Deutsche Bank Aktiengesellschaft, Frankfurt am Main or, as the case may be, Deutsche Bank Aktiengesellschaft, acting through its London Branch, as specified in Annex 1 (*Series of Securities*) hereto (in each case, the "**Issuer**"),

in relation to several series of securities identified in the table in Annex 1 (*Series of Securities*) to this notice (each, a "Series of Securities" and together, the "Securities")

under its

X-markets Programme for the issuance of Certificates, Warrants and Notes (the "Programme")

IMPORTANT NOTICE TO SECURITYHOLDERS

We refer to the Securities listed in Annex 1 (*Series of Securities*) hereto issued by the Issuer under the Programme. Reference is made to the final terms or any other type of offering document in respect of each Series of Securities described above, as amended and/or restated from time to time (each the "Offering Document") containing the specific terms of such Series of Securities (each, the "Relevant Terms") which complete the relevant general conditions (the "General Conditions") contained in the relevant base prospectus (each, a "Base Prospectus") or Offering Document, as the case may be, for the purposes of such Series of Securities. The Relevant Terms and General Conditions together constitute the current terms and conditions of the relevant Series of Securities (the "Terms and Conditions").

In accordance with the Terms and Conditions, certain payments in respect of the Securities are calculated by reference to the 3 months US Dollar LIBOR ("**USD LIBOR**") setting. We refer to the provisions set out in the relevant Offering Document which are applicable to such USD LIBOR setting.

We also refer to the UK Financial Conduct Authority ("**FCA**") announcement dated 5 March 2021 on the future cessation and loss of representativeness of certain LIBOR benchmarks in which the FCA, *inter alia*, announced that immediately after 30 June 2023, all USD LIBOR settings will either cease to be provided by any administrator or no longer be representative.

In accordance with regulatory guidance published by the FCA in connection with the transition away from LIBOR benchmarks and in compliance with the Terms and Conditions, it has been determined that certain adjustments, as described in Annex 2 (*Adjustments*) hereto (the "**Adjustments**"), shall be made to the Terms and Conditions of each Series of Securities with effect from the date of this Notice (the "**Effective Date**").

Capitalised terms not otherwise defined in this Notice will have their respective meanings in the Terms and Conditions.

This Notice forms part of and should be read in conjunction with the Terms and Conditions. In the case of any inconsistency between the Terms and Conditions or any earlier notice relating to the Securities and the terms of this Notice, the terms of this Notice shall prevail.

Please contact your legal or financial advisor if you have any queries in connection with the contents of this Notice.

We would also remind you that under normal market conditions, the Issuer may continuously provide indicative (non-binding) bid and ask prices for the Securities (although it is under no legal obligation to purchase any Securities).

Deutsche Bank Aktiengesellschaft

Dated 23 June 2023

Annex 1 Series of Securities

	Issuer	ISIN	WKN	Type of Product	Relevant Base Prospectus	Reference to the General Conditions in the relevant Base Prospectus or other Offering Document
1	Deutsche Bank Aktiengesellschaft, London Branch	XS0461367053	DB1ZAV	Fixed to Floating Note	9 September 2016	 §6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
2	Deutsche Bank Aktiengesellschaft, London Branch	XS0461353004	DB1Y5B	Fixed to Floating	9 September 2016	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
3	Deutsche Bank Aktiengesellschaft, London Branch	XS0461350323	DB1Y4C	Fixed to Floating Note	9 September 2016	 §6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
4	Deutsche Bank Aktiengesellschaft, London Branch	XS0461387168	DB1ZF1	Fixed to Floating Note	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
5	Deutsche Bank Aktiengesellschaft, London Branch	XS0461384900	DB1ZFF	Fixed to Floating Note	26 November 2015	 §6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
6	Deutsche Bank Aktiengesellschaft, London Branch	XS0461329988	DB1YUV	Fixed to Floating Note	09 June 2017	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
7	Deutsche Bank Aktiengesellschaft, London Branch	XS0461383258	DB1ZEZ	Fixed to Floating with Multiplication Factor	9 September 2016	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
8	Deutsche Bank Aktiengesellschaft, London Branch	XS1628407899	DM7GE6	Floater Note	Not applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
9	Deutsche Bank Aktiengesellschaft,	XS1628409085	DM7GFH	Floater Note	Not applicable	§6 Adjustment Events and

