular, the euro interbank offered rate) to which paragraph 6 of this Attachment applies.

*5. Amendments to Protocol Covered Documents Which Reference a Relevant IBOR “as defined”, or as Having the Meaning Given, in a Covered ISDA Definitions Booklet*

A Protocol Covered Document of the type described in subparagraph (b) of, respectively, the definition of Protocol Covered Confirmation, Protocol Covered Credit Support Document or Protocol Covered Master Agreement shall be amended so that the reference to the Relevant IBOR “as defined in”, or the reference to the Relevant IBOR as having the meaning given in, the Covered ISDA Definitions Booklet will instead be a reference to the relevant Rate Option in the IBOR Fallbacks Supplement (or, if there is more than one relevant Rate Option, the first relevant Rate Option in the IBOR Fallbacks Supplement) for the Relevant IBOR “as defined in the IBOR Fallbacks Supplement” (and, if that Protocol Covered Document is a Protocol Covered Master Agreement, any reference to the Relevant IBOR (as defined in that Protocol Covered Master Agreement) in a Confirmation which supplements, forms part of and is subject to that Protocol Covered Master Agreement will be a reference to the relevant Rate Option in the IBOR Fallbacks Supplement (or, if there is more than one relevant Rate Option, the first relevant Rate Option in the IBOR Fallbacks Supplement) for the Relevant IBOR “as defined in the IBOR Fallbacks Supplement”), provided that:

- (a) If the Relevant IBOR is:
- (i) “EUR-EURIBOR-Telerate”, it will be deemed to be a reference to “EUR-EURIBOR-Reuters”;

- (ii) “AUD-BBR-ISDC”, it will be deemed to be a reference to “AUD-BBR-AUBBSW”;

- (iii) “XEU-LIBOR-BBA”, it will be deemed to be a reference to “EUR-LIBOR-BBA”; and

- (iv) “SGD-SOR-Telerate”, it will be deemed to be a reference to “SGD-SOR-VWAP”, in each case, as defined in the IBOR Fallbacks Supplement; and

(b) If the Relevant IBOR is “THB-THBFIX-Reuters” and the Covered ISDA Definitions Booklet is the 2000 ISDA Definitions, the IBOR Fallbacks Supplement shall be deemed amended in accordance with subparagraph 2(e) of this Attachment.

*6. Amendments to Certain Protocol Covered Documents That Reference a Relevant IBOR*

If a Protocol Covered Document is of the type described in subparagraph (c) of, respectively, the definition of Protocol Covered Confirmation, Protocol Covered Credit Support Document or Protocol Covered Master Agreement and, in each case, includes a reference to a Relevant IBOR pursuant to which the Relevant IBOR is required for any determination, and:

- (a) (i) The Relevant IBOR which is required for that determination is neither the Singapore dollar swap offer rate nor the Thai baht interest rate fixing, (ii) the Relevant IBOR which is required for that determination has not been published by the source that is specified or otherwise ordinarily used to determine the level of the Relevant IBOR on the day on which it is required, and (iii) an Index Cessation Effective Date with respect to the Relevant IBOR has not occurred, then the reference to the Relevant IBOR will be deemed to be a reference to the rate as provided by the administrator of the Relevant IBOR and published by an authorized distributor of the Relevant IBOR or the administrator of the Relevant IBOR itself in respect of the day on which it is required. If neither an authorized distributor nor the administrator has published or provided the Relevant IBOR in respect of that day and an Index Cessation Effective Date with respect to the Relevant IBOR has not

occurred, then, unless otherwise agreed by the parties, the reference to the Relevant IBOR will be deemed to be a reference to:

(A) A rate formally recommended for use by the administrator of the Relevant IBOR; or

(B) A rate formally recommended for use by:

(I) If the Relevant IBOR which is required for that determination is Swiss franc LIBOR, the competent authority responsible for supervising that rate or the administrator of that rate;

(II) If the Relevant IBOR which is required for that determination is sterling LIBOR, euro LIBOR or the euro interbank offered rate, the supervisor which is responsible for supervising the Relevant IBOR or the administrator of the Relevant IBOR;

(III) If the Relevant IBOR which is required for that determination is Japanese yen LIBOR, the Japanese yen Tokyo interbank offered rate or the euroyen Tokyo interbank offered rate, a committee officially endorsed or convened by the Bank of Japan for the purposes of recommending an alternative rate for that Relevant IBOR (which rate may be produced by the Bank of Japan or another administrator) or any other supervisor which is responsible for supervising the Relevant IBOR or the administrator of the Relevant IBOR;

(IV) If the Relevant IBOR which is required for that determination is U.S. dollar LIBOR, the Federal Reserve Board or the Federal Reserve Bank of New York or any other supervisor which is responsible for supervising the Relevant IBOR or the administrator of the Relevant IBOR; and

(V) If the Relevant IBOR which is required for that determination is the bank bill swap rate, the Australian Securities and Investments Commission (or any successor to the Australian Securities and Investments Commission in its role as supervisor of the bank bill swap rate),

in each case, during the period of

nonpublication of the Relevant IBOR and for so long as an Index Cessation Effective Date has not occurred. If a rate described in subparagraph (A) above is available, that rate shall apply. If no such rate is available but, in respect of the Relevant IBOR, a rate described in subparagraph (B) above, if applicable, is available, that rate shall apply. If neither a rate described in subparagraph (A) above is available nor a rate described in subparagraph (B) above, if applicable, is available, then the Calculation Agent shall determine a commercially reasonable alternative for the Relevant IBOR, taking into account any rate implemented by central counterparties and/or futures exchanges, in each case with trading volumes in derivatives or futures referencing the Relevant IBOR that the Calculation Agent considers sufficient for that rate to be a representative alternative rate.

If the Relevant IBOR is the Hong Kong interbank offered rate and the Protocol Covered Document provides that the Hong Kong Association of Banks' (or any successor's) typhoon and rainstorm arrangements (as published on the Hong Kong Association of Banks' website or on any successor website) apply, then those typhoon and rainstorm arrangements shall continue to apply and shall take precedence over the provisions of this paragraph 6(a);

(b) (i) The Relevant IBOR which is required for that determination is the Singapore dollar swap offer rate, (ii) the Singapore dollar swap offer rate has not been published by the source that is specified or otherwise ordinarily used to determine the level of the Singapore dollar swap offer rate on the day on which it is required and (iii) an Index Cessation Effective Date with respect to U.S. dollar LIBOR has not occurred, then the reference to the Singapore dollar swap offer rate will be deemed to be a reference to the substitute rate announced by ABS Benchmarks Administration Co Pte. Ltd. (or its successor as administrator or sponsor of that rate) in respect of the Singapore dollar swap offer rate.

If ABS Benchmarks Administration Co Pte. Ltd. (or its successor as administrator or sponsor of that rate) has not announced a



substitute rate by 9:00 p.m., Singapore time, on the Relevant Original Fixing Date and an Index Cessation Effective Date with respect to U.S. dollar LIBOR has not occurred, then, unless otherwise agreed by the parties, the reference to the Singapore dollar swap offer rate will be deemed to be a reference to:

(A) A rate formally recommended for use by the administrator of the Singapore dollar swap offer rate; or

(B) A rate formally recommended for use by the Monetary Authority of Singapore (or any other supervisor which is responsible for supervising the Singapore dollar swap offer rate or the administrator of the Singapore dollar swap offer rate) or a committee officially endorsed or convened by the Monetary Authority of Singapore (or any other supervisor which is responsible for supervising the Singapore dollar swap offer rate or the administrator of the Singapore dollar swap offer rate),

in each case, during the period of non-publication of the Singapore dollar swap offer rate and for so long as an Index Cessation Effective Date with respect to U.S. dollar LIBOR has not occurred. If a rate described in subparagraph (A) above is available, that rate shall apply. If no such rate is available but a rate described in subparagraph (B) above is available, that rate shall apply. If neither a rate described in subparagraph (A) above nor a rate described in subparagraph (B) above is available, then the Calculation Agent shall determine a commercially reasonable alternative for the Singapore dollar swap offer rate, taking into account any rate implemented by central counterparties and/or futures exchanges, in each case with trading volumes in derivatives or futures referencing the Singapore dollar swap offer rate that the Calculation Agent considers sufficient for that rate to be a representative alternative rate;

(c) (i) The Relevant IBOR which is required for that determination is the Thai baht interest rate fixing, (ii) the Thai baht interest rate fixing has not been published by the source that is specified or otherwise ordinarily used to determine the level of the

Thai baht interest rate fixing on the day on which it is required and (iii) an Index Cessation Effective Date with respect to U.S. dollar LIBOR has not occurred, then the reference to the Thai baht interest rate fixing will be deemed to be a reference to “THB-THBFIX-Reference Banks” (as defined in the 2006 ISDA Definitions) but with the references to (A) “Reset Date” being replaced by “the day on which the rate is required”; (B) “Designated Maturity” being replaced by “the period of time in respect of which the Thai baht interest rate fixing is to be determined”; (C) “Calculation Period” being replaced by “period”; and (D) “Representative Amount” being replaced by “an amount that is representative for a single transaction in the relevant market at the relevant time”. If the rate cannot be determined pursuant to “THB-THBFIX-Reference Banks” (as defined in the 2006 ISDA Definitions) and an Index Cessation Effective Date with respect to U.S. dollar LIBOR has not occurred, the rate will be determined by the Calculation Agent taking into consideration all available information that in good faith it deems relevant;

(d) Subject to paragraphs 6(e), (f) and (g) below, an Index Cessation Event has occurred with respect to the Relevant IBOR (or, if the Relevant IBOR is either the Singapore dollar swap offer rate or the Thai baht interest rate fixing, with respect to U.S. dollar LIBOR), then the reference to the Relevant IBOR will be deemed to be a reference to the Applicable Fallback Rate from and including either the Index Cessation Effective Date or, if the Relevant IBOR is observed on a day that is a period of time prior to the date for which the Relevant IBOR is set, such period of time following the Index Cessation Effective Date, provided that:

(i) If the Applicable Fallback Rate is Fallback Rate (SONIA), Fallback Rate (SARON), Fallback Rate (SOFR), Fallback Rate (EuroSTR), Fallback Rate (TONA), Fallback Rate (AONIA), Fallback Rate (CORRA), Fallback Rate (HONIA), Fallback Rate (SOR) or Fallback Rate (THBFIX), then the rate for the Relevant

Original Fixing Date will be the Applicable Fallback Rate for the ‘Original IBOR Rate Record Day’ (or, if Fallback Rate (SOR) or Fallback Rate (THBFIX) is the Applicable Fallback Rate, for the ‘Original SOR Rate Record Day’ or ‘Original THBFIX Rate Record Day’, as applicable) that corresponds to the Relevant Original Fixing Date, as most recently provided or published as at the Applicable Cut-off Time. If neither the provider of the Applicable Fallback Rate (or a successor provider, which, if the Applicable Fallback Rate is Fallback Rate (SONIA), Fallback Rate (SARON), Fallback Rate (SOFR), Fallback Rate (EuroSTR), Fallback Rate (TONA), Fallback Rate (AONIA), Fallback Rate (CORRA) or Fallback Rate (HONIA), is approved and/or appointed by ISDA from time to time) provides, nor any authorized distributors publish, the Applicable Fallback Rate for that ‘Original IBOR Rate Record Day’ (or that ‘Original SOR Rate Record Day’ or ‘Original THBFIX Rate Record Day’, as applicable) at, or prior to, the Applicable Cutoff Time and a Fallback Index Cessation Effective Date with respect to that Applicable Fallback Rate has not occurred, then the rate for the Relevant Original Fixing Date will be the Applicable Fallback Rate as most recently provided or published at the Applicable Cutoff Time for the most recent ‘Original IBOR Rate Record Day’ (or ‘Original SOR Rate Record Day’ or ‘Original THBFIX Rate Record Day’, as applicable), notwithstanding that such day does not correspond to the Relevant Original Fixing Date;

(ii) If (A) the Applicable Fallback Rate is SONIA, the GBP Recommended Rate, SARON, the NWG Recommended Rate, the Modified SNB Policy Rate, SOFR, the Fed Recommended Rate, OBFR, the FOMC Target Rate, EuroSTR, the ECB Recommended Rate, Modified EDFR, TONA, the JPY Recommended Rate, AONIA, the RBA Recommended Rate, CORRA, the CAD Recommended Rate, the BOC Target Rate, HONIA, the HKD Recommended Rate, the MAS Recommended Rate, SORA, the BOT Recommended Rate or THOR, (B) neither the administrator provides nor authorized

distributors publish that Applicable Fallback Rate (or if the Applicable Fallback Rate is the Modified SNB Policy Rate or Modified EDFR, the index, benchmark or other price source that is referred to in the definition thereof) and (C) a Fallback Index Cessation Effective Date with respect to that Applicable Fallback Rate has not occurred, then, in respect of any day for which that Applicable Fallback Rate is required, references to that Applicable Fallback Rate will be deemed to be references to the last provided or published Applicable Fallback Rate. If the Applicable Fallback Rate is the Modified SNB Policy Rate or Modified EDFR, references to that Applicable Fallback Rate in subparagraph 6(d)(ii)(C) above shall be deemed to be references to the index, benchmark or other price source that is referred to in the definition of Modified SNB Policy Rate or Modified EDFR, as applicable; and

(iii) If the Applicable Fallback Rate is UK Bank Rate, in respect of any day for which the UK Bank Rate is required, references to the UK Bank Rate will be deemed to be references to the last provided or published UK Bank Rate as at close of business in London on that day.

