# 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 one or more tenors of the USD LIBOR ICE Swap Rate(s) (the "**USD LIBOR ISR(s)**") published by ICE Benchmark Administration Limited ("**IBA**"). The USD LIBOR ISR(s) were formerly known as "ISDAFIX" and are sometimes referred to as the CMS (constant-maturity swap) rates. We refer to the provisions set out in the relevant Offering Document which are applicable to the relevant USD LIBOR ISR(s).

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.

As the USD LIBOR ISR(s) are determined by reference to USD LIBOR and based on the feedback received in respect of a consultation published in August 2022, IBA announced on 14 November 2022 that it will cease the publication of all USD LIBOR ISRs for all tenors immediately after publication on 30 June 2023.

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 AG, London Branch	XS0461343112	DB1Y1G	Steepener	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
2.	Deutsche Bank AG, London Branch	XS0461350919	DB1Y4H	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
3.	Deutsche Bank AG, London Branch	XS0461369000	DB1ZBC	Steepener	19 December 2013	§6 Adjustment Events and Adjustment/Termination Events
4.	Deutsche Bank AG, London Branch	XS0461369349	DB1ZBF	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
5.	Deutsche Bank AG, London Branch	XS0461370271	DB1ZBN	Steepener	19 December 2013	§6 Adjustment Events and Adjustment/Termination Events
6.	Deutsche Bank AG, London Branch	XS0461393307	DB1ZHL	Steepener	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
7.	Deutsche Bank AG, London Branch	XS1628411065	DM7GF2	Steepener	16 January 2018	§6 Adjustment Events and Adjustment/Termination Events
8.	Deutsche Bank AG, London Branch	XS1628412972	DM7GGK	Steepener	16 January 2018	§6 Adjustment Events and Adjustment/Termination Events
9.	Deutsche Bank AG, Frankfurt am Main	XS1809925453	DS3N3C	Steepener	8 February 2019	§6 Adjustment Events and Adjustment/Termination Events
10.	Deutsche Bank AG, Frankfurt am Main	XS1809925701	DS3N3F	Steepener	8 February 2019	§6 Adjustment Events and Adjustment/Termination Events
11.	Deutsche Bank AG, Frankfurt am Main	XS2011152647	DC5PP3	Steepener	24 April 2020	§6 Adjustment Events and Adjustment/Termination Events
12.	Deutsche Bank AG, London Branch	XS0461340100	DB1Y0D	Floater Note	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
13.	Deutsche Bank AG, London Branch	XS0461359035	DB1Y7L	Floater Note	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
14.	Deutsche Bank AG, Frankfurt am Main	XS1809927236	DS3N3U	Fixed to Floating Note	22 May 2019	§6 Adjustment Events and Adjustment/Termination Events
15.	Deutsche Bank AG, Frankfurt am Main	XS2011155749	DC5PQU	Fixed to Floating Note	24 April 2020	§6 Adjustment Events and Adjustment/Termination Events
16.	Deutsche Bank AG, Frankfurt am Main	XS2011157877	DC5PRA	Fixed to Floating Note	24 April 2020	§6 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
17.	Deutsche Bank AG, London Branch	XS0461351057	DB1Y4J	Fixed to Floating with Multiplication Factor	9 September 2016	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
18.	Deutsche Bank AG, Frankfurt am Main	XS2011156986	DC5PQ4	Floater Note with multiplication factor	24 April 2020	§6 Adjustment Events and Adjustment/Termination Events
19.	Deutsche Bank AG, London Branch	XS0461387325	DB1ZF5	Note with variable coupon	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
20.	Deutsche Bank AG, London Branch	XS0461332933	DB1YVM	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
21.	Deutsche Bank AG, London Branch	XS1628414598	DM7GGZ	Fixed Rate Note with Bonus Coupon linked to US LIBOR	16 January 2018	§6 Adjustment Events and Adjustment/Termination Events
22.	Deutsche Bank AG, London Branch	XS0461336769	DB1YX2	Steepener	Not applicable	§6 Adjustment Events and Adjustment/Termination Events (V. General Conditions)
23.	Deutsche Bank AG, London Branch	XS0461337148	DB1YX7	Steepener	9 September 2016	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
24.	Deutsche Bank AG, London Branch	XS0461338542	DB1YY8	Steepener	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
25.	Deutsche Bank AG, London Branch	XS0461348855	DB1Y3K	Steepener	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
26.	Deutsche Bank AG, London Branch	XS0461356874	DB1Y6N	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
27.	Deutsche Bank AG, London Branch	XS0461371832	DB1ZB3	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
28.	Deutsche Bank AG, London Branch	XS0461389370	DB1ZGN	Steepener	18 December 2014	§6 Adjustment Events and Adjustment/Termination Events
29.	Deutsche Bank AG, London Branch	XS0461389453	DB1ZGP	Steepener	14 December 2015	§6 Adjustment Events and Adjustment/Termination Events
30.	Deutsche Bank AG, London Branch	XS1628418664	DM7GH3	Steepener	6 June 2018	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation
31.	Deutsche Bank AG, London Branch	XS1628408434	DM7GFB	Steepener	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)

