SUPPLEMENT NO. 3 TO THE BASE PROSPECTUS DATED MAY 22, 2019 AS SUPPLEMENTED BY THE PROSPECTUS SUPPLEMENT NO. 1 DATED AUGUST 2, 2019 AND THE PROSPECTUS SUPPLEMENT NO. 2 DATED NOVEMBER 5, 2019



Up to U.S.\$40,000,000 BNP PARIBAS (as Issuer) 3(a)(2), 144A and Reg. S Notes and 3(a)(2), 144A and Reg. S Warrants

3(a)(2) Notes and Warrants Guaranteed by

**BNP PARIBAS, NEW YORK BRANCH** 

Supplement No. 3

to the Base Prospectus dated May 22, 2019 as supplemented by the Prospectus Supplement No. 1 dated August 2, 2019 and the Prospectus Supplement No. 2 dated November 5, 2019

This prospectus supplement (the "**Prospectus Supplement**") should be read in conjunction with the base prospectus dated May 22, 2019, as amended by the prospectus supplement No. 1 dated August 2, 2019 and the prospectus supplement No. 2 dated November 5, 2019 (together, the "**Base Prospectus**"), prepared in connection with the \$40,000,000 U.S. Medium-Term Note and Warrant Program of BNP Paribas. All capitalized terms not defined herein shall have the meanings given to them in the Base Prospectus.

This Prospectus Supplement has been prepared for the purposes of amending the sections entitled "Risk Factors" and "Terms and Conditions of the Notes" of the Base Prospectus.

The provisions of this Prospectus Supplement supersede those of the Base Prospectus in the event and to the extent of any inconsistency.

Prospectus Supplement dated January 6, 2020

#### **RISK FACTORS**

In the discussion of the Secured Overnight Financing Rate ("SOFR") in the Base Prospectus, as well as the following discussion, when we refer to SOFR-linked Notes, we mean the Notes at any time when the interest rate on the Notes is or will be determined based on SOFR.

The risk factors below supplement the risk factors under the section "Additional Risks relating to Floating-Rate Notes and Resettable Notes" in the Base Prospectus.

### Additional Risks relating to Floating-Rate Notes and Resettable Notes

### Investors should not rely on indicative or historical data concerning SOFR.

SOFR is published by the Federal Reserve Bank of New York (the "NY Federal Reserve") and is intended to be a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. The NY Federal Reserve reports that SOFR includes all trades in the Broad General Collateral Rate, plus bilateral U.S. Treasury repurchase agreement ("repo") transactions cleared through the delivery-versus-payment service offered by the Fixed Income Clearing Corporation (the "FICC"), a subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). SOFR is filtered by the NY Federal Reserve to remove a portion of the foregoing transactions considered to be "specials". According to the NY Federal Reserve, "specials" are repos for specific-issue collateral which take place at cash-lending rates below those for general collateral repos because cash providers are willing to accept a lesser return on their cash in order to obtain a particular security.

The NY Federal Reserve reports that SOFR is calculated as a volume-weighted median of transaction-level tri-party repo data collected from The Bank of New York Mellon, which currently acts as the clearing bank for the triparty repo market, as well as General Collateral Finance Repo transaction data and data on bilateral U.S. Treasury repo transactions cleared through the FICC's delivery-versus-payment service. The NY Federal Reserve states that it obtains information from DTCC Solutions LLC, an affiliate of DTCC, the parent company of the depository of the Notes.

Federal The NY Reserve currently publishes SOFR daily its website on at https://apps.newyorkfed.org/markets/autorates/sofr. The NY Federal Reserve states on its publication page for SOFR that use of SOFR is subject to important disclaimers, limitations and indemnification obligations, including that the NY Federal Reserve may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. The aforementioned website is an inactive textual reference only, meaning that the information contained on the website is not part of this prospectus supplement or the Base Prospectus or incorporated by reference herein or therein.

The NY Federal Reserve started publishing SOFR in April 2018. The NY Federal Reserve has also started publishing historical indicative SOFRs dating back to 2014, although such historical indicative data inherently involves assumptions, estimates and approximations. Investors should not rely on such historical indicative data or on any historical changes or trends in SOFR as an indicator of the future performance of SOFR. Since the initial publication of SOFR, daily changes in the rate have, on occasion, been more volatile than daily changes in comparable benchmark or market rates, and SOFR over time may bear little or no relation to the historical actual or historical indicative data. In addition, the return on and value of the SOFR-linked Notes may fluctuate more than floating rate securities that are linked to less volatile rates.