If the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, an Index Cessation Event with respect to U.S. dollar LIBOR will also occur if the Relevant IBOR in the relevant tenor (which under the 2006 ISDA Definitions would be equivalent to the “Designated Maturity”) has not been published by the source that is specified or otherwise ordinarily used to determine the level of the Relevant IBOR and, as of the Relevant Original Fixing Date, U.S. dollar LIBOR in the relevant tenor (which under the 2006 ISDA Definitions would be equivalent to the “Designated Maturity”) has been permanently discontinued or is Non-Representative and there is either no U.S. dollar LIBOR which has not been permanently discontinued and which is not Non-Representative for a period which is longer than that relevant tenor or no U.S. dollar LIBOR which has not been permanently discontinued and which is not Non-Representative for a period which is shorter than that relevant tenor. The related

Index Cessation Effective Date shall be the first date on which there is no such longer or shorter rate or, if later, the first date on which U.S. dollar LIBOR in the relevant tenor (which under the 2006 ISDA Definitions would be equivalent to the “Designated Maturity”) is permanently unavailable or Non-Representative.

For the purposes of this paragraph 6(d), references to an “Original IBOR Rate Record Day”, “Original SOR Rate Record Day” and “Original THBFIX Rate Record Day” are to that term as used on the Fallback Rate Screen. For the purposes of the immediately preceding paragraph above, (A) references to a rate being “permanently discontinued” or “permanently unavailable” shall be deemed to be references to such rate being permanently discontinued or permanently unavailable following a public statement or publication of information which would constitute an Index Cessation Event in accordance with subparagraphs (a) and (b) of the definition thereof in respect of that rate in the relevant tenor and (B) references to “U.S. dollar LIBOR” in the definition of “Non-Representative” shall be deemed to be references to the relevant tenor of U.S. dollar LIBOR;

(e) If the Relevant IBOR which is required for that determination is neither the Singapore dollar swap offer rate nor the Thai baht interest rate fixing and:

(i) The determination for which the Relevant IBOR is required is ordinarily made by reference to linear interpolation between two rates, each of which is based on the Relevant IBOR, then (notwithstanding paragraph 6(d) above) the provisions of Section 7.9(a) of the 2006 ISDA Definitions shall be deemed to apply, provided that the Calculation Agent shall make such adaptations as are reasonable and necessary to the provisions of Section 7.9(a) of the 2006 ISDA Definitions in order to apply them to the relevant Protocol Covered Document;

(ii) The Relevant IBOR which is required for that determination is to be determined by reference to one or more rates, either (A) at least one of which has been permanently discontinued, or (B) if the Relevant IBOR is a Relevant LIBOR, at least one of

which is Non-Representative, and, in either case, at least two Relevant IBOR tenors, at least one of which is shorter than the period of time in respect of which the Relevant IBOR is to be determined and at least one of which is longer than the period of time in respect of which the Relevant IBOR is to be determined, have not been permanently discontinued (and, if the Relevant IBOR is a Relevant LIBOR, are not Non-Representative), then the provisions of Section 8.5 and Section 8.6 of the 2006 ISDA Definitions shall be deemed to apply, provided that the Calculation Agent shall make such adaptations as are reasonable and necessary to the provisions of Sections 8.5 and 8.6 of the 2006 ISDA Definitions in order to apply them to the relevant Protocol Covered Document;

(iii) The Relevant IBOR which is required for that determination is to be determined by reference to a tenor of the Relevant IBOR which has been permanently discontinued (or, if the Relevant IBOR is a Relevant LIBOR, which is Non-Representative), and there are either no shorter or no longer tenors in respect of the Relevant IBOR which have not been permanently discontinued (or, if the Relevant IBOR is a Relevant LIBOR, which are not Non-Representative), then an Index Cessation Event shall be deemed to have occurred with respect to the Relevant IBOR and the Index Cessation Effective Date shall be the first date on which there is either no such shorter or no such longer tenor or, if later, the first date on which the Relevant IBOR in the relevant tenor is permanently unavailable (or, if the Relevant IBOR is a Relevant LIBOR, Non-Representative);

(iv) In the event of any inconsistency between the provisions of subparagraph 6(e)(ii) or subparagraph 6(e)(iii) above and the provisions of subparagraph 6(e)(i) above, subparagraph 6(e)(i) above shall prevail; and

(v) In the event of any inconsistency between the provisions of subparagraph 6(e)(ii) or subparagraph 6(e)(iii) above and paragraph 6(d) above (including any terms used in paragraph 6(d) above and defined

below), subparagraph 6(e)(ii) or subparagraph 6(e)(iii) above (as applicable) shall prevail.

For the purposes of this paragraph 6(e), (A) references to a rate being “permanently discontinued” shall be deemed to be references to such rate being permanently discontinued following a public statement or publication of information which would constitute an Index Cessation Event in accordance with subparagraphs (a) and (b) of the definition thereof in respect of that rate in the relevant tenor, (B) references to the “Relevant LIBOR” in the definition of “Non-Representative” shall be deemed to be references to the relevant tenor of the Relevant LIBOR and (C) Section 7.9(a), 8.5 and 8.6 of the 2006 ISDA Definitions shall be construed in accordance with Sections 7.3(r) and 7.3(s) of the 2006 ISDA Definitions;

(f) If the Relevant IBOR which is required for that determination is the Singapore dollar swap offer rate or the Thai baht interest rate fixing and the determination for which the Relevant IBOR is required is ordinarily made by reference to linear interpolation between two rates, each of which is based on the Relevant IBOR, then (notwithstanding paragraph 6(d) above) the provisions of Section 7.10(a) of the 2006 ISDA Definitions shall be deemed to apply, provided that the Calculation Agent shall make such adaptations as are reasonable and necessary to the provisions of Section 7.10(a) of the 2006 ISDA Definitions in order to apply them to the relevant Protocol Covered Document.

For the purposes of this paragraph 6(f), Section 7.10(a) of the 2006 ISDA Definitions shall be construed in accordance with Sections 7.3(r) and 7.3(s) of the 2006 ISDA Definitions;

(g) If (i) the Relevant IBOR which is required for that determination is the Singapore dollar swap offer rate or the Thai baht interest rate fixing and the Applicable Fallback Rate is Fallback Rate (SOR) or Fallback Rate (THBFIX), as applicable, (ii) the determination for which the Relevant IBOR is required is not ordinarily made by reference to linear interpolation between two rates and (iii) the period of time for which the rate is required

(which under the 2006 ISDA Definitions would be the “Calculation Period”) is shorter than the Relevant IBOR in the relevant tenor (which under the 2006 ISDA Definitions would be the “Designated Maturity”), then (notwithstanding paragraph 6(d) above) the provisions of Section 7.11(a) of the 2006 ISDA Definitions shall be deemed to apply, provided that the Calculation Agent shall make such adaptations as are reasonable and necessary to the provisions of Section 7.11(a) of the 2006 ISDA Definitions in order to apply them to the relevant Protocol Covered Document; and

(h) If the definition, methodology, formula or other means of calculating the Relevant IBOR or the Applicable Fallback Rate (or, if applicable, the index, benchmark or other price source that is referred to in the Relevant IBOR or the Applicable Fallback Rate) is modified, each party acknowledges that, unless otherwise specified or agreed, references to that Relevant IBOR or the Applicable Fallback Rate (or the index, benchmark or other price source that is referred to in the Relevant IBOR or the Applicable Fallback Rate) shall be to the Relevant IBOR or the Applicable Fallback Rate (or the index, benchmark or other price source that is referred to in the Relevant IBOR or the Applicable Fallback Rate) as modified. In the event of any inconsistency between this paragraph 6(h) and paragraphs 6(a) through 6(d) above (including any terms used in those paragraphs and defined below and including subparagraphs 6(e)(ii) and 6(e)(iii) above as they apply in priority to paragraph 6(d) above), paragraphs 6(a) through 6(d) above including subparagraphs 6(e)(ii) and 6(e)(iii) as they apply in priority to paragraph 6(d) above shall prevail.

If the Relevant IBOR referenced in the Protocol Covered Document is LIBOR with no reference to, or indication of, the currency of the relevant LIBOR (including, for the avoidance of doubt, the reference in Section 7.3 (*Corrections to Published Prices*) of the 2005 ISDA Commodity Definitions to “the spot offered rate for deposits in the payment currency in the London interbank market as at approximately 11:00 a.m., London time”), then the reference to LIBOR (howsoever de-

defined or described) in the Protocol Covered Document will be deemed to be a reference to LIBOR in the currency of the related payment for which LIBOR is required pursuant to the terms of the Protocol Covered Document and paragraphs 6(a), 6(d) and 6(e) above, and the related definitions below, shall be construed accordingly.

For the purposes of any Protocol Covered Document which does not include a definition of “Calculation Agent”, the term “Calculation Agent” shall be deemed to be a reference to a party or parties who would ordinarily be responsible for calculating or determining any rates or amounts payable under the relevant Protocol Covered Document and performing any associated duties.

If the Protocol Covered Document to which this paragraph 6 applies is a Protocol Covered Master Agreement, the Relevant IBOR is defined in the Protocol Covered Master Agreement and that definition is referenced in a Confirmation that supplements, forms part of and is subject to that Protocol Covered Master Agreement, then the reference in the Protocol Covered Master Agreement to the Relevant IBOR as amended by this paragraph 6 will also apply to the reference to the Relevant IBOR in that Confirmation.

For these purposes:

*Applicable Banking Days* means, if the Relevant IBOR is:

- (a) Swiss franc LIBOR, U.S. dollar LIBOR or Japanese yen LIBOR, London Banking Days (as defined in the 2006 ISDA Definitions);
- (b) Euro LIBOR or the euro interbank offered rate, TARGET Settlement Days (as defined in the 2006 ISDA Definitions);
- (c) The Japanese yen Tokyo interbank offered rate or the euroyen Tokyo interbank offered rate, Tokyo Banking Days (as defined in the 2006 ISDA Definitions);
- (d) The Singapore dollar swap offer rate, Singapore and London Banking Days (as defined in the 2006 ISDA Definitions); and
- (e) The Thai baht interest rate fixing, Bangkok Banking Days (as defined in the 2006 ISDA Definitions).

*Applicable Cut-off Time* means:

- (a) for Fallback Rate (SONIA), 11:30 a.m., London time;
- (b) for Fallback Rate (SARON), 8:30 p.m., Zurich time;
- (c) for Fallback Rate (SOFR), 10:30 a.m., New York City time;
- (d) for Fallback Rate (EuroSTR), 11:30 a.m., Frankfurt time;
- (e) for Fallback Rate (TONA), 12:30 p.m., Tokyo time;
- (f) for Fallback Rate (AONIA), 11:30 a.m., Sydney time;
- (g) for Fallback Rate (CORRA), 11:30 a.m., Toronto time;
- (h) for Fallback Rate (HONIA), 7:30 p.m., Hong Kong time;
- (i) for Fallback Rate (SOR), 11:30 a.m., New York City time; and
- (j) for Fallback Rate (THBFIX), 10:00 a.m., Bangkok time, in each case, on the Fallback Observation Day.

*Applicable Fallback Rate* means, in respect of a Relevant IBOR, for the purposes of:

- (a) Sterling LIBOR, Fallback Rate (SONIA) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (SONIA), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA) will be the Sterling Overnight Index Average (“SONIA”) rate administered by the Bank of England (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA), referred to in the definition of “Fallback Rate (SONIA)” after making such adjustments to SONIA as are necessary to account for any difference in term structure or tenor of SONIA by comparison to Fallback Rate (SONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (SONIA) and SONIA, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback

Index Cessation Effective Date with respect to Fallback Rate (SONIA) (or, if later, the Fallback Index Cessation Effective Date with respect to SONIA) will be the GBP Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA), referred to in the definition of “Fallback Rate (SONIA)” after making such adjustments to the GBP Recommended Rate as are necessary to account for any difference in term structure or tenor of the GBP Recommended Rate by comparison to Fallback Rate (SONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If there is no GBP Recommended Rate before the end of the first London Banking Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA) (or, if later, the end of the first London Banking Day following the Fallback Index Cessation Effective Date with respect to SONIA), or there is a GBP Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA) (or, if later, the Fallback Index Cessation Effective Date with respect to SONIA) or the Fallback Index Cessation Effective Date with respect to the GBP Recommended Rate (as applicable) will be the UK Bank Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SONIA), referred to in the definition of “Fallback Rate (SONIA)” after making such adjustments to the UK Bank Rate as are necessary to account for any difference in term structure or tenor of the UK Bank Rate by comparison to Fallback Rate (SONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(b) Swiss franc LIBOR, Fallback Rate (SARON) or if a Fallback Index Cessation

Event has occurred with respect to Fallback Rate (SARON), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON) will be the Swiss Average Rate Overnight (“SARON”) administered by SIX Swiss Exchange AG (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON), referred to in the definition of “Fallback Rate (SARON)” after making such adjustments to SARON as are necessary to account for any difference in term structure or tenor of SARON by comparison to Fallback Rate (SARON) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book.

If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (SARON) and SARON, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON) (or, if later, the Fallback Index Cessation Effective Date with respect to SARON) will be the NWG Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON), referred to in the definition of “Fallback Rate (SARON)” after making such adjustments to the NWG Recommended Rate as are necessary to account for any difference in term structure or tenor of the NWG Recommended Rate by comparison to Fallback Rate (SARON) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book.

