

Information Memorandum dated 14 March 2023



BANCO SANTANDER, S.A.

(incorporated with limited liability under the laws of Spain)

€20,000,000,000

EURO-COMMERCIAL PAPER PROGRAMME

Application has been made to the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") for Euro-commercial paper notes (the "**Notes**") issued during the twelve months after the date of this document under the €20,000,000,000 Euro-commercial paper programme (the "**Programme**") of Banco Santander, S.A. ("**Santander**", "**Banco Santander**", the "**Bank**" or the "**Issuer**"); described in this document to be admitted to the official list of Euronext Dublin (the "**Official List**") and trading on its regulated market. The regulated market of Euronext Dublin is a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MiFID II**").

There are certain risks related to any issue of Notes under the Programme, which investors should ensure they fully understand (see "*Risk Factors*" on pages 1-35 of this Information Memorandum).

Potential purchasers should note the statements on pages 154-162 regarding the tax treatment in Spain of income obtained in respect of the Notes and the disclosure requirements imposed by Law 10/2014, of 26 June on regulation, supervision and solvency of credit entities ("**Law 10/2014**") on the Issuer relating to the Notes. In particular, payments on the Notes may be subject to Spanish withholding tax if certain information is not received by the Issuer in a timely manner.

Arranger

Barclays

Dealers

Barclays
Crédit Agricole CIB
ING
Rabobank
Société Générale

Citigroup
Credit Suisse
J.P. Morgan
Santander Corporate & Investment Banking
(SCIB)
UBS Investment Bank

IMPORTANT NOTICE

This Information Memorandum (together with any supplementary information memorandum and any documents incorporated by reference, the "**Information Memorandum**") contains summary information provided by the Issuer in connection with a euro-commercial paper programme (the "**Programme**") under which the Issuer may issue and have outstanding at any time euro-commercial paper notes (the "**Notes**") up to a maximum aggregate amount of €20,000,000,000 or its equivalent in alternative currencies. Under the Programme, the Issuer may issue Notes outside the United States pursuant to Regulation S ("**Regulation S**") of the United States Securities Act of 1933, as amended (the "**Securities Act**"). The Issuer has, pursuant to a dealer agreement dated 14 March 2023 (the "**Dealer Agreement**"), appointed Barclays Bank Ireland PLC as arranger for the Programme (the "**Arranger**"), appointed Banco Santander, S.A., Barclays Bank Ireland PLC; Citigroup Global Markets Limited; Citigroup Global Markets Europe AG; Coöperatieve Rabobank U.A.; Crédit Agricole Corporate and Investment Bank; Credit Suisse Bank (Europe), S.A.; ING Bank N.V.; J.P. Morgan SE; Société Générale and UBS Europe SE as dealers for the Notes (together with the Arranger, the "**Dealers**"), and authorised and requested the Dealers to circulate the Information Memorandum in connection with the Programme on their behalf to purchasers or potential purchasers of the Notes.

The Issuer accepts responsibility for the information contained in this Information Memorandum and the Final Terms for each Tranche of Notes issued under the Programme. To the best of the knowledge of the Issuer, the information contained in this Information Memorandum is in accordance with the facts and does not omit anything likely to affect the import of such information.

Notice of the aggregate nominal amount of Notes, the issue price of Notes and any other terms and conditions not contained herein which are applicable to each issue of Notes will be set out in final terms (each the "**Final Terms**") which will be attached to the relevant form of Note (see "*Forms of Notes*"). Each Final Terms will be supplemental to and must be read in conjunction with the full terms and conditions of the Notes, which are set out in the form of Note (as appropriate). The relevant Final Terms are also a summary of the terms and conditions of the Notes for the purposes of listing. Copies of each Final Terms containing details of each particular issue of Notes will be available from the specified office set out below of the Issuing and Paying Agent (as defined below).

The Issuer has confirmed to the Dealers that the information contained or incorporated by reference in the Information Memorandum is true, accurate and complete in all material respects and is not misleading and there are no other facts in relation thereto the omission of which would in the context of the Programme or the issue of the relevant Notes make any statement in the Information Memorandum misleading in any material respect, and all reasonable enquiries have been made to verify the foregoing and the opinions and intentions expressed therein are honestly held and, in relation to each issue of Notes agreed as contemplated in the Dealer Agreement to be issued and subscribed, the Information Memorandum together with the relevant Final Terms contains all the information which is material in the context of the issue of such Notes.

Neither the Issuer, the Arranger nor the Dealers accept any responsibility, express or implied, for updating the Information Memorandum and neither the delivery of the Information Memorandum nor any offer or sale made on the basis of the information in the Information Memorandum shall under any circumstances create any implication that the Information Memorandum is accurate at any time subsequent to the date thereof with respect to the Issuer or that there has been no change in the business, financial condition or affairs of the Issuer since the date thereof.

This Information Memorandum comprises listing particulars made pursuant to the Listing and Admission to Trading Rules for Short Term Paper published by Euronext Dublin. This Information Memorandum should be read and construed with any supplemental Information Memorandum, any Final Terms and with any other document incorporated by reference.

The Issuer has not authorised the making or provision of any representation or information regarding the Issuer and the companies whose accounts are consolidated with those of the Issuer (together, the "**Group**" or "**Grupo Santander**") or the Notes other than as contained or incorporated by reference in this Information Memorandum, in the Dealer Agreement (as defined herein), in any other document prepared in connection with the Programme or in any Final Terms or as approved for such purpose by the Issuer. Any such representation or information should not be relied upon as having been authorised by the Issuer, the Arranger, the Dealers or any of them.

Neither the Arranger nor any Dealer has independently verified the information contained in the Information Memorandum. Accordingly, no representation or warranty or undertaking (express or implied) is made, and no responsibility or liability is accepted by the Arranger or the Dealers as to the authenticity, origin, validity, accuracy or completeness of, or any errors in or omissions from, any information or statement contained in the Information Memorandum, any Final Terms or in or from any accompanying or subsequent material or presentation.

The information contained in the Information Memorandum or any Final Terms is not and should not be construed as a recommendation by the Arranger, the Dealers or the Issuer that any recipient should purchase Notes. Each such recipient must make and shall be deemed to have made its own independent assessment and investigation of the financial condition, affairs and creditworthiness of the Issuer and of the Programme as it may deem necessary and must base any investment decision upon such independent assessment and investigation and not on the Information Memorandum or any Final Terms.

Neither the Arranger nor any Dealer undertakes to review the business or financial condition or affairs of the Issuer during the life of the Programme, nor undertakes to advise any recipient of the Information Memorandum or any Final Terms of any information or change in such information coming to the Arranger's or any Dealer's attention.

Neither the Arranger nor any of the Dealers accepts any liability in relation to this Information Memorandum or any Final Terms or its or their distribution by any other person. This Information Memorandum does not, and is not intended to, constitute (nor will any Final Terms constitute, or be intended to constitute) an offer or invitation to any person to purchase Notes. The distribution of this Information Memorandum and any Final Terms and the offering for sale of Notes or any interest in such Notes or any rights in respect of such Notes, in certain jurisdictions, may be restricted by law. Persons obtaining this Information Memorandum, any Final Terms or any Notes or any interest in such Notes or any rights in respect of such Notes are required by the Issuer, the Arranger and the Dealers to inform themselves about and to observe any such restrictions. In particular, but without limitation, such persons are required to comply with the restrictions on offers or sales of Notes and on distribution of this Information Memorandum and other information in relation to the Notes and the Issuer as set out under "*Subscription and Sale*" below.

Product Governance under Directive 2014/65/EU (as amended)

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

The Final Terms in respect of any Notes will include a legend entitled "*MiFID II Product Governance*" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

In particular, solely by virtue of its appointment as Arranger or Dealer, as applicable, neither the arranger nor any Dealer nor any of their respective affiliates will be a manufacturer for the purposes of the MiFID Product Governance Rules.

UK Product Governance under the UK MiFIR Product Governance Rules

A determination will be made in relation to each issue about whether, for the purpose of the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arrangers nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MiFIR Product Governance Rules.

The Final Terms in respect of any Notes will include a legend entitled "**UK MiFIR Product Governance**" which will outline the target market assessment in respect of the Notes and which channels for distribution

of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to the UK MiFIR Product Governance Rules is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

In particular, solely by virtue of its appointment as Arranger or Dealer, as applicable, neither the arranger nor any Dealer nor any of their respective affiliates will be a manufacturer for the purposes of the UK MiFIR Product Governance Rules.

THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933 (THE "SECURITIES ACT") OR ANY U.S. STATE SECURITIES LAWS AND MAY NOT BE OFFERED, SOLD OR DELIVERED WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OF BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATIONS UNDER THE SECURITIES ACT (REGULATIONS)) ("U.S. PERSONS") UNLESS AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IS AVAILABLE AND IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER JURISDICTION.

The Notes have not been approved or disapproved by the United States Securities and Exchange Commission or any other securities commission or other regulatory authority in the United States, nor have the foregoing authorities approved this Information Memorandum or confirmed the accuracy or determined the adequacy of the information contained in this Information Memorandum. Any representation to the contrary is unlawful.

The Issuer has undertaken, in connection with the admission to listing of the Notes on the Official List and the admission to trading of the Notes on the regulated market of Euronext Dublin, that if there shall occur any adverse change in the business or financial position of the Issuer or any change in the terms and conditions of the Notes, that is material in the context of the issuance of Notes under the Programme, the Issuer will prepare or procure the preparation of an amendment or supplement to this Information Memorandum or, as the case may be, publish a new Information Memorandum, for use in connection with any subsequent issue by the Issuer of Notes to be admitted to the Official List and to trading on the regulated market of Euronext Dublin. Any such supplement to this Information Memorandum will be subject to the approval of Euronext Dublin prior to its publication.

This Information Memorandum describes certain Spanish tax implications and tax information procedures in connection with an investment in the Notes (see "*Risk Factors – Risks in Relation to the Notes – Risks in Relation to Spanish Taxation*", "*Taxation – Taxation in Spain*" and Exhibit 1). Holders of Notes must seek their own advice to ensure that they comply with all procedures to ensure correct tax treatment of their Notes.

Amounts payable under the Notes may be calculated or otherwise determined by reference to a reference rate or an index or a combination of indices and amounts payable on the Notes issued under the Programme may in certain circumstances be determined in part by reference to such reference rates or indices. Any such index may constitute a benchmark for the purposes of the Benchmark Regulation (Regulation (EU) 2016/1011) (the "**EU BMR**"). If any such reference rate or index does constitute such a benchmark the applicable final terms will indicate whether or not the benchmark is provided by an administrator included in the register of administrators and benchmarks established and maintained by the European Securities and Markets Authority ("**ESMA**") pursuant to article 36 of the EU BMR. Not every reference rate or index will fall within the scope of the EU BMR. Furthermore, the transitional provisions in Article 51 of the EU BMR apply such that the administrator of a particular benchmark may not currently be required to obtain authorisation or registration (or, if located outside the European Union, recognition, endorsement or equivalence) at the date of the applicable final terms.

Notification under Section 309B(1)(c) of the Securities and Futures Act 2001, as modified or amended from time to time (the "**SFA**") - Unless otherwise stated in the applicable Final Terms, all Notes shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "**CMP Regulations 2018**")).

Interpretation

In the Information Memorandum, references to "**euro**", and "€" refer to the currency introduced at the start of the third stage of European economic and monetary union, and as defined in Article 2 of Council Regulation (EC) No. 974/98 of 3 May 1998 on the introduction of the euro, as amended; references to "**Sterling**" and "£" are to pounds sterling; references to "**U.S. Dollars**" and "U.S.\$ " are to United States dollars; references to "**JPY**" and "¥" are to Japanese Yen; references to "**CHF**" are to Swiss Francs; references to "**A\$**" are to Australian dollars; references to "**C\$**" are to Canadian dollars and references to "**NZ\$**" are to New Zealand dollars.

Where the Information Memorandum refers to the provisions of any other document, such reference should not be relied upon and the document must be referred to for its full effect.

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RISK FACTORS

The Bank believes that the following factors may affect its ability to fulfil its obligations under the Notes. Most of these factors are contingencies which may or may not occur and the Bank is not in a position to express a view on the likelihood of any such contingency occurring.

In addition, factors which are material for the purpose of assessing the market risks associated with the Notes are also described below.

The Bank believes that the factors described below represent the principal risks inherent in investing in the Notes, but the inability of the Bank to pay any amounts due on or in connection with any Notes or the Deed of Covenant may occur for other reasons and the Bank does not represent that the statements below regarding the risks of holding the Notes are exhaustive. Prospective investors should also read the detailed information set out elsewhere in, or incorporated by reference into, this Information Memorandum and reach their own views prior to making any investment decision. Words and expressions defined in the "Forms of the Notes" below or elsewhere in this Information Memorandum have the same meanings in this "Risk Factors" section.

Any reference throughout the risk factors to "we", "our" and "us" will also refer to the Bank and its Group.

1. Macro-Economic and Political Risks

The growth, asset quality and profitability of the Group, among others, may be adversely affected by a slowdown in one or more of the economies in which the Group operates, as well as volatile macroeconomic and political conditions.

A slowdown or recession of one or more of the economies in which the Group operates, such as the severe recession faced by most world economies as a result of covid-19 pandemic during 2020, could lead major financial institutions, including some of the world's largest global commercial banks, investment banks, mortgage lenders, mortgage guarantors and insurance companies to experience significant difficulties, including runs on deposits, the need for government aid or assistance or the need to reduce or cease providing funding to borrowers (including to other financial institutions).

Volatile conditions in the global financial markets could also have a material adverse effect on the Group, including on the ability of the Group to access capital and liquidity on financial terms acceptable to the Group, if at all. If capital markets financing ceases to become available, or becomes excessively expensive, the Group may be forced to raise the rates it pays on deposits to attract more customers and become unable to maintain certain liability maturities. Any such increase in capital markets funding availability or costs or in deposit rates could have a material adverse effect on its interest margins and liquidity.

In particular, the Group faces, among others, the following risks related to the economic downturn and volatile conditions:

- Reduced demand for its products and services.
- Increased regulation of its industry. Compliance with such regulation will continue to increase the costs of the Group and may affect the pricing for its products and services, increase its conduct and regulatory risks related to non-compliance and limit its ability to pursue business opportunities.
- Inability of its borrowers to timely or fully comply with their existing obligations. Macroeconomic shocks may negatively impact the income of its customers, both retail and corporate, and may adversely affect the recoverability of its loans, resulting in increased loan losses.
- The process the Group uses to estimate losses inherent in its credit exposure requires complex judgements, including forecasts of economic conditions and how these economic conditions might impair the ability of its borrowers to repay their loans. The degree of uncertainty concerning economic conditions may adversely affect the accuracy of its estimates, which may, in turn, impact the reliability of the process and the sufficiency of its loan loss allowances.
- The value and liquidity of the portfolio of investment securities that the Group holds may be adversely affected.

The recoverability of the loan portfolios of the Group and its ability to increase the amount of loans outstanding and its results of operations and financial condition in general, are dependent to a significant

extent on the level of economic activity in Europe (in particular, Spain and the UK), North America (in particular, Mexico and the United States) and South America (in particular, Brazil). The credit quality of the loan portfolio of the Group may deteriorate as a result of these risks and the Group's loan loss reserves could be insufficient to cover the Group's loan losses, which can have a material adverse effect on the Group. See risk factor '*The credit quality of the loan portfolio of the Group may deteriorate and the Group's loan loss reserves could be insufficient to cover its loan losses, which could have a material adverse effect on the Group*'.

In addition, the Group is exposed to sovereign debt in these regions. The Group's net exposure to sovereign debt at 31 December 2022 amounted to € 134,893 million (7.78 per cent. of the Group's total assets at that date) of which the main exposures in the eurozone relate to Spain and Portugal with net exposure of €29,095 million and €5,456 million, respectively. In North America, the main exposures relate to Mexico and the United States (€17,306 million and €23,298 million, respectively) and in South America to Brazil (€23,728 million). Recessionary conditions in the economies of Europe (in particular, Spain and the UK), North America or some of the South American countries in which the Group operates, would likely have a significant adverse impact on its loan portfolio and sovereign debt holdings and, as a result, on its financial condition, cash flows and results of operations.

The Group's revenues are also subject to risk of deterioration from unfavourable political and diplomatic developments, social instability, international conflicts, and changes in governmental policies, including expropriation, nationalisation, international ownership legislation, sanctions, interest-rate caps, fiscal and monetary policies globally.

For the year ending 31 December 2022, 33 per cent. of the underlying profit attributable to the Bank came from Europe (of which 13 per cent. was from Spain and 12 per cent. from the UK), 31 per cent. from South America (22 per cent. from Brazil), 25 per cent. from North America (15 per cent. from the United States and 10 per cent. from Mexico) and 11 per cent. from the Digital Consumer Bank segment (primarily Europe). As of 31 December 2022, the Group's total assets stood at 57 per cent. in Europe (29 per cent. in Spain and 19 per cent. in the UK), 17 per cent. in South America (11 per cent. in Brazil) and 17 per cent. in North America (12 per cent. in the United States and 5 per cent. in Mexico) and 9 per cent. in the Digital Consumer Bank segment (primarily Europe).¹

In particular, the main regions where the Group operates are subject to the following macroeconomic and political conditions, which could have a material adverse effect on its business, results of operations, financial condition and prospects:

- Governmental and regulatory authorities throughout the world, particularly in Europe and the United States, implemented fiscal and monetary policies and initiatives in response to the adverse effects of the covid-19 pandemic on the economy, individual businesses and households. These fiscal and monetary policy measures accelerated the economic recovery in 2021 but in turn significantly increased public debt and introduced risks of economic overheating in certain countries. In 2022, inflationary pressures intensified due to a number of factors, including the revitalisation of demand for consumer goods, labour shortages, supply chain issues and the rise of the prices of energy, oil, gas and other commodities exacerbated by the war in Ukraine. In an effort to contain inflation, central banks have increased interest rates contributing to a slowdown of the global economy. Among the risks that could negatively affect the economies and financial markets of the regions where the Group operates and lead to a further slowdown of the global economy, recession and/or stagflation are (i) the continuance or escalation of the war in Ukraine; (ii) further increases in the prices of energy and other commodities that can lead to further inflationary pressures; (iii) the continued breakdown of global supply chains; and (iv) the tightening of monetary and fiscal policies, including rising interest costs.
- In October 2022, the expansionary fiscal policy measures announced by the Prime Minister of the UK in a scenario of high inflation and restrictive monetary policy triggered a crisis of confidence which resulted in sharp falls in government bond prices and rising yields leading to massive purchases of debt by the Bank of England. If the market volatility that was experienced were to be

¹ Percentages calculated using as denominator the underlying profit of total operating areas (i.e. without considering the -€2,049 million underlying losses accounted for in the Corporate Centre resulting from centralised management of the areas) and the total assets of total operating areas (i.e. without considering €262,217 million total assets accounted for in the Corporate Centre and without intra-group eliminations).

repeated and spread to other regions, it could generate a financial crisis that could have a material adverse impact on the financial sector, affecting the Group's operating results, financial position and prospects.

- The risk of returning to a fragile and volatile environment and to heightened political tensions in Europe exists if, among others, the policies implemented to provide emergency assistance and support to Ukraine and in the EU countries to alleviate the consequences of the war, to provide relief to the economies most affected by the covid-19 pandemic and to contain inflation do not succeed, the reforms aimed at improving productivity and competition fail, the banking union and other measures of European integration do not take hold or anti- European groups become more widespread. Furthermore, increasing public debt levels together with rising interest costs may not be sustainable, which could lead certain countries into sovereign debt crises. A deterioration of the economic and financial environment in Europe could have a material adverse impact on the financial sector, affecting the Group's operating results, financial position and prospects.
- Growing protectionism and trade tensions, such as the tensions between the United States and China in recent years, could have a negative impact on the economies of the countries where the Group operates, which would also impact its operating results, financial condition and prospects.
- China's deceleration based on structural low economic growth coupled with real estate distress and slow population growth could negatively affect the world economy which would also impact the Group's operating results, financial condition and prospects.
- The economies of some of the countries where the Group operates, particularly in Latin America, have experienced significant volatility in recent decades. This volatility resulted in fluctuations in the levels of deposits and in the relative economic strength of various segments of the economies to which the Group lends. In addition, some of the countries where the Group operates are particularly affected by commodities price fluctuations, which in turn may affect financial market conditions through exchange rate fluctuations, interest rate volatility and deposits volatility. In addition, the Group is exposed to variations in its net interest income or in the fair value of its assets and liabilities resulting from exchange rate fluctuations. In particular, the fiscal instability and political tensions in Brazil and Mexico, and the financial volatility in Argentina could have a negative impact on the economy of these countries and may have a material adverse effect on the Group.

The war in Ukraine could materially affect the Group's financial position and increase the Group's operational risk.

On 24 February 2022, Russia launched a large-scale military action against Ukraine. The war in Ukraine has caused an ongoing humanitarian crisis in Europe, as well as volatility in financial markets globally, heightened inflation, shortages and increases in the prices of energy, oil, gas and other commodities. The continuance or escalation of the war, including its extension to other countries in the region, could lead to further increases in energy, oil and gas prices (particularly if supplies to Europe are interrupted) and heightened inflationary pressures, which in turn could lead to further increases in interest rates and market volatility. In addition, the war has exacerbated supply chain problems, particularly to those businesses most sensitive to rising energy prices. The war and its effects could exacerbate the current slowdown in the global economy and could negatively affect the payment capacity of some of the Group's customers, especially those with more exposure to the Russian or Ukrainian markets.

In response to the Russian military action against Ukraine, several countries, including the United States, the EU member states, the UK and other United Nations ("UN") member states, have imposed severe sanctions on Russia and Belarus, including freezing/blocking assets, targeting major Russian banks, the Russian Central Bank, and certain Russian companies and individuals, imposing trade restrictions against Russia and Russian interests, as well as the disconnection of certain Russian banks from the SWIFT system (*Society for Worldwide Interbank Financial Telecommunication*). In addition, the sanctions imposed also include a ban on trading in sovereign debt and other securities. The scale of sanctions is unprecedented, complex and rapidly evolving, and poses continuously increasing operational risk to the Group. Its corporate framework and policies are designed to ensure compliance with applicable laws, regulations and economic sanctions in the countries in which the Group operates, including the United States, UK, EU and UN economic sanctions. The Group cannot predict whether any of the countries in which it operates will enact additional economic sanctions or trade restrictions in response to the Russian military action against Ukraine. While the Group does not knowingly engage in direct or indirect dealings with sanctioned parties according to applicable sanctions, or in direct dealings with the sanctioned countries/territories, it may on

occasion have indirect dealings within the sanctioned countries/territories, but it aims to operate in line with applicable United States, EU, UK and UN blocking and sectoral sanctions regulations.

Furthermore, the risk of cyberattacks on companies and institutions is expected to increase as a result of the war and in response to the sanctions imposed, which could adversely affect the Group's ability to maintain or enhance its cyber security and data protection measures. The Group is actively monitoring the situation to ensure that cyber defences remain updated against current and emerging threats.

While the Group does not have a physical presence in Russia and Ukraine and its direct exposure to Russian or Ukrainian markets and assets is not material, the impact of the war in Ukraine and the sanctions imposed on global markets and institutions, the impact on macroeconomic conditions generally, and other potential future geopolitical tensions and consequences arising from the conflict remain uncertain and may exacerbate its operational risk. Episodes of economic and market volatility and pressure on supply chains and inflation may continue to occur and could worsen if the war persists or increases in severity. As a result, the Group's businesses, results of operations and financial position could be adversely affected by any of these factors directly or indirectly arising from the war in Ukraine.

The global covid-19 pandemic has materially impacted the business of the Group, and the continuance of this pandemic or any future outbreak of any other highly contagious diseases or other public health emergency, could materially and adversely impact its business, financial condition, liquidity and results of operations.