## Changes in SOFR could adversely affect holders of the SOFR-linked Notes.

Because SOFR is published by the NY Federal Reserve based on data received from other sources, we have no control over its determination, calculation or publication. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the SOFRlinked Notes. If the manner in which SOFR is calculated is changed, that change may result in a reduction in the amount of interest that accrues on the SOFR-linked Notes during any floating rate period, which may adversely affect the trading prices of the SOFR-linked Notes. In addition, the interest rate on the SOFR-linked Notes for any day will not be adjusted for any modification or amendment to SOFR for that day that the NY Federal Reserve may publish if the interest rate for that day has already been determined prior to such publication. Further, if the interest rate on the SOFR-linked Notes during the floating rate period on any day or for any interest period declines to zero or becomes negative, no interest will accrue on the SOFR-linked Notes with respect to that day or interest period. There is no assurance that changes in SOFR will not have a material adverse effect on the yield on, value of, or market for the SOFR-linked Notes.

### SOFR differs fundamentally from, and may not be a comparable substitute for, U.S. dollar LIBOR.

In June 2017, the Alternative Reference Rates Committee (the "ARRC") convened by the Board of Governors of the Federal Reserve System and the NY Federal Reserve announced SOFR as its recommended alternative to the London interbank offered rate for U.S. dollar obligations ("U.S. dollar LIBOR"). However, because SOFR is a broad U.S. Treasury repo financing rate that represents overnight secured funding transactions, it differs fundamentally from U.S. dollar LIBOR. For example, SOFR is a secured overnight rate, while U.S. dollar LIBOR is an unsecured rate that represents interbank funding over different maturities. In addition, SOFR can be calculated on either a forward-looking (e.g. Three-Month Term SOFR) or backward-looking (e.g. Compounded SOFR) basis, whereas U.S. dollar LIBOR is forward-looking. Because of these and other differences, there can be no assurance that SOFR will perform in the same way as U.S. dollar LIBOR would have done at any time, and there is no guarantee that it is a comparable substitute for U.S. dollar LIBOR.

## Any failure of SOFR to gain market acceptance could adversely affect holders of the SOFR-linked Notes.

SOFR may fail to gain market acceptance. SOFR was developed for use in certain U.S. dollar derivatives and other financial contracts as an alternative to U.S. dollar LIBOR in part because it is considered to be a good representation of general funding conditions in the overnight U.S. Treasury repo market. However, as a rate based on transactions secured by U.S. Treasury securities, it does not measure bank-specific credit risk and, as a result, is less likely to correlate with the unsecured short-term funding costs of banks. This may mean that market participants would not consider SOFR to be a suitable substitute or successor for all of the purposes for which U.S. dollar LIBOR historically has been used (including, without limitation, as a representation of the unsecured short-term funding costs of banks), which may, in turn, lessen its market acceptance. Any failure of SOFR to gain or maintain market acceptance could adversely affect the return on, value of and market for the SOFR-linked Notes.

#### Any market for the SOFR-linked Notes may be illiquid or unpredictable.

The SOFR-linked Notes will likely have no established trading market when issued, and an established trading market for the SOFR-linked Notes may never develop or may not be very liquid. Market terms for securities that are linked to SOFR, such as the spread over the base rate reflected in the interest rate provisions, may evolve over time, and as a result, trading prices of the SOFR-linked Notes may be lower than those of later-issued securities that are linked to SOFR. Similarly, if SOFR does not prove to be widely used in securities that are similar or comparable to the SOFR-linked Notes, the trading price of the SOFR-linked Notes may be lower than those of securities that are linked to rates that are more widely used. Investors in the SOFR-linked Notes may not be able to sell the SOFR-linked Notes at all or may not be able to sell the SOFR-linked Notes at prices that will provide them with a yield comparable to similar investments that have a developed secondary market, and may consequently suffer from increased pricing volatility and market risk.

The manner of adoption or application of reference rates based on SOFR in the bond market may differ materially compared with the application and adoption of SOFR in other markets, such as the derivatives and loan markets. Investors should carefully consider how any potential inconsistencies between the adoption of reference rates based on SOFR across these markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of the SOFR-linked Notes.