If there is no NWG Recommended Rate before the end of the first Zurich Banking Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON) (or, if later, the end of the first Zurich Banking Day following the Fallback Index Cessation Effective Date with respect to SARON), then the Applicable Fallback Rate for any Fallback Obser-

vation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON) (or, if later, the Fallback Index Cessation Effective Date with respect to SARON) will be the Modified SNB Policy Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SARON), referred to in the definition of “Fallback Rate (SARON)” after making such adjustments to the Modified SNB Policy Rate as are necessary to account for any difference in term structure or tenor of the Modified SNB Policy Rate by comparison to Fallback Rate (SARON) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(c) U.S. dollar LIBOR, Fallback Rate (SOFR) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (SOFR), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR) will be the Secured Overnight Financing Rate (“SOFR”) administered by the Federal Reserve Bank of New York (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR), referred to in the definition of “Fallback Rate (SOFR)” after making such adjustments to SOFR as are necessary to account for any difference in term structure or tenor of SOFR by comparison to Fallback Rate (SOFR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book.

If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (SOFR) and SOFR, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR) (or, if later, the Fallback Index Cessation Effective Date with respect to SOFR) will be the Fed Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index

Cessation Effective Date with respect to Fallback Rate (SOFR), referred to in the definition of “Fallback Rate (SOFR)” after making such adjustments to the Fed Recommended Rate as are necessary to account for any difference in term structure or tenor of the Fed Recommended Rate by comparison to Fallback Rate (SOFR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book.

If there is no Fed Recommended Rate before the end of the first U.S. Government Securities Business Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR) (or, if later, the end of the first U.S. Government Securities Business Day following the Fallback Index Cessation Effective Date with respect to SOFR), or there is a Fed Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR) (or, if later, the Fallback Index Cessation Effective Date with respect to SOFR) or the Fallback Index Cessation Effective Date with respect to the Fed Recommended Rate (as applicable) will be OBFR, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR), referred to in the definition of “Fallback Rate (SOFR)” after making such adjustments to OBFR as are necessary to account for any difference in term structure or tenor of OBFR by comparison to Fallback Rate (SOFR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If there is no Fed Recommended Rate, or there is a Fed Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, and a Fallback Index Cessation Effective Date also occurs with respect to OBFR, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect

to OBFR (or, if later, the Fallback Index Cessation Effective Date with respect to the Fed Recommended Rate, SOFR or Fallback Rate (SOFR), as applicable) will be the FOMC Target Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOFR), referred to in the definition of “Fallback Rate (SOFR)” after making such adjustments to the FOMC Target Rate as are necessary to account for any difference in term structure or tenor of the FOMC Target Rate by comparison to Fallback Rate (SOFR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(d) Euro LIBOR and the euro interbank offered rate, Fallback Rate (EuroSTR) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (EuroSTR), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR) will be the Euro Short-Term Rate (“EuroSTR”) administered by the European Central Bank (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR), referred to in the definition of “Fallback Rate (EuroSTR)” after making such adjustments to EuroSTR as are necessary to account for any difference in term structure or tenor of EuroSTR by comparison to Fallback Rate (EuroSTR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (EuroSTR) and EuroSTR, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR) (or, if later, the Fallback Index Cessation Effective Date with respect to EuroSTR) will be the ECB Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index

Cessation Effective Date with respect to Fallback Rate (EuroSTR), referred to in the definition of “Fallback Rate (EuroSTR)” after making such adjustments to the ECB Recommended Rate as are necessary to account for any difference in term structure or tenor of the ECB Recommended Rate by comparison to Fallback Rate (EuroSTR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book.

If no ECB Recommended Rate is recommended before the end of the first TARGET Settlement Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR) (or, if later, the end of the first TARGET Settlement Day following the Fallback Index Cessation Effective Date with respect to EuroSTR), or a Fallback Index Cessation Effective Date with respect to the ECB Recommended Rate subsequently occurs, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR) (or, if later, the Fallback Index Cessation Effective Date with respect to EuroSTR) or the Fallback Index Cessation Effective Date with respect to the ECB Recommended Rate (as applicable) will be Modified EDFR, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR), referred to in the definition of “Fallback Rate (EuroSTR)” after making such adjustments to Modified EDFR as are necessary to account for any difference in term structure or tenor of Modified EDFR by comparison to Fallback Rate (EuroSTR) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(e) Japanese yen LIBOR, the Japanese yen Tokyo interbank offered rate and the euroyen Tokyo interbank offered rate, Fallback Rate (TONA) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (TONA), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fall-



back Index Cessation Effective Date with respect to Fallback Rate (TONA) will be the Tokyo Overnight Average Rate (“TONA”) administered by the Bank of Japan (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (TONA), referred to in the definition of “Fallback Rate (TONA)” after making such adjustments to TONA as are necessary to account for any difference in term structure or tenor of TONA by comparison to Fallback Rate (TONA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (TONA) and TONA, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (TONA) (or, if later, the Fallback Index Cessation Effective Date with respect to TONA) will be the JPY Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (TONA), referred to in the definition of “Fallback Rate (TONA)” after making such adjustments to the JPY Recommended Rate as are necessary to account for any difference in term structure or tenor of the JPY Recommended Rate by comparison to Fallback Rate (TONA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(f) The bank bill swap rate, Fallback Rate (AONIA) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (AONIA), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (AONIA) will be the inter-bank overnight cash rate (“AONIA”) administered by the Reserve Bank of Australia (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect

to Fallback Rate (AONIA), referred to in the definition of “Fallback Rate (AONIA)” after making such adjustments to AONIA as are necessary to account for any difference in term structure or tenor of AONIA by comparison to Fallback Rate (AONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (AONIA) and AONIA, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (AONIA) (or, if later, the Fallback Index Cessation Effective Date with respect to AONIA) will be the RBA Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (AONIA), referred to in the definition of “Fallback Rate (AONIA)” after making such adjustments to the RBA Recommended Rate as are necessary to account for any difference in term structure or tenor of the RBA Recommended Rate by comparison to Fallback Rate (AONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(g) The Canadian dollar offered rate, Fallback Rate (CORRA) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (CORRA), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA) will be the Canadian Overnight Repo Rate Average (“CORRA”) administered by the Bank of Canada (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA), referred to in the definition of “Fallback Rate (CORRA)” after making such adjustments to CORRA as are necessary to account for any difference in term structure or tenor of CORRA by comparison to Fallback Rate (CORRA) and by reference to the Bloomberg IBOR Fallback Rate Adjust-

ments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (CORRA) and CORRA, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA) (or, if later, the Fallback Index Cessation Effective Date with respect to CORRA) will be the CAD Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA), referred to in the definition of “Fallback Rate (CORRA)” after making such adjustments to the CAD Recommended Rate as are necessary to account for any difference in term structure or tenor of the CAD Recommended Rate by comparison to Fallback Rate (CORRA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If there is no CAD Recommended Rate before the end of the first Toronto Banking Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA) (or, if later, the end of the first Toronto Banking Day following the Fallback Index Cessation Effective Date with respect to CORRA), or there is a CAD Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA) (or, if later, the Fallback Index Cessation Effective Date with respect to CORRA) or the Fallback Index Cessation Effective Date with respect to the CAD Recommended Rate (as applicable) will be the BOC Target Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (CORRA), referred to in the definition of “Fallback Rate (CORRA)” after making such adjustments to the BOC Target Rate as are necessary to account for any difference in term

structure or tenor of the BOC Target Rate by comparison to Fallback Rate (CORRA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book;

(h) The Hong Kong interbank offered rate, Fallback Rate (HONIA) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (HONIA), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (HONIA) will be the Hong Kong Dollar Overnight Index Average (“HONIA”) rate administered by the Treasury Markets Association (or any successor administrator), to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (HONIA), referred to in the definition of “Fallback Rate (HONIA)” after making such adjustments to HONIA as are necessary to account for any difference in term structure or tenor of HONIA by comparison to Fallback Rate (HONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book. If a Fallback Index Cessation Effective Date occurs with respect to each of Fallback Rate (HONIA) and HONIA, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (HONIA) (or, if later, the Fallback Index Cessation Effective Date with respect to HONIA) will be the HKD Recommended Rate, to which the Calculation Agent shall apply the most recently published spread, as at the Fallback Index Cessation Effective Date with respect to Fallback Rate (HONIA), referred to in the definition of “Fallback Rate (HONIA)” after making such adjustments to the HKD Recommended Rate as are necessary to account for any difference in term structure or tenor of the HKD Recommended Rate by comparison to Fallback Rate (HONIA) and by reference to the Bloomberg IBOR Fallback Rate Adjustments Rule Book; the Singapore dollar swap offer rate, Fallback Rate (SOR) or if a Fallback Index Cessation Event has occurred with respect to Fallback

Rate (SOR), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOR) will be the MAS Recommended Rate or, if there is no MAS Recommended Rate before the end of the first Singapore Banking Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOR), or there is a MAS Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (SOR) or the Fallback Index Cessation Effective Date with respect to the MAS Recommended Rate (as applicable) will be SORA, to which the Calculation Agent shall make such adjustments as are necessary to account for any difference in term structure or tenor of SORA by comparison to Fallback Rate (SOR) and by reference to the Calculation Methodology for Fallback Rate (SOR); and (i) The Thai baht interest rate fixing, Fallback Rate (THBFIX) or if a Fallback Index Cessation Event has occurred with respect to Fallback Rate (THBFIX), then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (THBFIX) will be the BOT Recommended Rate or, if there is no BOT Recommended Rate before the end of the first Bangkok Banking Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (THBFIX), or there is a BOT Recommended Rate and a Fallback Index Cessation Effective Date subsequently occurs with respect to it, then the Applicable Fallback Rate for any Fallback Observation Day that occurs on or after the Fallback Index Cessation Effective Date with respect to Fallback Rate (THBFIX) or the Fallback Index Cessation Effective Date with respect to the BOT Recommended Rate (as applicable) will be THOR, to which the Calcula-

tion Agent shall make such adjustments as are necessary to account for any difference in term structure or tenor of THOR by comparison to Fallback Rate (THBFIX) and by reference to the Bank of Thailand THBFIX Fallback Rate Adjustments Rule Book.

*Bank of Thailand THBFIX Fallback Rate Adjustments Rule Book* means the THBFIX Fallback Rate Adjustments Rule Book published by the Bank of Thailand as updated from time to time.

*Bloomberg IBOR Fallback Rate Adjustments Rule Book* means the IBOR Fallback Rate Adjustments Rule Book published by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time) as updated from time to time in accordance with its terms.

*BOC Target Rate* means the Bank of Canada's Target for the Overnight Rate as set by the Bank of Canada and published on the Bank of Canada's website (as defined in the 2006 ISDA Definitions).

*BOT Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for Fallback Rate (THBFIX) by the Bank of Thailand or by a committee officially endorsed or convened by the Bank of Thailand (which rate may be produced by the Bank of Thailand or another administrator) and as provided by the administrator of that rate in respect of the day for which that rate is required (which under the 2006 ISDA Definitions would be the "Reset Date") or, if that rate is not provided by the administrator of that rate (or a successor administrator), published by an authorized distributor.

*CAD Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for CORRA by a committee officially endorsed or convened by the Bank of Canada for the purpose of recommending a replacement for CORRA (which rate may be produced by the Bank of Canada or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a

successor administrator), published by an authorized distributor. “Calculation Methodology for Fallback Rate (SOR)” means the Calculation Methodology for Fallback Rate (SOR) published by ABS Benchmarks Administration Co Pte. Ltd. as updated from time to time.

*ECB Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for EuroSTR by the European Central Bank (or any successor administrator of EuroSTR) and/or by a committee officially endorsed or convened by the European Central Bank (or any successor administrator of EuroSTR) for the purpose of recommending a replacement for EuroSTR (which rate may be produced by the European Central Bank or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*EDFR Spread* means:

- (a) If no ECB Recommended Rate is recommended before the end of the first TARGET Settlement Day (as defined in the 2006 ISDA Definitions) following the Fallback Index Cessation Effective Date with respect to Fallback Rate (EuroSTR) (or, if later, before the end of the first TARGET Settlement Day following the Fallback Index Cessation Effective Date with respect to EuroSTR), the arithmetic mean of the daily difference between EuroSTR and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the Fallback Index Cessation Event with respect to Fallback Rate (EuroSTR) occurs (or, if later, 30 TARGET Settlement Days prior to the day on which the first Fallback Index Cessation Event with respect to EuroSTR occurs) and ending on the TARGET Settlement Day immediately preceding the day on which the Fallback Index Cessation Event with respect to Fallback Rate (EuroSTR) occurs (or, if later, the TARGET Settlement Day immediately preceding the day on which the first Fallback Index Cessation Event with respect to EuroSTR occurs); or

- (b) If a Fallback Index Cessation Event with respect to the ECB Recommended Rate occurs, the arithmetic mean of the daily difference between the ECB Recommended Rate and the Eurosystem Deposit Facility Rate over an observation period of 30 TARGET Settlement Days starting 30 TARGET Settlement Days prior to the day on which the Fallback Index Cessation Event with respect to the ECB Recommended Rate occurs and ending on the TARGET Settlement Day immediately preceding the day on which that Fallback Index Cessation Event occurs.

*Eurosystem Deposit Facility Rate* means the rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem and which is published on the ECB’s website (as defined in the 2006 ISDA Definitions).

*Fallback Index Cessation Effective Date* means, in respect of a Fallback Index Cessation Event, the first date on which the Applicable Fallback Rate is no longer provided. If the Applicable Fallback Rate ceases to be provided on the same day that it would have been observed but it was provided at the time at which it is ordinarily observed (or, if no such time is specified, at the time at which it is ordinarily published), then the Fallback Index Cessation Effective Date will be the next day on which the rate would ordinarily have been published. If the Applicable Fallback Rate is the Modified SNB Policy Rate or Modified EDFR, references to the Applicable Fallback Rate in this definition of “Fallback Index Cessation Effective Date” shall be deemed to be references to the index, benchmark or other price source that is referred to in the definition of Modified SNB Policy Rate or Modified EDFR, as applicable.