	Issuer	ISIN	WKN	Type of Product	Relevant Base Prospectus	Reference to the General Conditions in the relevant Base Prospectus or other Offering Document
	London Branch					Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
10	Deutsche Bank Aktiengesellschaft, London Branch	XS1628414838	DM7GG2	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
11	Deutsche Bank Aktiengesellschaft, London Branch	XS1628415728	DM7GHB	Floater Note	Not applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
12	Deutsche Bank Aktiengesellschaft, London Branch	XS1628421882	DM7GJW	Floater Note	Not applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
13	Deutsche Bank Aktiengesellschaft, London Branch	XS1628424803	DM7GKP	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
14	Deutsche Bank Aktiengesellschaft, London Branch	XS1628425792	DM7GKX	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
15	Deutsche Bank Aktiengesellschaft, London Branch	XS1628415132	DM7GG5	Credit Linked Note with floating coupon	18 July 2018	Product Condition 8 - Adjustment Events and Adjustment/Termination Events

	Issuer	ISIN	WKN	Type of Product	Relevant Base Prospectus	Reference to the General Conditions in the relevant Base Prospectus or other Offering Document
16	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	XS2011147217	DC5PNW	Floater Note	Not applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
17	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	XS2011152993	DC5PP5	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
18	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	XS2011154858	DC5PQM	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
19	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	X\$2011152720	DC5PP4	Floater Note	Not applicable	§6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
20	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	XS2011157281	DC5PQ6	Floater Note	Not applicable	 §6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)

Annex 2 Adjustments

1. <u>Replacement of USD LIBOR</u>

In accordance with §6 of the General Conditions (the provision dealing with adjustment events and adjustment/termination events as detailed in Annex 1 (*Series of Securities*)), it has been determined that all calculations to be made under the Terms and Conditions which reference 3 months USD LIBOR will, with effect from the first Determination Date which falls on or after the Successor Rate Starting Date, be calculated by reference to the USD LIBOR Replacement Rate (and the Terms and Conditions will be construed accordingly).

For these purposes:

"USD LIBOR Replacement Rate" means:

- (i) the Screen Rate; or
- (ii) if the Screen Rate has not been published on the relevant Bloomberg Screen as at the Reference Time on the Determination Date and no Benchmark Transition Event (as defined in paragraph 2 (Subsequent Benchmark Replacement) below) has occurred, the sum of (a) Compounded Daily SOFR and (b) the Benchmark Replacement Adjustment.

For the purposes of the above definition, the following terms have the following meanings:

"Benchmark Replacement Adjustment" means 0.26161 per cent. (being the fixed adjustment to be applied to the compounded daily SOFR rate as the fallback for 3 months USD LIBOR, as recommended by the Alternative Reference Rates Committee (ARRC) established by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York, to take into account that LIBOR rates are generally higher than SOFR rates).

"Bloomberg Screen" means Bloomberg page VUS0003M Index in respect of the Screen Rate, or any other published source designated by Bloomberg Index Services Limited (or any successor thereto).

"**Compounded Daily SOFR**" means the compounded daily SOFR rate for the relevant SOFR Observation Period calculated by the Calculation Agent in respect of the relevant Determination Date as follows, and the resulting percentage will be rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards:

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

For the purposes of the above definition, the following terms have the following meanings:

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

"**d**₀" means in respect of any SOFR Observation Period, the number of U.S. Government Securities Business Days in the relevant SOFR Observation Period;

"i" means a series of whole numbers from 1 to " d_0 ", 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 the SOFR Observation Period;

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

"**SOFR**" means the secured overnight financing rate administered by the Federal Reserve Bank of New York (or any successor administrator);

"**SOFR**_i" means, in respect of any U.S. Government Securities Business Day "i" falling in the relevant SOFR Observation Period, the SOFR Reference Rate for such day;

"SOFR Reference Rate", in respect of any U.S. Government Securities Business Day ("USBD_x"), is a reference rate equal to the SOFR rate for such USBD_x as provided by the Federal Reserve Bank of New York, as the administrator of such rate (or any successor administrator of such rate) on the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor website or the website of any successor administrator for the publication of such rate (the "New York Federal Reserve's Website") (in each case, on or about 8:00 a.m., New York City time, on the U.S. Government Securities Business Day immediately following such USBD_x) or if the New York Federal Reserve's Website is unavailable as otherwise published by or on behalf of the relevant administrator;

 $\prod_{i=1}^{n}$ means the product of the relevant factors up to the amount of n. For example,

$$\left[\prod_{i=1}^{30} \left(1 + \frac{X_i}{360}\right) - 1\right]$$

means [(1 + X1 / 360) - 1] x [(1 + X2 / 360) - 1] x ... x [(1 + X30 / 360) - 1].

Annex 3 below contains a description of the main characteristics of the USD LIBOR Replacement Rate.

"**Coupon Determination Date**" means the date that is 2 U.S. Government Securities Business Days prior to the last day of the relevant Coupon Period.

"Coupon Period" means the period for the determination of any interest or coupon as set out in the Terms and Conditions.