Although the global economy has begun to recover from the covid-19 pandemic, certain adverse effects of the pandemic continue to impact the macroeconomic environment and may persist for some time. Should the ongoing effects of the covid-19 pandemic continue for an extended period of time, or worsen, the Group's business, financial position, liquidity, results of operations and prospects could be adversely affected.

In 2021, high vaccination rates in many countries and a progressive relaxation of health and safety restrictions, together with the fiscal and monetary policy measures implemented, contributed to an increase in employment levels and recovery of the global economy generally, with some variations across sectors and regions. In 2022, certain adverse consequences of the pandemic continued to impact the macroeconomic environment and may persist for some time, including labour shortages and disruptions of global supply chains, that contributed to rising inflationary pressures. The pandemic remains dynamic and the emergence of variants resistant to existing vaccines remains uncertain.

If new covid-19 waves force countries to re-adopt measures that restrict economic activity, the macroeconomic environment could deteriorate and adversely impact the business and results of operations of the Group, which could include, but is not limited to (i) a continued decreased demand for its products and services; (ii) further material impairment of its loans and other assets including goodwill; (iii) decline in value of collateral; (iv) constraints on its liquidity due to market conditions, exchange rates and customer withdrawal of deposits and continued draws on lines of credit; and (v) downgrades to its credit ratings. See risk factor "*Credit, market and liquidity risk may have an adverse effect on the credit ratings of the Group and its cost of funds. Any downgrade in the credit rating of the Group would likely increase its cost of funding, require the Group to post additional collateral or take other actions under some of its derivative and other contracts and adversely affect its interest margins and results of operations*".

Moreover, the operations of the Group could still be impacted by risks from remote work or bans on non-essential activities. While in 2022 the employees of the Group have progressively returned to the office, there is still flexibility to work remotely. If the Group becomes unable to successfully operate its business from remote locations including, for example, due to failures of its technology infrastructure, increased cybersecurity risks, or governmental restrictions that affect its operations, this could result in business disruptions that could have a material and adverse effect on its business.

In light of the impact that the covid-19 pandemic had on the economic situation and forecasts in the markets where the Group is present, a review was carried out in 2020 to evaluate both goodwill and the recoverability of deferred tax assets. As a result of this review, in 2020 the Group adjusted the valuation of its goodwill and deferred tax assets, resulting in a non-recurring impairment of €12,600 million, of which €10,100 million related to goodwill and €2,500 million related to deferred tax assets. This adjustment did not affect the Group's liquidity, credit risk or market positions, and was neutral in CET1 capital. Furthermore, at the end of 2020 the Group recorded additional allowances for impairment of financial assets at amortised cost of €3,105 million due to the effect of the covid-19 pandemic. At the end of December 2021 and December 2022 the Group did not record additional provisions related to the covid-19 pandemic.

The extent to which the consequences of the covid-19 pandemic affect the Group's business, financial condition, liquidity and results of operations of the Group will depend on future developments that remain uncertain, including the rate of distribution and administration of vaccines globally, the severity and duration of any resurgence of covid-19 variants, future actions taken by governments, central banks and other third parties in response to the pandemic, and the effects on the Group's customers, counterparties, employees and third-party service providers. Any future outbreak of any other highly contagious diseases or other public health emergency may also have similar adverse effects on the Group's business, financial condition, liquidity and results of operations or cause other risks to it.

The UK's withdrawal from the EU has led to disruptions in the Group's UK-based operations that could have a material adverse effect on the operations, financial condition and prospects of the Group.

On 31 January 2020, the UK ceased to be a member of the EU ("**Brexit**") and a limited trade deal was agreed between the UK and the EU with the relevant new regulations coming into force on 1 January 2021.

The trade deal, however, does not include agreements on certain areas, such as financial services and data adequacy. As a result, Santander UK plc ("**Santander UK**") has, and will continue to have, a limited ability to provide cross-border services to EU customers and to trade with EU counterparties. The wider and continuing impact of the UK's withdrawal from the EU on financial markets through market fragmentation, reduced access to finance and funding, and a lack of access to certain financial market infrastructure, may affect the operations, financial condition and prospects of the Group and those of its customers.

Residual risks remain around the impact of Brexit to the UK's economy. Brexit has contributed to global pandemic-related supply and labour market constraints and reduced economic output and exports as businesses attempt to adapt the new cross-border procedures and rules applicable in the UK and in the EU to their activities, products, customers and suppliers.

The UK's withdrawal from the EU has been hampered by the overlay and development of economic risks from the covid-19 pandemic and the war in Ukraine and the longer term effects are difficult to assess. Further, there is ongoing political and economic uncertainty, such as (i) increased friction with the EU and EU countries; (ii) the possibility of second referendum on Scottish independence from the UK; and (iii) instability in Northern Ireland derived from failure of the agreement between the UK and the EU to reach a deal on the Northern Ireland protocol, which could negatively affect Santander UK's customers and counterparties and have a material adverse effect on the operations, financial condition and prospects of the Group.

The Group considered these circumstances in its assessment of the recoverability of the cash-generating unit that supports Santander UK's goodwill, which was impaired during 2020 and 2019. In 2021 and 2022 there was no impairment of Santander UK's goodwill.

2. Risks Relating to the Issuer and the Group Business

Legal, Regulatory and Compliance Risks to the business model of the Group.

The Group is exposed to risk of loss from legal and regulatory proceedings.

The Group faces risk of loss from legal and regulatory proceedings, including tax proceedings, that could subject it to monetary judgements, regulatory enforcement actions, fines and penalties. The current regulatory and tax enforcement environment in the jurisdictions in which the Group operates reflects an increased supervisory focus on enforcement, combined with uncertainty about the evolution of the regulatory regime, and may lead to material operational and compliance costs.

The Group is from time to time subject to regulatory investigations and civil and tax claims, and party to certain legal proceedings incidental to the normal course of its business, including among others in connection with conflicts of interest, lending and derivatives activities, relationships with its employees and other commercial, data protection or tax matters. In view of the inherent difficulty of predicting the outcome of legal matters, particularly where the claimants seek very large or indeterminate damages, or where the cases present novel legal theories, involve a large number of parties or are in the early stages of investigation or discovery, the Group cannot state with certainty what the eventual outcome of these pending matters will be or what the eventual loss, fines or penalties related to each pending matter may be.

The amount of the Group's reserves in respect of these matters, which considers the likelihood of future cash flow outflows associated with each of such claims, is substantially less than the total amount of the claims asserted against it, and, in light of the uncertainties involved in such claims and proceedings, there

is no assurance that the ultimate resolution of these matters will not significantly exceed the reserves currently accrued by the Group. As a result, the outcome of a particular matter may be material to its operating results for a particular period. As of 31 December 2022, the Group had provisions for taxes, other legal contingencies and other provisions for €4,073 million.

For example, in Poland the Group is exposed to significant litigation in connection with CHF indexed and CHF denominated loans in which it is facing claims that those loans or clauses included in them are abusive. Whilst the Court of Justice of the European Union ("CJEU") and the Polish Supreme court have issued several rulings on this matter sufficient case law has not yet been developed. In the absence of a firm position by the Polish Supreme Court, it is difficult to expect a full unification of judicial decisions, and decisions of the Polish Supreme Court and CJEU issued on particular issues may be important for shaping further case law on CHF matters. The CJEU is expected to make a decision in 2023 on one of the individual cases, which would need to be reviewed and adopted by Polish national courts to be binding precedent.

At the time of this Information Memorandum, it is not possible to predict the Polish Supreme Court's and CJEU's decisions on individual cases and, to the extent the CJEU issues any decisions, whether national courts will uphold it. As of 31 December 2022, Santander Bank Polska S.A. and Santander Consumer Bank S.A. maintain a portfolio of mortgages denominated in or indexed to CHF for an approximate gross amount of zł8,393.7 million (€1,791.8 million) and the total value of the adjustments to gross carrying amount in accordance with IFRS9 as well as the provisions recorded under IAS37, amount to zł3,557.3 million (€759.4 million). The provisions and adjustments recorded are deemed sufficient to cover the risks associated with the legal claims against the Group. However, in the event that the Group is required to make higher payments than estimated, either with respect to existing or new claims, there could be a significant adverse effect on its results and financial situation.

The Group is subject to extensive regulation and regulatory and governmental oversight which could adversely affect its business, operations and financial condition.

As a financial institution, the Group is subject to extensive regulation, which materially affects its businesses. In Spain and the other jurisdictions where the Group operates, there is continuing political, competitive and regulatory scrutiny of the banking industry. Political involvement in the regulatory process, in the behaviour and governance of the banking sector and in the major financial institutions in which the local governments have a direct financial interest and in their products and services, and the prices and other terms they apply to them, is likely to continue. Accordingly, the statutes, regulations and policies to which the Group is subject may be changed at any time. In addition, the interpretation and the application by regulators of the laws and regulations to which the Group is subject may also change from time to time. Extensive legislation and regulation affecting the financial services industry has been adopted in regions that directly or indirectly affect the Group's business, including Spain, the United States, the EU, the UK, Latin America and other jurisdictions, and further regulations are in the process of being implemented. The manner in which those laws and related regulations are applied to the operations of financial institutions is still evolving. Moreover, to the extent these regulations are implemented inconsistently in the various jurisdictions in which the Group operates, it may face higher compliance costs. Any legislative or regulatory actions and any required changes to its business operations resulting from such legislation and regulations, as well as any deficiencies in its compliance with such legislation and regulation, could result in significant loss of revenue, limit the ability of the Group to pursue business opportunities in which the Group might otherwise consider engaging, limit the Group's ability to provide certain products and services, affect the value of assets that it holds, require the Group to increase its prices and therefore reduce demand for its products, impose additional compliance and other costs on the Group or otherwise adversely affect its businesses.

In particular, legislative or regulatory actions resulting in enhanced prudential standards, in particular with respect to capital and liquidity, could impose a significant regulatory burden on the Bank or on its subsidiaries and could limit the Bank subsidiaries' ability to distribute capital and liquidity, thereby negatively impacting the Bank. Future liquidity standards could require the Bank to maintain a greater proportion of its assets in highly-liquid but lower-yielding financial instruments, which would negatively affect its net interest margin. Moreover, the regulatory and supervisory authorities of the Bank, periodically review the allowance for its loan losses.

Such regulators may recommend the Bank to increase its allowance for loan losses or to recognize further losses. Any such additional provisions for loan losses, as recommended by these regulatory agencies, whose views may differ from those of the Bank's management, could have an adverse effect on its earnings and

financial condition. Accordingly, there can be no assurance that future changes in regulations or in their interpretation or application will not adversely affect the Group.

The wide range of regulations, actions and proposals which most significantly affect, or which could most significantly affect, the Group in the future, relate to capital requirements, funding and liquidity and development of a fiscal and banking union in the EU, which are discussed in further detail below. Moreover, there is uncertainty regarding the future of financial reforms in the United States and the impact that potential financial reform changes to the United States banking system may have on ongoing international regulatory proposals. In general, regulatory reforms adopted or proposed in the wake of the financial crisis have increased and may continue to materially increase the Group's operating costs and negatively impact the Group's business model. Furthermore, regulatory authorities have substantial discretion in how to regulate banks, and this discretion, and the means available to the regulators, have been increasing during recent years. Regulation may be imposed on an ad hoc basis by governments and regulators in response to a crisis, and these may especially affect financial institutions such as the Group that are deemed to be a global systemically important institution ("**G-SII**"). The main regulations and regulatory and governmental oversight that can adversely impact the Group include but are not limited to the items below.

Increasingly stricter capital regulations and potential requirements could have an impact on the functioning of the Group and its businesses.

Increasingly onerous capital requirements constitute one of the Bank's main regulatory challenges. Increasing capital requirements may adversely affect the Bank's profitability and create regulatory risk associated with the possibility of failure to maintain required capital levels.

In 2011, the framework known as Basel III, which is a full set of reform measures to strengthen the regulation, supervision and risk management of the banking sector, was introduced (see "*Regulation—Capital, liquidity and funding requirements*"). This aimed to boost the banking sector's ability to absorb impacts caused by financial and economic stress, improve risk management and corporate governance, and improve banking transparency and disclosures. Concerning capital, Basel III redefines available capital at financial institutions (including new deductions and raising the requirements for eligible equity instruments), tightens the minimum capital requirements, compels financial institutions to operate permanently with surplus capital (capital "buffers"), and includes new requirements for the risks considered.

The amendments to the solvency requirements of credit institutions and various transparency regulations, from the practical standpoint, grant priority to high-quality capital (Common Equity Tier 1 or "**CET1**"), introducing stricter eligibility criteria and more stringent ratios, in a bid to guarantee higher standards of capital adequacy in the financial sector.

The European Central Bank (the "**ECB**") is required under Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions (the "**SSM Regulation**") to carry out a supervisory review and evaluation process (the "**SREP**") at least on an annual basis.

The Bank announced on 22 December 2022 that it had received from the ECB its decision regarding the prudential minimum capital requirements effective as of 1 January 2023, following the results of SREP. The ECB decision required the Group to maintain a CET1 ratio of at least 8.91 per cent. on a consolidated basis. This 8.91 per cent. capital requirement includes: the minimum Pillar 1 requirement (4.5 per cent.); the Pillar 2 requirements (0.89 per cent.); the capital conservation buffer (2.5 per cent.); the requirement deriving from its consideration of the Bank as a G-SII (1.0 per cent.) and the counter-cyclical buffer (0.0253 per cent.). The ECB decision also requires that the Group maintains a CET1 capital ratio of at least 7.85 per cent. on an individual basis. As of 31 December 2022, on a consolidated basis, the Group's total capital ratio was 15.99 per cent. while its CET1 ratio was 12.18 per cent. If the Group did not apply the transitory IFRS 9 provisions, nor the subsequent amendments introduced by Regulation 2020/873 of the EU, the fully-loaded CET1 ratio would have been 12.04 per cent.

In addition, the Bank shall comply with the TLAC/MREL Requirements (as defined in section "*Regulation – Capital, liquidity and funding requirements – MREL requirements*"). The Bank announced on 20 May 2022 that it had received formal notification from the Bank of Spain of its binding minimum MREL requirement, both total and subordinated, for the resolution group of Banco Santander (the "**Resolution Group**") at a sub-consolidated level, as determined by the Single Resolution Board ("**SRB**"). The requirement became effective on 1 January 2022 and replaced the previously applicable one. The total MREL requirement was set at 30.32 per cent. for 2024 and at 28.95 per cent. as intermediate target for 2022 of the resolution group's total risk weighted assets. The subordination requirement was set at 9.05 per cent

for 2024 and at 9.04 per cent. as intermediate target for 2022. As of 31 December 2022 the structure of own funds and eligible liabilities of the Resolution Group met the intermediate target of the requirement determined by the SRB effective 1 January 2022, and the Bank's funding plan has been built to further strengthen MREL ratio and to comply with the final requirement. Future requirements are subject to ongoing review by the resolution authority.

See "*Regulation—Capital, liquidity and funding requirements*" for additional information.

In this regard, there can be no assurance that the application of the existing regulatory requirements, standards or recommendations will not require the Bank to issue additional securities that qualify as own funds or eligible liabilities, to maintain a greater proportion of its assets in highly-liquid but lower-yielding financial instruments, to liquidate assets, to curtail business or to take any other actions, any of which may have a material adverse effect on the Group's business, results of operations and/or financial position.

Any failure by the Bank and/or the Group to maintain its Pillar 1 minimum regulatory capital ratios and any Pillar 2 additional capital requirements could result in administrative actions or sanctions (including restrictions on Discretionary Payments, as defined in section "*Regulation – MREL requirements*"), which, in turn, may have a material adverse impact on the Group's results of operations.

Moreover, it should not be disregarded that new and more demanding additional regulatory requirements, standards or recommendations may be applied in the future, notably once the final Basel III reforms are implemented in the EU. In this regard, the European Commission published on 27 October 2021 legislative proposal which aims to complete the post-crisis reforms and to faithfully implement the outstanding elements of the Basel III reform in the EU.

All the applicable regulations and the approval of any other regulatory requirements could have an adverse effect on the Group's activities and operations, and most particularly affect the ability of the Bank to distribute dividends. Therefore, these regulations could have a material adverse effect on the Group's business, results of operations and/or financial position.

See "*Regulation—Capital, liquidity and funding requirements*" for additional information.

The Group is subject to potential action by any of its regulators or supervisors, particularly in response to customer complaints.

As noted above, the business and operations of the Group are subject to increasingly significant rules and regulations that are required to conduct banking and financial services business. These apply to business operations, affect financial returns, include reserve and reporting requirements, and prudential and conduct of business regulations. These requirements are set by the relevant central banks and regulatory authorities that authorize, regulate and supervise the Group in the jurisdictions in which it operates.

In their supervisory roles, the regulators seek to maintain the safety and soundness of financial institutions with the aim of strengthening the protection of customers and the financial system. The supervisors' continuing supervision of financial institutions is conducted through a variety of regulatory tools, including the collection of information by way of prudential returns, reports obtained from skilled persons, visits to firms and regular meetings with management to discuss issues such as performance, risk management and strategy. In general, these regulators have a more outcome-focused regulatory approach that involves more proactive enforcement and more punitive penalties for infringement. As a result, the Group faces increased supervisory scrutiny (resulting in increasing internal compliance costs and supervision fees), and in the event of a breach of its regulatory obligations the Group is likely to face more stringent regulatory fines. Some of the regulators are focusing intently on consumer protection and on conduct risk and will continue to do so. This has included a focus on the design and operation of products, the behaviour of customers and the operation of markets. Such a focus could result, for example, in pricing regulations that could restrict the ability of the Group to charge certain levels of interest in credit transactions or in regulation that would prevent the Group from bundling products that it offers to its customers. Some of the laws in the relevant jurisdictions in which the Group operates, give the regulators the power to make temporary product intervention rules either to improve a firm's systems and controls in relation to product design, product management and implementation, or to address problems identified with financial products. These problems may potentially cause significant detriment to consumers because of certain product features or governance flaws or distribution strategies. Such rules may prevent institutions from entering into product agreements with customers until such problems have been solved. Some of the regulatory regimes in the relevant jurisdictions in which the Group operates, requires the Group to be in compliance across all aspects of its business, including the training, authorisation and supervision of personnel, systems, processes and documentation. If it fails to comply with the relevant regulations, there would be a risk of an adverse impact

on its business from sanctions, fines or other actions imposed by the regulatory authorities. Customers of financial services institutions, including Group's customers, may seek redress if they consider that they have suffered loss as a result of the mis-selling of a particular product, or through incorrect application of the terms and conditions of a particular product. Given the inherent unpredictability of litigation and the evolution of judgements by the relevant authorities, it is possible that an adverse outcome in some matters could harm the reputation of the Group or have a material adverse effect on its operating results, financial condition and prospects arising from any penalties imposed or compensation awarded, together with the costs of defending such an action, thereby reducing its profitability.

The Group is subject to review by tax authorities, and an incorrect interpretation of tax laws and regulations by the Group may have a material adverse effect on it.

The preparation of the tax returns of the Group requires the use of estimates and interpretations of complex tax laws and regulations and is subject to review by tax authorities. The Group is subject to the income tax laws of Spain and the other jurisdictions in which it operates. These tax laws are complex and subject to different interpretations by the taxpayer and relevant governmental tax authorities, which are sometimes subject to prolonged evaluation periods until a final resolution is reached. In establishing a provision for income tax expense and filing returns, the Group must make judgements and interpretations about the application of these inherently complex tax laws. If the judgement, estimates and assumptions the Group uses in preparing its tax returns are subsequently found to be incorrect, there could be a material adverse effect on Group's results of operations. In some jurisdictions, the interpretations of the tax authorities are unpredictable and frequently involve litigation, which introduces further uncertainty and risk as to tax expense.

The Group may not be able to detect or prevent money laundering and other financial crime activities fully or on a timely basis, which could expose it to additional liability and could have a material adverse effect on the Group.

The Group is required to comply with applicable anti-money laundering and combating the financing of terrorism ("AML/CFT"), anti-bribery and corruption, sanctions and other laws and regulations (collectively, financial crime compliance ("FCC") regulations). These laws and regulations require the Group, among other things, to conduct full customer due diligence (including sanctions and politically-exposed person screening), keep its customer, account and transaction information up to date and have FCC policies and procedures in place detailing what is required from those responsible. The Group is also required to conduct FCC training for its employees and to report suspicious transactions and activity to appropriate law enforcement following full investigation by Group's local FCC team.

Financial crime continues to be the subject of enhanced regulatory scrutiny and supervision by regulators globally. FCC regulations are increasingly complex and detailed. Key standard-setting and regulatory bodies continue to provide guidelines to strengthen the interaction and cooperation between prudential and AML or combating the financing of terrorism ("CFT") supervisors. Compliance with these laws and regulations requires automated systems, sophisticated monitoring and skilled compliance personnel.

For example, in December 2022 Santander UK paid a £107.8 million (€127 million) financial penalty to settle the Financial Conduct Authority ("FCA") enforcement investigation into the anti-money laundering systems and controls in the Business Banking division in the period between 31 December 2012 and 18 October 2017. This settlement concluded the FCA's investigation.

The Group maintains updated policies and procedures aimed at detecting and preventing the use of its banking network for money laundering and other financial crime related activities. However, emerging technologies, such as cryptocurrencies and innovative payment methods, could limit Group's ability to track the movement of funds. The ability of the Group to comply with the legal requirements depends on its ability to improve detection and reporting capabilities and reduce variation in control processes and oversight accountability. These require implementation and embedding within its business effective controls and monitoring, which in turn requires on-going changes to systems and operational activities. Financial crime is continually evolving and, as noted, is subject to increasingly stringent regulatory oversight and focus. This requires proactive and adaptable responses from the Group so that the Group is able to deter threats and criminality effectively. As a global bank, the Group is particularly exposed to this risk. Even known threats can never be fully eliminated, and there will be instances where the Group may be used by other parties to engage in money laundering and other illegal or improper activities. In addition, the Group relies heavily on its employees to assist the Group by spotting such activities and reporting them, and its employees have varying degrees of experience in recognizing criminal tactics and understanding the level of sophistication of criminal organisations. Where the Group outsources any of its customer due

diligence, customer screening or anti financial crime operations, it remains responsible and accountable for full compliance and any breaches. If the Group is unable to apply the necessary scrutiny and oversight of third parties to whom it outsources certain tasks and processes, there remains a risk of regulatory breach.

If the Group is unable to fully comply with applicable laws, regulations and expectations, regulators and relevant law enforcement agencies have the ability and authority to impose significant fines and other penalties on the Group, including requiring a complete review of its business systems, day-to-day supervision by external consultants and ultimately the revocation of Group's banking licence.

The reputational damage to the business of the Group and global brand would be severe if it were found to have breached FCC requirements. Its reputation could also suffer if the Group is unable to protect its customers' bank products and services from being used by criminals for illegal or improper purposes.

The Brazilian Federal Public Prosecutor's Office, or "MPF," has charged one of the Group's officers in connection with the alleged bribery of a Brazilian tax auditor to secure favourable decisions in tax cases resulting in a claimed R\$83 million (approximately US\$15 million) benefit to the Group. On 23 October 2018, the officer was formally indicted and asked to present his defence. On 5 November 2018 the officer in question presented his defence. The proceeding is currently in course. The Group is not a party to these proceedings. The Group has voluntarily provided information to the Brazilian authorities and have relinquished the benefit of certain tax credits to which the allegations relate in order to show good faith.