*Fallback Index Cessation Event* means, in respect of an Applicable Fallback Rate:

- (a) A public statement or publication of information by or on behalf of the administrator or provider of the Applicable Fallback Rate announcing that it has ceased or will cease to provide the Applicable Fallback Rate permanently or indefinitely, provided that, at the time of the statement or publica-

tion, there is no successor administrator or provider that will continue to provide the Applicable Fallback Rate; or

(b) If the Applicable Fallback Rate is:

(i) Fallback Rate (SONIA), Fallback Rate (SARON), Fallback Rate (SOFR), Fallback Rate (EuroSTR), Fallback Rate (TONA), Fallback Rate (AONIA), Fallback Rate (CORRA) or Fallback Rate (HONIA), a public statement or publication of information by the regulatory supervisor for the administrator of the Underlying Rate, the central bank for the currency of the Underlying Rate, an insolvency official with jurisdiction over the administrator for the Underlying Rate, a resolution authority with jurisdiction over the administrator for the Underlying Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Underlying Rate, which states that the administrator of the Underlying Rate has ceased or will cease to provide the Underlying Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Underlying Rate; or

(ii) SONIA, the GBP Recommended Rate, SARON, the NWG Recommended Rate, the Modified SNB Policy Rate, SOFR, the Fed Recommended Rate, OBFR, the FOMC Target Rate, EuroSTR, the ECB Recommended Rate, Modified EDFR, TONA, the JPY Recommended Rate, AONIA, the RBA Recommended Rate, CORRA, the CAD Recommended Rate, the BOC Target Rate, HONIA, the HKD Recommended Rate, Fallback Rate (SOR), the MAS Recommended Rate, SORA, Fallback Rate (THBFX), the BOT Recommended Rate or THOR, a public statement or publication of information by the regulatory supervisor for the administrator or provider of the Applicable Fallback Rate, the central bank for the currency of the Applicable Fallback Rate, an insolvency official with jurisdiction over the administrator or provider for the Applicable Fallback Rate, a resolution authority with jurisdiction over

the administrator or provider for the Applicable Fallback Rate or a court or an entity with similar insolvency or resolution authority over the administrator or provider for the Applicable Fallback Rate, which states that the administrator or provider of the Applicable Fallback Rate has ceased or will cease to provide the Applicable Fallback Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator or provider that will continue to provide the Applicable Fallback Rate.

If the Applicable Fallback Rate is the Modified SNB Policy Rate or Modified EDFR, references to the administrator or provider of such rate in this definition of “Fallback Index Cessation Event” shall be deemed to be references to the administrator or provider of the index, benchmark or other price source that is referred to in the definition of Modified SNB Policy Rate or Modified EDFR, as applicable.

*Fallback Observation Day* means, in respect of an Applicable Fallback Rate and unless otherwise agreed, the day that is two Business Days (as defined in the relevant Protocol Covered Document or, if that term is not defined therein, as defined in the 2006 ISDA Definitions and, in each case, for the purposes of the payment which is calculated by reference to that Applicable Fallback Rate) preceding the day on which payment by reference to that rate is due (which under the 2006 ISDA Definitions would be equivalent to the “Payment Date”).

*Fallback Rate (AONIA)* means the term adjusted AONIA plus the spread relating to the bank bill swap rate, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted AONIA and the spread, on the Fallback Rate (AONIA) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (AONIA) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for the bank bill swap rate for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (CORRA)* means the term adjusted CORRA plus the spread relating to the Canadian dollar offered rate, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted CORRA and the spread, on the Fallback Rate (CORRA) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (CORRA) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for the Canadian dollar offered rate for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (EuroSTR)* means:

- (a) The term adjusted EuroSTR; plus
- (b) If the Relevant IBOR is:
  - (i) Euro LIBOR, the spread relating to euro LIBOR; or
  - (ii) The euro interbank offered rate, the spread relating to the euro interbank offered rate,
 in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index

Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted EuroSTR and the spread, on the Fallback Rate (EuroSTR) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (EuroSTR) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for euro LIBOR or the euro interbank offered rate, as applicable, for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (HONIA)* means the term adjusted HONIA rate plus the spread relating to the Hong Kong interbank offered rate, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted HONIA and the spread, on the Fallback Rate (HONIA) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (HONIA) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for the Hong Kong interbank offered rate for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (SARON)* means the term adjusted SARON plus the spread relating to

Swiss franc LIBOR, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SARON and the spread, on the Fallback Rate (SARON) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (SARON) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for Swiss franc LIBOR for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate Screen* means, if the Applicable Fallback Rate is: (a) Fallback Rate (SONIA), the Fallback Rate (SONIA) Screen; (b) Fallback Rate (SARON), the Fallback Rate (SARON) Screen; (c) Fallback Rate (SOFR), the Fallback Rate (SOFR) Screen; (d) Fallback Rate (EuroSTR), the Fallback Rate (EuroSTR) Screen; (e) Fallback Rate (TONA), the Fallback Rate (TONA) Screen; (f) Fallback Rate (AONIA), the Fallback Rate (AONIA) Screen; (g) Fallback Rate (CORRA), the Fallback Rate (CORRA) Screen, (h) Fallback Rate (HONIA), the Fallback Rate (HONIA) Screen, (i) Fallback Rate (SOR), the Fallback Rate (SOR) Screen; and (j) Fallback Rate (THBFX), the Fallback Rate (THBFX) Screen.

*Fallback Rate (SOFR)* means the term adjusted SOFR plus the spread relating to U.S. dollar LIBOR, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SOFR and the spread, on the Fallback Rate

(SOFR) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (SOFR) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for U.S. dollar LIBOR for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (SONIA)* means the term adjusted SONIA rate plus the spread relating to sterling LIBOR, in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted SONIA and the spread, on the Fallback Rate (SONIA) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (SONIA) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for sterling LIBOR for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fallback Rate (SOR)* means the rate based on actual transactions in the U.S. dollar/Singapore dollar foreign exchange swap market and a U.S. dollar interest rate calculated by reference to “Fallback Rate (SOFR)” as defined above and including any fallback rate that may apply pursuant to subparagraph (c)

of the definition of “Applicable Fallback Rate” above for the period of time in respect of which the Relevant IBOR is to be determined provided by ABS Benchmarks Administration Co Pte. Ltd. (or a successor provider), as the provider of Fallback Rate (SOR), on the Fallback Rate (SOR) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (SOR) Screen* means the Refinitiv Screen (as defined in the 2006 ISDA Definitions) corresponding to the Refinitiv ticker for the fallback for the Singapore dollar swap offer rate for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Refinitiv Screen (or, if applicable, accessed via the relevant Refinitiv Screen for ‘price history’) or any other published source designated by ABS Benchmarks Administration Co Pte. Ltd. (or a successor provider).

*Fallback Rate (THBFIX)* means the rate based on actual transactions in the U.S. dollar/Thai baht foreign exchange swap market and a U.S. dollar interest rate calculated by reference to “Fallback Rate (SOFR)” as defined above and including any fallback rate that may apply pursuant to subparagraph (c) of the definition of “Applicable Fallback Rate” above for the period of time in respect of which the Relevant IBOR is to be determined provided by the Bank of Thailand (or a successor provider), as the provider of Fallback Rate (THBFIX), on the Fallback Rate (THBFIX) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (THBFIX) Screen* means the Refinitiv Screen (as defined in the 2006 ISDA Definitions) corresponding to the Refinitiv ticker for the fallback for the Thai baht interest rate fixing for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Refinitiv Screen (or, if applicable, accessed via the relevant Refinitiv Screen for ‘price history’) or any other published source designated by the Bank of Thailand (or a successor provider).

*Fallback Rate (TONA)* means:

- (a) The term adjusted TONA; plus
- (b) If the Relevant IBOR is:
  - (i) Japanese yen LIBOR, the spread relating to Japanese yen LIBOR;
  - (ii) The Japanese yen Tokyo interbank offered rate, the spread relating to the Japanese yen Tokyo interbank offered rate; or
  - (iii) the euroyen Tokyo interbank offered rate, the spread relating to the euroyen Tokyo interbank offered rate,

in each case, for the period of time in respect of which the Relevant IBOR is to be determined provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time), as the provider of term adjusted TONA and the spread, on the Fallback Rate (TONA) Screen (or by other means) or provided to, and published by, authorized distributors at, or prior to, the Applicable Cut-off Time.

*Fallback Rate (TONA) Screen* means the Bloomberg Screen (as defined in the 2006 ISDA Definitions) corresponding to the Bloomberg ticker for the fallback for Japanese yen LIBOR, the Japanese yen Tokyo interbank offered rate or the euroyen Tokyo interbank offered rate, as applicable, for the period of time in respect of which the Relevant IBOR is to be determined accessed via the Bloomberg Screen Page (or, if applicable, accessed via the Bloomberg Screen ) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).

*Fed Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for SOFR by the Federal Reserve Board or the Federal Reserve Bank of New York, or by a committee officially endorsed or convened by the Federal Reserve Board or the Federal Reserve Bank of New York for the purpose of recommending a replacement for SOFR (which rate may be produced by the Federal Reserve Bank of New York or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administra-



tor thereof (or a successor administrator), published by an authorized distributor.

*FOMC Target Rate* means the short-term interest rate target set by the Federal Open Market Committee and published on the Federal Reserve's website (as defined in the 2006 ISDA Definitions) or, if the Federal Open Market Committee does not target a single rate, the mid-point of the short-term interest rate target range set by the Federal Open Market Committee and published on the Federal Reserve's website (calculated as the arithmetic average of the upper bound of the target range and the lower bound of the target range, rounded, if necessary, in accordance with the method set forth in Section 8.1(c) of the 2006 ISDA Definitions).

*GBP Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for SONIA by (a) the administrator of SONIA if the administrator of SONIA is a national central bank, or (b) if the national central bank administrator of SONIA does not make a recommendation or the administrator of SONIA is not a national central bank, a committee designated for this purpose by one or both of the Financial Conduct Authority (or any successor thereto) and the Bank of England and as provided by the then administrator of that rate (or a successor administrator) or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*HKD Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for HONIA by the administrator of HONIA or by a committee officially endorsed or convened by the administrator of HONIA for the purpose of recommending a replacement for HONIA (which rate may be produced by the administrator of HONIA or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*Index Cessation Effective Date* means, in respect of a Relevant IBOR (or, if either the

Singapore dollar swap offer rate or the Thai baht interest rate fixing is the Relevant IBOR, U.S. dollar LIBOR) and one or more Index Cessation Events, the first date on which the Relevant IBOR (or, if either the Singapore dollar swap offer rate or the Thai baht interest rate fixing is the Relevant IBOR, U.S. dollar LIBOR) is either (a) in respect of a Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, in respect of U.S. dollar LIBOR), Non-Representative by reference to the most recent statement or publication contemplated in subparagraph (c) of the definition of "Index Cessation Event" below and even if such rate continues to be provided on such date or (b) no longer provided. If the Relevant IBOR (or, if either the Singapore dollar swap offer rate or the Thai baht interest rate fixing is the Relevant IBOR, U.S. dollar LIBOR) ceases to be provided on the Relevant Original Fixing Date but it was provided (and, in respect of a Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, in respect of U.S. dollar LIBOR), is not Non-Representative) at the time at which it is ordinarily observed, then the Index Cessation Effective Date will be the next day on which the rate would ordinarily have been published. An Index Cessation Effective Date may also occur in accordance with paragraph 6(d), subparagraph 6(e)(ii) or subparagraph 6(e)(iii) above.

*Index Cessation Event* means, in respect of a Relevant IBOR:

- (a) A public statement or publication of information by or on behalf of the administrator of the Relevant IBOR announcing that it has ceased or will cease to provide the Relevant IBOR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Relevant IBOR;
- (b) A public statement or publication of information by the regulatory supervisor for the administrator of the Relevant IBOR, the central bank for the currency of the Relevant IBOR, an insolvency official with jurisdiction over the administrator for the Rel-

evant IBOR, a resolution authority with jurisdiction over the administrator for the Relevant IBOR or a court or an entity with similar insolvency or resolution authority over the administrator for the Relevant IBOR, which states that the administrator of the Relevant IBOR has ceased or will cease to provide the Relevant IBOR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the Relevant IBOR; or

(c) If the Relevant IBOR is sterling LIBOR, Swiss franc LIBOR, U.S. dollar LIBOR, euro LIBOR, Japanese yen LIBOR, the Singapore dollar swap offer rate or the Thai baht interest rate fixing, a public statement or publication of information by the regulatory supervisor for the administrator of such Relevant IBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, by the regulatory supervisor for the administrator of U.S. dollar LIBOR) announcing that (i) the regulatory supervisor has determined that such Relevant IBOR is no longer, or as of a specified future date will no longer be, representative of the underlying market and economic reality that such Relevant IBOR is intended to measure and that representativeness will not be restored and (ii) it is being made in the awareness that the statement or publication will engage certain contractual triggers for fallbacks activated by pre-cessation announcements by such supervisor (howsoever described) in contracts, provided that, if either the Singapore dollar swap offer rate or the Thai baht interest rate fixing is the Relevant IBOR, references to the “Relevant IBOR” in subparagraphs (a), (b) and (c)(i) above of this definition of “Index Cessation Event” will be deemed to be references to U.S. dollar LIBOR.

An Index Cessation Event may also occur in accordance with paragraph 6(d), subparagraph 6(e)(ii) or subparagraph 6(e)(iii) above.