	Issuer	ISIN	WKN	Type of Product	Relevant Base Prospectus	Reference to the General Conditions in the relevant Base Prospectus or other Offering Document
32.	Deutsche Bank AG, Frankfurt am Main	XS2011153538	DC5PP9	Steepener	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
33.	Deutsche Bank AG, Frankfurt am Main	XS2011169294	DC5PTC	Steepener	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events (PART C – General Conditions)
34.	Deutsche Bank AG, London Branch	XS0461384652	DB1ZFB	Steepener	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
35.	Deutsche Bank AG, Frankfurt am Main	XS2011149346	DC5PN7	Steepener	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events, Succession and Substitute Reference Obligation (PART C – General Conditions)
36.	Deutsche Bank AG, Frankfurt am Main	XS0459883681	DB2D2N	Reverse Range Accrual	Not Applicable	§6 Adjustment Events and Adjustment/Termination Events (General Conditions of the Securities)
37.	Deutsche Bank Aktiengesellschaft, Frankfurt am Main	XS2011168130	DC5PS5	Range Accrual Steepener Note with Minimum Coupon	Not applicable	§6 Adjustment Events and Adjustment/Termination Events (PART C – General Conditions)

#### Annex 2 Adjustments

#### 1. Replacement of USD LIBOR ISR

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 USD LIBOR ISR (of any tenor) will, with effect from the first Determination Date which falls on or after the Successor Rate Starting Date, be calculated by reference to USD Replacement ISR with a maturity of the Designated Maturity and the Terms and Conditions will be construed accordingly.

For these purposes:

"USD Replacement ISR" means in respect of the first day of a Coupon Period:

- (A) the Published USD ISR Replacement Rate; or
- (B) if there is no Published USD ISR Replacement Rate, the Calculated USD ISR Replacement Rate,

in each case with a maturity equal to the tenor of the relevant USD LIBOR ISR being replaced (being the "**Designated Maturity**"), expressed as a percentage, provided or calculated (as applicable) as of 11:00 a.m., New York City time on the day that is 2 U.S. Government Securities Business Days preceding such day.

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

"Administrator" means ICE Benchmark Administration Limited as the administrator of the USD SOFR ICE Swap Rate (or a successor administrator).

"**Calculated USD ISR Replacement Rate**" means in respect of the first day of a Coupon Period, the rate calculated by the Calculation Agent as follows (and the resulting percentage will be rounded, if necessary, to the nearest one thousandth of a percentage point (0.001%)):

$$y^{L} = \frac{365.25}{360} \left[ 2 \times \left( \sqrt{1 + y^{OIS}} - 1 \right) + \left( s^{3M} \times \frac{1}{2} \times \left( \sqrt[4]{1 + y^{OIS}} + 1 \right) \right) \right]$$

Where:

"y<sup>L</sup>" is the Calculated USD ISR Replacement Rate with a maturity of the Designated Maturity;

*"y<sup>OIS"</sup>* is the USD SOFR ICE Swap Rate in respect of the day that is 2 U.S. Government Securities Business Days preceding that day with a maturity of the relevant Designated Maturity; and

*"s³™"* is 0.26161%.

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

"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.

"**Published USD ISR Replacement Rate**" means the rate calculated in accordance with the formula set forth in the definition of Calculated USD ISR Replacement Rate (and expected to be referred to as "USD SOFR Spread-Adjusted ICE Swap Rate), as provided by the Administrator.

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

"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.

"**USD SOFR ICE Swap Rate**" means the benchmark for the mid-price for the fixed leg of a fixed-for-floating U.S. Dollar swap transaction where the floating leg references SOFR and both the fixed leg and floating leg are paid annually, as provided by the Administrator.

#### Annex 3 below contains a description of the main characteristics of the USD Replacement ISR.

## 2. No USD SOFR ICE Swap Rate

If the USD SOFR ICE Swap Rate is not published by the Administrator by the relevant time on any date on which the USD SOFR ICE Swap Rate is required then, in respect of any day for which that rate is required, references to that rate will be deemed to be references to the rate determined by the Calculation Agent in accordance with the formula set forth in the definition of Calculated USD ISR Replacement Rate or in such other manner as is substantially consistent with market practice.

#### 3. <u>Conforming Changes</u>

In connection with the implementation of the USD Replacement ISR described in paragraph 1 (*Replacement of USD LIBOR ISR*), 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", "Specified Period" 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 USD Replacement ISR 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 USD Replacement ISR 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 Replacement ISR

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:

- USD LIBOR ISRs are based on the price for the fixed leg of a fixed-for-floating U.S. Dollar swap transaction where the floating leg references 3 months USD LIBOR. After the adjustments set out in Annex 2 (*Adjustments*) take effect, the replacement rate for the relevant USD LIBOR ISR to be used to calculate the interest rate (and other relevant amounts) for the affected Securities will be based on the mid-price for the fixed leg of a fixed-for-floating U.S. Dollar swap transaction where the floating leg references SOFR compounded in arrears for the relevant period (the "USD SOFR Swap Rate").
- USD SOFR Swap Rates are based in part on SOFR rates (which in turn are 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). USD LIBOR ICE Swap Rates are based in part on USD LIBOR rates (which represent the cost of interbank lending for a particular time period and take account of a certain amount of credit and liquidity premium and so are generally higher than SOFR rates). As a result, USD LIBOR ICE Swap Rates are generally higher than USD SOFR Swap 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 the USD LIBOR ISRs, which utilise 3 months USD LIBOR, an adjustment spread of 0.26161 per cent is incorporated into a market standard formula used to calculate the replacement rate.
- The replacement rate is published by ICE Benchmark Administration Limited ("**IBA**") at the relevant time. 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 IBA.
- If the replacement rate for the relevant USD LIBOR ISR is not published by IBA at the relevant time, the Calculation Agent will instead calculate the replacement rate itself using the same market standard formula used by IBA.