In addition, while the Group reviews its relevant counterparties' internal policies and procedures with respect to such matters, it expects its relevant counterparties to maintain and properly apply their own appropriate compliance procedures and internal policies. Such measures, procedures and internal policies may not be completely effective in preventing third parties from using its (and its relevant counterparties') services as a conduit for illicit purposes (including illegal cash operations) without the Group's (and its relevant counterparties') knowledge. If the Group is associated with, or even accused of being associated with, breaches of FCC requirements, the Group's reputation could suffer and/or it could become subject to fines, sanctions and/or legal enforcement (including being added to 'watch lists' that would prohibit certain parties from engaging in transactions with the Group), any one of which could have a material adverse effect on its operating results, financial condition and prospects.

Any such risks could have a material adverse effect on the Group's operating results, financial condition and prospects.

See - *"The Group is subject to extensive regulation and regulatory and governmental oversight which could adversely affect its business, operations and financial condition"*.

Changes in taxes and other assessments may adversely affect the Group.

The legislatures and tax authorities in the tax jurisdictions in which the Group operates regularly enact reforms to the tax and other assessment regimes to which it and its customers are subject to. Such reforms include changes in tax rates and, occasionally, enactment of temporary taxes, the proceeds of which are earmarked for designated governmental purposes.

The effects of these changes and any other changes that result from enactment of additional tax reforms cannot be quantified and there can be no assurance that any such reforms would not have an adverse effect upon the business of the Group.

Credit Risks.

The credit quality of the loan portfolio of the Group may deteriorate and the Group's loan loss reserves could be insufficient to cover its loan losses, which could have a material adverse effect on the Group.

Risks arising from changes in credit quality and the recoverability of loans and amounts due from counterparties are inherent to a wide range of the businesses of the Group. Non-performing or low credit quality loans have in the past negatively impacted the Group's results of operations and could do so in the future. In particular, the amount of the reported credit impaired loans of the Group may increase in the future as a result of growth in the Group's total loan portfolio, including as a result of loan portfolios that the Group may acquire in the future (the credit quality of which may turn out to be worse than it had anticipated), or factors beyond the Group's control, such as adverse changes in the credit quality of its borrowers and counterparties or a general deterioration in economic conditions in the regions where the Group operates or in global economic and political conditions, including as a result of the war in Ukraine or a prolonged covid-19 pandemic with the emergence of variants resistant to existing vaccines. If the Group

was unable to control the level of its credit impaired or poor credit quality loans, this could have a material adverse effect on the Group.

The loan loss reserves of the Group are based on its current assessment of and expectations concerning various factors affecting the quality of its loan portfolio. These factors include, among other things, the financial condition of the borrowers of the Group, repayment abilities and repayment intentions, the realizable value of any collateral, the prospects for support from any guarantor, government macroeconomic policies, interest rates and the legal and regulatory environment. Because many of these factors are beyond the Group's control and there is no infallible method for predicting loan and credit losses, the Group cannot assure that its current or future loan loss reserves will be sufficient to cover actual losses. If the Group's assessment of and expectations concerning the above mentioned factors differ from actual developments, if the quality of its total loan portfolio deteriorates, for any reason, or if the future actual losses exceed the estimates of expected losses of the Group, it may be required to increase its loan loss reserves, which may adversely affect the Group. Additionally, in calculating the Group's loan loss reserves, the Group employs qualitative tools and statistical models which may not be reliable in all circumstances and which are dependent upon data that may not be complete. For further details regarding the risk management policies of the Group, see *"Failure to successfully implement and continue to improve the risk management policies, procedures and methods of the Group, including its credit risk management systems, could materially and adversely affect the Group, and it may be exposed to unidentified or unanticipated risks"*.

On 31 December 2022, net loans and advances to customers of the Group amounted to €1,036,004 million (compared to €972,682 million as of 31 December 2021).

The loan portfolio of the Group is mainly located in Europe (in particular, Spain and the UK), North America (in particular, the United States) and South America (in particular, Brazil). At 31 December 2022, Europe accounted for 57 per cent. of the Group's total loan portfolio (Spain accounted for 25 per cent. of its total loan portfolio and the UK, where the loan portfolio consists primarily of residential mortgages, accounted for 24 per cent.), North America accounted for 17 per cent. (of which the United States represents 13 per cent. of its total loan portfolio), South America accounted for 14 per cent. (of which Brazil represents 8 per cent. of its total loan portfolio) and the Digital Consumer Bank segment (primarily Europe) accounted for 12 per cent.

Mortgage loans are one of the Group's principal assets, comprising 44 per cent. of its net loans and advances as of 31 December 2022, mainly located in Spain and the UK. 81 per cent. of such mortgage loans are residential. If Spain or the UK experience situations of economic stagnation, persistent housing oversupply, decreased housing demand, rising unemployment levels, subdued earnings growth, greater pressure on disposable income, a decline in the availability of mortgage finance or continued global markets volatility, for instance, home prices could decline, while mortgage delinquencies, forbearances and the Group's NPL ratio could increase, which in turn could have a material adverse effect on the Group's business, financial condition and results of operations. At 31 December 2022, the NPL ratio of residential mortgage loans for the Group in Spain and the UK was 1.62 per cent. and 0.98 per cent., respectively.

At 31 December 2022 the total Group NPL ratio stood at 3.08 per cent. as compared to 3.16 per cent. at 31 December 2021. Coverage as of 31 December 2022 was 68 per cent. as compared to 71 per cent. a year earlier.

Impairment on financial assets not measured at fair value through profit or loss (net) of the Group in 2022 was €10,863 million (mainly related to loans and advances to customers), a 47 per cent. increase as compared to €7,407 million in 2021 mainly related to releases recorded in the UK and the United States in 2021 and macro provisions in 2022 resulting from a potential macroeconomic slowdown.

At 31 December 2022, the gross amount of the Group's refinancing and restructuring operations was €34,173 million (3 per cent. of total gross loans and credits), of which €9,715 million have real estate collateral. At the same date, the net amount of non-current assets held for sale amounted €3,453 million; €3,101 million were foreclosed assets.

The value of the collateral securing the loans of the Group may not be sufficient, and the Group may be unable to realize the full value of the collateral securing its loan portfolio.

The value of the collateral securing the loan portfolio of the Group may fluctuate or decline due to factors beyond its control, including as a result of macroeconomic factors affecting Europe, North American countries and South American countries, the war in Ukraine or a prolonged covid-19 pandemic with the emergence of variants resistant to existing vaccines. The value of the collateral securing its loan portfolio may be adversely affected by force majeure events, such as natural disasters (including as a result of climate

change), particularly in locations where a significant portion of its loan portfolio is composed of real estate loans. The Group may also not have sufficiently recent information on the value of collateral, which may result in an inaccurate assessment for impairment losses of its loans secured by such collateral. If any of the above were to occur, the Group may need to make additional provisions to cover actual impairment losses of its loans, which may materially and adversely affect its results of operations and financial condition.

At 31 December 2022, 44 per cent. of the Group's loans and advances to customers have property collateral while 22 per cent. have other types of collateral (securities, pledges and others).

In addition, auto industry technology changes, accelerated by environmental rules, could affect the auto consumer business of the Group in the EU and the United States, particularly residual values of leased vehicles, which could have a material adverse effect on its operating results, financial condition and prospects.

The Group is subject to counterparty risk in its banking business.

The Group is exposed to counterparty risk in addition to credit risks associated with lending activities. Counterparty risk may arise from, for example, investing in securities of third parties, entering into derivative contracts under which counterparties have obligations to make payments to the Group or executing securities, futures, currency or commodity trades from proprietary trading activities that fail to settle at the required time due to non-delivery by the counterparty or systems failure by clearing agents, clearing houses or other financial intermediaries.

The Group routinely transacts with counterparties in the financial services industry, including brokers and dealers, commercial banks, investment banks, mutual funds, hedge funds and other institutional clients. Defaults by, and even rumours or questions about the solvency of, certain financial institutions and the financial services industry generally have led to market-wide liquidity problems and could lead to losses or defaults by other institutions. Many of the routine transactions the Group enters into expose it to significant credit risk in the event of default by one of its significant counterparties.

Operational and technology risks.

Any failure to improve or upgrade the information technology infrastructure and information management systems of the Group in an effective, timely and cost-effective manner including in response to new or modified cybersecurity and data privacy laws, rules and regulations, could have a material adverse effect on the Group.

The ability of the Group to remain competitive depends in part on its ability to upgrade its information technology in an effective, timely and cost-effective manner. It must continually make significant investments in, and improvements to, the information technology infrastructure and information management systems of the Group in order to meet the needs of its customers. The Group cannot guarantee that in the future it will be able to maintain the level of capital expenditures necessary to support the continuous improvement and upgrading of its information technology infrastructure and information management systems. To the extent that the Group is dependent on any particular technology or technological solution, it may be harmed if such technology or technological solution becomes non-compliant with existing industry standards or applicable laws, rules or regulations, fails to meet or exceed the capabilities of its competitors' equivalent technologies or technological solutions, becomes increasingly expensive to service, retain and update, becomes subject to third party claims of intellectual property infringement, misappropriation or other violation, or malfunctions or functions in a way the Group did not anticipate. Additionally, new technologies and technological solutions are continually being released. As such, it is difficult to predict the problems the Group may encounter in improving its technologies' functionality. There is no assurance that the Group will be able to successfully adopt new technology as critical systems and applications become obsolete and better ones become available. Any failure to effectively improve or upgrade the information technology infrastructure and information management systems in an effective, timely and cost-efficient manner could have a material adverse effect on the Group.

Data breaches and other security incidents with respect to the Group or its third-party vendors' systems could adversely affect the Group's business or reputation, and create significant legal, regulatory or financial exposure.

Like other financial institutions, in conducting the Group's banking operations, the Group receives, manages, holds, transmits and otherwise processes certain proprietary and sensitive or confidential information, including personal information of customers and employees as well as a large number of

assets. Accordingly, the business of the Group relies on its ability to process a large number of transactions efficiently and accurately, and on its ability to rely on its digital technologies, computer and email services, software and networks, as well as on the secure storage, transmission and otherwise processing of confidential, sensitive or personal data and other information using the computer systems and networks of the Group or those of its third party vendors. The proper and secure functioning of its financial controls, accounting and other data collection and processing systems is critical to its business and to its ability to compete effectively. Data breaches, security incidents and data losses can result from, among other things, inadequate personnel, inadequate or failed internal control processes and systems, or external events or actors that interrupt normal business operations. The Group also faces the risk that the design of its or its third-party vendors' cybersecurity controls and procedures prove to be inadequate or are circumvented such that its data or client records are incomplete, not recoverable or not securely stored. Any material disruption or slowdown of the systems of the Group could cause information, including data related to customer requests, to be lost or to be delivered to its clients with delays or errors, which could reduce demand for its services and products, produce customer claims and materially and adversely affect the Group.

Although the Group works with its clients, vendors, service providers, counterparties and other third parties to develop secure data and information processing, collection, authentication, management, usage, storage and transmission capabilities and to ensure the eventual destruction of sensitive and confidential information, including personal information, to prevent against information security risk, the Group routinely manages personal, confidential and proprietary information by electronic means, and the Group, its third-party vendors or other third parties with which the Group does business may be the target of attempted cyberattacks or subject to other information security incidents or breaches. This is especially applicable in the current global environment, with the war in Ukraine resulting in an increased risk of cyberattacks, and other disruptions in response to, or retaliation for, the sanctions and costs imposed on Russia and certain other countries directly or indirectly involved in the war. Additionally the shift to remote work policies for a significant portion of the Group's workforce, as they access the Group's secure networks remotely and its customers' increased reliance on digital banking products and other digital services, including mobile payment products, has also increased the risk of cyberattacks (see - "*The global covid-19 pandemic has materially impacted the Group's business, and the continuance of this pandemic or any future outbreak of any other highly contagious diseases or other public health emergency, could materially and adversely impact its business, financial condition, liquidity and results of operations*"). If the Group cannot maintain effective and secure electronic data and information (including personal information), management and processing systems or if it fails to maintain complete physical and electronic records, this could result in disruptions to its operations, litigation or claims from customers, regulators, employees and other third parties, as well as violations of applicable privacy and other laws, rules or regulations, regulatory sanctions and serious reputational and financial harm to the Group.

Although the Group takes protective measures and monitor and develop its systems to protect its technology infrastructure, data and information from misappropriation or corruption, the Group's and its third-party vendors' systems, software and networks nevertheless may be vulnerable to breaches, disruptions, failures or other security incidents caused by, among other things, unauthorised access or misuse, malware and ransomware affecting the Group's services and end-user technologies, social engineering and phishing attacks, denial-of-service attacks, misconduct, fraud, and other events that could have a serious impact on the Group. Although the Group has procedures and controls in place to safeguard personal and other confidential or sensitive information in its possession, the Group has been and continue to be subject to a range of cyberattacks, such as denial of service, malware and phishing attacks. While the Group generally performs cybersecurity due diligence on its key vendors, because it does not control its vendors and its ability to monitor their cybersecurity is limited, the Group cannot ensure the cybersecurity measures they take will be sufficient to protect any information it shares with them. Due to applicable laws and regulations or contractual obligations, the Group may be held responsible for security breaches, cyberattacks or other similar incidents attributed to its vendors as they relate to the information the Group share with them. Moreover, it is not always possible to deter or prevent employee misconduct, and the precautions the Group takes to detect and prevent this activity may not always be effective.

In addition, the Group may also be impacted by cyberattacks against national critical infrastructures of the countries where it operates, such as telecommunications networks. The Group's information technology systems are dependent on such national critical infrastructure and any cyberattack against such critical infrastructure could negatively affect its ability to service its customers. As the Group does not operate such national critical infrastructure, it has limited ability to protect its information technology systems from the adverse effects of a cyberattack.

The Group has seen in recent years the information technology and computer systems of companies and organisations being increasingly targeted, and the techniques used to obtain unauthorised, improper or illegal access to information technology and computer systems have become increasingly complex and sophisticated. Furthermore, such techniques change frequently and are often not recognised or detected until after they have been launched and can originate from a wide variety of sources, including not only cyber criminals, but also activists and terrorists, nation states, nation state-supported actors and others. As attempted attacks continue to evolve in scope and sophistication, the Group may incur significant costs in order to modify or enhance its protective measures against such attacks, or to investigate or remediate any vulnerability or resulting breach, or in communicating cyberattacks to its customers, affected individuals or regulators, as applicable.

If the Group or its third-party vendors fall victim to successful cyberattacks, penetrations, compromises, breaches or circumventions of the Group's information technology systems or experience other security incidents in the future, the Group may incur substantial costs and suffer other negative consequences, such as disruption to its operations, misappropriation of personal, proprietary, confidential or sensitive information, remediation costs (including liabilities for stolen assets or information, repairs of system damage, among others), increased cybersecurity protection costs, lost revenues arising from the unauthorised use of personal, proprietary, confidential or sensitive information or the failure to retain or attract its customers following an operational or security incident, litigation and legal risks (including regulatory action, reporting obligations, investigation, fines and penalties), increased insurance premiums, reputational damage affecting its customers' and the investors' confidence, as well as damages to the Group's competitiveness, stock price and long-term shareholder value. In addition, the Group's remediation efforts may not be successful, and it may not have adequate insurance to cover these losses. Moreover, even when a failure of or interruption in the Group's or its third-party vendors' systems or facilities is resolved in a timely manner or an attempted cyberattack, data breach or security incident is successfully avoided or thwarted, substantial resources and management attention are expended in doing so, and to successfully avoid or resolve any such incidents, the Group may be required to take actions that could adversely affect customer satisfaction or retention, as well as harm its reputation.

The Group relies on third parties and affiliates for important products and services.

Third party vendors and certain affiliated companies provide key components to the business infrastructure of the Group such as loan and deposit servicing systems, back office and business process support and software, information technology production and support, internet connections and network access, including cloud based services, as well as those of the Group's service providers. Relying on these third parties and affiliated companies can be a source of operational and regulatory risk to the Group, including with respect to security breaches affecting such parties. The Group is also subject to risk with respect to security breaches affecting the vendors and other parties that interact with these service providers. As the interconnectivity of the Group with these third parties and affiliated companies increases, the Group increasingly faces the risk of operational failure with respect to their systems. The Group may be required to take steps to protect the integrity of its operational systems, thereby increasing its operational costs and potentially decreasing customer satisfaction.

In addition, any problems caused by these third parties or affiliated companies, including as a result of them not providing the Group their services for any reason, or performing their services poorly, could adversely affect its ability to deliver products and services to customers and otherwise conduct its business, which could lead to reputational damage and regulatory investigations and intervention. While the Group has diversified providers for the main services and keeps strict and close monitoring on them, in some instances, replacing these third-party vendors could also entail significant delays and expense. Further, the operational and regulatory risk that the Group faces as a result of these arrangements may be increased to the extent that it restructures such arrangements. Any restructuring could involve significant expense to the Group and entail significant delivery and execution risk which could have a material adverse effect on its business, operations and financial condition.

Liquidity and Funding risks.

Liquidity and funding risks are inherent in the Group's business and could have a material adverse effect on it.

Liquidity risk is the risk that the Group either does not have sufficient financial resources available to meet its obligations as they are due or can only secure them at excessive cost. This risk is inherent in any banking business and can be heightened by a number of enterprise-specific factors, including over-reliance on a particular source of funding, changes in credit ratings or market-wide phenomena such as market

dislocation, including as a result of the war in Ukraine or new outbreaks of the covid-19 pandemic. While the Group has in place liquidity management processes to mitigate and control these risks as well as an organisational model based on autonomous subsidiaries in terms of capital and liquidity which limits the possibility of contagion between the units of the Group, systemic market factors make it difficult to eliminate these risks completely. Constraints in the supply of liquidity, including in inter-bank lending, could materially and adversely affect the cost of funding of the Group's business, and extreme liquidity constraints may affect its current operations and its ability to fulfil regulatory liquidity requirements, as well as limit growth possibilities.

The cost of the Group to obtain funding is directly related to prevailing interest rates and to its credit spreads. Increases in interest rates, such as those announced throughout 2022 by the ECB, the Bank of England and the Federal Reserve, and/or in its credit spreads can significantly increase the cost of its funding. Credit spreads variations are market-driven and may be influenced by market perceptions of creditworthiness of the Group. Changes to interest rates and in the credit spreads of the Group may occur frequently and could be unpredictable and highly volatile.

The Group relies, and will continue to rely, primarily on retail deposits to fund lending activities. The ongoing availability of this type of funding is sensitive to a variety of factors beyond the Group's control, such as general economic conditions and the confidence of retail depositors in the economy and in the financial services industry, and the availability and extent of deposit guarantees, as well as competition for deposits between banks or with other products, such as mutual funds. Any of these factors could increase the amount of retail deposit withdrawals in a short period of time, thereby reducing the ability of the Group to access retail deposit funding on appropriate terms, or at all, in the future. If these circumstances were to arise, this could have a material adverse effect on the operating results of the Group, financial condition and prospects.

Central banks took extraordinary measures to increase liquidity in the financial markets as a response to the financial crisis and the covid-19 pandemic. In Europe, the ECB's pandemic emergency purchase programme ("**PEPP**") was finalised by the end of March 2022, although maturing principal payments are expected to be repurchased until at least at the end of 2024. If these facilities, which are progressively being reduced, were to be rapidly removed, this could have an adverse effect on the ability of the Group to access liquidity and on the Group's funding costs.

Additionally, the activities of the Group could be adversely impacted by liquidity tensions arising from generalised drawdowns of committed credit lines to the customers of the Group.

The Issuer cannot assure that in the event of a sudden or unexpected shortage of funds in the banking system, the Group will be able to maintain levels of funding without incurring high funding costs, a reduction in the term of funding instruments or the liquidation of certain assets. If this were to happen, the Group could be materially adversely affected.

Finally, the implementation of internationally accepted liquidity ratios might require changes in business practices that affect the profitability of the Group. The liquidity coverage ratio ("**LCR**") is a liquidity standard that measures if banks have sufficient high-quality liquid assets to cover expected net cash outflows over a 30-day liquidity stress period. At 31 December 2022, the LCR ratio of the Group was 152 per cent., above the 100 per cent. minimum requirement. The net stable funding ratio ("**NSFR**") provides a sustainable maturity structure of assets and liabilities such that banks maintain a stable funding profile in relation to their activities. At the end of 2022, the NSFR ratio of the Group stood at 121 per cent. for the Group and over 100 per cent. for all of the Group's main subsidiaries.

Credit, market and liquidity risk may have an adverse effect on the credit ratings of the Group and its cost of funds. Any downgrade in the credit rating of the Group would likely increase its cost of funding, require the Group to post additional collateral or take other actions under some of its derivative and other contracts and adversely affect its interest margins and results of operations.

Credit ratings affect the cost and other terms upon which the Group is able to obtain funding. Rating agencies regularly evaluate the Group, and their ratings of its debt are based on a number of factors, including its financial strength and conditions affecting the financial services industry. In addition, due to the methodology of the main rating agencies, the credit rating of the Group is affected by the rating of Spanish sovereign debt. If Spain's sovereign debt is downgraded, the credit rating of the Group would also likely be downgraded.

Any downgrade in the Group's debt credit ratings would likely increase its borrowing costs and require the Group to post additional collateral or take other actions under some of its derivative and other contracts,

and could limit the Group's access to capital markets and adversely affect its commercial business. For example, a ratings downgrade could adversely affect the ability of the Group to sell or market some of its products, engage in certain longer-term and derivatives transactions and retain the Group's customers, particularly customers who need a minimum rating threshold in order to invest. In addition, under the terms of certain of the derivative contracts and other financial commitments of the Group, the Group may be required to maintain a minimum credit rating or terminate such contracts or require the posting of collateral. Any of these results of a ratings downgrade could reduce the liquidity of the Group and have an adverse effect on it, including on its operating results and financial condition.

The Group has the following ratings by the major rating agencies as of the report dates indicated below:

Rating agency	Long term	Short term	Last report date	Outlook
Banco Santander, S.A.				
Fitch Ratings ⁽¹⁾	A-	F2	December 2022	Stable
Moody's ⁽²⁾	A2	P-1	January 2023	Stable
Standard & Poor's ⁽³⁾	A+	A-1	July 2022	Stable
DBRS ⁽⁴⁾	A (High)	R-1 (Medium)	October 2022	Stable
Santander UK plc				
Fitch Ratings ⁽¹⁾	A+	F1	January 2023	Stable
Moody's ⁽²⁾	A1	P-1	November 2022	Negative
Standard & Poor's ⁽³⁾	A	A-1	September 2022	Stable
Banco Santander (Brasil), S.A.				
Moody's ⁽²⁾	Ba1	-	February 2023	Stable
Standard & Poor's ⁽³⁾	BB-	B	February 2023	Stable

- (1) Fitch Ratings Ireland Limited (Fitch Ratings).
(2) Moody's Investor Service Spain, S.A. (Moody's).
(3) S&P Global Ratings Europe Limited (Standard & Poor's).
(4) DBRS Ratings Limited (DBRS).

The Group conducts substantially all of its material derivative activities through Banco Santander and Santander UK. The Group estimates that as of 31 December 2022, if all the rating agencies were to downgrade Banco Santander's long-term senior debt ratings by one notch the Group would be required to post up to €155 million in additional collateral pursuant to derivative and other financial contracts. A hypothetical two-notch downgrade would result in a further requirement to post up to €350 million in additional collateral. The Group estimates that as of 31 December 2022, if all the rating agencies were to downgrade Santander UK's long-term credit ratings by one notch, and thereby trigger a short-term credit rating downgrade, this could result in contractual outflows from Santander UK's total liquid assets of £1.4 billion of cash and additional collateral that Santander UK would be required to post under the terms of secured funding and derivatives contracts. A hypothetical two-notch downgrade would result in a further outflow of £0.7 billion of cash and collateral under secured funding and derivatives contracts.