# The implementation of SOFR Benchmark Replacement Conforming Changes could adversely affect holders of the Notes.

Under the benchmark transition provisions of the SOFR-linked Notes, if a particular SOFR Benchmark Replacement or SOFR Benchmark Replacement Adjustment cannot be determined, then the next-available SOFR Benchmark Replacement or SOFR Benchmark Replacement Adjustment will apply. These replacement rates and adjustments may be selected or formulated by (i) the Relevant Governmental Body (as defined in "Terms and Conditions of the Notes"), (ii) ISDA or (iii) in certain circumstances, us and/or the SOFR Replacement Rate Determination Agent. In addition, the benchmark transition provisions related to the SOFR-linked Notes expressly authorize us to make certain changes, which are defined in the terms of such Notes as "SOFR Benchmark Replacement Conforming Changes," with respect to, among other things, the determination of interest periods, interest reset periods and interest reset dates, and the timing and frequency of determining rates and making payments of interest. The application of a SOFR Benchmark Replacement Conforming Changes, could result in adverse consequences to the amount of interest payable on the Notes during the floating rate period, which could adversely affect the yield on, value of and market for the SOFR-linked Notes. Further, there is no assurance that the characteristics of any SOFR Benchmark Replacement will be similar to the then-current benchmark that it is replacing, or that any SOFR Benchmark Replacement will produce the economic equivalent of the then-current benchmark that it is replacing.

## We or an affiliate of ours will or could have authority to make determinations and elections that could affect the return on, value of and market for the SOFR-linked Notes.

Under the terms of the Notes, we may make certain determinations, decisions and elections with respect to the interest rate on the SOFR-linked Notes during the floating rate period, including any determination, decision or election required to be made by the Calculation Agent that the Calculation Agent fails to make. We will make any such determination, decision or election in our sole discretion, and any such determination, decision or election that we make could affect the amount of interest payable on the Notes during the floating rate period. For example, we are expressly authorized to determine and implement Three-Month Term SOFR Conventions in order to reflect the use of Three-Month Term SOFR as the benchmark for the floating rate period. In addition, if we determine that a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred, then we or an affiliate of ours may determine, among other things, the SOFR Benchmark Replacement Conforming Changes. One of our affiliates will act as the initial Calculation Agent and we cannot assure you that we will appoint an independent thirdparty calculation agent at any time. Any exercise of discretion by us, or an affiliate of ours, under the terms of the Notes, including, without limitation, any discretion exercised by us or by an affiliate acting as calculation agent, could present a conflict of interest. In making the required determinations, decisions and elections, we or an affiliate of ours acting as calculation agent may have economic interests that are adverse to the interest of the holders of the Notes, and those determinations, decisions or elections could have a material adverse effect on the return on, value of and market for the Notes. All determinations, decisions or elections by us, or by us or an affiliate acting as calculation agent, under the terms of the Notes will be conclusive and binding absent manifest error.

## Additional Risks relating to Floating-Rate Notes and Resettable Notes linked to Three-Month Term SOFR

## The interest rate for the Notes during the floating rate period may be determined based on a rate other than Three-Month Term SOFR.

Under the terms of the Notes, the interest rate on the Notes for each interest period during the applicable floating rate period may be based on Three-Month Term SOFR, a forward-looking term rate for a tenor of three months that will be based on SOFR. Three-Month Term SOFR is not currently quoted and is currently being developed under the sponsorship of the ARRC. There is no assurance that the development of Three-Month Term SOFR, or any other forward-looking term rate based on SOFR, will be completed. Uncertainty surrounding the development of forward-looking term rates based on SOFR could have a material adverse effect on the return on, value of and market for the Notes. If, at the commencement of the floating rate period for the Notes, the Relevant Governmental Body has not selected or recommended a forward-looking term rate for a tenor of three months based on SOFR, the development of a forward-looking term rate for a tenor of three months based on SOFR. There is no attend to the emplicit of a tenor of three months based on SOFR, the development of a forward-looking term rate for a tenor of three months based on SOFR. The emplicit of the Relevant Governmental Body is not complete or we determine that the use of a forward-looking rate for a tenor of three months based on SOFR. Benchmark Replacement under the benchmark transition provisions will be used to determine the interest rate on the Notes during the floating rate period (unless a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date occur with respect to that next-available SOFR Benchmark Replacement).