*JPY Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for TONA by a committee officially endorsed or convened by

the Bank of Japan for the purpose of recommending a replacement for TONA (which rate may be produced by the Bank of Japan or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*MAS Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for Fallback Rate (SOR) by the Monetary Authority of Singapore or by a committee officially endorsed or convened by the Monetary Authority of Singapore (which rate may be produced by the Monetary Authority of Singapore or another administrator) and as provided by the administrator of that rate in respect of the day for which that rate is required (which under the 2006 ISDA Definitions would be the “Reset Date”) or, if that rate is not provided by the administrator of that rate (or a successor administrator), published by an authorized distributor.

*Modified EDFR* means a rate equal to the Eurosystem Deposit Facility Rate plus the EDFR Spread.

*Modified SNB Policy Rate* means a rate equal to the SNB Policy Rate plus the SNB Spread.

*Non-Representative* means, in respect of a Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, in respect of U.S. dollar LIBOR), the regulatory supervisor for the administrator of the Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, U.S. dollar LIBOR):

- (a) Has determined and announced that the Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, U.S. dollar LIBOR) is no longer representative of the underlying market and economic reality it is intended to measure and representativeness will not be restored; and
- (b) Is aware that certain contractual triggers for fallbacks activated by pre-cessation announcements by such supervisor (howso-

ever described) in contracts have been or are engaged, provided that such Relevant LIBOR (or, if the Relevant IBOR is the Singapore dollar swap offer rate or the Thai baht interest rate fixing, U.S. dollar LIBOR) will be ‘Non-Representative’ by reference to the date indicated in the most recent statement or publication contemplated in subparagraph (c) of the definition of “Index Cessation Event” above.

*NWG Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for SARON by any working group or committee in Switzerland organized in the same or a similar manner as the National Working Group on Swiss Franc Reference Rates that was founded in 2013 for purposes of, among other things, considering proposals to reform reference interest rates in Switzerland, and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*OBFR* means the Overnight Bank Funding Rate, as provided by the Federal Reserve Bank of New York (or a successor administrator) on the New York Fed’s website (as defined in the 2006 ISDA Definitions) or, if that rate is not provided by the Federal Reserve Bank of New York (or a successor administrator), published by an authorized distributor.

*RBA Recommended Rate* means the rate (inclusive of any spreads or adjustments) recommended as the replacement for AONIA by the Reserve Bank of Australia (which rate may be produced by the Reserve Bank of Australia or another administrator) and as provided by the administrator of that rate or, if that rate is not provided by the administrator thereof (or a successor administrator), published by an authorized distributor.

*Relevant LIBOR* means sterling LIBOR, Swiss franc LIBOR, U.S. dollar LIBOR, euro LIBOR and Japanese yen LIBOR. “Relevant Original Fixing Date” means, in respect of a Relevant IBOR and unless otherwise agreed, the day on which that Relevant IBOR would have been observed (which under the 2006

ISDA Definitions would be the “Reset Date” or, if the Relevant IBOR is Swiss franc LIBOR, U.S. dollar LIBOR, euro LIBOR, the euro interbank offered rate, Japanese yen LIBOR, the Japanese yen Tokyo interbank offered rate, the euroyen Tokyo interbank offered rate, the Singapore dollar swap offer rate or the Thai baht interest rate fixing, the day that is two Applicable Banking Days preceding a relevant “Reset Date”, as applicable).

*SNB Policy Rate* means the policy rate of the Swiss National Bank.

*SNB Spread* means the historical median between SARON and the SNB Policy Rate over an observation period of two years starting two years prior to the day on which the Fallback Index Cessation Event with respect to Fallback Rate (SARON) occurs (or, if later, two years prior to the day on which the first Fallback Index Cessation Event with respect to SARON occurs) and ending on the Zurich Banking Day (as defined in the 2006 ISDA Definitions) immediately preceding the day on which the Fallback Index Cessation Event with respect to Fallback Rate (SARON) occurs (or, if later, the Zurich Banking Day immediately preceding the day on which the first Fallback Index Cessation Event with respect to SARON occurs), as determined by the Calculation Agent.

*SORA* means the Singapore Overnight Rate Average as provided by the Monetary Authority of Singapore (or a successor administrator) on the Monetary Authority of Singapore’s website (as defined in the 2006 ISDA Definitions) (or as published by its authorized distributors).

*THOR* means the Thai Overnight Repurchase Rate as provided by the Bank of Thailand as administrator of the benchmark (or a successor administrator) on the Bank of Thailand’s website (as defined in the 2006 ISDA Definitions) (or as published by its authorized distributors).

*UK Bank Rate* means the official bank rate as determined by the Monetary Policy Committee of the Bank of England and published by the Bank of England from time to time.

*Underlying Rate* means, if the Applicable Fallback Rate is: (a) Fallback Rate (SONIA), SONIA; (b) Fallback Rate (SARON), SARON; (c) Fallback Rate (SOFR), SOFR; (d) Fallback Rate (EuroSTR), EuroSTR; (e) Fallback Rate (TONA), TONA; (f) Fallback Rate (AONIA), AONIA; (g) Fallback Rate (CORRA), CORRA; and (h) Fallback Rate (HONIA), HONIA.

*7. Negative Interest Protocol*

The parties agree that the amendments made by this Protocol do not constitute a “Spread

Provision” (as defined in the ISDA 2014 Collateral Agreement Negative Interest Protocol published on May 12, 2014 by ISDA).

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# Adjustable Interest Rate (LIBOR) Act

12 U.S.C. 5801 *et seq.*; 136 Stat. 825; Pub. L. 117-103, Consolidated Appropriations Act, 2022, Division U (March 15, 2022)

Section		(3) to allow existing contracts that refer- ence LIBOR but provide for the use of a clearly defined and practicable replacement rate, to operate according to their terms; and
101	Short Title	
102	Findings and Purpose	
103	Definitions	
104	LIBOR Contracts	
105	Continuity of Contract and Safe Harbor	(4) to address LIBOR references in federal law.
106	Benchmark for Loans	
107	Preemption	[12 USC 5801.]
110	Rulemaking	

3-4253

## 3-4251 SECTION 103—Definitions

### SECTION 101—Short Title

This division may be cited as the “Adjustable Interest Rate (LIBOR) Act”.

[12 USC 5801 note.]

## 3-4252

### SECTION 102—Findings and Purpose

(a) Congress finds that—

- (1) LIBOR is used as a benchmark rate in more than \$200,000,000,000,000 worth of contracts worldwide;
- (2) a significant number of existing contracts that reference LIBOR do not provide for the use of a clearly defined or practicable replacement benchmark rate when LIBOR is discontinued; and
- (3) the cessation or nonrepresentativeness of LIBOR could result in disruptive litigation related to existing contracts that do not provide for the use of a clearly defined or practicable replacement benchmark rate.

(b) It is the purpose of this division—

- (1) to establish a clear and uniform process, on a nationwide basis, for replacing LIBOR in existing contracts the terms of which do not provide for the use of a clearly defined or practicable replacement benchmark rate, without affecting the ability of parties to use any appropriate benchmark rate in new contracts;
- (2) to preclude litigation related to existing contracts the terms of which do not provide for the use of a clearly defined or practicable replacement benchmark rate;

In this division:

- (1) The term *benchmark* means an index of interest rates or dividend rates that is used, in whole or in part, as the basis of or as a reference for calculating or determining any valuation, payment, or other measurement.
- (2) The term *benchmark administrator* means a person that publishes a benchmark for use by third parties.
- (3) The term *benchmark replacement* means a benchmark, or an interest rate or dividend rate (which may or may not be based in whole or in part on a prior setting of LIBOR), to replace LIBOR or any interest rate or dividend rate based on LIBOR, whether on a temporary, permanent, or indefinite basis, under or with respect to a LIBOR contract.
- (4) The term *benchmark replacement conforming changes* means any technical, administrative, or operational changes, alterations, or modifications that—
  - (A) the Board determines, in its discretion, would address 1 or more issues affecting the implementation, administration, and calculation of the Board-selected benchmark replacement in LIBOR contracts; or
  - (B) solely with respect to a LIBOR contract that is not a consumer loan, in the reasonable judgment of a calculating person, are otherwise necessary or appropriate to permit the implementation, administration, and calculation of the Board-selected benchmark replacement under or with respect to a LIBOR contract after

giving due consideration to any benchmark replacement conforming changes under subparagraph (A).

(5) The term *Board* means the Board of Governors of the Federal Reserve System.

(6) The term *Board-selected benchmark replacement* means a benchmark replacement identified by the Board that is based on SOFR, including any tenor spread adjustment pursuant to section 104(e).

(7) The term *calculating person* means, with respect to any LIBOR contract, any person, including the determining person, responsible for calculating or determining any valuation, payment, or other measurement based on a benchmark.

(8) The terms *consumer* and *credit* have the meanings given the terms in section 103 of the Truth in Lending Act (15 U.S.C. 1602).

(9) The term *consumer loan* means a consumer credit transaction.

(10) The term *determining person* means, with respect to any LIBOR contract, any person with the authority, right, or obligation, including on a temporary basis (as identified by the LIBOR contract or by the governing law of the LIBOR contract, as appropriate) to determine a benchmark replacement.

(11) The term *fallback provisions* means terms in a LIBOR contract for determining a benchmark replacement, including any terms relating to the date on which the benchmark replacement becomes effective.

(12) The term *IBOR* means LIBOR, any tenor of non-U.S. dollar currency rates formerly known as the London interbank offered rate as administered by ICE Benchmark Administration Limited (or any predecessor or successor administrator thereof), and any other interbank offered rates that are expected to cease.

(13) The term *IBOR benchmark replacement* means a benchmark, or an interest rate or dividend rate (which may or may not be based in whole or in part on a prior setting of an IBOR), to replace an IBOR or any interest rate or dividend rate based on an IBOR, whether on a temporary, permanent, or indefinite basis, under or with respect to an IBOR contract.

(14) The term *IBOR contract* means any

contract, agreement, indenture, organizational document, guarantee, mortgage, deed of trust, lease, security (whether representing debt or equity, including any interest in a corporation, a partnership, or a limited liability company), instrument, or other obligation or asset that, by its terms, continues in any way to use an IBOR as a benchmark.

(15) The term *LIBOR*—

(A) means the overnight and 1-, 3-, 6-, and 12-month tenors of U.S. dollar LIBOR (formerly known as the London interbank offered rate) as administered by ICE Benchmark Administration Limited (or any predecessor or successor administrator thereof); and

(B) does not include the 1-week or 2-month tenors of U.S. dollar LIBOR.

(16) The term *LIBOR contract* means any contract, agreement, indenture, organizational document, guarantee, mortgage, deed of trust, lease, security (whether representing debt or equity, including any interest in a corporation, a partnership, or a limited liability company), instrument, or other obligation or asset that, by its terms, uses LIBOR as a benchmark.

(17) The term *LIBOR replacement date* means the first London banking day after June 30, 2023, unless the Board determines that any LIBOR tenor will cease to be published or cease to be representative on a different date.

(18) The term *security* has the meaning given the term in section 2(a) of the Securities Act of 1933 (15 U.S.C. 77b(a)).

(19) The term *SOFR* means the Secured Overnight Financing Rate published by the Federal Reserve Bank of New York (or a successor administrator).

(20) The term *tenor spread adjustment* means—

(A) 0.00644 percent for overnight LIBOR;

(B) 0.11448 percent for 1-month LIBOR;

(C) 0.26161 percent for 3-month LIBOR;

(D) 0.42826 percent for 6-month LIBOR; and

(E) 0.71513 percent for 12-month LIBOR.

[12 USC 5802.]

## 3-4254

## SECTION 104—LIBOR Contracts

(a) On the LIBOR replacement date, the Board-selected benchmark replacement shall be the benchmark replacement for any LIBOR contract that, after giving any effect to subsection (b)—

- (1) contains no fallback provisions; or
- (2) contains fallback provisions that identify neither—
  - (A) a specific benchmark replacement; nor
  - (B) a determining person.

(b) On the LIBOR replacement date, any reference in the fallback provisions of a LIBOR contract to—

- (1) a benchmark replacement that is based in any way on any LIBOR value, except to account for the difference between LIBOR and the benchmark replacement; or
- (2) a requirement that a person (other than a benchmark administrator) conduct a poll, survey, or inquiries for quotes or information concerning interbank lending or deposit rates; shall be disregarded as if not included in the fallback provisions of such LIBOR contract and shall be deemed null and void and without any force or effect.

(c) *Authority of determining person.*

- (1) Subject to subsection (f)(2), a determining person may select the Board-selected benchmark replacement as the benchmark replacement.
- (2) Any selection by a determining person of the Board-selected benchmark replacement pursuant to paragraph (1) shall be—
  - (A) irrevocable;
  - (B) made by the earlier of the LIBOR replacement date and the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract; and
  - (C) used in any determinations of the benchmark under or with respect to the LIBOR contract occurring on and after the LIBOR replacement date.
- (3) If a determining person does not select a benchmark replacement by the date specified in paragraph (2)(B), the Board-selected benchmark replacement, on and after the

LIBOR replacement date, shall be the benchmark replacement for the LIBOR contract.

(d) *Conforming changes.*

- (1) If the Board-selected benchmark replacement becomes the benchmark replacement for a LIBOR contract pursuant to subsection (a) or (c), all benchmark replacement conforming changes shall become an integral part of the LIBOR contract.
- (2) A calculating person shall not be required to obtain consent from any other person prior to the adoption of benchmark replacement conforming changes.