While certain potential impacts of these downgrades are contractual and quantifiable, the full consequences of a credit rating downgrade are inherently uncertain, as they depend on numerous dynamic, complex and inter-related factors and assumptions, including market conditions at the time of any downgrade, whether any downgrade of the Group's long-term credit rating precipitates downgrades to its short-term credit rating, and assumptions about the potential behaviours of various customers, investors and counterparties. Actual outflows could be higher or lower than the preceding hypothetical examples, depending upon certain factors including which credit rating agency downgrades the credit rating of the Group, any management or

restructuring actions that could be taken to reduce cash outflows and the potential liquidity impact from loss of unsecured funding (such as from money market funds) or loss of secured funding capacity. Although unsecured and secured funding stresses are included in the stress testing scenarios of the Group and a portion of its total liquid assets is held against these risks, a credit rating downgrade could still have a material adverse effect on the Group.

In addition, if the Group were required to cancel its derivatives contracts with certain counterparties and were unable to replace such contracts, the market risk profile of the Group could be altered.

There can be no assurance that the rating agencies will maintain the current ratings or outlooks. In general, the future evolution of the Group's ratings is linked, to a large extent, to the general macroeconomic outlook which includes the impact of the war in Ukraine and the covid-19 pandemic (including, for example, new variants, new lockdowns, etc.) on the asset quality, profitability and capital of the Group. Failure to maintain favourable ratings and outlooks could increase the cost of funding of the Group and adversely affect interest margins, which could have a material adverse effect on the Group.

Market Risks

The Group's financial results are constantly exposed to market risk. The Group is subject to fluctuations in interest rates and other market risks, which may materially and adversely affect the Group and its profitability.

The Group's financial results are constantly exposed to market risk. In 2022, inflationary pressures, increases in the prices of energy, oil, gas and other commodities, the war in Ukraine and the lingering effects of the covid-19 pandemic caused and could continue to cause high market volatility which could materially and adversely affect the Group and its trading and banking book.

Economic activities exposed to market risk include (i) transactions where risk is assumed as a consequence of potential changes in interest rates, inflation rates, exchange rates, stock prices, credit spreads, commodity prices, volatility and other market factors; (ii) the liquidity risk from the Group's products and markets; and (iii) the balance sheet liquidity risk.

As described below, market risk affects (i) the Group's interest income / (charges); (ii) the market value of the Group's assets and liabilities, in particular of its securities holdings, loans and deposits and derivatives transactions; and (iii) other areas of the Group's business such as the volume of loans originated or credit spreads. The performance of financial markets may cause changes in the value of investment and trading portfolios of the Group. The volatility of world equity markets due to the continued economic uncertainty and sovereign debt crisis has had a particularly strong impact on the financial sector. Continued volatility may affect the value of the Group's investments in equity securities and, depending on their fair value and future recovery expectations, could become a permanent impairment which would be subject to write-offs against the Group's results.

Market risk could include unexpected or unpredictable risks related to periods in which the market does not calculate prices efficiently (for example, during market interruptions or shocks).

Variations in the interest income/ (charges) of the Group

Interest rates are sensitive to many factors beyond the Group's control, including increased regulation of the financial sector, monetary policies and domestic and international economic and political conditions. Variations in interest rates could affect the interest earned on the assets and the interest paid on the borrowings of the Group, thereby affecting its interest income / (charges), which comprises the majority of its revenue, reducing the growth rate of the Group and potentially resulting in losses. In addition, costs in which the Group incurs as it implements strategies to reduce interest rate exposure could increase in the future (which, in turn, will impact the results of the Group).

Due to the historically low interest rate environment in the eurozone, in the UK and in the United States in recent years, the rates on many of the interest-bearing deposit products of the Group were priced at or near zero or negative, limiting its ability to further reduce rates and thus negatively impacting its margins and the Group's results of operations.

Throughout 2022, central banks, including the ECB, the Bank of England and the Federal Reserve, increased interest rates to contain inflation and further increases are expected in the coming months.

Increases in interest rates may reduce the volume of loans that the Group originates. Sustained high interest rates have historically discouraged customers from borrowing and have resulted in increased delinquencies

in outstanding loans and deterioration in the quality of assets. Increases in interest rates may reduce the value of the financial assets of the Group and may reduce gains or require the Group to record losses on sales of its loans or securities. Additionally, a shrinking yield premium between short-term and long-term market interest rates coupled with inflation, could adversely affect the Group's business and results of operations.

At 31 December 2022, the risk on net interest income over a one year period, measured as the sensitivity to parallel changes in the worst-case scenario of ± 100 basis points, (i) was positive in Europe (i.e. a decrease in interest rates would potentially produce a decrease in net interest income) and mainly in the euro, at €1,009 million, the British pound at €191 million, the Polish zloty, at €64 million; and the US dollar, at €51 million; (ii) was positive in North America (i.e. a decrease in interest rates would potentially produce a decrease in net interest income) and the risk was mainly located in the United States (€151 million); and (iii) was negative in South America (i.e. an increase in interest rates would potentially produce a decrease in net interest income) and was mainly found in Chile (€72 million) and Brazil (€169 million).

Variations in the market value of the assets and liabilities of the Group

The market risk in relation to the change in the market value of the assets and liabilities of the Group refers to the loss of value of assets or increase in the value of liabilities due to fluctuations in their prices in the markets where those assets or liabilities are traded, or even if not traded, in the value that a third party outside the Group would be willing to offer in a hypothetical transaction.

The standard methodology that the Group applies for risk management is Value at Risk (VaR), which measures the maximum expected loss within a certain confidence level and time frame.

In relation to structural balance sheet risks:

- At 31 December 2022, the maximum expected loss in the value of assets and liabilities due to variations in interest rate was €304.5 million (€287.8 million and €345.5 million at 31 December 2021 and 2020, respectively), measured with a VaR confidence level of 99 per cent. and a temporary horizon of one day.
- At 31 December 2022, the maximum expected loss in the value of assets and liabilities due to variations in exchange rate was €461.0 million (€655.2 million and €502.6 million at 31 December 2021 and 2020, respectively), measured with a VaR confidence level of 99 per cent. and a temporary horizon of one day.
- At 31 December 2022, the maximum expected loss in the value of assets and liabilities due to variations in equity portfolio was €195.4 million (€309.1 million and €318.5 million at 31 December 2021 and 2020, respectively), measured with a VaR confidence level of 99 per cent. and a temporary horizon of one day.

In relation to the trading portfolio, the Santander Corporate & Investment Banking segment VaR closed December 2022 with €11.6 million.

The Group is also exposed to foreign exchange rate risk as a result of mismatches between assets and liabilities denominated in different currencies. Fluctuations in the exchange rate between currencies may negatively affect the earnings and value of the assets and securities of the Group.

If any of these risks were to materialize, net interest income or the market value of the Group's assets and liabilities could suffer a material adverse impact.

The Group is subject to market, operational and other related risks associated with its derivative transactions that could have a material adverse effect on the Group.

The Group enters into derivative transactions for trading purposes as well as for hedging purposes. The Group is subject to market, credit and operational risks associated with these transactions, including basis risk (the risk of loss associated with variations in the spread between the asset yield and the funding and/or hedge cost) and credit or default risk (the risk of insolvency or other inability of the counterparty to a particular transaction to perform its obligations thereunder, including providing sufficient collateral).

Market practices and documentation for derivative transactions differ by country. In addition, the execution and performance of these transactions depend on the ability of the Group to maintain adequate control and administration systems. Moreover, its ability to adequately monitor, analyse and report derivative

transactions continues to depend, largely, on its information technology systems. These factors further increase the risks associated with these transactions and could have a material adverse effect on the Group.

At 31 December 2022, the notional value of the trading derivatives in the books of the Group amounted to €6,463,470 million (with a fair value of €67,002 million of debit balance and €64,891 million of credit balance).

At 31 December 2022, the nominal value of the hedging derivatives in the books of the Group within its financial risk management strategy and with the aim of reducing asymmetries in the accounting treatment of its operations amounted to €386,843 million (with fair value of €8,069 million in assets and €9,228 million in liabilities).

Market conditions have resulted and could result in material changes to the estimated fair values of the Group's financial assets. Negative fair value adjustments could have a material adverse effect on its operating results, financial condition and prospects.

In the past, financial markets have been subject to significant stress resulting in steep falls in perceived or actual financial asset values, particularly due to volatility in global financial markets and the resulting widening of credit spreads, including as a result of the war in Ukraine or the covid-19 pandemic. The Group has material exposures to securities, loans and other investments that are recorded at fair value and are therefore exposed to potential negative fair value adjustments. Asset valuations in future periods, reflecting then-prevailing market conditions, may result in negative changes in the fair values of the financial assets of the Group and these may also translate into increased impairments. In addition, the value ultimately realised by the Group on disposal may be lower than the current fair value. Any of these factors could require the Group to record negative fair value adjustments, which may have a material adverse effect on its operating results, financial condition or prospects.

In addition, to the extent that fair values are determined using financial valuation models, such values may be inaccurate or subject to change, as the data used by such models may not be available or may become unavailable due to changes in market conditions, particularly for illiquid assets, and particularly in times of economic instability. In such circumstances, its valuation methodologies require the Group to make assumptions, judgements and estimates in order to establish fair value, and reliable assumptions are difficult to make and are inherently uncertain and valuation models are complex, making them inherently imperfect predictors of actual results. Any consequential impairments or write-downs could have a material adverse effect on the operating results, financial condition and prospects of the Group.

Risks related to the industry of the Group.

Goodwill impairments may be required in relation to acquired businesses.

The Group has made business acquisitions in recent years and may make further acquisitions in the future. It is possible that the goodwill which has been attributed, or may be attributed, to these businesses may have to be written-down if Group's valuation assumptions are required to be reassessed as a result of any deterioration in their underlying profitability, asset quality and other relevant matters. Impairment testing in respect to goodwill is performed annually, or more frequently if there are impairment indicators present, and comprises a comparison of the carrying amount of the cash-generating unit with its recoverable amount. Goodwill impairment does not, however, affect the regulatory capital of the Group. In 2020, considering the economic and business environment resulting from the covid-19 pandemic, the Group recognised an impairment of goodwill of €10,100 million (of which €6,101 million correspond to Santander UK, €1,192 million to Santander Bank Polska, €1,177 million to Santander Bank, National Association, €1,153 million to Santander Consumer USA, and €277 million to Santander Consumer Nordics). In 2021 the Group recognised an impairment of goodwill of €6 million while no impairment was recognised in 2022. There can be no assurances that the Group will not have to write down the value attributed to goodwill in the future, which would adversely affect the Group's results and net assets.

Changes in the pension liabilities and obligations of the Group could have a material adverse effect on it.

The Group provides retirement benefits for many of its former and current employees through a number of defined benefit pension plans. The Group calculates the amount of its defined benefit obligations using actuarial techniques and assumptions, including mortality rates, the rate of increase of salaries, discount rates, inflation, the expected rate of return on plan assets, and others. The accounting and disclosures are based on IFRS-IASB and on those other requirements defined by the local supervisors. Given the nature of these obligations, changes in the assumptions that support valuations, including market conditions, can

result in actuarial losses which would in turn impact the financial condition of the pension funds of the Group. Because pension obligations are generally long term obligations, fluctuations in interest rates have a material impact on the projected costs of its defined benefit obligations and therefore on the amount of pension expense that it accrues.

Any increase in the current size of the funding deficit in the defined benefit pension plans of the Group could result in the Group having to make increased contributions to reduce or satisfy the deficits, which would divert resources from use in other areas of its business. Any such increase may be due to certain factors over which the Group has no or limited control. Increases in its pension liabilities and obligations could have a material adverse effect on its business, financial condition and results of operations.

At 31 December 2022, the provision for pensions and other obligations of the Group amounted to €3,342 million.

The Group depends in part on dividends and other funds from subsidiaries.

Some of the operations of the Group are conducted through its financial services subsidiaries. As a result, its ability to pay dividends, to the extent the Group decides to do so, depends in part on the ability of its subsidiaries to generate earnings and to pay dividends to the Group. Payment of dividends, distributions and advances by the subsidiaries of the Group will be contingent upon their earnings and business considerations and is or may be limited by legal, regulatory and contractual restrictions. For instance, the repatriation of dividends from its Argentine subsidiaries have been subject to certain restrictions. Additionally, the right of the Group to receive any assets of any of its subsidiaries as an equity holder of such subsidiaries upon their liquidation or reorganisation will be effectively subordinated to the claims of its subsidiaries' creditors, including trade creditors. The Group also has to comply with increased capital requirements, which could result in the imposition of restrictions or prohibitions on "discretionary payments" including the payment of dividends and other distributions to the Group by its subsidiaries. In 2020, given the uncertainty about the economic impact of the covid-19 pandemic, the ECB, the Prudential Regulation Authority of the UK and the Federal Reserve of the United States, imposed limitations on the distribution of dividends which were in force until the third quarter of 2021. Once the economic projections confirmed the economic recovery and the reduction in the levels of uncertainty, the suspension of dividend distributions was lifted. The supervisors will now assess the capital and dividend distribution plans for each entity as part of their regular supervisory process and make individualised recommendations.

To the extent that these recommendations, or other similar measures that may be taken by supervisory authorities from other regions, are applied by some of the subsidiaries of the Group, it could have a material adverse effect on its business, financial condition and results of operations.

At 31 December 2022, dividend income for Banco Santander, S.A. represented 58 per cent. of its total income.

Increased competition, including from non-traditional providers of banking services such as financial technology providers, and industry consolidation may adversely affect the results of operations of the Group.

The Group faces substantial competition in all parts of its business, including in payments, in originating loans and in attracting deposits. The competition in originating loans comes principally from other domestic and foreign banks, mortgage banking companies, consumer finance companies, insurance companies and other lenders and purchasers of loans.

In addition, there has been a trend towards consolidation in the banking industry, which has created larger banks with which the Group must now compete. There can be no assurance that this increased competition will not adversely affect its growth prospects, and therefore its operations. The Group also faces competition from non-bank competitors, such as brokerage companies, department stores (for some credit products), leasing and factoring companies, mutual fund and pension fund management companies and insurance companies.

Non-traditional providers of banking services, such as internet based e-commerce providers, mobile telephone companies and internet search engines may offer and/or increase their offerings of financial products and services directly to customers. These non-traditional providers of banking services currently have an advantage over traditional providers because they are not subject to banking regulation. Several of these competitors may have long operating histories, large customer bases, strong brand recognition and significant financial, marketing and other resources. They may adopt more aggressive pricing and rates and devote more resources to technology, infrastructure and marketing.

New competitors may enter the market or existing competitors may adjust their services with unique product or service offerings or approaches to providing banking services. If the Group is unable to successfully compete with current and new competitors, or if it is unable to anticipate and adapt its offerings to changing banking industry trends, including technological changes, its business may be adversely affected. In addition, the failure of the Group to effectively anticipate or adapt to emerging technologies or changes in customer behaviour, including among younger customers, could delay or prevent its access to new digital-based markets, which would in turn have an adverse effect on its competitive position and business. Furthermore, the widespread adoption of new technologies, including distributed ledger, artificial intelligence and/or biometrics, to provide services such as digital currencies, cryptocurrencies and payments, could require substantial expenditures to modify or adapt the existing products and services of the Group as it continues to grow its internet and mobile banking capabilities. Its customers may choose to conduct business or offer products in areas that may be considered speculative or risky. Such new technologies and mobile banking platforms in recent years could negatively impact the value of the investments of the Group in bank premises, equipment and personnel for its branch network. The persistence or acceleration of this shift in demand towards internet and mobile banking may necessitate changes to its retail distribution strategy, which may include closing and/or selling certain branches and restructuring the remaining branches and work force of the Group. These actions could lead to losses on these assets and may lead to increased expenditures to renovate, reconfigure or close a number of its remaining branches or to otherwise reform its retail distribution channel. Furthermore, if the Group fails to swiftly and effectively implement such changes to its distribution strategy could have an adverse effect its competitive position. As part of these restructuring processes, in 2021 the Group faced costs for a net impact of -€530 million, mainly in the UK and Portugal, while no restructuring costs were accounted for in 2022.

In particular, the Group faces the challenge to compete in an ecosystem where the relationship with the consumer is based on access to digital data and interactions. This access is increasingly dominated by digital platforms who are already eroding its results in very relevant markets such as payments. This privileged access to data can be used as a leverage to compete with the Group in other adjacent markets and may reduce its operations and margins in core businesses such as lending or wealth management. The alliances that its competitors are starting to build with large technology firms can make it more difficult for the Group to successfully compete with them and could adversely affect it.

Increasing competition could also require that the Group increases its rates offered on deposits or lower the rates it charges on loans, which could also have a material adverse effect on the Group, including its profitability. It may also negatively affect its business results and prospects by, among other things, limiting its ability to increase its customer base and expand its operations and increasing competition for investment opportunities.

If the customer service levels of the Group were perceived by the market to be materially below those of its competitor financial institutions, the Group could lose existing and potential business. If the Group is not successful in retaining and strengthening customer relationships, it may lose market share, incur losses on some or all of its activities or fail to attract new deposits or retain existing deposits, which could have a material adverse effect on the Group's operating results, financial condition and prospects.

If the Group is unable to manage the growth of its operations, to integrate successfully its inorganic growth, or to execute successfully any of its strategic actions this could have an adverse impact on its profitability.

The Group allocates management and planning resources to develop strategic plans for organic growth, and to identify possible acquisitions and disposals and areas for restructuring its businesses. From time to time, the Group evaluates acquisition and partnership opportunities that it believes offer additional value to its shareholders and are consistent with its business strategy. However, the Group may not be able to identify suitable acquisition or partnership candidates, and its ability to benefit from any such acquisitions and partnerships will depend in part on its successful integration of those businesses. Any such integration entails significant risks such as unforeseen difficulties in integrating operations and systems, unexpected liabilities or contingencies relating to the acquired businesses, including legal claims and delivery and execution risks. The Group can give no assurances that its expectations with regards to integration and synergies will materialize. It also cannot provide assurance that the Group will, in all cases, be able to manage its growth effectively or deliver its strategic growth objectives. Challenges that may result from its strategic growth decisions include the ability of the Group to:

- manage efficiently the operations and employees of expanding businesses;
- maintain or grow its existing customer base;

- assess the value, strengths and weaknesses of investment or acquisition candidates, including local regulation that can reduce or eliminate expected synergies;
- finance strategic investments or acquisitions;
- align its current information technology systems adequately with those of an enlarged group;
- apply its risk management policy effectively to an enlarged group; and
- manage a growing number of entities without over-committing management or losing key personnel.

Any failure to manage growth effectively or to execute successfully any of the Group's strategic actions could have a material adverse effect on its operating results, financial condition and prospects. In addition, any acquisition or venture could result in the loss of key employees and inconsistencies in standards, controls, procedures and policies.

Moreover, the success of the acquisition or venture will at least in part be subject to a number of political, economic and other factors that are beyond the control of the Group. Any of these factors, individually or collectively, could have a material adverse effect on the Group.

The Group may not effectively manage risks associated with the replacement or reform of benchmark indices.

Interest rate, equity, foreign exchange rate and other types of indices which are deemed to be "benchmarks", including those in widespread and long-standing use, have been the subject of ongoing international, national and other regulatory scrutiny and initiatives and proposals for reform.

On 5 March 2021, the U.K. Financial Conduct Authority (the "FCA"), which regulates the London interbank offered rate (LIBOR), published an announcement to confirm the dates immediately after which all LIBOR settings would either cease to be provided by any administrator or no longer be representative. The FCA announced that on 31 December 2021 all tenors would cease to be provided by any administrator except for the overnight, 1-, 3-, 6- and 12-month USD LIBOR tenors, which will be discontinued on 30 June 2023.

In March 2022, the U.S. Congress passed the Adjustable Interest Rate (LIBOR) Act (the "**LIBOR Act**"). This legislation establishes a uniform process, on a nationwide basis, for replacing LIBOR in existing contracts the terms of which do not contain fallback provisions by automatically replacing LIBOR, on the LIBOR replacement date (expected to be the first London banking day after 30 June 2023), with the "Board-selected benchmark replacement". On 16 December 2022, the Federal Reserve Board adopted a final rule that implements the LIBOR Act and identifies these benchmark replacements, which differ for different contracts, but are all based on SOFR.

The Group has focused and continues to focus on making all the contractual, commercial, operational and technological changes necessary to address relevant pending milestones.

These and other reforms have caused and may in the future cause benchmarks to perform differently than in the past, or to disappear entirely, or have other consequences introduce a number of risks for the Group. These risks include (i) legal risks arising from potential changes required to documentation for new and existing transactions; (ii) risk management, financial and accounting risks arising from market risk models and from valuation, hedging, discontinuation and recognition of financial instruments linked to benchmark rates; (iii) business risk of a decrease in revenues of products linked to indices that will be replaced; (iv) pricing risks arising from how changes to benchmark indices could impact pricing mechanisms on some instruments; (v) operational risks arising from the potential requirement to adapt IT systems, trade reporting infrastructure and operational processes; (vi) conduct risks arising from the potential impact of communication with customers and engagement during the transition period and inquiries, reviews or other actions from regulators regarding the Group's preparation, readiness and transition plans and (vii) litigation risks and risks relating to other disputes and actions with clients, counterparties, investors and other parties regarding the existing products of the Group and services, which could adversely impact its profitability. The implementation of alternative benchmark rates may have a material adverse effect on the business, results of operations, financial condition and prospects of the Group. The Group may also be adversely affected if the change restricts its ability to provide products and services or if it necessitates the development of additional IT systems.

Risk Management.

Failure to successfully implement and continue to improve the risk management policies, procedures and methods of the Group, including its credit risk management systems, could materially and adversely affect the Group, and it may be exposed to unidentified or unanticipated risks.

Risk management is a central part of the activities of the Group. The Group seeks to manage and control its risk exposure through a forward-looking management model, based on robust governance and advanced tools, supported by a risk culture that permeates the organisation. While the Group's management model uses a broad and diversified set of risk monitoring, control and mitigation techniques, such management model may not be fully effective at mitigating its risk exposure in all economic market environments or against all types of risk, including risks that it may fail to identify or anticipate.

Some of the tools and metrics of the Group for managing risk are based on its use of observed historical market behaviour. The Group applies statistical and other tools to these observations to arrive at quantifications of its risk exposures. These tools and metrics may fail to predict future risk exposures. These risk exposures could, for example, arise from factors the Group did not anticipate or correctly evaluate in its statistical models. This would limit its ability to manage its risks. Thus, the losses of the Group thus could be significantly higher than the historical measures indicate. In addition, its statistical models may not take all risks into account or measure emerging risks correctly.

The Group's approach to managing risks could prove insufficient, exposing it to material unanticipated losses. The Group could face adverse consequences as a result of decisions, which may lead to actions by management, based on models that are poorly developed, implemented or used, or as a result of the modelled outcome being misunderstood or the use of such information for purposes for which it was not designed. If existing or potential customers or counterparties believe the risk management of the Group is inadequate, they could take their business elsewhere or seek to limit their transactions with it. Any of these factors could have a material adverse effect on the reputation, operating results, financial condition and prospects of the Group.

As a retail bank, one of the main types of risks inherent to the business of the Group is credit risk. For example, an important feature of its credit risk management system is to employ an internal credit rating system to assess the particular risk profile of individual customers and SMEs. As this process involves detailed analyses of the customer, taking into account both quantitative and qualitative factors, it is subject to human or IT systems errors. In exercising their judgement on the customers' current or future credit risk behaviour of the Group, its management models may not always be able to assign an accurate credit rating, which may result in a higher exposure to credit risks than indicated by the Group's risk rating system.

Some of the models and other analytical and judgement-based estimations the Group uses in managing risks are subject to review by, and require the approval of, regulators. If models do not comply with all their expectations, regulators may require the Group to make changes to such models, may approve them with additional capital requirements or it may be precluded from using them. Any of these possible situations could limit the ability of the Group to expand its businesses or have a material impact on its financial results

Failure to effectively implement, consistently monitor or continuously improve the credit risk management system of the Group may result in an increase in the level of non-performing loans and a higher risk exposure for the Group, which could have a material adverse effect on it.