Under the terms of the Notes, we are expressly authorized to make determinations, decisions or elections with respect to technical, administrative or operational matters that we decide are appropriate to reflect the use of Three-Month Term SOFR as the interest rate basis for the Notes, which are defined in the terms of the Notes as "Three-Month Term SOFR Conventions". For example, assuming that a form of Three-Month Term SOFR is developed, it is not currently known how or by whom rates for Three-Month Term SOFR will be published. Accordingly, we will

need to determine and to instruct the Calculation Agent concerning the manner and timing for its determination of the applicable Three-Month Term SOFR during the floating rate period. Our determination and implementation of any Three-Month Term SOFR Conventions could result in adverse consequences to the amount of interest that accrues on the Notes during the floating rate period, which could adversely affect the return on, value of and market for the Notes.

### Any SOFR Benchmark Replacement may not be the economic equivalent of Three-Month Term SOFR.

Under the benchmark transition provisions of the Notes, if we determine that a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred with respect to Three-Month Term SOFR, then the interest rate on the Notes during the floating rate period will be determined using the next-available SOFR Benchmark Replacement (which may include a related SOFR Benchmark Replacement Adjustment). However, the SOFR Benchmark Replacement may not be the economic equivalent of Three-Month Term SOFR. For example, Compounded SOFR, the first-available SOFR Benchmark Replacement, is the compounded average of the daily Secured Overnight Financing Rates calculated in arrears, while Three-Month Term SOFR is intended to be a forwardlooking rate with a tenor of three months. In addition, very limited market precedent exists for securities that use Compounded SOFR as the rate basis, and the method for calculating Compounded SOFR in those precedents varies. Further, the ISDA Fallback Rate, which is another SOFR Benchmark Replacement, has not yet been established and may change over time.

## **TERMS AND CONDITIONS OF THE NOTES**

The following Condition amends and supersedes Condition 3(b)(v)2 in the Base Prospectus. The other Conditions in the Base Prospectus shall remain unchanged.

2. Screen Rate Determination with SOFR Benchmark

Where "Screen Rate Determination" is specified in the applicable supplement as the manner in which the rate of interest is to be determined and SOFR is specified as the Reference Rate, the rate of interest for each Interest Period will be determined based on one of Three-Month Term SOFR, SOFR Arithmetic Mean or SOFR Compound, as specified in the applicable supplement (or any applicable SOFR Benchmark Replacement rate), in each case plus or minus the margin (if any, as specified in the applicable supplement) as follows:

(A) if Three-Month Term SOFR ("Three-Month Term SOFR") is specified as applicable in the applicable supplement, the rate of interest for each Interest Period shall be the rate for Term SOFR for a tenor of three months that is published by the Term SOFR Administrator at the Reference Time for any interest period, as determined by the Calculation Agent after giving effect to the Three-Month Term SOFR Conventions;

where:

"Term SOFR" means the forward-looking term rate based on SOFR (and the stated tenor) that has been selected or recommended by the Relevant Governmental Body;

"**Term SOFR Administrator**" means any entity designated by the Relevant Governmental Body as the administrator of Term SOFR (or a successor administrator);

"Three-Month Term SOFR Conventions" means any determination, decision or election with respect to any technical, administrative or operational matter (including with respect to the manner and timing of the publication of Three-Month Term SOFR, or changes to the definitions of "interest period" and "interest reset dates", timing and frequency of determining Three-Month Term SOFR with respect to each interest period and making payments of interest, rounding of amounts or tenors, and other administrative matters) that we decide may be appropriate to reflect the use of Three-Month Term SOFR as the Reference Rate in a manner substantially consistent with market practice (or, if we decide that adoption of any portion of such market practice is not administratively feasible or if we determine that no market practice for the use of Three-Month Term SOFR exists, in such other manner as we determine is reasonably necessary).

Notwithstanding the foregoing paragraph, if we determine on or prior to the relevant Reference Time, with respect to the Notes, that a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date (each as defined below) have occurred with respect to Three-Month Term SOFR, then the provisions set forth below under the definition of SOFR Benchmark Replacement, which we refer to as the benchmark transition provisions, will thereafter apply to all determinations of the interest rate on the Notes for each interest period during the floating rate period. In accordance with the benchmark transition provisions, after a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred, the interest rate on the Notes for each interest period during the floating rate period will be a rate equal to the sum of the SOFR Benchmark Replacement (as defined below) and the margin as specified in the applicable supplement.