(e) *Adjustment by Board.*

- (1) Except as provided in paragraph (2), on the LIBOR replacement date, the Board shall adjust the Board-selected benchmark replacement for each category of LIBOR contract that the Board may identify to include the relevant tenor spread adjustment.
- (2) For LIBOR contracts that are consumer loans, the Board shall adjust the Board-selected benchmark replacement as follows:
  - (A) During the 1-year period beginning on the LIBOR replacement date, incorporate an amount, to be determined for any business day during that period, that transitions linearly from the difference between the Board-selected benchmark replacement and the corresponding LIBOR tenor determined as of the day immediately before the LIBOR replacement date to the relevant tenor spread adjustment.
  - (B) On and after the date that is 1 year after the LIBOR replacement date, incorporate the relevant tenor spread adjustment.

(f) Nothing in this division may be construed to alter or impair—

- (1) any written agreement specifying that a LIBOR contract shall not be subject to this division;
- (2) except as provided in subsection (b), any LIBOR contract that contains fallback provisions that identify a benchmark replacement that is not based in any way on any LIBOR value (including the prime rate or the effective federal funds rate);

- (3) except as provided in subsection (b) or (c)(3), any LIBOR contract subject to subsection (c)(1) as to which a determining person does not elect to use a Board-selected benchmark replacement pursuant to that subsection;
- (4) the application to a Board-selected benchmark replacement of any cap, floor, modifier, or spread adjustment to which LIBOR had been subject pursuant to the terms of a LIBOR contract;
- (5) any provision of federal consumer financial law that—
  - (A) requires creditors to notify borrowers regarding a change-in-terms; or
  - (B) governs the reevaluation of rate increases on credit card accounts under open-ended (not home-secured) consumer credit plans; or
- (6) except as provided in section 105(c), the rights or obligations of any person, or the authorities of any agency, under federal consumer financial law, as defined in section 1002 of the Consumer Financial Protection Act of 2010 (12 U.S.C. 5481).

[12 USC 5803.]

### 3-4255

#### SECTION 105—Continuity of Contract and Safe Harbor

- (a) A Board-selected benchmark replacement and the selection or use of a Board-selected benchmark replacement as a benchmark replacement under or with respect to a LIBOR contract, and any benchmark replacement conforming changes, shall constitute—
  - (1) a commercially reasonable replacement for and a commercially substantial equivalent to LIBOR;
  - (2) a reasonable, comparable, or analogous rate, index, or term for LIBOR;
  - (3) a replacement that is based on a methodology or information that is similar or comparable to LIBOR;
  - (4) substantial performance by any person of any right or obligation relating to or based on LIBOR; and
  - (5) a replacement that has historical fluctuations that are substantially similar to those of LIBOR for purposes of the Truth

in Lending Act (15 U.S.C. 1601 note) and regulations promulgated under that division.

- (b) Neither the selection or use of a Board-selected benchmark replacement as a benchmark replacement nor the determination, implementation, or performance of benchmark replacement conforming changes under section 104 may—
  - (1) be deemed to impair or affect the right of any person to receive a payment, or to affect the amount or timing of such payment, under any LIBOR contract; or
  - (2) have the effect of—
    - (A) discharging or excusing performance under any LIBOR contract for any reason, claim, or defense (including any force majeure or other provision in any LIBOR contract);
    - (B) giving any person the right to unilaterally terminate or suspend performance under any LIBOR contract;
    - (C) constituting a breach of any LIBOR contract; or
    - (D) voiding or nullifying any LIBOR contract.

(c) No person shall be subject to any claim or cause of action in law or equity or request for equitable relief, or have liability for damages, arising out of—

- (1) the selection or use of a Board-selected benchmark replacement;
  - (2) the implementation of benchmark replacement conforming changes; or
  - (3) with respect to a LIBOR contract that is not a consumer loan, the determination of benchmark replacement conforming changes, in each case after giving effect to the provisions of section 104; provided, however, that in each case any person (including a calculating person) shall remain subject to the terms of a LIBOR contract that are not affected by this division and any existing legal, regulatory, or contractual obligations to correct servicing or other ministerial errors under or with respect to a LIBOR contract.
- (d) The selection or use of a Board-selected benchmark replacement or the determination, implementation, or performance of benchmark



replacement conforming changes under section 104 shall not be deemed to—

- (1) be an amendment or modification of any LIBOR contract; or
- (2) prejudice, impair, or affect the rights, interests, or obligations of any person under or with respect to any LIBOR contract.

(e) Except as provided in subsections (a), (b), or (c)(1) of section 104, nothing in this division may be construed to create any negative inference or negative presumption regarding the validity or enforceability of—

- (1) any benchmark replacement (including any method for calculating, determining, or implementing an adjustment to the benchmark replacement to account for any historical differences between LIBOR and the benchmark replacement) that is not a Board-selected benchmark replacement; or
- (2) any changes, alterations, or modifications to or with respect to a LIBOR contract that are not benchmark replacement conforming changes.

[12 USC 5804.]

### 3-4256

#### SECTION 106—Benchmark for Loans

(a) In this section:

- (1) The term *bank* means an institution subject to examination by a federal financial institutions regulatory agency.
- (2) The term *covered action* means—
  - (A) the initiation by a federal supervisory agency of an enforcement action, including the issuance of a cease-and-desist order; or
  - (B) the issuance by a federal supervisory agency of a matter requiring attention, a matter requiring immediate attention; or a matter requiring board attention resulting from a supervisory activity conducted by the federal supervisory agency.
- (3) The term *federal financial institutions regulatory agencies* has the meaning given the term in section 1003 of the Federal Financial Institutions Examination Council Act of 1978 (12 U.S.C. 3302).
- (4) The term *federal supervisory agency* means an agency listed in subparagraphs

(A) through (H) of section 1101(7) of the Right to Financial Privacy Act of 1978 (12 U.S.C. 3401(7)).

(5) The term *non-IBOR loan* means any loan that, by its terms, does not use in any way LIBOR, any tenor of non-U.S. dollar currency rates formerly known as the London interbank offered rate as administered by ICE Benchmark Administration Limited (or any predecessor or successor administrator thereof), and any other interbank offered rates that are expected to cease, as a benchmark.

(b) With respect to a benchmark used by a bank—

- (1) the bank, in any non-IBOR loan made before, on, or after the date of enactment of this Act, may use any benchmark, including a benchmark that is not SOFR, that the bank determines to be appropriate for the funding model of the bank; the needs of the customers of the bank; and the products, risk profile, risk management capabilities, and operational capabilities of the bank; provided, however, that the use of any benchmark shall remain subject to the terms of the non-IBOR loan, and applicable law; and
- (2) no federal supervisory agency may take any covered action against the bank solely because that benchmark is not SOFR.

[12 USC 5805.]

### 3-4257

#### SECTION 107—Preemption

This division, and regulations promulgated under this division, shall supersede any provision of any state or local law, statute, rule, regulation, or standard—

- (1) relating to the selection or use of a benchmark replacement or related conforming changes; or
- (2) expressly limiting the manner of calculating interest, including the compounding of interest, as that provision applies to the selection or use of a Board-selected benchmark replacement or benchmark replacement conforming changes.

[12 USC 5806.]

## 3-4260

## SECTION 110—Rulemaking

Not later than 180 days after the date of enactment of this Act, the Board shall promulgate regulations to carry out this division.

[12 USC 5807.]

## 3-4265

## LIBOR

Formerly known as the London interbank offered rate, LIBOR is an interest rate benchmark that was the dominant reference rate used in financial contracts in recent decades, serving as the benchmark rate in more than \$200 trillion worth of contracts worldwide.<sup>1</sup> While over-the-counter and exchange-traded derivatives account for the vast majority of this estimated exposure to LIBOR, LIBOR is also referenced in trillions of dollars' worth of business and consumer loans, bonds, securitizations, and nonfinancial corporate contracts.

LIBOR is intended to reflect the rate at which large banks can borrow wholesale funds on an unsecured basis. LIBOR is calculated based on submissions contributed by a panel of large, globally active banks (LIBOR panel banks). Until December 31, 2021, LIBOR's administrator calculated and published LIBOR each London business day for five currencies (USD, GBP, EUR, CHF, and JPY) and seven borrowing periods, known as tenors (overnight, one week, one month, two months, three months, six months, and twelve months).

Over the past decade, financial regulators have expressed growing concern regarding the structural vulnerabilities and robustness of LIBOR.<sup>2</sup> Following the financial crisis of 2007-2009, other forms of borrowing have largely replaced short-term unsecured wholesale borrowing as a source of funds for most banks, resulting in far fewer market transactions on which LIBOR panel banks can base their submissions. At the same time, weaknesses in the governance of LIBOR created

the opportunity for LIBOR panel banks to manipulate LIBOR, and numerous high-profile examples of such manipulation were exposed.<sup>3</sup> Following these scandals, in 2013, the administration of LIBOR was transferred to a new administrator, ICE Benchmark Administration Limited (IBA), which is regulated by the U.K.'s Financial Conduct Authority (FCA).

Despite increased regulatory oversight and efforts to improve LIBOR, confidence in LIBOR continued to wane, and financial regulators and market participants began to search for alternative reference rates and develop plans for a transition away from LIBOR. In the United States, this effort has been led by the Alternative Reference Rates Committee (ARRC), a group of private-sector firms convened jointly by the Board and the Federal Reserve Bank of New York (FRBNY) in 2014.<sup>4</sup> Among other work, the ARRC identified the Secured Overnight Financing Rate (SOFR) as its recommended replacement for USD LIBOR and developed a Paced Transition Plan to support the transition from USD LIBOR to SOFR.<sup>5</sup> SOFR is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities.<sup>6</sup> Similar

<sup>3</sup> See, e.g., U.S. Department of Justice (DOJ), Barclays Bank PLC Admits Misconduct Related to Submissions for London Interbank Offered Rate and the Euro Interbank Offered Rate and Agrees to Pay \$160 Million Penalty (June 27, 2012), <https://www.justice.gov/opa/pr/barclays-bank-plc-admits-misconduct-related-submissions-london-interbank-offered-rate-and>; DOJ, Rabobank Admits Wrongdoing in Libor Investigation, Agrees to Pay \$325 Million Criminal Penalty (October 29, 2013), <https://www.justice.gov/opa/pr/rabobank-admits-wrongdoing-libor-investigation-agrees-pay-325-million-criminal-penalty>; DOJ, Deutsche Bank's London Subsidiary Agrees to Plead Guilty in Connection with Long-Running Manipulation of LIBOR (April 23, 2015), <https://www.justice.gov/opa/pr/deutsche-banks-london-subsidiary-agrees-plead-guilty-connection-long-running-manipulation>.

<sup>4</sup> See ARRC, *About*, <https://www.newyorkfed.org/arrc/about>.

<sup>5</sup> ARRC, *The ARRC Selects a Broad Repo Rate as Its Preferred Alternative Reference Rate* (June 22, 2017), <https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-press-release-Jun-22-2017.pdf>; ARRC, *Second Report* (March 2018): 17, <https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report>.

<sup>6</sup> SOFR is published daily by the Federal Reserve Bank of New York (FRBNY) in cooperation with the U.S. Department of the Treasury's Office of Financial Research. See FRBNY, *Secured Overnight Financing Rate Data*, <https://www.newyorkfed.org/markets/reference-rates/sofr>. SOFR is calculated as a volume-weighted median of transaction-level tri-party repurchase agreement (repo) data

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<sup>1</sup> 12 U.S.C. 5801(a)(1).

<sup>2</sup> See, e.g., Financial Stability Oversight Council, *2013 Annual Report*, 137-42.

groups were convened in other jurisdictions and identified comparable risk-free rates as recommended replacements for the other LIBOR currencies.

In July 2017, following the departure of some panel banks, the FCA announced that the remaining LIBOR panel banks had voluntarily agreed to sustain LIBOR through the end of 2021 to facilitate an orderly transition away from LIBOR.<sup>7</sup> On March 5, 2021, the FCA announced that, after December 31, 2021, IBA would cease publishing 24 currency and tenor pairs (known as settings). The discontinued LIBOR settings included one-week and two-month USD LIBOR, as well as all EUR and CHF LIBOR tenors and most GBP and JPY LIBOR tenors.<sup>8</sup> However, the FCA required IBA to continue publishing, on a temporary basis, certain GBP and JPY LIBOR tenors on a “synthetic” basis, stating that any such synthetic LIBOR settings “will no longer be representative of the underlying market and economic reality the setting is intended to measure.”<sup>9</sup>

To allow most legacy USD LIBOR contracts governed by non-U.S. law to mature without disruption, the FCA also announced that the panels for the remaining five tenors of USD LIBOR would continue through, but cease after, June 30, 2023. The FCA has proposed to require IBA to continue publishing one-, three-, or six-month USD LIBOR on a synthetic basis until the end of September 2024 (synthetic LIBOR).<sup>10</sup> As with synthetic

GBP or JPY LIBOR settings, the FCA has announced that synthetic LIBOR settings are “not representative of the markets that the original LIBOR settings were intended to measure.”<sup>11</sup>

In response to the planned cessation of USD LIBOR, U.S. financial regulators have encouraged market participants to transition away from USD LIBOR as a reference rate as soon as practicable. For example, in November 2020, the Board, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC) issued an interagency statement stating that banking organizations generally should not enter into new contracts referencing USD LIBOR after December 31, 2021.<sup>12</sup> The ARRC and other private industry groups also have worked to encourage an orderly transition away from USD LIBOR. For example, as discussed further below, the International Swaps and Derivatives Association (ISDA) has developed a contractual protocol by which parties to derivative transactions governed by ISDA documentation and other financial contracts can agree to incorporate more robust contractual fallback provisions that replace references to LIBOR with an alternative benchmark based on SOFR in the event that a given LIBOR rate ceases publication or is found by the FCA to no longer be representative.<sup>13</sup> The ARRC has developed guiding principles for similar fallback language for cash products such as business loans, securitizations, floating rate notes, and consumer products, including specific recommended language for certain cash products.<sup>14</sup> ISDA’s IBOR protocol and

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collected from the Bank of New York Mellon, as well as general collateral financing repo transaction data and data on bilateral Treasury repo transactions cleared through the Fixed Income Clearing Corporation’s delivery-versus-payment service, which are obtained from the U.S. Department of the Treasury’s Office of Financial Research.