"**Determination Date**" means the Coupon Determination Date, or, in respect of any date for the purposes of the determination of any other variable or amount under the Terms and Conditions that depends on the determination of the Benchmark Rate (as defined in paragraph 2 (*Subsequent Benchmark Replacement*) below), the date as determined by the Calculation Agent in accordance with the Benchmark Replacement Conforming Changes (as defined in paragraph 3 (*Conforming Changes*) below).

"London Banking Day" means any calendar day (other than a Saturday and Sunday) on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London.

"Reference Time" means with respect to:

- (i) the Screen Rate, 10.30 a.m., New York City time on the Determination Date;
- (ii) any other Benchmark Rate, the time determined by the Calculation Agent in accordance with the Benchmark Replacement Conforming Changes.

"Screen Rate" means the compounded daily SOFR rate for the relevant SOFR Observation Period plus the Benchmark Replacement Adjustment (together being the fallback for 3 months USD LIBOR), as provided by Bloomberg Index Services Limited (or any successor provider) on the Bloomberg Screen as at the Reference Time on the Determination Date.

"SOFR Observation Period" means:

- (i) in respect of each Coupon Period, the period from and including the date falling 2 U.S. Government Securities Business Days preceding the first date in such Coupon Period to but excluding the date falling 2 U.S. Government Securities Business Days preceding the last day of the relevant Coupon Period in respect of the relevant Coupon Period; and
- (ii) in respect of any date for the purposes of the determination of any other variable or amount under the Terms and Conditions that depends on the determination of the Benchmark Rate, such period as determined by the Calculation Agent in accordance with the Benchmark Replacement Conforming Changes.

"Successor Rate Starting Date" means the first London Banking Day following 30 June 2023.

"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 (or any successor) recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

2. Subsequent Benchmark Replacement

If the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred prior to the Reference Time in respect of any determination of the relevant Benchmark Rate on any date for the purposes of the determination of the Coupon Amount or other variable or amount under the Terms and Conditions that depends on the determination of the Benchmark Rate, the Benchmark Replacement will replace the then-current Benchmark Rate for all purposes relating to the Securities during the applicable Coupon Period or other applicable period or date(s), as the case may be, in respect of such determination on such date and all determinations on all subsequent dates under the Securities.

For these purposes:

"**Benchmark Rate**" means, initially, SOFR of the appropriate tenor (as the benchmark rate underlying the USD LIBOR Replacement Rate); provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to SOFR (or the then-current Benchmark Rate), then "Benchmark Rate" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Calculation Agent as of the Benchmark Replacement Date:

- (i) the sum of: (a) the Compounded Daily SOFR Recommended Fallback Rate and (b) the Benchmark Replacement Adjustment;
- (ii) the sum of: (a) the alternate rate of interest that has been selected by the Issuer or the Calculation Agent as the replacement for the then-current Benchmark Rate for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the thencurrent Benchmark Rate for U.S. dollar-denominated floating rate notes at such time and (b) the Benchmark Replacement Adjustment.

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current relevant Benchmark Rate:

- (i) in the case of paragraph (i) or (ii) of the definition of "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 Rate permanently or indefinitely ceases to provide the Benchmark Rate; or
- (ii) in the case of paragraph (iii) of the definition of "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 Benchmark Rate ceases to be representative by reference to the most recent public statement or publication of information referenced therein or, if earlier, the date the Benchmark Rate is no longer provided.

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

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark Rate:

- a public statement or publication of information by or on behalf of the administrator of the Benchmark Rate announcing that such administrator has ceased or will cease to provide the Benchmark Rate, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate;
- (ii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate, the central bank for the currency of the Benchmark Rate, an insolvency official with jurisdiction over the administrator for the Benchmark Rate, a resolution authority with jurisdiction over the administrator for the Benchmark Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark Rate, which states that the administrator of the Benchmark Rate has ceased or will cease to provide the Benchmark Rate permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark Rate; or
- (iii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark Rate announcing that the Benchmark Rate is no longer representative, or as of a specified future date will no longer be capable of being representative, of the market or economic reality that such Benchmark Rate is intended to measure.

"Compounded Daily SOFR Recommended Fallback Rate" means:

- the rate (if any) 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 such purpose ("Fallback SOFR"); or
- (ii) if the Calculation Agent determines that (a) a Benchmark Transition Event and its related Benchmark Replacement Date has not occurred with respect to Fallback SOFR, and (b) neither the administrator of SOFR nor any authorised distributor has provided or published Fallback SOFR for the day in respect of which it is required, the last provided or published Fallback SOFR; or
- (iii) if the Calculation Agent determines that (a) a Benchmark Transition Event and its related Benchmark Replacement Date has not occurred with respect to Fallback SOFR, (b) neither the administrator of SOFR nor any authorised distributor has provided or published Fallback SOFR for the day in respect

of which it is required, and (c) there is no last provided or published Fallback SOFR, the last provided or published SOFR; or

(iv) if the Calculation Agent determines that (a) Fallback SOFR has not been published or provided before the end of the first U.S. Government Securities Business Day following the Benchmark Transition Event and its related Benchmark Replacement Date with respect to SOFR, or (b) a Benchmark Transition Event and its related Benchmark Replacement Date has occurred with respect to Fallback SOFR, the Overnight Bank Funding Rate (known as "**OBFR**") administered by the Federal Reserve Bank of New York or any successor administrator.