- (B) if SOFR Arithmetic Mean ("SOFR Arithmetic Mean") is specified as applicable in the applicable supplement, the rate of interest for each Interest Period shall be the arithmetic mean of the SOFR rates for each day during the period, as calculated by the Calculation Agent, where the SOFR rate on the SOFR Rate Cut-Off Date shall be used for the days in the period from and including the SOFR Rate Cut-Off Date to but excluding the Interest Payment Date; or
- (C) if SOFR Compound ("SOFR Compound") is specified in the applicable supplement, the rate of interest for each Interest Period shall be equal to the value of the SOFR rates for each day during the period, compounded daily, as calculated by the Calculation Agent. Where not otherwise specified for in the applicable supplement, in calculating SOFR Compound the SOFR Rate Cut-Off Date (as defined below) shall be the fourth U.S. Government Securities Business Day prior to the Interest Payment Date in respect of the relevant Interest Period.

In connection with the SOFR Compound definition above, the following formula applies:

$$\left[\left(\prod_{i=1}^{d_0} \left(1 + \frac{\text{SOFR}_i \times n_i}{360}\right) - 1\right) \times \frac{360}{d}\right]$$

with the resulting percentage being rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards,

where:

"d" means the number of calendar days in the relevant Interest Period;

"d0" for any Interest Period, means the number of U.S. Government Securities Business Days in the relevant Interest Period;

"i" means a series of whole numbers from one to d0, each representing the relevant U.S. Government Securities Business Days in chronological order from, and including, the first U.S. Government Securities Business Day in the relevant Interest Period;

"**n**<sub>i</sub>" for any U.S. Government Securities Business Day i, means the number of calendar days from, and including, such U.S. Government Securities Business Day i up to, but excluding, the following U.S. Government Securities Business Day;

"**SOFR**<sup>i</sup>" means for any U.S. Government Securities Business Day i that is a SOFR Interest Reset Date, SOFR in respect of this SOFR Interest Reset Date; provided, however that where a SOFR Rate Cut-Off Date applies, the SOFR with respect to any SOFR Interest Reset Date in the period from and including, the SOFR Rate Cut-Off Date to, but excluding, the corresponding Interest Payment Date of an Interest Period, will be the SOFR with respect to the SOFR Interest Reset Date coinciding with the SOFR Rate Cut-Off Date for such Interest Period

"**SOFR**" means the rate determined by the Calculation Agent or the SOFR Replacement Rate Determination Agent, as the case may be, in accordance with the following provisions:

- (1) the Secured Overnight Financing Rate for trades made on the Interest Determination Date corresponding to the related SOFR Interest Reset Date that appears at approximately 3:00 p.m. (New York City time) (the "SOFR Determination Time") on the NY Federal Reserve's Website on such SOFR Interest Reset Date, as such rate is reported on the Bloomberg Screen SOFRRATE Page for such SOFR Interest Reset Date or, if no such rate is reported on the Bloomberg Screen SOFRRATE Page, then the Secured Overnight Financing Rate that is reported on the Reuters Page USDSOFR= or, if no such rate is reported on the Reuters Page USDSOFR=, then the Secured Overnight Financing Rate that appears at approximately 3:00 p.m. (New York City time) on the NY Federal Reserve's Website on such SOFR Interest Reset Date on such SOFR Interest Reset Date on the Reuters Page USDSOFR=, then the Secured Overnight Financing Rate that appears at approximately 3:00 p.m. (New York City time) on the NY Federal Reserve's Website on such SOFR Interest Reset Date (the "SOFR Screen Page");
- (2) if the rate specified in (1) above does not so appear, and the Issuer determines that a SOFR Benchmark Transition Event and SOFR Benchmark Replacement Date have not occurred, the Secured Overnight Financing Rate published on the NY Federal Reserve's Website for the first

preceding U.S. Government Securities Business Day for which the Secured Overnight Financing Rate was published on the NY Federal Reserve's Website;

(3) if the Issuer determines that a SOFR Benchmark Transition Event and SOFR Benchmark Replacement Date have occurred, the Issuer will deliver notice thereof to the Calculation Agent and as soon as reasonably practicable (and in any event prior to the next relevant Interest Determination Date) appoint an agent (the "SOFR Replacement Rate Determination Agent") which will use the SOFR Benchmark Replacement to determine the rate. The SOFR Replacement Rate Determination Agent may be (x) a leading bank, broker-dealer or benchmark agent in the principal financial center of the Specified Currency as appointed by the Issuer, (y) the Issuer, (z) an affiliate of the Issuer or (zz) such other entity that the Issuer in its sole and absolute discretion determines to be competent to carry out such role.