The board of directors of the Group is responsible for the approval of the Group's general policies and strategies, and in particular for the corporate risk framework. In addition to the executive committee, which maintains a special focus on risk, the board has a specific risk supervision, regulation and compliance committee.

Model Risk.

The Group relies on models for many of its decisions. Their inaccurate or incorrect use could have a material adverse effect on the Group

The Group uses models for approval (scoring/rating), capital calculation, behaviour, provisions, market risk, operational risk, compliance and liquidity. A model is a system, approach or quantitative method that applies statistical, economic, financial or mathematical theories, techniques or hypotheses to transform input data into quantitative estimates and forecasts. It involves simplified representations of real world relationships between characteristics, values and observed assumptions that allows the Group to focus on specific aspects.

Model risk is the negative consequence of decisions based on inaccurate, improper or incorrect use of models. Sources of model risk include (i) incorrect or incomplete data in the model itself or the modelling method used in systems; and (ii) incorrect use or implementation of the model.

Model risk can cause financial loss, erroneous commercial and strategic decision-making or damage to the Group's transactions any of which could have a material adverse effect on its operating results, financial condition and prospects. In addition, the Group's models and the underlying methodologies are subject to scrutiny from its supervisors, who could identify potential weaknesses or deficiencies that may result in enforcement actions, including sanctions, fines and/or the imposition of stricter capital requirements, as well as mandates and recommendations with respect to the methodologies underlying its models, which could also lead the Group to more onerous or inefficient capital consumptions.

Unprecedented movement in economic and market drivers related to external events such as the war in Ukraine and the covid-19 pandemic required monitoring and adjustment of financial models (including credit loss models, capital models, traded risk models and models used in the asset/liability management process) to comply with the guidance and recommendations of standard setters, regulators and supervisors, particularly for credit loss models. It also resulted in the use of mitigants for model limitations, such as adjustments to model outputs to reflect consideration of management judgment. The performance and usage of models was and may continue to be impacted by the consequences of external events. In addition, data obtained during these external events may not be representative and may distort the calibration of the models in the future, which could have a material adverse effect on the Group.

In addition, the fair value of the Group's financial assets, determined using financial valuation models, may be inaccurate or subject to change and, as a consequence, the Group may have to register impairments or write-downs that could have a material adverse effect on its operating results, financial condition and prospects. See –'Market conditions have resulted and could result in material changes to the estimated fair values of the Group's financial assets. Negative fair value adjustments could have a material adverse effect on its operating results, financial condition and prospects'.

General risks.

Risks related to the industry of the Group

Climate change can create transition risks, physical risks, and other risks that could adversely affect the Group.

There is an increasing focus over the risks of climate change and related environmental sustainability matters. Climate change may imply two primary drivers of financial risk that could adversely affect the Group:

- Transition risks associated with the move to a low-carbon economy, both at idiosyncratic and systemic levels, such as through policy, regulatory and technological changes and business and consumer preferences, which could increase the Group's expenses and impact its strategies.
- Physical risks related to discrete events, such as flooding and wildfires, and extreme weather impacts and longer-term shifts in climate patterns, such as extreme heat, sea level rise and more frequent and prolonged drought, which could result in financial losses that could impair asset values and the creditworthiness of the Group's customers. Such events could disrupt the Group's operations or those of its customers or third parties on which the Group relies and does business with, including through direct damage to assets and indirect impacts from supply chain disruption and market volatility

These primary drivers could materialize, among others, in the following financial risks:

- Credit risks: Physical climate change could lead to increased credit exposure. Additionally, companies with business models not aligned with the transition to a low-carbon economy may face a higher risk of reduced corporate earnings and business disruption due to new regulations or market shifts.
- Market and liquidity risks: Market changes in the most carbon-intensive sectors could affect energy and commodity prices, corporate bonds, equities and certain derivatives contracts. Increasing frequency of severe weather events could affect macroeconomic conditions, weakening fundamental factors such as economic growth, employment and inflation. Companies could face liquidity risks derived from cash outflows to improve their reputation in the market or solve climate-related problems.

- Operational risks: Severe weather events could directly impact business continuity and both of the customers and the operations of the Group.
- Regulatory compliance risks: Increased regulatory compliance risk may result from the increasing focus, pace, breadth and depth of regulatory expectations requiring implementation in short timeframes across multiple jurisdictions and from changes in public policy, laws and regulations in connection with climate change and related environmental sustainability matters.
- Conduct risks: Conduct risks could develop in association with the increasing demand for "green" products where there are differing and developing standards or taxonomies.
- Reputational risk: The Group's reputation and client relationships may be damaged as a result of its practices, disclosures and decisions related to climate change and the environment, or to the practices or involvement of its clients, vendors or suppliers in certain industries or projects associated with causing or exacerbating climate change. Furthermore, parties who may suffer losses from the effects of climate change may seek compensation from those they hold responsible such as state entities, regulators, investors and lenders.

As climate risk is interconnected with all key risk types, the Group has developed and continues to enhance processes to embed climate risk considerations into its core processes and risk management cycle; however, because the timing and severity of climate change may not be predictable, and is rapidly evolving, the Group's risk management strategies may not be effective in mitigating climate risk exposure. Additionally, the Group may become subject to new or heightened regulatory requirements relating to climate change, which may result in increased regulatory, compliance or other costs. As the risks, perspective and focus of regulators, shareholders, employees, and other stakeholders regarding climate change are evolving rapidly, it can be difficult to assess the ultimate impact on the Group of climate change-related risks, compliance risks, and uncertainties.

The Group periodically discloses information such as emissions and other climate-related performance data, statistics, metrics and/or targets. If the Group lacks robust and high-quality climate-related procedures, controls and data, the Group may not be able to disclose reliable climate-related information. In addition, because the climate-related information is based on current expectations and future estimates about the Bank's and third-parties' operations and businesses and addresses matters that are uncertain to varying degrees, the Group may not be able to meet its estimates, targets or commitments or it may not be able to achieve them within the timelines it announces. Actual or perceived shortcomings with respect to these emissions and other climate-related initiatives and reporting could result in litigation or regulatory enforcement and impact its ability to hire and retain employees increase its customer base, and attract and retain certain types of investors.

Any of the conditions described above, or the Group's failure to identify other climate-related risks could have a material adverse effect on the business, financial condition and results of operations of the Group.

The financial problems faced by its customers could adversely affect the Group.

Potential market turmoil and economic recession could materially and adversely affect the liquidity, credit ratings, businesses and/or financial conditions of the customers of the Group, which could in turn increase its non-performing loan ratios, impair its loan and other financial assets and result in decreased demand for borrowings and deposits in general. In addition, the customers of the Group may further significantly decrease their risk tolerance to non-deposit investments such as stocks, bonds and mutual funds, which would adversely affect its fee and commission income. Any of the conditions described above could have a material adverse effect on the business, financial condition and results of operations of the Group.

The ability of the Group to maintain its competitive position depends, in part, on the success of new products and services the Group offers to its customers and on its ability to offer products and services that meet the customers' needs during the whole life cycle of the products or services. The Group's failure to manage various risks it faces as it expands its range of products and services that could have a material adverse effect on the Group.

The success of the operations and profitability of the Group depend, in part, on the success of new products and services it offers to its customers and on its ability to offer products and services that meet their needs during their entire life cycle. However, customers' needs or desires may change over time, and such changes may render the products and services of the Group obsolete, outdated or unattractive, and it may not be able to develop new products that meet its customers' changing needs. The success of the Group is also dependent on its ability to anticipate and leverage new and existing technologies that may have an impact

on products and services in the banking industry. Technological changes may further intensify and complicate the competitive landscape and influence customer behaviour. If the Group cannot respond in a timely fashion to the changing needs of its customers, it may lose existing or potential customers, which could in turn materially and adversely affect the Group. In addition, the cost of developing products is likely to affect its results of operations.

As the Group expands the range of its products and services, some of which may be at an early stage of development in the markets of certain regions where the Group operates, it will be exposed to new and potentially increasingly complex risks, such as the conduct risk in the relationship with customers, and development expenses. The employees and risk management systems of the Group, as well as its experience and that of its partners may not be sufficient to enable the Group to properly manage such risks. Any or all of these factors, individually or collectively, could have a material adverse effect on the Group.

While the Group has successfully increased its customer service levels in recent years, should these levels ever be perceived by the market to be materially below those of its competitor financial institutions, the Group could lose existing and potential new business. If the Group is not successful in retaining and strengthening customer relationships, it may lose market share, incur losses on some or all of its activities or fail to attract new deposits or retain existing deposits, which could have a material adverse effect on its operating results, financial condition and prospects.

The Group relies on recruiting, retaining and developing appropriate senior management and skilled personnel.

The continued success of the Group depends in part on the continued service of key members of its senior executive team and other key employees. The ability to continue to attract, train, motivate and retain highly qualified and talented professionals is a key element of the strategy of the Group. The successful implementation of this strategy and culture depends on the availability of skilled and appropriate management, both at the Group's head office and in each of its business units. If the Group or one of its business units or other functions fails to staff its operations appropriately, or loses one or more of its key senior executives or other key employees and fails to replace them in a satisfactory and timely manner, its business, financial condition and results of operations, including control and operational risks, may be adversely affected.

The Group's ability to attract and retain qualified employees is affected by perceptions of its culture, social and corporate governance policies and management, its profile in the markets in which the Group operates and the professional opportunities it offers.

In addition, the financial industry has and may continue to experience more stringent regulation of employee compensation, which could have an adverse effect on the ability of the Group to hire or retain the most qualified employees. If the Group fails or is unable to attract and appropriately train, motivate and retain qualified professionals, its business may also be adversely affected.

Damage to the reputation of the Group could cause harm to its business prospects.

Maintaining a robust risk management framework based on robust ethical principles and corporate values is critical to protect the Group's reputation and the Group's brand, attract and retain customers, investors and employees and conduct business transactions with counterparties. Damage to the reputation of the Group can therefore cause significant harm to its business and prospects. Harm to such reputation can arise from numerous sources, including, among others, employee misconduct, including the possibility of fraud perpetrated by the employees of the Group, litigation or regulatory enforcement, failure to deliver minimum standards of service and quality, negative perceptions regarding the Group's ability to maintain the security of its technology systems and protect customer data (including as a result of a cybersecurity incident), dealing with sectors that are not well perceived by the public (weapons industries or embargoed countries, for example), dealing with customers in sanctions lists, rating downgrades, significant variations in the share price of the Group throughout the year, compliance failures, unethical behaviour, actual or alleged conduct in any number of activities, including lending practice, sales and marketing, corporate governance and corporate culture, and the activities of customers and counterparties, including activities that negatively affect the environment. Further, negative publicity regarding the Group may result in harm to its prospects.

Actions by the financial services industry generally or by certain members of, or individuals in, the industry can also affect the reputation of the Group. For example, the role played by financial services firms in the financial crisis and the seeming shift toward increasing regulatory supervision and enforcement has caused public perception of the Group and others in the financial services industry to decline.

Additionally, the Group could suffer significant reputational harm that could affect its business, results of operations and prospects from any negative perceptions regarding topics related to environmental, social and corporate governance policies. There has been increased focus by customers, shareholders, investor advocacy groups, employees, regulators and other stakeholders on these topics, and the Group's policies, practices and disclosures in these areas could come under scrutiny. Governments may implement new or additional regulations and standards or investors, customers and other stakeholders may impose new expectations or focus investments in ways that cause significant shifts in disclosure, consumption and behaviours that may have negative impacts on the Group's business. If regulators or stakeholders consider the Group's efforts to be ineffective, inadequate or unsatisfactory, whether real or perceived, it could harm its reputation, business and prospects and the Group could be subject to enforcement, other supervisory actions or other harm.

The Group could also suffer significant reputational harm if it fails to identify and manage potential conflicts of interest properly. The failure, or perceived failure, to adequately address conflicts of interest could affect the willingness of clients to deal with the Group or could give rise to litigation or enforcement actions against the Group, which could have an adverse effect on its operating results, financial condition and prospects.

The Group may be the subject of misinformation and misrepresentations deliberately propagated to harm its reputation or for other deceitful purposes, or by profiteering short sellers seeking to gain an illegal market advantage by spreading false information about the Group. There can be no assurance that it will effectively neutralize and contain a false information that may be propagated regarding the Group, which could have an adverse effect on its operating results, financial condition and prospects.

The Group engages in transactions with its subsidiaries or affiliates that others may not consider to be on an arm's-length basis.

The Group and its affiliates have entered into a number of services agreements pursuant to which it renders services, such as administrative, accounting, finance, treasury, legal services and others.

Spanish and United States law provide for several procedures designed to ensure that the transactions entered into with or among the financial subsidiaries and/or affiliates of the Group do not deviate from prevailing market conditions for those types of transactions.

The Bank is likely to continue to engage in transactions with its affiliates. Future conflicts of interests may arise between the Group and any of its affiliates, or among its affiliates, which may not be resolved in its favour.

Reporting and control risks

Changes in accounting standards could impact reported earnings.

The accounting standard setters and other regulatory bodies periodically change the financial accounting and reporting standards that govern the preparation of the consolidated financial statements of the Group. These changes can materially impact how the Group records and reports its financial condition and results of operations, as well as affect the calculation of its capital ratios. In some cases, the Group could be required to apply a new or revised standard retroactively, resulting in the restatement of prior period financial statements.

The financial statements of the Group are based in part on assumptions and estimates which, if inaccurate, could cause material misstatement of the results of its operations and financial position.

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses. Due to the inherent uncertainty in making estimates, actual results reported in future periods may be based upon amounts which differ from those estimates. Estimates, judgements and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected. The accounting policies deemed critical to the results and financial position of the Group, based upon materiality and significant judgements and estimates, include impairment of loans and advances, goodwill impairment, valuation of financial instruments, deferred tax assets provision and pension obligation for liabilities.

If the judgement, estimates and assumptions the Group uses in preparing its consolidated financial statements are subsequently found to be incorrect, there could be a material effect on its results of operations and a corresponding effect on its funding requirements and capital ratios.

Disclosure controls and procedures over financial and non-financial reporting may not prevent or detect all errors or acts of fraud.

Disclosure controls and procedures, including internal controls over financial and non-financial reporting (including climate-related reporting), are designed to provide reasonable assurance that information required to be disclosed by the company in reports filed or submitted under the US Securities Exchange Act of 1934 (the "**Exchange Act**") is accumulated and communicated to management, and recorded, processed, summarised and reported within the time periods specified in the US Securities and Exchange Commission's rules and forms.

These disclosure controls and procedures have inherent limitations which include the possibility that judgements in decision-making can be faulty and that breakdowns occur because of errors or mistakes. Additionally, controls can be circumvented by any unauthorised override of the controls. Consequently, the businesses of the Group are exposed to risk from potential non-compliance with policies, employee misconduct or negligence and fraud, which could result in regulatory sanctions, civil claims and serious reputational or financial harm. In recent years, a number of multinational financial institutions have suffered material losses due to the actions of 'rogue traders' or other employees. It is not always possible to deter employee misconduct and the precautions the Group takes to prevent and detect this activity may not always be effective. Accordingly, because of the inherent limitations in the control system, misstatements due to error or fraud may occur and not be detected.

Risks in relation to the Notes

There is no active trading market for the Notes

The Notes may have no established trading market when issued, and one may never develop. If an active trading market does not develop or is not maintained, the market price and liquidity of the Notes may be adversely affected. If a market does develop, it may not be very liquid. Therefore, investors may not be able to sell their Notes at a particular time or may not be able to sell their Notes at a favourable price. Although applications have been made for Notes issued under the Programme to be admitted to the Official List and to trading on the regulated market of Euronext Dublin, there is no assurance that such applications will be accepted, that any particular issue of Notes will be so admitted or that an active trading market will develop. Accordingly, there is no assurance as to the development or liquidity of any trading market for any particular issue of Notes.

Global Notes held in a clearing system

Because the Global Notes are held by or on behalf of Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream, Luxembourg**") and possibly other clearing systems, investors will have to rely on their procedures for transfer, payment and communication with the Issuer.

Notes issued under the Programme may be represented by one or more Global Notes. If the relevant Final Terms specify that the New Global Note form is not applicable, such Global Note will be deposited with a common depository for Euroclear and/or Clearstream, Luxembourg or shall be deposited with such other clearing system, or to the order of such other Clearing System's nominee. If the relevant Final Terms specify that the New Global Note form is applicable, such Global Note will be deposited with a common safekeeper for Euroclear and/or Clearstream, Luxembourg. Except in the circumstances described in the relevant Global Note, investors will not be entitled to receive definitive Notes. Euroclear and/or Clearstream, Luxembourg and/or any other clearing system will maintain records of the holdings of their participants. In turn, such participants and their clients will maintain records of the ultimate holders of beneficial interests in the Global Notes. While the Notes are represented by one or more Global Notes, investors will be able to trade their beneficial interests only through Euroclear and/or Clearstream, Luxembourg and/or any other clearing system on whose behalf such Global Notes are held.

While the Notes are represented by one or more Global Notes, the Issuer will discharge its payment obligations under such Notes by making payments to the common depository (in the case of Global Notes which are not in the New Global Note form) or, as the case may be, the common service provider (in the case of Global Notes in New Global Note form) for Euroclear and/or Clearstream, Luxembourg and/or any

other clearing system for distribution to their account holders for onward transmission to the Beneficial Owners. A holder of a beneficial interest in a Global Note must rely on the procedures of Euroclear and/or Clearstream, Luxembourg and/or any other clearing system and their relevant participants, to receive payments under their relevant Notes. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Holders of beneficial interests in the Global Notes will not have a direct right to take enforcement action against the Issuer under the relevant Notes but will have to rely upon their rights under the Deed of Covenant dated 14 March 2023 (the "**Deed of Covenant**").

Potential conflicts of interest between the investor and the Calculation Agent

Potential conflicts of interest may arise between the Calculation Agent, if any, for a Tranche of Notes and the Holders (including where a Dealer acts as a calculation agent), including with respect to certain discretionary determinations and judgments that such Calculation Agent may make pursuant to the terms and conditions of the Notes that may influence the amount receivable upon redemption of the Notes.

Credit ratings may not reflect all risks

One or more independent credit rating agencies may assign credit ratings to the Notes. The credit ratings may not reflect the potential impact of all risks related to structure, market, additional factors discussed above, and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the rating agency at any time.

In general, European regulated investors are restricted under the CRA Regulation from using credit ratings for regulatory purposes, unless such ratings are issued by a credit rating agency established in the EU and registered under the CRA Regulation (and such registration has not been withdrawn or suspended). Such general restriction will also apply in the case of credit ratings issued by non-EU credit rating agencies, unless the relevant credit ratings are endorsed by an EU-registered credit rating agency or the relevant non-EU rating agency is certified in accordance with the CRA Regulation (and such endorsement action or certification, as the case may be, has not been withdrawn or suspended).

Certain information with respect to the credit rating agencies and ratings will be disclosed in the relevant Final Terms.

The Issuer may redeem the Notes for tax reasons

An optional redemption feature of Notes is likely to limit their market value. During any period when the Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

The Issuer may be expected to redeem Notes if it has or will become obliged to pay additional amounts pursuant to the terms and conditions of the Notes as a result of any change in, or amendment to, the laws or regulations of the Kingdom of Spain or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction) which change or amendment becomes effective on or after the issue date of the relevant Notes and such obligation cannot be avoided by the Issuer taking reasonable measures available to it.

Potential investors should consider the reinvestment risks in light of other investments available at the time any Notes are so redeemed.

Risks in Relation to Spanish Taxation

The Issuer is required to receive certain information relating to the Notes. If such information is not received by the Issuer it will be required to apply Spanish withholding tax to any payment of interest in respect of the relevant Notes, or income arising from the payment of Notes issued below par.

Under Spanish Law 10/2014 and Royal Decree 1065/2007, as amended, payments of income in respect of the Notes will be made without withholding tax in Spain **provided that** the Issue and Paying Agent provides to the Issuer at the relevant time a certificate in the Spanish language substantially in the form set out in Exhibit I, attached hereto.

This information must be provided by the Issue and Paying Agent to the Issuer before the close of business on the Business Day (as defined in the Notes) immediately preceding the date on which any payment of interest, principal or of any amounts in respect of the early redemption of the Notes (each a "**Payment Date**") is due.

The Issuer and the Issue and Paying Agent have arranged certain procedures to facilitate the collection of information concerning the Notes. If, despite these procedures, the relevant information is not received by the Issuer on each Payment Date, the Issuer will instruct the Issue and Paying Agent to withhold tax at the then-applicable rate (as at the date of this Information Memorandum 19 per cent.) from any payment in respect of the relevant Notes. The Issuer will not pay any additional amounts with respect to any such withholding.

The Agency Agreement provides that the Issue and Paying Agent will, to the extent applicable, comply with the relevant procedures to facilitate the collection of information concerning the Notes. See section titled "*Taxation – Taxation in Spain—Information about the Notes in Connection with Payments*".

The procedures may be modified, amended or supplemented to, among other reasons, reflect a change in applicable Spanish law, regulation, ruling or interpretation thereof. None of the Issuer or the Dealers assumes any responsibility therefor.

Royal Decree 1065/2007 of 27 July, as amended, provides that any payment of interest made under securities originally registered in a non-Spanish clearing and settlement entity recognised by Spanish legislation or by the legislation of another OECD country will be made with no withholding or deduction from Spanish taxes **provided that** the relevant information about the Notes is received by the Issuer. In the opinion of the Issuer, payments in respect of the Notes will be made without deduction or withholding of taxes in Spain **provided that** the relevant information about the Notes is submitted by the Issue and Paying Agent to them, notwithstanding the information obligations of the Issuer under general provisions of Spanish tax legislation, by virtue of which identification of Spanish investors may be provided to the Spanish tax authorities.

Notwithstanding the above, in the case of Notes held by Spanish resident individuals (and, under certain circumstances, by Spanish entities subject to Corporate Income Tax) and deposited with a Spanish resident entity acting as depositary or custodian, payments in respect of such Notes may be subject to withholding by such depositary or custodian at the current rate of 19 per cent.

If the Spanish tax authorities maintain a different opinion as to the application by the Issuer of withholding to payments made to Spanish residents (individuals and entities subject to Corporate Income Tax), the Issuer will be bound by that opinion and, with immediate effect, will make the appropriate withholding and the Issuer will not, as a result, pay additional amounts.

Certain benchmark rates, including EURIBOR, may be discontinued or reformed in the future.

The Euro Interbank Offered Rate ("**EURIBOR**") and other interest rates or other types of rates and indices which are deemed to be benchmarks are the subject of ongoing national and international regulatory discussions and proposals for reform. Some of these reforms are already effective whilst others are still to be implemented.

Regulation (EU) No. 2016/1011 (the "**EU BMR**") applies, subject to certain transitional provisions, to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark, within the EU. Regulation (EU) No. 2016/1011 as it forms part of domestic law of the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 (the "**UK BMR**") applies to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark, within the EU and the UK. The EU BMR or the UK BMR, as applicable, could have a material impact on any Notes linked to EURIBOR or another benchmark rate or index, in particular, if the methodology or other terms of the benchmark are changed in order to comply with the terms of the EU BMR or UK BMR, and such changes could (amongst other things) have the effect of reducing or increasing the rate or level, or affecting the volatility of the published rate or level, of the benchmark.

More broadly, any of the international, national or other proposals for reform, or the general increased regulatory scrutiny of benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements. Such

factors may have the effect of discouraging market participants from continuing to administer or contribute to certain benchmarks, trigger changes in the rules or methodologies used in certain benchmarks or lead to the discontinuance or unavailability of quotes of certain "benchmarks".