<sup>7</sup> See Andrew Bailey, Chief Executive, FCA, “The Future of LIBOR” (speech at Bloomberg London, UK, July 27, 2017), <https://www.fca.org.uk/news/speeches/the-future-of-libor>.

<sup>8</sup> See FCA, “FCA Announcement on Future Cessation and Loss of Representativeness of the LIBOR Benchmarks” (March 5, 2021), <https://www.fca.org.uk/publication/documents/future-cessation-loss-representativeness-libor-benchmarks.pdf>.

<sup>9</sup> FCA, “FCA Announcement on Future Cessation.”

<sup>10</sup> See FCA, “Further Consultation and Announcements on the Wind-down of LIBOR” (November 23, 2022), <https://www.fca.org.uk/news/news-stories/further-consultation-announcements-wind-down-libor> (discussing further consultation on synthetic LIBOR, <https://www.fca.org.uk/publication/consultation/cp22-21.pdf>).

<sup>11</sup> See FCA, “Consultation on ‘Synthetic’ US Dollar LIBOR and Feedback to CP22/11” ¶ 1.7 (November 2022), <https://www.fca.org.uk/publication/consultation/cp22-21.pdf>; see also FCA, “FCA Announcement on Future Cessation.”

<sup>12</sup> See Board, FDIC, OCC, “Statement on LIBOR Transition” (November 30, 2020), <https://www.federalreserve.gov/supervisionreg/srletters/SR2027a1.pdf>.

<sup>13</sup> ISDA, *ISDA 2020 IBOR Fallbacks Protocol*, <https://www.isda.org/protocol/isda-2020-ibor-fallbacks-protocol/>.

<sup>14</sup> See, e.g., ARRC, *ARRC Guiding Principles for More Robust LIBOR Fallback Contract Language in Cash Products* (July 9, 2018), <https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-principles-July2018>; ARRC, *Summary of ARRC’s LIBOR Fallback Language* (November 15, 2019), [https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/LIBOR\\_Fallback\\_Language\\_Summary](https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/LIBOR_Fallback_Language_Summary); ARRC, *ARRC*

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the ARRC fallback language recommendations were both subject to numerous public consultations, and they have received widespread adoption subsequent to their release.<sup>15</sup>

### Legacy Contracts and the Adjustable Interest Rate (LIBOR) Act

Notwithstanding governmental and private-sector efforts to encourage market participants to prepare for the cessation of USD LIBOR, there are a significant number of existing contracts that reference USD LIBOR. Of particular concern are so-called “tough legacy contracts,” which are contracts that reference USD LIBOR and will not mature by June 30, 2023, but which lack adequate fallback provisions providing for a clearly defined or practicable replacement benchmark following the cessation of USD LIBOR. To address these tough legacy contracts, multiple states adopted legislation, initially proposed by the ARRC, to provide a statutory remedy for financial contracts governed by the laws of the enacting states that reference USD LIBOR, will not mature until after USD LIBOR ceases or becomes nonrepresentative, and have no effective means to replace USD LIBOR after it ceases or becomes nonrepresentative.<sup>16</sup> While these state laws provided a solution for a large number of tough legacy contracts, further leg-

islative action was needed to address tough legacy contracts governed by the laws of other states.

Recognizing the need for a uniform, nationwide solution for replacing references to USD LIBOR in tough legacy contracts, on March 15, 2022, Congress enacted the Adjustable Interest Rate (LIBOR) Act (LIBOR Act) as part of the Consolidated Appropriations Act, 2022.<sup>17</sup> Among other things, the LIBOR Act lays out a set of default rules that apply to tough legacy contracts subject to U.S. law.

The LIBOR Act broadly distinguishes between three categories of LIBOR contracts with different types of fallback provisions. For these purposes, the LIBOR Act defines “LIBOR contract” broadly to include any obligation or asset that, by its terms, uses the overnight, one-month, three-month, six-month, or 12-month tenors of USD LIBOR as a benchmark.<sup>18</sup> Consistent with this definition, Regulation ZZ focuses on these stated tenors of USD LIBOR only. The LIBOR Act defines “fallback provisions” to mean the terms in a LIBOR contract for determining a benchmark replacement, including any terms relating to the date on which the benchmark replacement becomes effective.<sup>19</sup>

The first category of LIBOR contracts encompasses contracts that contain fallback provisions identifying a specific benchmark replacement that is not based in any way on any USD LIBOR values (except to account for the difference between LIBOR and the benchmark replacement) and that do not require any person (other than a benchmark administrator) to conduct a poll, survey, or inquiries for quotes

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*Recommendations Regarding More Robust Fallback Language for New Issuance of LIBOR Securitizations* (May 31, 2019), [https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/Securitization\\_Fallback\\_Language.pdf](https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/Securitization_Fallback_Language.pdf); ARRC, *ARRC Recommendations Regarding More Robust LIBOR Fallback Contract Language for New Closed-End, Residential Adjustable Rate Mortgages* (November 15, 2019), [https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/ARM\\_Fallback\\_Language.pdf](https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2019/ARM_Fallback_Language.pdf).

<sup>15</sup> See, e.g., ISDA, *ISDA 2020 IBOR Fallbacks Protocol—List of Adhering Parties*, <https://www.isda.org/protocol/isda-2020-ibor-fallbacks-protocol/adhering-parties>. The DOJ also reviewed ISDA’s IBOR protocol, concluded that it is unlikely to harm competition, and stated that the DOJ would not challenge ISDA’s IBOR protocol under federal antitrust laws. See DOJ, Justice Department Issues Favorable Business Review Letter to ISDA for Proposed Amendments to Address Interest Rate Benchmarks (October 1, 2020), <https://www.justice.gov/opa/pr/justice-department-issues-favorable-business-review-letter-isda-proposed-amendments-address>.

<sup>16</sup> See, e.g., N.Y. Gen. Oblig. Law art. 18-C; Ala. Code tit. 5, ch. 28; Fla. Stat. 687.15; Tenn. Code Ann. sec. 47-33-101 *et seq.*; Ind. Code 28-10-2; Neb. Rev. Stat. 8-3101 *et seq.*

<sup>17</sup> Public Law 117-103, division U, codified at 12 U.S.C. 5801 *et seq.*

<sup>18</sup> See 12 U.S.C. 5802(16) (definition of “LIBOR contract”), 5802(15) (definition of “LIBOR”). The LIBOR Act does not apply to contracts that use the one-week or two-month tenors of USD LIBOR as a benchmark. The LIBOR Act defines “benchmark” to mean an index of interest rates or dividend rates that is used, in whole or in part, as the basis of or as a reference for calculating or determining any valuation, payment, or other measurement. 12 U.S.C. 5802(1).

<sup>19</sup> 12 U.S.C. 5802(11). The LIBOR Act defines “benchmark replacement” to mean a benchmark, or an interest rate or dividend rate (which may or may not be based in whole or in part on a prior setting of LIBOR), to replace LIBOR or any interest rate or dividend rate based on LIBOR, whether on a temporary, permanent, or indefinite basis, under or with respect to a LIBOR contract. 12 U.S.C. 5802(3).

or information concerning interbank lending or deposit rates.<sup>20</sup> These LIBOR contracts generally can be expected to transition to the contractually agreed-upon benchmark replacement as provided by their fallback provisions on or before the LIBOR replacement date—the first London banking day after June 30, 2023 (unless the Board determines that any LIBOR tenor will cease to be published or cease to be representative on a different date).<sup>21</sup>

The second category of LIBOR contracts encompasses (i) contracts that contain no fallback provisions, as well as (ii) LIBOR contracts with fallback provisions that do not identify a determining person and that only (A) identify a benchmark replacement that is based in any way on USD LIBOR values (except to account for the difference between LIBOR and the benchmark replacement) or (B) require that a person (other than a benchmark administrator) conduct a poll, survey, or inquiries for quotes or information concerning interbank lending or deposit rates.<sup>22</sup> For this second category of LIBOR contracts, the LIBOR Act provides that the benchmark replacement on the LIBOR replacement date will be the Board-selected benchmark replacement identified by the Board, which must be based on SOFR and include the tenor spread adjustments required under the LIBOR Act.<sup>23</sup> Thus, any references to USD LIBOR in LIBOR contracts in this second category will, by operation of law, be replaced by the Board-selected benchmark replacement on the LIBOR replacement date.

For contracts that fall into this second category, the LIBOR Act provides a series of

statutory protections, including that no person shall be subject to any claim or cause of action in law or equity or request for equitable relief, or have liability for damages, arising out of the use of the Board-selected benchmark replacement as a benchmark replacement.<sup>24</sup> These statutory provisions are described in more detail below.

The third category of LIBOR contracts encompasses LIBOR contracts that contain fallback provisions authorizing a determining person to determine a benchmark replacement.<sup>25</sup> The application of the LIBOR Act to LIBOR contracts in this third category depends on the determination, if any, made by the determining person. Where a determining person does not select a benchmark replacement by the LIBOR replacement date or the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract (whichever is earlier), the LIBOR Act provides that the benchmark replacement for such LIBOR contract will be, by operation of law, the Board-selected benchmark replacement on and after the LIBOR replacement date.<sup>26</sup> Where a determining person selects the Board-selected benchmark replacement as the benchmark replacement, the LIBOR Act provides that such selection shall be (i) irrevocable, (ii) made by the earlier of the LIBOR replacement date and the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract, and (iii) used in any determinations of the benchmark under or with respect to the LIBOR contract occurring on and after the LIBOR replacement date.<sup>27</sup>

Although the LIBOR Act does not require a determining person to select the Board-selected benchmark replacement as the benchmark replacement for a LIBOR contract, the statute provides a series of statutory protections for any determining person who does so, including that a determining person generally shall not be subject to any claim or cause of

<sup>20</sup> See 12 U.S.C. 5803(b). The LIBOR Act defines “benchmark administrator” to mean a person that publishes a benchmark for use by third parties. 12 U.S.C. 5802(2).

<sup>21</sup> 12 U.S.C. 5803(f)(2); *see also* 12 U.S.C. 5802(17) (definition of “LIBOR replacement date”). The Board has not determined, and does not expect to determine, a LIBOR replacement date earlier than the first London banking day after June 30, 2023.

<sup>22</sup> The LIBOR Act deems these types of fallback provisions to be null and void by operation of law. 12 U.S.C. 5803(b). To the extent a LIBOR contract contains fallback provisions that would be applied ahead of another, separate benchmark replacement, then under the LIBOR Act, these fallback provisions would be disregarded and the separate benchmark replacement would apply.

<sup>23</sup> 12 U.S.C. 5803(a)-(b); *see also* 12 U.S.C. 5802(6) (definition of “Board-selected benchmark replacement”).

<sup>24</sup> 12 U.S.C. 5804(a)-(b), (c)(1), (d).

<sup>25</sup> The LIBOR Act defines “determining person” to mean, with respect to any LIBOR contract, any person with the authority, right, or obligation, including on a temporary basis (as identified by the LIBOR contract or by the governing law of the LIBOR contract, as appropriate) to determine a benchmark replacement. 12 U.S.C. 5802(10).

<sup>26</sup> 12 U.S.C. 5803(c)(3).

<sup>27</sup> 12 U.S.C. 5803(c)(2).

action in law or equity or request for equitable relief, or have liability for damages, arising out of the selection of the Board-selected benchmark replacement as a benchmark replacement.<sup>28</sup>

Where the Board-selected benchmark replacement becomes the benchmark replacement for a LIBOR contract (either by operation of law or through the selection of a determining person), the LIBOR Act contemplates that certain conforming changes to a LIBOR contract may be necessary to facilitate the transition from USD LIBOR to the Board-selected benchmark replacement. These “benchmark replacement conforming changes” may arise in one of two ways. First, the LIBOR Act authorizes the Board to determine benchmark replacement conforming changes that, in its discretion, would address one or more issues affecting the implementation, administration, and calculation of the Board-selected benchmark replacement in LIBOR contracts.<sup>29</sup> Second, for a LIBOR contract that is not a consumer loan, a calculating person may, in its reasonable judgment, determine that benchmark replacement conforming changes are otherwise necessary or appropriate to permit the implementation, administration, and calculation of the Board-selected benchmark replacement under or with respect to a LIBOR contract after giving due consideration to any benchmark replacement conforming changes determined by the Board.<sup>30</sup> For this purpose, the LIBOR Act defines “calculating person” to mean, with respect to any LIBOR contract, any person, including the determining person, responsible for calculating or determining any valuation, payment, or other measurement based on a benchmark.<sup>31</sup>

The LIBOR Act provides that all benchmark replacement conforming changes (whether determined by the Board or, if applicable, a calculating person) shall become an

integral part of the LIBOR contract, and a calculating person shall not be required to obtain consent from any other person prior to the adoption of benchmark replacement conforming changes.<sup>32</sup> In addition, the determination, implementation, and performance of benchmark replacement conforming changes are generally subject to certain statutory protections provided by the LIBOR Act, which are designed to ensure continuity of contract.<sup>33</sup> Finally, where a calculating person implements or (in the case of a LIBOR contract that is not a consumer loan) determines benchmark replacement conforming changes, the LIBOR Act provides that the calculating person shall not be subject to any claim or cause of action in law or equity or request for equitable relief, or have liability for damages.<sup>34</sup>

The LIBOR Act includes various other provisions beyond the main operative provisions and statutory protections described above. For example, the LIBOR Act generally provides that a bank may use any benchmark (including a benchmark that is not SOFR) in any non-IBOR loan made before, on, or after the date of enactment of the LIBOR Act that the bank determines to be appropriate, and that no federal supervisory agency may take enforcement or supervisory action against the bank solely because that benchmark is not SOFR.<sup>35</sup> Other provisions of the LIBOR Act amend the Trust Indenture Act of 1939 (15 U.S.C. 77ppp(b)) and the Higher Education Act of 1965 (20 U.S.C. 1087-1(b)(2)(I)), respectively, to facilitate the transition from USD LIBOR.<sup>36</sup> Finally, the LIBOR Act expressly preempts any provision of state or local law relating to the selection or use of a benchmark replacement or related conforming changes, or expressly limiting the manner of calculating interest (including the compounding of interest) as that provision applies to the selection or use of a Board-selected benchmark replace-

<sup>28</sup> 12 U.S.C. 5804(c)(1)-(2), 5804(a)-(d). This statutory safe harbor also applies to the use of the Board-selected benchmark replacement other than at the selection of a determining person.