For the avoidance of doubt, in accordance with the benchmark transition provisions, after a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred, the interest rate on the notes for each interest period during the floating rate period will be a rate equal to the sum of the SOFR Benchmark Replacement (as defined below) and the margin as specified in the applicable supplement.

In connection with the implementation of a SOFR Benchmark Replacement, we will have the right to make SOFR Benchmark Replacement Conforming Changes from time to time.

In connection with the SOFR definition above, the following definitions apply:

(1) "**SOFR Benchmark Replacement**" means one or more of the alternatives, as set forth in order of priority, if any, in the applicable supplement (or if no such order is set forth in such supplement, in the order of priority listed below) that can be determined by the SOFR Replacement Rate Determination Agent at the SOFR Replacement Rate Determination Agent's discretion as of the SOFR Benchmark Replacement Date if the Issuer determines that a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred on or prior to the Reference Time in respect of any determination of the Reference Rate on any date:

- (A) Replacement Compounded SOFR ("**Replacement Compounded SOFR**"), where Compounded SOFR means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for such rate, and conventions for such rate being established by the SOFR Replacement Rate Determination Agent in accordance with:
  - a. the rate, or methodology for such rate, and conventions for such rate as selected or recommended by the Relevant Governmental Body for determining Compounded SOFR; provided that
  - b. if, and to the extent that, the SOFR Replacement Rate Determination Agent determines that Replacement Compounded SOFR cannot be determined in accordance with clause (a) above, then the SOFR Replacement Rate Determination Agent will determine the rate, methodology and conventions for such rate, provided that the SOFR Replacement Rate Determination Agent will only proceed to such determination if such rate, methodology and conventions can be determined in a way that is substantially comparable with any industryaccepted market practice for U.S. dollar-denominated floating rate securities at such time, acting in good faith and in a commercially reasonable manner.

The calculation of Replacement Compounded SOFR shall exclude any SOFR Benchmark Replacement Adjustment and the initial margin for the Notes;

- (B) the sum of: (a) the alternate rate that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current benchmark for the applicable Corresponding Tenor and (b) the SOFR Benchmark Replacement Adjustment;
- (C) the sum of: (a) the ISDA Fallback Rate and (b) the SOFR Benchmark Replacement Adjustment;
- (D) the sum of: (a) the alternate rate that has been selected by the SOFR Replacement Rate Determination Agent as the replacement for the then-current benchmark for the applicable Corresponding Tenor giving due consideration to any industryaccepted rate as a replacement for the then-current benchmark for U.S. dollardenominated floating rate securities at such time and (b) the SOFR Benchmark Replacement Adjustment;

provided, that the SOFR Benchmark Replacement (as specified according to the priority given in the applicable supplement) will replace the then-current Reference Rate for all purposes relating to the Notes during the floating rate period in respect of such determination on such date and all determinations on all subsequent dates;

and provided, further, that upon selection of a substitute or successor rate in accordance with paragraphs (A), (B), (C) or (D) above, the SOFR Rate Determination Agent may determine the day count fraction, the business day convention, the definition of business day, the interest determination date, interest reset date, accrued interest rate and any other relevant methodology or definition for calculating such substitute or successor rate in a manner that is consistent with any industry-accepted practices for such substitute or successor rate.