As an example of such benchmark reforms, on 21 September 2017, the European Central Bank announced that it would be part of a new working group tasked with the identification and adoption of a "risk free overnight rate" which can serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area. On 13 September 2018, the working group on Euro risk-free rates recommended the new Euro short-term rate ("**€STR**") as the new risk-free rate for the euro area. The €STR was published for the first time on 2 October 2019. Although EURIBOR has subsequently been reformed in order to comply with the terms of the EU BMR, it remains uncertain as to how long it will continue in its current form, or whether it will be further reformed or replaced with €STR or an alternative benchmark.

The elimination of EURIBOR or any other benchmark, or changes in the manner of administration of any benchmark, could require or result in an adjustment to the interest calculation provisions of the terms and conditions of the Notes, or result in adverse consequences to holders of any Notes linked to such benchmark (including Floating Rate Notes whose interest rates are linked to EURIBOR or any other such benchmark that is subject to reform). Furthermore, even prior to the implementation of any changes, uncertainty as to the nature of alternative reference rates and as to potential changes to such benchmark may adversely affect such benchmark during the term of the relevant Notes, the return on the relevant Notes and the trading market for securities (including the Notes) based on the same benchmark.

The terms and conditions of the Notes provide for certain fallback arrangements in the event that a published benchmark (including any page on which such benchmark may be published (or any other successor service)) becomes unavailable or a Benchmark Event (as defined in the terms and conditions of the Notes), as applicable, otherwise occurs. Such an event may be deemed to have occurred prior to the issue date for a Series of Notes. Such fallback arrangements include the possibility that the rate of interest could be set by reference to a successor rate or an alternative rate and that such successor rate or alternative reference rate may be adjusted (if required) in accordance with the recommendation of a relevant governmental body or in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to investors arising out of the replacement of the relevant benchmark, although the application of such adjustments to the Notes may not achieve this objective. Any such changes may result in the Notes performing differently (which may include payment of a lower interest rate) than if the original benchmark continued to apply. In certain circumstances the ultimate fallback of interest for a particular Interest Period may result in the rate of interest for the last preceding Interest Period being used.

This may result in the effective application of a fixed rate for Floating Rate Notes based on the rate which was last observed on the Relevant Screen Page. In addition, due to the uncertainty concerning the availability of successor rates and alternative reference rates and the involvement of an Independent Adviser (as defined in the terms and conditions of the Notes) in certain circumstances, the relevant fallback provisions may not operate as intended at the relevant time.

Any such consequences could have a material adverse effect on the value of and return on any such Notes.

Investors should consult their own independent advisers and make their own assessment about the potential risks arising from the possible cessation or reform of certain reference rates in making any investment decision with respect to any Notes linked to or referencing a benchmark.

The market continues to develop in relation to €STR, SARON, SONIA, SOFR and TONA as reference rates for Floating Rates Notes

Where the relevant Final Terms for a Series of Floating Rate Notes identifies that the Rate of Interest for such Notes will be determined by reference to €STR, SARON, SONIA, SOFR or TONA the Rate of Interest will be determined by reference to Compounded Daily €STR, SARON, SONIA or TONA, Weighted Average €STR, SARON, SONIA or TONA, Compounded Daily SOFR (including on the basis of the SOFR Index published on the NY Federal Reserve's Website) or SOFR Arithmetic Mean. In each case such rate will differ from the relevant LIBOR or EURIBOR rate in a number of material respects, including (without limitation) that a compounded daily rate or weighted average rate is a backwards-looking, risk-free overnight rate, and a single daily rate is a risk-free overnight non-term rate, whereas LIBOR and EURIBOR are expressed on the basis of a forward-looking term and include a risk-element based on inter-bank lending.

As such, investors should be aware that LIBOR, EURIBOR, €STR, SARON, SONIA, SOFR and TONA may behave materially differently as interest reference rates for Notes issued under the Programme.

The market continues to develop in relation to €STR, SARON, SONIA, SOFR and TONA as reference rates in the capital markets and their adoption as alternatives to the relevant interbank offered rates. In addition, market participants and relevant working groups are exploring alternative reference rates based on €STR, SARON, SONIA, SOFR or TONA, including term €STR, SARON, SONIA, SOFR and TONA reference rates (which seek to measure the market's forward expectation of an average €STR, SARON, SONIA, SOFR or TONA rate over a designated term). The development of €STR, SARON, SONIA, SOFR and TONA as interest reference rates for the Eurobond markets, as well as continued development of €STR, SARON, SONIA, SOFR and TONA based rates for such market and the market infrastructure for adopting such rates, could result in reduced liquidity or increased volatility or could otherwise affect the market price of the Notes.

The use of €STR, SARON, SONIA, SOFR or TONA as reference rates for Eurobonds continues to develop both in terms of the substance of the calculation and in the development and adoption of market infrastructure for the issuance and trading of bonds referencing €STR, SARON, SONIA, SOFR or TONA. Publication of such reference rates has a limited history. The future performance of €STR, SARON, SONIA, SOFR or TONA may therefore be difficult to predict based on the limited historical performance. The level of €STR, SARON, SONIA, SOFR or TONA during the term of the Notes may bear little or no relation to the historical level of €STR, SARON, SONIA, SOFR or TONA. Prior observed patterns, if any, in the behaviour of market variables and their relation to €STR, SARON, SONIA, SOFR or TONA such as correlations, may change in the future.

The market or a significant part thereof may adopt an application of €STR, SARON, SONIA, SOFR or TONA that differs significantly from that set out in the terms and conditions as applicable to the Notes. Furthermore, the Issuer may, in future, issue Notes referencing €STR, SARON, SONIA, SOFR or TONA that differ materially in terms of interest determination when compared with the Notes. In addition, the manner of adoption or application of €STR, SARON, SONIA, SOFR or TONA reference rates in the Eurobond markets may differ materially compared with the application and adoption of €STR, SARON, SONIA, SOFR or TONA in other markets, such as the derivatives and loan markets. Investors should carefully consider how any mismatch between the adoption of €STR, SARON, SONIA, SOFR or TONA reference rates 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 Notes referencing any such rate.

Furthermore, the Rate of Interest on Notes which reference €STR, SARON, SONIA, SOFR or TONA is only capable of being determined immediately prior to the relevant Interest Payment Date. It may be difficult for investors to estimate reliably the amount of interest which will be payable on the Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which factors could adversely impact the liquidity of the Notes. Further, in contrast to LIBOR-based or EURIBOR-based Notes, if the Notes are redeemed early on a date which is not an Interest Payment Date, the final Rate of Interest payable in respect of the Notes shall be determined by reference to a shortened period ending immediately prior to the date on which the Notes become due and payable.

To the extent the €STR, SARON, SONIA, SOFR or TONA rate is not published, the applicable rate to be used to calculate the Interest Rate on Notes referencing €STR, SARON, SONIA, SOFR or TONA, as applicable, will be determined using the fallback provisions set out in the terms and conditions applicable to the Notes, some of which apply specifically to Notes referencing €STR, SARON, SONIA, SOFR or TONA and are distinct to those applying to other types of Notes. Any of these fallback provisions may result in interest payments that are lower than, or do not otherwise correlate over time with, the payments that would have been made on the Notes if the relevant €STR, SARON, SONIA, SOFR or TONA rate had been so published in its current form. In addition, use of the fallback provisions may result in the effective application of a fixed rate of interest to the Notes.

Risk-free rates may differ from LIBOR and other inter-bank offered rates in a number of material respects and have a limited history

Risk-free rates may differ from The London Interbank Offered Rate ("**LIBOR**") and other inter-bank offered rates in a number of material respects. These include (without limitation) being backwards-looking, in most cases, calculated on a compounded or weighted average basis, risk-free, overnight rates and, in the case of SOFR, secured, whereas such interbank offered rates are generally expressed on the basis of a

forward-looking term, are unsecured and include a risk-element based on interbank lending. As such, investors should be aware that risk-free rates may behave materially differently to interbank offered rates as interest reference rates for the Notes. Furthermore, SOFR and SARON are secured rates that represent overnight secured funding transactions, and therefore will perform differently over time to unsecured rates. For example, since publication of SOFR began on 3 April 2018, daily changes in SOFR have, on occasion, been more volatile than daily changes in comparable benchmarks or other market rates.

Risk-free rates offered as alternatives to interbank offered rates also have a limited history. For that reason, future performance of such rates may be difficult to predict based on their limited historical performance. The level of such rates during the term of the Notes may bear little or no relation to historical levels. Prior observed patterns, if any, in the behaviour of market variables and their relation to such rates such as correlations, may change in the future. Investors should not rely on historical performance data as an indicator of the future performance of such risk-free rates nor should they rely on any hypothetical data.

Furthermore, the interest on Notes which reference a backwards-looking risk-free rate is only capable of being determined immediately prior to the relevant Interest Payment Date. It may be difficult for investors in Notes which reference such risk-free rates reliably to estimate the amount of interest which will be payable on such Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which could adversely impact the liquidity of such Notes. Further, in contrast to Notes linked to interbank offered rates, if Notes referencing backwards-looking rates are redeemed early on a date which is not an Interest Payment Date, the final Rate of Interest payable in respect of such Notes shall be determined by reference to a shortened period ending immediately prior to the date on which the Notes become due and payable or are scheduled for redemption.

The administrator of €STR, SARON, SONIA, SOFR or TONA may make changes that could change the value of €STR, SARON, SONIA, SOFR or TONA or discontinue €STR, SARON, SONIA, SOFR or TONA

The European Central Bank (or a successor) as administrator of €STR, SIX Swiss Exchange AG (or a successor) as administrator of SARON, the Bank of England (or a successor), as administrator of SONIA, the Federal Reserve Bank of New York (or a successor), as administrator of SOFR and the Bank of Japan (or a successor) as administrator of TONA, may make methodological or other changes that could change the value of €STR, SARON, SONIA, SOFR or TONA, respectively, including changes related to the method by which €STR, SARON, SONIA, SOFR or TONA is calculated, eligibility criteria applicable to the transactions used to calculate €STR, SARON, SONIA, SOFR or TONA, or timing related to the publication of €STR, SARON, SONIA, SOFR or TONA. In addition, the administrator may alter, discontinue or suspend calculation or dissemination of €STR, SARON, SONIA, SOFR or TONA (in which case the fallback methods of determining the interest rate on the Notes will apply). The administrators have no obligation to consider the interests of Holders when calculating, adjusting, converting, revising or discontinuing €STR, SARON, SONIA, SOFR or TONA.

There are restrictions on the ability to resell Notes

The Notes have not been registered under the Securities Act, any state securities laws or the laws of any other jurisdiction. Absent such registration, the Notes may be offered or sold only in transactions that are not subject to, or that are exempt from, the registration requirement of the Securities Act and applicable state securities laws.

If an investor holds Notes which are not denominated in the investor's home currency, that investor will be exposed to movements in exchange rates adversely affecting the value of its holding. In addition, the imposition of exchange controls in relation to any Notes could result in an investor not receiving payments on those Notes

The Issuer will pay principal and interest on the Notes in the Specified Currency. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Specified Currency would decrease (i) the Investor's Currency-equivalent yield on the Notes, (ii) the Investor's Currency-equivalent value of the principal payable on the Notes and (iii) the Investor's Currency-equivalent market value of the Notes.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate or the ability of the issuer to make payments in respect of the Notes. As a result, investors may receive less interest or principal than expected, or no interest or principal.

In any winding up of the Issuer, Noteholders may not be entitled to receive the currency of issue of the Notes

Should Noteholders be entitled to any amount with respect to the Notes in any winding-up of the Issuer, Noteholders might not be entitled in those proceedings to a recovery in the currency of issue of the Notes and might be entitled only to a recovery in euro or any other lawful currency of Spain or such other jurisdiction in which the Issuer may then be incorporated.

The taking of actions under Law 11/2015, which partially implements BRRD, and/or the SRM Regulation could materially affect the value of any Notes

The European Bank Recovery and Resolution Directive (Directive 2014/59/EU) (the "**BRRD**") (which has been implemented in Spain through Law 11/2015, of 18 June, on the Recovery and Resolution of Credit Institutions and Investment Firms ("**Law 11/2015**") and Royal Decree 1012/2015, of 6 November, implementing Law 11/2015 ("**Royal Decree 1012/2015**") is designed to provide authorities with tools to intervene in an unsound or failing institution so as to ensure the continuity of the institution's critical financial and economic functions, while minimising the impact of an institution's failure on the economy and financial system. The BRRD further provides that any extraordinary public financial support through additional financial stabilisation tools is only to be used by a Member State as a last resort, after having assessed the resolution tools set out below to the maximum extent possible while maintaining financial stability.

In accordance with Article 20 of Law 11/2015, an institution will be considered as failing or likely to fail in any of the following circumstances: (i) it is, or is likely in the near future to be, in significant breach of its solvency or any other requirements for maintaining its authorisation; (ii) its assets are, or are likely in the near future to be, less than its liabilities; (iii) it is, or is likely in the near future to be, unable to pay its debts as they fall due; or (iv) it requires extraordinary public financial support (except in limited circumstances). The determination that an institution is failing or likely to fail may depend on a number of factors which may be outside of that institution's control.

As provided in the BRRD, Law 11/2015 contains four resolution tools and powers which may be used alone or in combination where the Relevant Resolution Authority considers that (a) an institution is failing or likely to fail, (b) there is no reasonable prospect that any alternative private sector measures would prevent the failure of such institution within a reasonable timeframe, and (c) a resolution action is in the public interest.

The four resolution tools are: (i) sale of business - which enables resolution authorities to direct the sale of the institution or the whole or part of its business on commercial terms; (ii) bridge institution - which enables resolution authorities to transfer all or part of the business of the institution to a "bridge institution" (an entity created for this purpose that is wholly or partially in public control); (iii) asset separation - which enables resolution authorities to transfer impaired or problem assets to one or more publicly owned asset management vehicles to allow them to be managed with a view to maximising their value through eventual sale or orderly wind-down (this can be used together with another resolution tool only); and (iv) bail-in - which gives resolution authorities the power to write down (including to zero) certain claims of unsecured creditors of a failing institution and to convert certain unsecured debt to equity or other securities or obligations (the "**general bail-in tool**"), which equity could also be subject to any application of the relevant resolution tools.

In accordance with Article 48 of Law 11/2015 (and subject to any exclusions that may be applied by the Relevant Resolution Authority under Article 43 of Law 11/2015), in the case of any application of the general bail-in tool, the sequence of any resulting write-down or conversion by the Relevant Resolution Authority shall be as follows: (i) CET1 instruments; (ii) the principal amount of Additional Tier 1 capital instruments; (iii) the principal amount of Tier 2 capital instruments; (iv) the principal amount of other subordinated claims that do not qualify as Additional Tier 1 capital or Tier 2 capital instruments; and (v) the principal or outstanding amount of the bail-inable liabilities (*pasivos susceptibles de recapitalización interna*) prescribed in Article 41 of Law 11/2015 (which would include the Notes). Any application of the

bail-in tool shall be in accordance with the hierarchy of claims in normal insolvency proceedings (unless otherwise provided in applicable banking regulations).

In accordance with Article 64.1.(i) of Law 11/2015, the FROB has also the power to alter the amount of interest payable under debt instruments and other eligible liabilities of institutions subject to resolution proceedings and the date on which the interest becomes payable under the debt instrument (including the power to suspend payment for a temporary period).

The powers set out in the BRRD, as implemented in Spain through Law 11/2015 and Royal Decree 1012/2015 and the SRM Regulation will impact how credit institutions and investment firms are managed as well as, in certain circumstances, the rights of creditors. Holders of Notes may be subject to write-down (including to zero) or conversion into equity on any application of the general bail-in tool. The exercise of powers under the BRRD or any suggestion of such exercise could, therefore, materially adversely affect the rights of Noteholders, the price or value of their investment in any Notes and/or the ability of the Issuer to satisfy their obligations under any Notes.

There may be limited protections, if any, that will be available to holders of securities subject to the general bail-in power (including the Notes) and to the broader resolution powers of the Relevant Resolution Authority. Accordingly, Noteholders may have limited or circumscribed rights to challenge any decision of the Relevant Resolution Authority to exercise its bail-in power.

There remains uncertainty as to how or when the general bail-in power or other resolution tools may be exercised and how it would affect the Group and the Notes. The application of resolution tools and the determination that all or part of the principal amount of the Notes will be subject to loss absorption is likely to be inherently unpredictable and may depend on a number of factors which may be outside of the Bank's control. Although there are proposed pre-conditions for the exercise of the resolution tools, there remains uncertainty regarding the specific factors which the relevant resolution authority would consider in deciding whether to exercise them. In addition, as the relevant resolution authority will retain an element of discretion, holders of the Notes may not be able to refer to publicly available criteria in order to anticipate a potential exercise of any resolution tool. Because of this inherent uncertainty, it will be difficult to predict when, if at all, the exercise of any such powers may occur.

The uncertainty may adversely affect the value of holders' investments in the Notes and the price and trading behaviour of the Notes may be affected by the threat of a possible exercise of any power under Law 11/2015 (including any early intervention measure before any resolution) or any suggestion of such exercise, even if the likelihood of such exercise is remote. Moreover, the relevant resolution authority may exercise any such power without providing any advance notice to the holders.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents shall be deemed to be incorporated in, and to form part of, this Information Memorandum

- The annual report of the Issuer prepared for the year ended 31 December 2022 (the "**2022 Annual Report**"), which contains the English language translation of the audited annual consolidated financial statements of the Issuer prepared under IFRS-EU for the year ended 31 December 2022 (the "**2022 Financial Statements**"), together with the English language translation of the auditor's report, in pages 501 to 807:

<https://www.santander.com/content/dam/santander-com/en/documentos/informe-financiero-anual/2022/ifa-2022-consolidated-annual-financial-report-en.pdf>

- The annual report of the Issuer prepared for the year ended 31 December 2021 (the "**2021 Annual Report**"), which contains the English language translation of the audited annual consolidated financial statements of the Issuer prepared under IFRS-EU for the year ended 31 December 2021 (the "**2021 Financial Statements**"), together with the English language translation of the auditor's report in pages 512 to 807:

<https://www.santander.com/content/dam/santander-com/en/documentos/informe-financiero-anual/2021/ifa-2021-consolidated-annual-financial-report-en.pdf>

In relation to the 2021 Financial Statements, the 2022 Financial Statements and the 2022 Annual Report, any information not specified in the cross-reference tables set out below but which is included in the documents from which the information incorporated by reference has been derived, is for information purposes only and is not incorporated by reference because Banco Santander considers that it is not relevant for the investor.

Issuer Annual Financial Information and Annual Report

The tables below set out the relevant page references in the 2022 Annual Report and the 2021 Annual Report where the following information incorporated by reference in this Information Memorandum can be found:

Information incorporated by reference in this Information Memorandum	2022 Annual Report page reference⁽¹⁾
1. Independent Auditor's report on consolidated annual accounts for the year ended 31 December 2022	503-513
2. Audited consolidated balance sheets at 31 December 2022 and the comparative consolidated financial information of the Issuer at 31 December 2021 and 31 December 2020	514-517
3. Audited consolidated income statements for the year ended 31 December 2022 and the comparative consolidated financial information of the Issuer for the years ended 31 December 2021 and 31 December 2020	518-519
4. Audited consolidated statements of recognised income and expense for the year ended 31 December 2022 and the comparative consolidated financial information of the Issuer for the years ended 31 December 2021 and 31 December 2020.....	520
5. Audited consolidated statements of changes in total equity for the year ended 31 December 2022 and the comparative for the years ended 31 December 2021 and 31 December 2020	521-526
6. Audited consolidated statements of cash flow for the year ended 31 December 2022 and the comparative consolidated cash flow statement of the Issuer for the years ended 31 December 2021 and 31 December 2020.....	527-528
7. Notes to the consolidated annual accounts for the year ended 31 December 2022.....	529-764

Information incorporated by reference in this Information Memorandum		2022 Annual Report page reference⁽¹⁾
8.	2. Ownership structure	CG 166-171 ⁽²⁾
9.	4. Board of directors	CG 179-227 ⁽²⁾
10.	7. Group structure and internal governance	CG 256-258 ⁽²⁾
11.	4. Financial information by segment	EFR 356-398 ⁽³⁾
12.	8. Alternative Performance Measures (APMs)	EFR 410-418 ⁽³⁾
13.	Glossary	GL 497-500 ⁽⁴⁾
14.	General Information	GL 808-809 ⁽⁵⁾

Notes:

- (1) Not all the pages of the 2022 Annual Report are paginated continuously. See Notes below for detailed indications on where the relevant sections incorporated by reference in this Information Memorandum are located.
- (2) "CG" corresponds to the section entitled "Corporate Governance" of the 2022 Annual Report located immediately after the section entitled "Responsible banking" and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (3) "EFR" corresponds to the sub-section entitled "Economic Financial Review" of the 2022 Annual Report located immediately after the section entitled "Corporate governance" (see note (2) above) and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (4) "GL" corresponds to the sub-section entitled "Glossary" of the 2022 Annual Report located immediately after the section entitled "Strategic risk" and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (5) "GI" corresponds to the section entitled "General Information" of the 2022 Annual Report located immediately after the Glossary and the page reference is to the page number appearing in the bottom left of such section.

Information incorporated by reference in this Information Memorandum		2021 Annual Report page reference⁽¹⁾
1.	Independent Auditor's report on consolidated financial statements for the year ended 31 December 2021	514-524
2.	Audited consolidated balance sheets at 31 December 2021 and the comparative consolidated financial information of the Issuer at 31 December 2020 and 31 December 2019	525-528
3.	Audited consolidated income statements for the year ended 31 December 2021 and the comparative consolidated financial information of the Issuer for the years ended 31 December 2020 and 31 December 2019	529-530
4.	Audited consolidated statements of recognised income and expense for the year ended 31 December 2021 and the comparative consolidated financial information of the Issuer for the years ended 31 December 2020 and 31 December 2019	531
5.	Audited consolidated statements of changes in total equity for the year ended 31 December 2021 and the comparative for the years ended 31 December 2020 and 31 December 2019	532-537
6.	Audited consolidated statements of cash flow for the year ended 31 December 2021 and the comparative consolidated cash flow statement of the Issuer for the years ended 31 December 2020 and 31 December 2019	538-539
7.	Notes to the consolidated financial statements for the year ended 31 December 2021.	540-766
8.	2. Ownership structure	CG 188-192 ⁽²⁾

Information incorporated by reference in this Information Memorandum		2021 Annual Report page reference⁽¹⁾
9.	4. Board of directors	CG 200-246 ⁽²⁾
10.	7. Group structure and internal governance	CG 273-275 ⁽²⁾
11.	4. Financial information by segments	EFR 368-409 ⁽³⁾
12.	8. Alternative Performance Measures (APMs)	EFR 421-429 ⁽³⁾
13.	Glossary	GL 504-511 ⁽⁴⁾
14.	General Information	GI 808-809 ⁽⁵⁾

Notes:

- (1) Not all the pages of the 2021 Annual Report are paginated continuously. See Notes below for detailed indications on where the relevant sections incorporated by reference in this Information Memorandum are located.
- (2) "CG" corresponds to the section entitled "Corporate Governance" of the 2021 Annual Report located immediately after the section entitled "Responsible banking" and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (3) "EFR" corresponds to the sub-section entitled "Economic Financial Review" of the 2021 Annual Report located immediately after the section entitled "Corporate governance" (see note (2) above) and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (4) "GL" corresponds to the sub-section entitled "Glossary" of the 2021 Annual Report located immediately after the section entitled "Strategic risk" and page references are to the page numbers appearing in the bottom left or right corner, as applicable, of each page in such section.
- (5) "GI" corresponds to the section entitled "General Information" of the 2021 Annual Report located immediately after the Glossary and the page reference is to the page number appearing in the bottom left of such section.

The information on the corporate website of the Issuer does not form part of this Information Memorandum unless that information is incorporated by reference into this Information Memorandum.