<sup>29</sup> 12 U.S.C. 5802(4)(A).

<sup>30</sup> 12 U.S.C. 5802(4)(B). The LIBOR Act defines “consumer loan” to mean a consumer credit transaction, which is defined by cross-reference to the Truth in Lending Act. 12 U.S.C. 5802(9) (definition of “consumer loan”); 12 U.S.C. 5802(8) (definitions of “consumer” and “credit”).

<sup>31</sup> 12 U.S.C. 5802(7).

<sup>32</sup> 12 U.S.C. 5803(d).

<sup>33</sup> See 12 U.S.C. 5804(a)-(d).

<sup>34</sup> 12 U.S.C. 5804(c).

<sup>35</sup> 12 U.S.C. 5805.

<sup>36</sup> LIBOR Act sections 108-09, codified at 15 U.S.C. 77ppp(b) and 20 U.S.C. 1087-1(b)(2)(I).

ment or benchmark replacement conforming changes.<sup>37</sup>

### Overview

Regulation ZZ, as required by the LIBOR Act, identifies SOFR-based Board-selected benchmark replacements for LIBOR contracts that will not mature prior to the LIBOR replacement date and do not contain clear and practicable benchmark replacements. Regulation ZZ identifies different SOFR-based Board-selected benchmark replacements for different categories of LIBOR contracts. In addition, Regulation ZZ identifies certain benchmark replacement conforming changes related to the implementation, administration, and calculation of the Board-selected benchmark replacement. Consistent with the LIBOR Act, Regulation ZZ also expressly indicates that a determining person may select the Board-selected benchmark replacement for the relevant type of LIBOR contract, with any applicable benchmark replacement conforming changes. In addition, Regulation ZZ expressly provides that the LIBOR Act's protections related to the selection or use of the Board-selected benchmark replacement shall apply to any LIBOR contract for which the Board-selected benchmark replacement becomes the benchmark replacement (whether by operation of law or by the selection of a determining person). Finally, Regulation ZZ indicates that, under the LIBOR Act, the Board's Regulation ZZ (12 CFR part 253) preempts any state or local law or standard relating to the selection or use of a benchmark replacement or conforming changes.

Section 253.1 sets forth the authority for, purpose of, and scope of Regulation ZZ. Significantly, and consistent with the statute as described above, Regulation ZZ does not apply to (i) contracts that do not reference the overnight or one-, three-, six-, or 12-month tenors of LIBOR or (ii) LIBOR contracts that have fallback provisions providing for the use of a clearly defined and practicable replacement benchmark for LIBOR (including LIBOR contracts where the determining person selects a benchmark replacement other than the Board-selected benchmark replace-

ment), except as provided in section 253.3(a)(1)(iii) and (c).<sup>38</sup> Section 253.1 also clarifies that any determining person's selection of the applicable Board-selected benchmark replacement is subject to sections 253.4 (identifying Board-selected benchmark replacements for specific categories of LIBOR contracts), 253.5 (concerning benchmark replacement conforming changes), 253.6 (concerning preemption), and 253.7 (concerning statutory protections for the selection or use of the Board-selected benchmark replacement). Regulation ZZ also applies only to existing contracts governed by federal law or the law of any state. In addition, consistent with the LIBOR Act, section 253.1 states that the parties to a LIBOR contract may, by written agreement, specify that a LIBOR contract shall not be subject to the rule.<sup>39</sup>

Section 253.2 provides definitions for many of the terms used in Regulation ZZ. Most of the defined terms in section 253.2 are substantially the same as the defined terms in the LIBOR Act. However, section 253.2 includes additional definitions for the terms "30-day Average SOFR," "90-day Average SOFR," "CME Term SOFR," "derivative transaction," "derivative transaction fallback observation day," "Federal Housing Finance Agency (FHFA)-regulated entity," "Federal Family Education Loan Program (FFELP) Asset-Backed Securitization (ABS)," "FHFA-regulated-entity contract," "ISDA protocol," and "relevant benchmark administrator." For ease of reference, the ISDA protocol in its entirety is republished in appendix A.

Section 253.3 addresses the applicability of the regulation to LIBOR contracts. Specifically, for the following LIBOR contracts, the applicable Board-selected benchmark replacement indicated in section 253.4 shall be the benchmark replacement for the contract on and after the LIBOR replacement date unless

<sup>38</sup> 12 U.S.C. 5803(f)(2)-(3). However, consistent with the LIBOR Act, Regulation ZZ applies to LIBOR contracts that identify a determining person if the determining person has not selected a benchmark replacement by the earlier of (i) the LIBOR replacement date and (ii) the latest date for selecting a benchmark replacement according to the terms of the contract. *See* section 253.3(a)(1)(iii). In addition, Regulation ZZ mirrors provisions in the LIBOR Act related to any selection by a determining person of the Board-selected benchmark replacement. *See* section 253.3(c).

<sup>39</sup> *See* 12 U.S.C. 5803(f)(1).

<sup>37</sup> 12 U.S.C. 5806.

an express exception applies: (i) LIBOR contracts that contain no fallback provisions; (ii) LIBOR contracts that contain fallback provisions that identify neither a specific benchmark replacement nor a determining person; and (iii) LIBOR contracts that contain fallback provisions that identify a determining person, but where the determining person has not selected a benchmark replacement by the earlier of the LIBOR replacement date and the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract, for any reason.<sup>40</sup>

In evaluating whether a LIBOR contract has any of these characteristics on the LIBOR replacement date, Regulation ZZ mirrors the statute and disregards any reference in any fallback provisions of a LIBOR contract to the following: (i) a benchmark replacement that is based in any way on any LIBOR value, except to account for the difference between LIBOR and the benchmark replacement; or (ii) a requirement that a person (other than a benchmark administrator) conduct a poll, survey, or inquiries for quotes or information concerning interbank lending or deposit rates (collectively, “LIBOR- or poll-based fallback provisions”).<sup>41</sup> For example, if a LIBOR contract specifies the last published LIBOR value will be used if LIBOR is not published, but contains no other fallback provisions, then, pursuant to section 253.3(a)(2), this language would be disregarded as of the LIBOR replacement date. As a result, on the LIBOR replacement date, the LIBOR contract would be treated as having no fallback provisions and would transition to the Board-selected benchmark replacement under Regulation ZZ.

Consistent with the LIBOR Act, section 253.3(b) lists three types of contracts that generally would not be subject to the act: (i) any LIBOR contract that the parties have agreed in writing shall not be subject to the act; (ii) any LIBOR contract that contains fallback provisions that identify a benchmark replacement that is not based in any way on any

<sup>40</sup> 12 CFR 253.3(a).

<sup>41</sup> 12 CFR 253.3(a)(2). Under the statute, any such references in any fallback provisions of the LIBOR contract would be disregarded as if not included in the fallback provisions of the contract and would be deemed null and void and without any force or effect. 12 U.S.C. 5803(b).

LIBOR value (including the prime rate or the effective federal funds rate), after disregarding any LIBOR- or poll-based fallback provisions; and (iii) any LIBOR contract as to which a determining person does not elect to use the Board-selected benchmark replacement, again after disregarding any LIBOR- or poll-based fallback provisions.<sup>42</sup> Importantly, however, even if a determining person does not elect to use the Board-selected benchmark replacement, the LIBOR contract will transition to the Board-selected benchmark replacement by operation of law if the determining person does not select any benchmark replacement by the earlier of (i) the LIBOR replacement date and (ii) the latest date for selecting a benchmark replacement according to the terms of the LIBOR contract.<sup>43</sup>

Section 253.4 identifies the Board-selected benchmark replacements for various types of contracts subject to the LIBOR Act. The Board agrees with the ARRC’s observation that different benchmark replacements may be appropriate for derivative transactions and other transactions (hereafter, “cash transactions”).<sup>44</sup> Therefore, Regulation ZZ identifies different benchmark replacements for derivative transactions and for different types of cash transactions. Consistent with the LIBOR Act, all of the Board-selected benchmark replacements (i) are based upon SOFR and (ii) incorporate spread adjustments for each specified tenor of LIBOR.<sup>45</sup>

The spread adjustments specified in the LIBOR Act are intended to address certain differences between SOFR and LIBOR, including the fact that LIBOR is unsecured and therefore includes an element of bank credit risk which may cause it to be higher than SOFR.<sup>46</sup> LIBOR also may include term

<sup>42</sup> 12 CFR 253.3(b). Nothing in Regulation ZZ is intended to alter or modify the availability or effect of the provisions of section 105(e) of the LIBOR Act, and those provisions may apply to these LIBOR contracts. See 12 U.S.C. 5804(e).

<sup>43</sup> 12 CFR 253.3(a)(1)(iii).

<sup>44</sup> ARRC, *ARRC Best Practice Recommendations Related to Scope of Use of the Term Rate* (May 4, 2022), [https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/ARRC\\_Scope\\_of\\_Use.pdf](https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2021/ARRC_Scope_of_Use.pdf).

<sup>45</sup> See 12 CFR 253.4. See also 12 U.S.C. 5802-03.

<sup>46</sup> ARRC, *ARRC Consultation on Spread Adjustment Methodologies for Fallbacks in Cash Products Referencing USD LIBOR* (January 21, 2020), <https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/>



premia and reflect supply and demand conditions in wholesale unsecured funding markets, each of which may cause LIBOR to be higher than SOFR.<sup>47</sup> The LIBOR Act prescribes static spread adjustments based on the tenor of LIBOR referenced in the contract (tenor spread adjustments)—specifically, 0.644 basis points (bps) (0.00644 percent) for overnight LIBOR, 11.448 bps (0.11448 percent) for one-month LIBOR, 26.161 bps (0.26161 percent) for three-month LIBOR, 42.826 bps (0.42826 percent) for six-month LIBOR, and 71.513 bps (0.71513 percent) for 12-month LIBOR.<sup>48</sup> For clarity, Regulation ZZ reiterates these tenor spread adjustments in paragraph (c) of section 253.4.<sup>49</sup>

Section 253.5 includes provisions mirroring the language in sections 103(4) and 104(d) of the LIBOR Act, including the Board’s ability to, in its discretion, publish additional bench-

mark replacement conforming changes, by regulation or order, and a calculating person’s ability to make certain conforming changes with respect to a LIBOR contract that is not a consumer loan, consistent with the LIBOR Act.<sup>50</sup> Regulation ZZ also specifies certain conforming changes and, consistent with the LIBOR Act, indicates that these conforming changes shall become an integral part of any LIBOR contract for which the Board-selected benchmark replacement replaces the contract’s references to LIBOR.<sup>51</sup>

Section 253.6 establishes that Regulation ZZ preempts any provision of state or local law, statute, rule, regulation, or standard relating to the selection or use of a benchmark replacement or related conforming changes, as provided in section 107 of the LIBOR Act.

Section 253.7 expressly states that the provisions of section 105(a)-(d) of the LIBOR Act shall apply to any LIBOR contract for which the Board-selected benchmark replacement becomes the benchmark replacement pursuant to section 253.3(a) or (c).<sup>52</sup> The section separately states that nothing in Regulation ZZ is intended to alter or modify the availability or effect of the provisions of section 105(e) of the LIBOR Act.<sup>53</sup>

Continued  
2020/ARRC\_Spread\_Adjustment\_Consultation.pdf.

<sup>47</sup> ARRC, *ARRC Consultation on Spread Adjustment Methodologies*.

<sup>48</sup> See 12 U.S.C. 5802(20) (defining “tenor spread adjustment”). These spread adjustments were based on a methodology originally advanced by ISDA that uses the historical median over a five-year lookback period calculating the difference between USD LIBOR and SOFR. ARRC, *ARRC Announces Further Details Regarding Its Recommendation of Spread Adjustments for Cash Products* (June 30, 2020), [https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC\\_Recommendation\\_Spread\\_Adjustments\\_Cash\\_Products\\_Press\\_Release.pdf](https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC_Recommendation_Spread_Adjustments_Cash_Products_Press_Release.pdf).

<sup>49</sup> 12 CFR 253.4(c).

<sup>50</sup> 12 CFR 253.5(a).

<sup>51</sup> 12 CFR 253.5(a) and (b).

<sup>52</sup> 12 CFR 253.7(a).

<sup>53</sup> 12 CFR 253.7(b).