Notwithstanding any other provisions of this definition, if (i) the SOFR Rate Determination Agent is unable or otherwise does not determine for any Interest Determination Date a SOFR Benchmark Replacement or (ii) the Issuer determines that (a) the replacement of SOFR by the SOFR Benchmark Replacement or any other amendment to the Terms and Conditions necessary to implement such replacement would result in all or part of the aggregate outstanding nominal amount of such Series of Notes being excluded from the eligible liabilities available to meet the MREL/TLAC Requirements (however called or defined by then applicable regulations) and/or, in the case of Subordinated Notes, all or part of the aggregate outstanding nominal amount of SOFR by the SOFR Benchmark Replacement or any other amount of Notes being excluded from the own funds of the Group or reclassified as a lower quality form of own funds of the Group or (b) the replacement of SOFR by the SOFR Benchmark Replacement or any other amendment to the Terms and Conditions necessary to implement such replacement would result in the Relevant Regulator treating the next Interest Determination Date as the effective maturity of the Notes, rather than the relevant Maturity Date, no SOFR Benchmark Replacement will be adopted, and the Reference Rate will be the rate of interest (excluding the initial margin for the Notes) applicable for the Interest Period immediately preceding the SOFR Benchmark Replacement Date.

(2) "SOFR Benchmark Replacement Adjustment" means, with respect to any SOFR Benchmark Replacement, the spread adjustment, or method for calculating or determining such spread adjustment (which may be positive, negative, or zero) that shall have been selected, endorsed or recommended by the Relevant Governmental Body for the applicable Unadjusted SOFR Benchmark Replacement, provided that:

(A) if the SOFR Benchmark Replacement Adjustment cannot be determined as of a SOFR Interest Reset Date in accordance with the immediately preceding clause and the applicable Unadjusted SOFR Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the SOFR Benchmark Replacement Adjustment shall be the spread adjustment, or method for calculating or determining such spread adjustment (which may be positive, negative, or zero) ("ISDA Spread Adjustment") that shall have been selected by ISDA as the spread adjustment that would apply to the ISDA Fallback Rate; provided, further, that (B) if (a) the SOFR Benchmark Replacement Adjustment cannot be determined as of a SOFR Interest Reset Date in accordance with the initial clause of this definition or paragraph (A) above or (b) the SOFR Replacement Rate Determination Agent shall have determined that the ISDA Spread Adjustment determined in accordance with paragraph (A) above does not produce a SOFR Benchmark Replacement that is an industry-accepted successor or substitute rate for such Notes at such time, then the SOFR Benchmark Replacement Adjustment shall be the spread adjustment, or method for calculating or determining such spread adjustment (which may be positive, negative, or zero) determined by the SOFR Replacement Rate Determination Agent to produce a SOFR Benchmark Replacement that is an industry-accepted successor or substitute rate for such Notes at such time.

(3) "SOFR Benchmark Replacement Conforming Changes" means, with respect to any SOFR Benchmark Replacement, any technical, administrative or operational changes (including changes to the definitions of "interest period", "interest reset period" and "interest reset dates", timing and frequency of determining rates with respect to each interest period and making payments of interest, rounding of amounts or tenors, and other administrative matters) that we decide may be appropriate to reflect the adoption of such SOFR Benchmark Replacement in a manner substantially consistent with market practice (or, if we decide that adoption of any portion of such market practice is not administratively feasible or if we determine that no market practice for use of the SOFR Benchmark Replacement exists, in such other manner as we determine is reasonably necessary).

(4) **"SOFR Benchmark Replacement Date**" means the earliest to occur of the following events with respect to the then-current Reference Rate (including the daily published component used in the calculation thereof):

- (1) in the case of clause (1) of the definition of "SOFR Benchmark Transition Event," the relevant Reference Time in respect of any determination;
- (2) in the case of clause (2) or (3) of the definition of "SOFR Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the benchmark permanently or indefinitely ceases to provide the benchmark (or such component); or
- (3) in the case of clause (4) of the definition of "SOFR Benchmark Transition Event," the date of the public statement or publication of information referenced therein;

provided that, in the event of any public statements or publications of information as referenced in clauses (2) or (3) above, should such event or circumstance referred to in such a public statement or publication occur on a date falling later than three (3) months after the relevant public statement or publication, the SOFR Benchmark Transition Event shall be deemed to occur on the date falling three (3) months prior to such specified date (and not the date of the relevant public statement or publication).