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

3. <u>Conforming Changes</u>

In connection with the implementation of the USD LIBOR Replacement Rate described in paragraph 1 (*Replacement of USD LIBOR*) and any subsequent Benchmark Replacement, the Issuer or the Calculation Agent may make certain conforming changes to the Terms and Conditions.

Those conforming changes (the "Benchmark Replacement Conforming Changes") will be:

- (i) any technical, administrative or operational changes (including without limitation changes to the definition of "Coupon Period", "Coupon Determination Date", "Coupon Observation Date" or other applicable periods and dates, as the case may be, timing and frequency of determining rates and making payments of interest or coupon, rounding of amounts or tenors, the introduction of any time delay or lag between the calculation or observation period of a rate and the related payment dates and other administrative matters) that the Calculation Agent determines is appropriate to reflect the adoption of the Benchmark Rate or Benchmark Replacement, as applicable, in a manner substantially consistent with market practice; or
- (ii) if the Calculation Agent determines that adoption of any portion of such market practice is not administratively feasible or if the Calculation Agent determines that no market practice for use of the Benchmark Rate or Benchmark Replacement, as applicable, exists, in such other manner as the Calculation Agent determines is reasonably necessary.

4. No other changes

For the avoidance of doubt, other than any Benchmark Replacement Conforming Changes that are required from time to time, the Terms and Conditions will remain in full force and effect.

Annex 3

Main characteristics of the USD LIBOR Replacement Rate

In relation to the adjustments set out in Annex 2 (*Adjustments*) after the Effective Date and in respect of each Series of Securities with effect from the relevant Successor Rate Starting Date:

- The 3 months USD LIBOR benchmark used to calculate the interest rate (and other relevant amounts), will be replaced by the secured overnight financing rate ("**SOFR**"), compounded daily over a particular period plus an adjustment spread (as described below).
- SOFR rates are based on a measurement of actual overnight borrowing costs in the relevant currency and are known as "risk free rates" because they do *not* take into account credit and liquidity premium. In contrast USD LIBOR rates represent the cost of interbank lending for a particular time period and take account of a certain amount of credit and liquidity premium. As a result, LIBOR rates are generally higher than SOFR rates.
- In order to facilitate a fair and transparent transition to SOFR designed to be economically neutral, the Alternative Reference Rates Committee (ARRC) established by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York has recommended that a fixed adjustment spread be applied to the SOFR rate. This adjustment spread was agreed within the industry to be the 5 Year Historical Median difference between each LIBOR tenor and the associated daily SOFR rate compounded over the same term. For the replacement of 3 months USD LIBOR an adjustment spread of 0.26161 per cent is therefore being applied.
- The Calculation Agent will determine the applicable rate for a particular day or period in order to calculate the interest rate (and other relevant amounts) by taking the rate provided by Bloomberg Index Services Limited ("**Bloomberg**") and shown on a particular Bloomberg screen at the relevant time. This rate is the aggregate of (i) the compounded daily SOFR rate and (ii) the adjustment spread of 0.26161 per cent.
- If the replacement rate for 3 months USD LIBOR is not displayed on the relevant Bloomberg screen at the relevant time, the Calculation Agent will calculate the alternative replacement rate in accordance with the formula set out in Annex 2 (*Adjustments*) by adding together (i) the compounded daily SOFR rate (based on the daily SOFR rates for the relevant period as provided by the Federal Reserve Bank of New York) and (ii) the adjustment spread of 0.26161 per cent.
- 3 months USD LIBOR is calculated on a forward-looking basis and is typically determined just prior to the start of a particular time period. In contrast the compounded daily SOFR rates are calculated on a backward-looking basis, using the known overnight rates for a particular period. The transition to SOFR rates will therefore result in the determination of the applicable rate taking place just prior to the *end* of the relevant period.
- The provisions dealing with how an interest rate (and other relevant amounts) will be calculated in case the SOFR rates cease to be published (or cannot be determined) will be adjusted as set out in Annex 2 (*Adjustments*) so that they take into account the market standard fallbacks applicable to SOFR rates and allow an appropriate replacement rate to be determined.