Copies of the documents specified above as containing information incorporated by reference in this Information Memorandum may be inspected, free of charge, at the specified offices of the Issuing and Paying Agent, the initial specified offices of which are set out below. Copies of such documents are also available for inspection at Euronext Dublin.

Any information contained in any of the documents specified above which is not incorporated by reference in this Information Memorandum is either not relevant to investors or is covered elsewhere in this Information Memorandum.

KEY FEATURES OF THE PROGRAMME

Issuer:	Banco Santander, S.A.
Legal entity identifier (LEI):	5493006QMFDDMYWIAM13
Risk Factors:	Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the abilities of the Issuer to fulfil their respective obligations under the Notes are discussed under " <i>Risk Factors</i> ", above.
Arranger:	Barclays Bank Ireland PLC
Dealers:	Banco Santander, S.A., Barclays Bank Ireland PLC, Citigroup Global Markets Limited, Citigroup Global Markets Europe AG, Coöperatieve Rabobank U.A., Crédit Agricole Corporate and Investment Bank, Credit Suisse Bank (Europe), S.A., ING Bank N.V., J.P. Morgan SE, Société Générale, UBS Europe SE and any other Dealer appointed from time to time by the Issuer either generally in respect of the Programme or in relation to a particular issue of Notes.
Issuing and Paying Agent:	Citibank N.A., London Branch
Listing Agent:	A&L Listing Limited
Programme Amount:	The aggregate principal amount of Notes outstanding and guaranteed at any time will not exceed €20,000,000,000 or its equivalent in alternative currencies subject to applicable legal and regulatory requirements. The Programme Amount may be increased from time to time in accordance with the Dealer Agreement.
Currencies:	Notes may be issued in Australian Dollars, Canadian Dollars, Euro, Japanese Yen, New Zealand Dollars, Sterling, Swiss Francs and United States Dollars and such other currencies as may be agreed between the Issuer and the relevant Dealer(s) from time to time and subject to the necessary regulatory requirements having been satisfied.
Denominations:	<p>Global Notes shall be issued (and interests therein exchanged for Definitive Notes, if applicable) in the following minimum denominations (or integral multiples thereof):</p> <ul style="list-style-type: none">(a) for U.S.\$ Notes, U.S.\$500,000;(b) for euro Notes, €500,000;(c) for Sterling Notes, £100,000;(d) for Yen Notes, Yen 100,000,000;(e) for Swiss franc Notes, CHF 500,000;(f) for Australian dollar Notes, A\$1,000,000;(g) for Canadian dollar Notes, C\$500,000; or(h) for New Zealand dollar Notes, NZ\$1,000,000, <p>or such other conventionally accepted denominations in those currencies (including, in addition to those listed above, Danish kroner, Swedish kroner and Norwegian kroner) as may be agreed between the Issuer and the relevant Dealer from time to time, subject</p>

in each case to compliance with all applicable legal and regulatory requirements and **provided that** the equivalent of that denomination in Sterling as at the Issue Date is not less than £100,000.

Maturity of the Notes: Not less than 1 nor more than 364 days, subject to legal and regulatory requirements.

Tax Redemption: Early redemption will only be permitted for tax reasons as described in the terms of the Notes.

Redemption on Maturity: The Notes will be redeemed at par.

Issue Price: The Issue Price of each issue of interest bearing Notes (and, in the case of discount Notes, the discount rate) will be as set out in the relevant Final Terms.

Status of the Notes: The payment obligations of the Issuer pursuant to the Notes constitute and at all times shall constitute direct, unconditional, unsubordinated and unsecured obligations (*créditos ordinados*) of the Issuer, and, in accordance with Additional Provision 14.2° of Law 11/2015, but subject to any other ranking that may apply as a result of any mandatory provision of law (or otherwise), upon the insolvency of the Issuer (and unless they qualify as subordinated debts (*créditos subordinados*) under article 281 of the restated text of the Spanish Insolvency Law, approved by Legislative Royal Decree 1/2020, of 5 May (the "**Insolvency Law**") or equivalent legal provision which replaces it in the future), such payment obligations in respect of principal rank (a) *pari passu* and rateably without any preference among themselves and with any Senior Higher Priority Liabilities and (b) senior to (i) Senior Non Preferred Liabilities and (ii) any present and future subordinated obligations (*créditos subordinados*) of the Issuer in accordance with article 281 of the Insolvency Law.

"**Law 11/2015**" means Law 11/2015, of 18 June, on recovery and resolution of credit institutions and investment firms, as amended from time to time.

"**Senior Higher Priority Liabilities**" means any obligations in respect of principal of the Issuer under any Notes and any other unsecured and unsubordinated obligations (*créditos ordinarios*) of the Issuer, other than the Senior Non Preferred Liabilities; and

"**Senior Non Preferred Liabilities**" means any unsubordinated and unsecured senior non preferred obligations (*créditos ordinarios no preferentes*) of the Issuer under Additional Provision 14.2° of Law 11/2015, and any other obligations which, by law and/or by their terms, and to the extent permitted by Spanish law, rank *pari passu* with the Senior Non Preferred Liabilities.

Ratings: Tranches of Notes may be rated or unrated and, if rated, such ratings will be specified in the relevant Final Terms. Whether or not each credit rating applied for in relation to a relevant Tranche of Notes will be issued by a credit rating agency established in the EU and registered under the CRA Regulation will be disclosed in the relevant Final Terms.

A security rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Taxation:	All payments under the Notes will be made without deduction or withholding for or on account of any present or future Spanish withholding taxes, except as stated in the Notes and as stated under the heading " <i>Taxation - Taxation in Spain</i> ".
Information requirements under Spanish Tax Law:	<p>Under Spanish Law 10/2014 and Royal Decree 1065/2007, as amended, the Issuer is required to receive certain information relating to the Notes.</p> <p>If the Issue and Paying Agent fails to provide the Issuer with the required information described under "<i>Taxation in Spain—Information about the Notes in Connection with Payments</i>", the Issuer will be required to instruct the Issue and Paying Agent to withhold tax and may pay income in respect of the relevant Notes net of the Spanish withholding tax applicable to such payments (as at the date of the Information Memorandum, 19 per cent.).</p> <p>None of the Issuer, the Arranger, the Dealers or the European clearing systems assumes any responsibility therefor.</p>
Form of the Notes:	The Notes will be in bearer form. Each issue of Notes will initially be represented by one or more global notes (each a " Global Note ", and together the " Global Notes "). Each Global Note which is not intended to be issued in new global note form (a " Classic Global Note " or " CGN "), as specified in the relevant Final Terms, will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system and each Global Note which is intended to be issued in new global note form (a " New Global Note " or " NGN "), as specified in the relevant Final Terms, will be deposited on or around the relevant issue date with a common safekeeper for Euroclear and/or Clearstream, Luxembourg. Global Notes will be exchangeable for Definitive Notes in whole, but not in part, in the limited circumstances set out in the Global Notes (see " <i>Certain Information in Respect of the Notes - Forms of Notes</i> ").
Listing and Trading:	Each issue of Notes may be admitted to the Official List and admitted to trading on the regulated market of Euronext Dublin and/or listed, traded and/or quoted on any other listing authority, stock exchange and/or quotation system as the Issuer may decide. The Issuer shall be responsible for any fees incurred therewith. The Issuer shall notify the relevant Dealer of any change of listing venue in accordance with the Dealer Agreement. No Notes may be issued on an unlisted basis.
Delivery:	The Notes will be available in London for delivery to Euroclear or Clearstream, Luxembourg or to any other recognised clearing system (as its nominee or depositary) in which the Notes may from time to time be held.
Selling Restrictions:	The offering and sale of the Notes is subject to all applicable selling restrictions including, without limitation, those of the United States of America, the United Kingdom, Japan, Singapore, Spain, Switzerland, Belgium, Italy and France (see " <i>Subscription and Sale</i> ").
Governing Law:	The status of the Notes, the exercise of the Bail-in Power by the Relevant Resolution Authority, the capacity of the Issuer and the relevant corporate resolutions shall be governed by Spanish law. Any non-contractual obligations arising out of or in connection with the Notes, the terms and conditions of the Notes and all related

contractual documentation will be governed by, and construed in accordance with, English law.

Use of Proceeds:

The net proceeds of the issue of the Notes will be deposited on a permanent basis with Banco Santander and will be used for the general funding purposes of the Group.

BANCO SANTANDER, S.A.

The description of the Issuer is set out in certain sections of the 2022 Annual Report. These sections have been incorporated by reference into this Information Memorandum (see "*Documents Incorporated by Reference*"), which provides a table reconciling the content of this section with the corresponding page number(s) of the 2022 Annual Report containing such information.

CERTAIN INFORMATION IN RESPECT OF THE NOTES

Key Information

The persons involved in the Programme and the capacities in which they act are specified at the end of this Information Memorandum.

The net proceeds of the issue of each issue of Notes will be deposited on a permanent basis with the Issuer and will be used for the general funding purposes of the Group.

Information Concerning the Securities to be admitted to Trading

Total amount of Notes Admitted to Trading

The aggregate amount of each issue of Notes on the date of issue of such Notes will be set out in the applicable Final Terms.

The maximum aggregate principal amount of Notes which may be outstanding and guaranteed at any one time is €20,000,000,000 (or its equivalent in other currencies). Such amount may be increased from time to time in accordance with the Dealer Agreement.

Type and Class of Notes

Notes will be issued in tranches. Global Notes shall be issued (and interests therein exchanged for Definitive Notes, if applicable) in the following minimum denominations (or integral multiples thereof):

- (a) for U.S.\$ Notes, U.S.\$500,000;
- (b) for euro Notes, €500,000;
- (c) for Sterling Notes, £100,000;
- (d) for Yen Notes, Yen 100,000,000;
- (e) for Swiss franc Notes, CHF 500,000;
- (f) for Australian dollar Notes, A\$1,000,000;
- (g) for Canadian dollar Notes, C\$500,000; or
- (h) for New Zealand dollar Notes, NZ\$1,000,000,

or such other conventionally accepted denominations in those currencies (including, in addition to those listed above, Danish kroner, Swedish kroner and Norwegian kroner) as may be agreed between the Issuer and the relevant Dealer from time to time, subject in each case to compliance with all applicable legal and regulatory requirements and **provided that** the equivalent of that denomination in Sterling as at the Issue Date is not less than £100,000.

The international security identification number of each issue of Notes will be specified in the relevant Final Terms.

Legislation under which the Notes and the Deed of Covenant have been created

The status of the Notes, the exercise of the Bail-in Power by the Relevant Resolution Authority, the capacity of the Issuer and the relevant corporate resolutions shall be governed by Spanish law. Any non-contractual obligations arising out of or in connection with the Notes, the terms and conditions of the Notes and all related contractual documentation will be governed by, and construed in accordance with, English law.

Form of the Notes

The Notes will be in bearer form. Each issue of Notes will initially be represented by a Global Note and, in the case of a Global Note which is not intended to be issued in new global note ("NGN") form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Notes with a

depository or common depository for Euroclear and/or Clearstream, Luxembourg and/or any other relevant clearing system. Each Global Note which is intended to be issued in NGN form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Notes with a common safekeeper for Euroclear and/or Clearstream, Luxembourg. Each Global Note may, if so specified in the relevant Final Terms, be exchangeable for Notes in definitive bearer form in the limited circumstances specified in the relevant Global Note.

On 13 June 2006 the ECB announced that Notes in NGN form are in compliance with the "Standards for the use of EU securities settlement systems in ESCB credit operations" of the central banking system for the euro (the "**Eurosystem**"), **provided that** certain other criteria are fulfilled. At the same time the ECB also announced that arrangements for Notes in NGN form will be offered by Euroclear and Clearstream, Luxembourg as of 30 June 2006 and that debt securities in global bearer form issued through Euroclear and Clearstream, Luxembourg after 31 December 2006 will only be eligible as collateral for Eurosystem operations if the NGN form is used.

Currency of the Notes

Notes may be issued in Australian Dollars, Canadian Dollars, Euro, Japanese Yen, New Zealand Dollars, Sterling, Swiss Francs and United States Dollars and such other currencies as may be agreed between the Issuer and the relevant Dealer(s) from time to time and subject to the necessary regulatory requirements having been satisfied.

Status of the Notes

The payment obligations of the Issuer pursuant to the Notes constitute and at all times shall constitute direct, unconditional, unsubordinated and unsecured obligations (*créditos ordinados*) of the Issuer, and, in accordance with Additional Provision 14.2^o of Law 11/2015, but subject to any other ranking that may apply as a result of any mandatory provision of law (or otherwise), upon the insolvency of the Issuer (and unless they qualify as subordinated debts (*créditos subordinados*) under article 281 of the restated text of the Spanish Insolvency Law, approved by Legislative Royal Decree 1/2020, of 5 May (the "**Insolvency Law**") or equivalent legal provision which replaces it in the future), such payment obligations in respect of principal rank (a) *pari passu* and rateably without any preference among themselves and with any Senior Higher Priority Liabilities and (b) senior to (i) Senior Non Preferred Liabilities and (ii) any present and future subordinated obligations (*créditos subordinados*) of the Issuer in accordance with article 281 of the Insolvency Law.

"**Law 11/2015**" means Law 11/2015, of 18 June, on recovery and resolution of credit institutions and investment firms, as amended from time to time.

"**Senior Higher Priority Liabilities**" means any obligations in respect of principal of the Issuer under any Notes and any other unsecured and unsubordinated obligations (*créditos ordinarios*) of the Issuer, other than the Senior Non Preferred Liabilities; and

"**Senior Non Preferred Liabilities**" means any unsubordinated and unsecured senior non preferred obligations (*créditos ordinarios no preferentes*) of the Issuer under Additional Provision 14.2^o of Law 11/2015 and any other obligations which, by law and/or by their terms, and to the extent permitted by Spanish law, rank *pari passu* with the Senior Non Preferred Liabilities.

In the event of insolvency (*concurso*) of the Issuer, under the Insolvency Law, claims relating to the Notes (unless they qualify as subordinated credits (*créditos subordinados*) under the limited events regulated by Article 281 of the Insolvency Law) will be ordinary credits (*créditos ordinarios*) as defined in the Insolvency Law. The claims that qualify as subordinated credits under the limited events regulated by Article 281 of the Insolvency Law include, but are not limited to, any accrued and unpaid non-secured interests due in respect of any Notes at the commencement of an insolvency proceeding (*concurso*) of the Issuer (including, for Notes sold at a discount, the amortisation of the original issue discount from (and including) the date of issue to (but excluding) the date upon which the insolvency proceeding (*concurso*) of the Issuer commenced). Ordinary credits rank below credits against the insolvency estate (*créditos contra la masa*) and credits with a privilege (*créditos privilegiados*). Ordinary credits rank above subordinated credits and the rights of shareholders. Under Spanish law, accrual of non-secured interests shall be suspended from the date of any declaration of insolvency.

Rights attaching to the Notes

Each issue of Notes will be the subject of Final Terms which, for the purposes of that issue only, supplements the terms and conditions set out in the relevant Global Note or, as the case may be, definitive Notes and must be read in conjunction with the relevant Notes. See "*Forms of Notes*" and "*Form of Final Terms*".

Maturity of the Notes

The Maturity Date applicable to each issue of Notes will be specified in the relevant Final Terms. The Maturity Date of an issue of Notes may not be less than one day nor more than 364 days, subject to applicable legal and regulatory requirements.

Optional Redemption for Tax Reasons

The Issuer may redeem Notes (in whole but not in part) if they have or will become obliged to pay additional amounts pursuant to the terms and conditions of the Notes as a result of any change in, or amendment to, the laws or regulations of the Kingdom of Spain or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction) which change or amendment becomes effective on or after the issue date of the relevant Notes and such obligation cannot be avoided by the Issuer taking reasonable measures available to them.

Prescription

Claims for payment of principal and interest in respect of the Notes shall become prescribed and void unless made, in the case of principal, within ten years after the Maturity Date (or, as the case may be, the Relevant Date) or, in the case of interest, five years after the relevant Interest Payment Date in each case as specified in the relevant Final Terms.

Yield Basis

Notes may be issued on the basis that they will be interest bearing or they may be issued at a discount (in which case they will not bear interest). The yield basis in respect of Notes bearing interest at a fixed rate will be set out in the relevant Final Terms.

Authorisations and approvals

The update of the Programme and the issuance of Notes pursuant thereto was authorised by resolutions of the Executive Committee of Banco Santander passed on 20 February 2023.

The Issuer has obtained or will obtain from time to time all necessary consents, approvals and authorisations in connection with the issue and performance of the Notes and the giving of the guarantee relating to them.

Admission to Trading and Dealing Arrangements

Application has been made to Euronext Dublin for Notes issued under the Programme during the period of twelve months after the date of this Information Memorandum to be admitted to the Official List and to trading on the regulated market of Euronext Dublin. Notes may be listed, traded and/or quoted on any other listing authority, stock exchange and/or quotations system, as the Issuer may decide. The Issuer shall be responsible for any fees incurred therewith. The Issuer shall notify the relevant Dealer of any change of listing venue in accordance with the Dealer Agreement. No Notes may be issued on an unlisted basis.

Citibank N.A., London Branch at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, UK, is the Issuing and Paying Agent in respect of the Notes.

Expense of the Admission to Trading

An estimate of the expenses in relation to the admission to trading of each issue of Notes will be specified in the relevant Final Terms.

Additional Information

The legal advisers and capacity in which they act are specified at the end of this Information Memorandum.

As at the date of this Information Memorandum, the Programme's short-term public credit rating is as follows:

S&P Global Ratings Europe Limited: A-1

Fitch Ratings Ireland Spanish Branch, Sucursal en España: F1

Moody's Investors Service España, S.A.: P-1

The credit ratings assigned to the Notes to be issued under the Programme will be set out in the relevant Final Terms.

A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, charge or withdrawal at any time by the assigning rating agency.

FORMS OF NOTES

PART A– FORM OF MULTICURRENCY GLOBAL NOTE

THE SECURITIES REPRESENTED BY THIS GLOBAL NOTE AND THE GUARANTEE HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**") OR ANY U.S. STATE SECURITIES LAWS AND MAY NOT BE OFFERED, SOLD OR DELIVERED WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT) UNLESS AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT IS AVAILABLE AND IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES AND ANY OTHER JURISDICTION. THIS LEGEND SHALL CEASE TO APPLY UPON THE EXPIRY OF THE PERIOD OF 40 DAYS AFTER THE COMPLETION OF THE DISTRIBUTION OF ALL THE SECURITIES OF THE TRANCHE OF WHICH THIS SECURITY FORMS PART.

BANCO SANTANDER, S.A.

(LEI: 5493006QMFDDMYWIAM13)

(Incorporated with limited liability in the Kingdom of Spain)

€20,000,000,000

EURO-COMMERCIAL PAPER PROGRAMME

1. For value received, Banco Santander, S.A. (the "**Issuer**") promises to pay to the bearer of this Global Note on the Maturity Date set out in the Final Terms or on such earlier date as the same may become payable in accordance with paragraph 4 below (the "**Relevant Date**"), the aggregate Nominal Amount or, as the case may be, the Redemption Amount set out in the Final Terms, together with interest thereon, if this is an interest bearing Global Note, at the rate and at the times (if any) specified herein and in the Final Terms. Terms defined in the Final Terms attached hereto but not otherwise defined in this Global Note shall have the same meaning in this Global Note.

All such payments shall be made in accordance with an amended and restated issuing and paying agency agreement (the "**Agency Agreement**") dated 14 March 2023 (as amended and restated or supplemented from time to time) between the Issuer and Citibank N.A., London Branch as issue agent and as principal paying agent (the "**Issuing and Paying Agent**"), a copy of which is available for inspection at the offices of the Issuing and Paying Agent at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, UK and subject to and in accordance with the terms and conditions set forth below. All such payments shall be made (upon presentation and surrender (as the case may be) of this Global Note to the bearer through Euroclear Bank SA/NV and Clearstream Banking S.A. or any other relevant clearing system or, if this Global Note has been exchanged for bearer definitive Notes pursuant to paragraph 11, by transfer to an account denominated in the Specified Currency set out in the Final Terms maintained by the bearer in the principal financial centre in the country of that currency or, in the case of a Global Note denominated in Euro, by Euro cheque drawn on, or by transfer to a Euro account (or any other account to which Euro may be credited or transferred) maintained by the payee with, a bank in the principal financial centre of any Member State of the European Union.

Notwithstanding the foregoing, presentation and surrender of this Global Note shall be made outside the United States and no amount shall be paid by transfer to an account in the United States, or mailed to an address in the United States. In the case of a Global Note denominated in U.S. dollars, payments shall be made by transfer to an account denominated in U.S. Dollars in the principal financial centre of any country outside of the United States that the Issuer or Issuing and Paying Agent so chooses.

2. If the Final Terms specify that the New Global Note form is applicable, this Global Note shall be a "**New Global Note**" or "**NGN**" and the aggregate Nominal Amount of Notes represented by this Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs (as defined below). The records of the ICSDs (which expression in this Global Note means the records that each ICSD holds for its customers which reflect the amount of such customers' interests in the Notes (but excluding any interest in any Notes of one ICSD shown in the records

of another ICSD)) shall be conclusive evidence of the aggregate Nominal Amount of Notes represented by this Global Note and, for these purposes, a statement issued by an ICSD (which statement shall be made available to the bearer upon request) stating the aggregate Nominal Amount of Notes represented by this Global Note at any time shall be conclusive evidence of the records of the ICSD at that time.

If the Final Terms specify that the New Global Note form is not applicable, this Global Note shall be a "**Classic Global Note**" or "**CGN**" and the aggregate Nominal Amount of Notes represented by this Global Note shall be the aggregate Nominal Amount stated in the Final Terms or, if lower, the aggregate Nominal Amount most recently entered by or on behalf of the Issuer in the relevant column in the Schedule hereto.

3. All payments in respect of this Global Note by or on behalf of the Issuer shall be made without set-off, counterclaim, fees, liabilities or similar deductions and free and clear of, and without deduction or withholding for or on account of, taxes, levies, duties, assessments or charges of any nature now or hereafter imposed, levied, collected, withheld or assessed by or on behalf of the Kingdom of Spain or any political subdivision thereof or any taxing authority or agency thereof or therein ("**Taxes**"). If the Issuer or any agent thereof is required by law or regulation to make any deduction or withholding for or on account of Taxes, the Issuer shall, to the extent permitted by applicable law or regulation, pay such additional amounts as shall be necessary in order that the net amounts received by the bearer of this Global Note or the holder or beneficial owner of any interest herein or rights in respect hereof (each, a "**Beneficial Owner**") after such deduction or withholding shall equal the amount which would have been receivable hereunder in the absence of such deduction or withholding, except that the Issuer shall not be required to pay any additional amounts in relation to any payment:
 - (i) to, or to a third party on behalf of, a Beneficial Owner of a Note who is liable for such taxes, duties, assessments or governmental charges in respect of such Note by reason of his having some connection with Spain other than the mere holding of such Note; or
 - (ii) to, or to a third party on behalf of, a holder in respect of whose Notes the Issuer does not receive such information as may be required in order to comply with the applicable Spanish tax reporting obligations; or
 - (iii) in respect of any Note presented for payment more than fifteen days after the Maturity Date (or, as the case may be, the Relevant Date) or, if applicable, the relevant Interest Payment Date or (in either case) the date on which the payment hereof is duly provided for, whichever occurs later, except to the extent that the relevant holder would have been entitled to such additional amounts on presenting the same for payment on the expiry of such period of fifteen days.
4. The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 14 days notice to the holders (which notice shall be irrevocable), at the Redemption Amount specified in the Final Terms, together with (if this Note is an interest bearing Note) interest accrued to the date fixed for redemption, if:
 - (a) the Issuer has or will become obliged to pay additional amounts as provided or referred to in paragraph 3 as a result of any change in, or amendment to, the laws or regulations of the Kingdom of Spain or any political subdivision thereof or any authority or agency thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date specified in the Final Terms; and
 - (b) such obligation cannot be avoided by the Issuer taking reasonable measures available to it;

provided, however, that no such notice of redemption shall be given earlier than 14 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Issuing and Paying Agent:

- (a) a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred; and
- (b) an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Upon the expiry of any such notice as is referred to in this paragraph, the Issuer shall be bound to redeem the Notes in accordance with this paragraph.