For the avoidance of doubt, if the event giving rise to the SOFR Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the SOFR Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

(5) **"SOFR Benchmark Transition Event**" means the occurrence of one or more of the following events with respect to the then-current benchmark (including the daily published component used in the calculation thereof):

(1) if the Reference Rate is Three-Month Term SOFR, (a) the Relevant Governmental Body has not selected or recommended a forward-looking term rate for a tenor of three months based on SOFR, (b) the development of a forward-looking term rate for a tenor of three months based on SOFR that has been recommended or selected by the Relevant Governmental Body is not complete or (c) we determine that the use of a forward-looking rate for a tenor of three months based on SOFR is not administratively feasible;

- (2) a public statement or publication of information by or on behalf of the administrator of the Reference Rate (or such component) announcing that such administrator has ceased or will cease to provide the Reference Rate (or such component), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Reference Rate (or such component);
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the Reference Rate (or such component), the central bank for the currency of the Reference Rate (or such component), an insolvency official with jurisdiction over the administrator for the Reference Rate (or such component), a resolution authority with jurisdiction over the administrator for the Reference Rate (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for the Reference Rate (or such component), which states that the administrator of the Reference Rate (or such component) has ceased or will cease to provide the Reference Rate (or such component) permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Reference Rate (or such component);
- (4) a public statement or publication of information by the regulatory supervisor for the administrator of the Reference Rate announcing that the Reference Rate is no longer representative, the Reference Rate has been or will be prohibited from being used or that its use has been or will be subject to restrictions or adverse consequences, either generally or in respect of the Notes; or
- (5) the Reference Rate is not published by the administrator of the Reference Rate (or a successor administrator) for six (6) consecutive Business Days.

(6) **"Bloomberg Screen SOFRRATE Page**" means the Bloomberg screen designated "SOFRRATE" or any successor page or service.

(7) **"Corresponding Tenor**" with respect to a SOFR Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Reference Rate.

(8) **"ISDA Definitions**" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

(9) **"ISDA Fallback Adjustment"** means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Reference Rate for the applicable tenor.

(10) **"ISDA Fallback Rate"** means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of a SOFR Benchmark Transition Event with respect to the Reference Rate for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

(11) "NY Federal Reserve" means the Federal Reserve Bank of New York.

(12) "**NY Federal Reserve's Website**" means the website of the NY Federal Reserve, currently at www.newyorkfed.org, or any successor website of the NY Federal Reserve or the website of any successor administrator of SOFR.

(13) "**Reference Rate**" means SOFR or such benchmark in respect of Floating-Rate Notes as specified in the applicable supplement (or, in the event that SOFR or such other rate specified in the applicable supplement has been discontinued, such other successor benchmark rate as identified in the SOFR Benchmark Replacement definition above).

(14) "**Reference Time**" with respect to any determination of the Reference Rate means (1) if the Reference Rate is SOFR Arithmetic Mean or SOFR Compound, the SOFR Determination Time, (2) if the Reference Rate is Three-Month Term SOFR, the time determined by the Issuer or the Calculation Agent after giving effect to the Three-Month Term SOFR Conventions or (3) if the Reference Rate is not SOFR Arithmetic Mean, SOFR Compound or Three-Month Term SOFR, the time determined by the Issuer or Calculation Agent after giving effect to the SOFR Benchmark Replacement Conforming Changes.

(15) **"Relevant Governmental Body**" means the Board of Governors of the Federal Reserve System and/or the NY Federal Reserve or a committee officially endorsed or convened by the Board of Governors of the Federal Reserve System and/or the NY Federal Reserve or any successor thereto.

(16) **"Reuters Page USDSOFR="** means the Reuters page designated "USDSOFR=" or any successor page or service.

(17) **"SOFR Rate Cut-Off Date"** means, if applicable, the date that is the specified U.S. Government Securities Business Day, or such other date as is specified in the applicable supplement, prior to the Interest Payment Date in respect of the relevant Interest Period or such other date specified in the applicable supplement; for the avoidance of doubt, the SOFR Rate Cut-Off Date can be zero or none, in which case no SOFR Rate Cut-Off Date is applicable.

(18) **"SOFR Interest Reset Date"** means each U.S. Government Securities Business Day in the relevant Interest Period.

(19) "**Unadjusted SOFR Benchmark Replacement**" means the SOFR Benchmark Replacement excluding the applicable SOFR Benchmark Replacement Adjustment.

(20) **"U.S. Government Securities Business Day"** means any day except for a Saturday, Sunday or a day on which the Securities Industry and Financial Markets Association (SIFMA) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