5. The Issuer may at any time purchase Notes in the open market or otherwise and at any price **provided that** all unmatured interest coupons (if this Global Note is an interest bearing Global Note) are purchased therewith.
6. All Notes so purchased by the Issuer otherwise than in the ordinary course of business of dealings in securities or as a nominee shall be cancelled and shall not be reissued or resold. All Notes so purchased by any subsidiary of the Issuer may be cancelled, held by such subsidiary or resold.
7. On each occasion on which:
 - (i) *Definitive Notes*: Notes in definitive form are delivered; or
 - (ii) *Cancellation*: Notes represented by this Global Note are to be cancelled in accordance with paragraph 6,

the Issuer shall procure that:

- (a) if the Final Terms specify that the New Global Note form is not applicable, (i) the aggregate principal amount of such Notes; and (ii) the remaining aggregate Nominal Amount of Notes represented by this Global Note (which shall be the previous aggregate Nominal Amount hereof less the aggregate of the amount referred to in (i) above) are entered in the Schedule hereto, whereupon the aggregate Nominal Amount of Notes represented by this Global Note shall for all purposes be as most recently so entered; and
 - (b) if the Final Terms specify that the New Global Note form is applicable, details of the exchange or cancellation shall be entered *pro rata* in the records of the ICSDs and the aggregate Nominal Amount of the Notes entered in the records of the ICSDs and represented by this Global Note shall be reduced by the principal amount so exchanged or cancelled.
8. The payment obligations of the Issuer represented by this Global Note constitute and at all times shall constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer and upon insolvency of the Issuer (and unless they qualify as subordinated debts (*créditos subordinados*) under article 281 of the restated text of the Spanish Insolvency Law, approved by Legislative Royal Decree 1/2020, of 5 May (the "**Insolvency Law**") or equivalent legal provision which replaces it in the future, and subject to any applicable legal and statutory exceptions), rank (a) *pari passu* and rateably without any preference among themselves and with any Senior Higher Priority Liabilities and (b) senior to (i) Senior Non Preferred Liabilities and (ii) any present and future subordinated obligations (*créditos subordinados*) of the Issuer in accordance with article 281 of the Insolvency Law.

"**Law 11/2015**" means Law 11/2015 of 18 June on recovery and resolution of credit institutions and investment firms, as amended or superseded from time to time;

"**Senior Higher Priority Liabilities**" means any obligations in respect of principal of the Issuer under any Notes and any other unsecured and unsubordinated obligations (*créditos ordinarios*) of the Issuer, other than the Senior Non Preferred Liabilities; and

"Senior Non Preferred Liabilities" means any unsubordinated and unsecured senior non preferred obligations (*créditos ordinarios no preferentes*) of the Issuer under Additional Provision 14.2° of Law 11/2015 and any other obligations which, by law and/or by their terms, and to the extent permitted by Spanish law, rank *pari passu* with the Senior Non Preferred Liabilities.

9. If the Maturity Date (or, as the case may be, the Relevant Date) or, if applicable, the relevant Interest Payment Date, is not a Payment Business Day (as defined herein) payment in respect hereof will not be made and credit or transfer instructions shall not be given until the next following Payment Business Day unless that date falls more than 364 days after the Issue Date, in which case payment shall be made on the immediately preceding Payment Business Day, and the bearer of this Global Note shall not be entitled to any interest or other sums in respect of such postponed payment.

As used in this Global Note:

"Payment Business Day" means any day other than a Saturday or Sunday which is either (i) if the Specified Currency set out in the Final Terms is any currency other than Euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the Specified Currency set out in the Final Terms (which, if the Specified Currency is Australian dollars, shall be Sydney) or (ii) if the Specified Currency set out in the Final Terms is Euro, a day which is a TARGET Business Day; and

"TARGET2" means the Trans-European Automated Real-time Gross Settlement Express Transfer payment system which utilises a single shared platform and which was launched on 19 November 2007; and

"TARGET Business Day" means any day on which TARGET2 is open for the settlement of payments in Euro.

10. This Global Note is negotiable and, accordingly, title hereto shall pass by delivery and the bearer shall be treated as being absolutely entitled to receive payment upon due presentation hereof (notwithstanding any notation of ownership or other writing thereon or notice of any previous loss or theft thereof).
11. This Global Note is issued in respect of an issue of Notes of the Issuer and is exchangeable in whole (but not in part only) for duly executed and authenticated bearer Notes in definitive form (whether before, on or, subject as provided below, after the Maturity Date):
- (a) if Euroclear Bank SA/NV ("**Euroclear**") or Clearstream Banking S.A. ("**Clearstream, Luxembourg**", together with Euroclear, the international central securities depositories or "**ICSDs**") or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease to do business or does so in fact; or
 - (b) if default is made in the payment of any amount payable in respect of this Global Note; or
 - (c) the Notes are required to be removed from Euroclear, Clearstream, Luxembourg, or any other clearing system and no suitable (in the determination of the Issuer) alternative clearing system is available.

Upon presentation and surrender of this Global Note during normal business hours to the Issuer at the offices of the Issuing and Paying Agent (or to any other person or at any other office outside the United States as may be designated in writing by the Issuer to the bearer), the Issuing and Paying Agent shall authenticate and deliver, in exchange for this Global Note, bearer definitive notes denominated in the Specified Currency set out in the Final Terms in an aggregate nominal amount equal to the aggregate Nominal Amount of this Global Note.

12. If, upon any such default and following such surrender, definitive Notes are not issued in full exchange for this Global Note before 5.00 p.m. (London time) on the thirtieth day after surrender, this Global Note (including the obligation hereunder to issue definitive notes) will become void and the bearer will have no further rights under this Global Note (but without prejudice to the rights

which the bearer or any other person may have under a Deed of Covenant dated 14 March 2023 entered into by the Issuer).

13. If this is an interest bearing Global Note, then:
- (a) notwithstanding the provisions of paragraph 1 above, if any payment of interest in respect of this Global Note falling due for payment prior to the Maturity Date remains unpaid on the fifteenth day after falling so due, the amount referred to in paragraph 1 shall be payable on such fifteenth day;
 - (b) upon each payment of interest (if any) prior to the Maturity Date in respect of this Global Note, the Issuer shall procure that:
 - (i) if the Final Terms specify that the New Global Note form is not applicable, the Schedule hereto shall be duly completed by the Issuing and Paying Agent to reflect such payment; and
 - (ii) if the Final Terms specify that the New Global Note form is applicable, details of such payment shall be entered *pro rata* in the records of the ICSDs.
14. If this is a fixed rate interest bearing Global Note, interest shall be calculated on the aggregate Nominal Amount as follows:
- (a) interest shall be payable on the aggregate Nominal Amount in respect of each successive Interest Period (as defined below) from (and including) the Issue Date to (but excluding) the Maturity Date (or, as the case may be, to the Relevant Date), in arrears on the relevant Interest Payment Date, on the basis of the Day Count Convention specified in the Final Terms or, if none is specified, on the basis of the actual number of days in such Interest Period and a year of 360 days or, if this Global Note is denominated in Sterling, Australian Dollars or Canadian Dollars, 365 days at the Rate of Interest specified in the Final Terms with the resulting figure being rounded to the nearest amount of the Specified Currency which is available as legal tender in the country or countries (in the case of the Euro) of the Specified Currency (with halves being rounded upwards); and
 - (b) the period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is an "**Interest Period**" for the purposes of this paragraph.
15. If this is a floating rate interest bearing Global Note, interest shall be calculated on the aggregate Nominal Amount as follows:
- (a) in the case of a Global Note which specifies EURIBOR as the Reference Rate in the Final Terms, the Rate of Interest will be the aggregate of EURIBOR and the Margin specified in the Final Terms (if any) above or below EURIBOR. The Rate of Interest determined for any Interest Period by reference to EURIBOR shall be subject to a floor of zero to ensure that the Rate of Interest on any Interest Period for Floating Rate Notes is not negative. Interest shall be payable on the aggregate Nominal Amount in respect of each successive Interest Period (as defined below) from (and including) the Issue Date to (but excluding) the Maturity Date (or, as the case may be, to the Relevant Date), in arrears on the relevant Interest Payment Date, on the basis of the Day Count Convention specified in the Final Terms or, if none is specified, on the basis of the actual number of days in such Interest Period and a year of 360 days.

As used in this Global Note (and unless otherwise specified in the Final Terms), "**EURIBOR**" shall be equal to EUR-EURIBOR-Reuters (as defined in the 2021 ISDA Definitions) as at 11.00 a.m. (Brussels time) or as near thereto as practicable on the second TARGET Business Day before the first day of the relevant Interest Period (a "**EURIBOR Interest Determination Date**"), as if the Reset Date (as defined in the 2021 ISDA Definitions) were the first day of such Interest Period and the Designated Maturity (as defined in the 2021 ISDA Definitions) were the number of months specified in the Final Terms in relation to the Reference Rate.

If such rate does not appear on that page or if that page is unavailable, the Issuer will request the Relevant Financial Centre office of each of the four major banks selected by the Issuer in the market that are most closely connected with the Reference Rate (excluding the Calculation Agent) to provide a quotation of the Reference Rate at approximately the Relevant Time on the EURIBOR Interest Determination Date offered to leading banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and the Calculation Agent shall determine the arithmetic mean of such quotations.

If fewer than two such quotations are provided as requested, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in such financial centre(s) as the Issuer may select), at approximately 11.00 a.m. (Brussels time) on the first day of the relevant Interest Period for loans in the Specified Currency to leading European banks for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time and the Rate of Interest for such Interest Period shall be the rate or (as the case may be) the arithmetic mean so determined.

If the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest will be the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period, substituting, where a different margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the margin relating to the relevant Interest Period in place of the margin relating to that last preceding Interest Period.

- (b) in the case of a Global Note which specifies ISDA Determination in the Final Terms, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "ISDA Rate" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the 2021 ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the 2021 ISDA Definitions and under which:
- (i) the Floating Rate Option (as defined in the 2021 ISDA Definitions) is as specified in the relevant Final Terms;
 - (ii) the Designated Maturity (as defined in the 2021 ISDA Definitions) is a period specified in the relevant Final Terms; and
 - (iii) the relevant Reset Date (as defined in the 2021 ISDA Definitions) is as specified in the relevant Final Terms; and
 - (iv) if the specified Floating Rate Option is an Overnight Floating Rate Option (as defined in the 2021 ISDA Definitions), Compounding is specified to be applicable in the relevant Final Terms and:
 - (A) if Compounding with Lookback is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Lookback is the Overnight Rate Compounding Method and (b) Lookback is the number of Applicable Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms;
 - (B) if Compounding with Observation Period Shift is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Observation Period Shift is the Overnight Rate Compounding Method, (b) Observation Period Shift is the number of Observation Period Shift Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Observation Period Shift Additional Business Days (as defined in the 2021 ISDA

- Definitions), if applicable, are the days specified in the relevant Final Terms; or
- (C) if Compounding with Lockout is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Lockout is the Overnight Rate Compounding Method, (b) Lockout is the number of Lockout Period Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms;
- (v) if the specified Floating Rate Option is an Overnight Floating Rate Option (as defined in the 2021 ISDA Definitions), Averaging is specified to be applicable in the relevant Final Terms and:
- (A) if Averaging with Lookback is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Lookback is the Overnight Rate Averaging Method and (b) Lookback is the number of Applicable Business Days (as defined in the 2021 ISDA Definitions) as specified in the relevant Final Terms;
 - (B) if Averaging with Observation Period Shift is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Observation Period Shift is the Overnight Rate Averaging Method, (b) Observation Period Shift is the number of Observation Period Shift Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Observation Period Shift Additional Business Days (as defined in the 2021 ISDA Definitions), if applicable, are the days specified in the relevant Final Terms; or
 - (C) if Averaging with Lockout is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Lockout is the Overnight Rate Averaging Method, (b) Lockout is the number of Lockout Period Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms; and
- (vi) references in the 2021 ISDA Definitions to:
- (A) "Confirmation" shall be references to the relevant Final Terms;
 - (B) "Calculation Period" shall be references to the relevant Interest Period;
 - (C) "Termination Date" shall be references to the Maturity Date;
 - (D) "Effective Date" shall be references to the Interest Commencement Date; and
 - (E) if the Temporary Non-Publication Fallback in respect of any specified Floating Rate Option is specified to be "Temporary Non-Publication Fallback – Alternative Rate" in the Floating Rate Matrix of the 2021 ISDA Definitions the reference to "Calculation Agent Alternative Rate Determination" in the definition of "Temporary Non-Publication Fallback – Alternative Rate" shall be replaced by "Temporary Non-Publication Fallback – Previous Day's Rate".

The Rate of Interest determined for any Interest Period according to ISDA Determination shall be subject to a floor of zero to ensure that the Rate of Interest on any Interest Accrual Period for Floating Rate Notes is not negative.

Notwithstanding anything in the ISDA Definitions to the contrary the Calculation Agent will have no obligation to exercise any discretion (including in determining EURIBOR or the fallback rate), and to the extent the ISDA Definitions requires the Calculation Agent

to exercise any such discretion, the Issuer, will provide written direction to the Calculation Agent specifying how such discretion should be exercised, and the Calculation Agent will be entitled to conclusively rely on that direction and will be fully protected if it acts in accordance therewith.

(c) in the case of a Global Note which specifies SONIA as the Reference Rate in the Final Terms, the Rate of Interest will be calculated in accordance with paragraph 15(c)(A), paragraph 15(c)(B) or paragraph 15(c)(C) below, subject to the provisions of paragraph 15(c)(E) and paragraph 15(c)(F) below, as applicable:

(A) Where the Calculation Method is specified in the relevant Final Terms as being "SONIA Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SONIA Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SONIA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(B) Where the Calculation Method is specified in the relevant Final Terms as being "SONIA Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average SONIA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SONIA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(C) The following definitions shall apply for the purpose of this paragraph 15(c)(C)

"**Compounded Daily SONIA**" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Sterling (with the daily Sterling Overnight Index Average (SONIA) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_{i-ipLBD} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}; \text{ or}$$

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}; \text{ or}$$

Where, in each case:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

"**d**" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**d₀**" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of London Banking Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of London Banking Days in the relevant Observation Period;

"**i**" is a series of whole numbers from one to d_0 , each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"**Interest Period End Date**" shall have the meaning specified in the relevant Final Terms;

"**Lock-out Period**" means, in respect of an Interest Period, the period from and including the day following the SONIA Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"**London Banking Day**" or "**LBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"**n_i**", for any London Banking Day_i, means the number of calendar days from and including such London Banking Day_i up to but excluding the following London Banking Day; "**Observation Period**" means the period from and including the date falling "p" London Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" London Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"**p**" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five London Banking Days or such larger number of days as specified in the relevant Final Terms;

"**Reference Day**" means each London Banking Day in the relevant Interest Period that is not a London Banking Day falling in the Lock-out Period;

the "**SONIA reference rate**", means, in respect of any London Banking Day, a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors (in each case on the London Banking Day immediately following such London Banking Day);

"**SONIA_i**" means, in respect of any London Banking Day:

- (x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the SONIA reference rate in respect of pLBD in respect of such London Banking Day; or
- (y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:
 - (1) in respect of any London Banking Day_i that is a Reference Day, the SONIA reference rate in respect of the London Banking Day immediately preceding such Reference Day; otherwise

- (2) the SONIA reference rate in respect of the London Banking Day immediately preceding the SONIA Interest Determination Date for the relevant Interest Period;
- (z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the SONIA reference rate for such London Banking Day_i;

"SONIA_{i-pLBD}" means:

- (x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a London Banking Day_i, SONIA_i in respect of the London Banking Day falling p London Banking Days prior to such London Banking Day_i ("**pLBD**"); or
- (y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a London Banking Day_i, SONIA_i in respect of such London Banking Day_i;

"**Compounded Daily SONIA Index**" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Sterling (with the daily Sterling Overnight Index Average (SONIA) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily SONIA rates administered by the administrator of the SONIA reference rate that is published or displayed by such administrator or other information service from time to time on the relevant SONIA Interest Determination Date, as further specified in the relevant Final Terms (the "**SONIA Compounded Index**") and will be calculated as follows:

$$\left(\frac{\text{SONIA Compounded Index}_{\text{End}}}{\text{SONIA Compounded Index}_{\text{Start}}} - 1 \right) \times \frac{365}{d}$$

Where, in each case:

"**d**" is the number of calendar days from (and including) the day in relation to which SONIA Compounded Index_{Start} is determined to (but excluding) the day in relation to which SONIA Compounded Index_{End} is determined;

"**London Banking Day**" or "**LBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"**p**" means five London Banking Days or such larger number of days as specified in the relevant Final Terms;

"**Compounded Index_{Start}**" means, with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling "p" London Banking Days prior to the first day of such Interest Period; and

"**SONIA Compounded Index_{End}**" means with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling "p" London Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"Weighted Average SONIA" means:

- (x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the SONIA reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the SONIA reference rate in respect of any calendar day which is not a London Banking Day shall be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding such calendar day; or
 - (y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the SONIA reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, **provided that**, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the SONIA reference rate for such calendar day will be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the SONIA reference rate in respect of any calendar day which is not a London Banking Day shall, subject to the preceding proviso, be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding such calendar day.
- (D) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 15(c)(B), if the relevant SONIA Compounded Index is not published or displayed by the administrator of the SONIA reference rate or other information service by 5.00 p.m. (London time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the administrator of the SONIA reference rate or of such other information service, as the case may be) on the relevant SONIA Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the SONIA Compounded Index is not available in accordance with paragraph 4 15(c)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
- (E) If, in respect of any London Banking Day, the Calculation Agent determines that the SONIA reference rate is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such SONIA reference rate shall be:
- a. (A) the Bank of England's Bank Rate (the "**Bank Rate**") prevailing at close of business on the relevant London Banking Day; plus (B) the arithmetic mean of the spread of the SONIA reference rate to the Bank Rate over the previous five London Banking Days on which the SONIA reference rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate, or
 - b. if such Bank Rate is not available, the SONIA reference rate published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors) for the first preceding London Banking Day on which the SONIA reference rate was published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors).

Notwithstanding the foregoing, in the event of the Bank of England publishing guidance as to (i) how the SONIA reference is to be determined or (ii) any rate that is to replace the SONIA reference rate, the Calculation Agent, as applicable, shall follow such guidance to determine the SONIA reference rate for so long as the SONIA reference is not available or has not been published by the authorised distributors.

(d) in the case of a Global Note which specifies SOFR as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 15(d)(A) or paragraph 15(d)(B) below, subject to the provisions of paragraph 15(d)(D):

(A) Where the Calculation Method is specified in the relevant Final Terms as being "SOFR Arithmetic Mean", the Rate of Interest for each Interest Period will be the SOFR Arithmetic Mean plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent as at the relevant SOFR Interest Determination Date, as follows, and the resulting percentage will be rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards.

(B) Where the Calculation Method is specified in the relevant Final Terms as being "SOFR Compound", the Rate of Interest for each Interest Period will be the Compounded Daily SOFR on the relevant SOFR Interest Determination Date plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent with the resulting percentage being rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards.

(C) The following definitions shall apply for the purpose of this paragraph 15(d):

"Bloomberg Screen SOFRRATE Page" means the Bloomberg screen designated "SOFRRATE" or any successor page or service;

"Compounded Daily SOFR" means with respect to an Interest Period, an amount equal to the rate of return for each calendar day during the Interest Period, compounded daily, calculated by the Calculation Agent on the SOFR Interest Determination Date, as follows:

(i) if "SOFR Compound with Lookback" is specified in the relevant Final Terms:

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

Where:

"d" means, in respect of an Interest Period, the number of calendar days in such Interest Period;

"d₀" means, in respect of an Interest Period, 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;

"Lookback Period" or "p" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms;

"n_i" means, in respect of a U.S. Government Securities Business Day_i, 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_i" means, in respect of each U.S. Government Securities Business Day_i, the SOFR in respect of such U.S. Government Securities Business Day; and

"**SOFR_{i-pUSBD}**" means, in respect of a U.S. Government Securities Business Day_i, SOFR_i in respect of the U.S. Government Securities Business Day falling the number of U.S. Government Securities Business Days equal to the Lookback Period prior to such U.S. Government Securities Business Day_i ("**pUSBD**"), **provided that**, unless SOFR Cut-Off Date is specified as not applicable in the relevant Final Terms, SOFR_i in respect of each U.S. Government Securities Business Day_i in the period from, and including, the SOFR Cut-Off Date to, but excluding, the next occurring Interest Period End Date, will be SOFR_i in respect of the SOFR Cut-Off Date for such Interest Period;

- (ii) if "SOFR Compound with Observation Period Shift" is specified in the relevant Final Terms:

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

Where:

"**d**" means, in respect of an Observation Period, the number of calendar days in such Observation Period;

"**d₀**" means, in respect of an Observation Period, the number of U.S. Government Securities Business Days in the relevant Observation 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 Observation Period;

"**n_i**" means, in respect of a U.S. Government Securities Business Day_i, 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;

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling the number of Observation Shift Days prior to the first day of such Interest Period and ending on, but excluding, the date that is the number of Observation Shift Days prior to the next occurring Interest Period End Date for such Interest Period;

"**Observation Shift Days**" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms; and

"**SOFR_i**" means, in respect of each U.S. Government Securities Business Day_i, the SOFR in respect of such U.S. Government Securities Business Day;

- (iii) if "SOFR Compound with Payment Delay" is specified in the relevant Final Terms:

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

Where:

"**d**" means, in respect of an Interest Period, the number of calendar days in such Interest Period;

"**d₀**" means, in respect of an Interest Period, 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;

"**Interest Period End Dates**" shall have the meaning specified in the relevant Final Terms;

"**Interest Payment Dates**" shall be the dates occurring the number of Business Days equal to the Interest Payment Delay following each Interest Period End Date; **provided that** the Interest Payment Date with respect to the final Interest Period will be the Maturity Date or, if the Notes are to be redeemed prior to the Maturity Date, such earlier date on which the Notes become due and payable;

"**Interest Payment Delay**" means the number of U.S. Government Securities Business Days specified in the relevant Final Terms;

"**SOFR Interest Determination Date**" shall be the Interest Period End Date at the end of each Interest Period; **provided that** the SOFR Interest Determination Date with respect to the final Interest Period will be the SOFR Cut-Off Date;

"**n_i**" means, in respect of a U.S. Government Securities Business Day_i 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_i; and

"**SOFR_i**" means, for any U.S. Government Securities Business Day_i in the relevant Interest Period, the SOFR in respect of such U.S. Government Securities Business Day_i.

For purposes of calculating SOFR Compound with Payment Delay with respect to the final Interest Period, the level of SOFR for each U.S. Government Securities Business Day in the period from and including the SOFR Cut-Off Date to but excluding the Maturity Date or any earlier date on which the Notes become due and payable, as applicable, shall be the level of SOFR in respect of such SOFR Cut-Off Date.

(iv) if "SOFR Index with Observation Shift" is specified in the relevant Final Terms:

$$\left(\frac{SOFR Index_{Final}}{SOFR Index_{Initial}} - 1 \right) \times \frac{360}{d_c}$$

Where:

"**d_c**" means, in respect of each Interest Period, the number of calendar days in the relevant Interest Period;

"**Interest Period End Dates**" shall have the meaning specified in the relevant Final Terms;

"**Observation Shift Days**" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms;

"**SOFR Index**" means with respect to any U.S. Government Securities Business Day, (i) the SOFR Index value as published by the NY Federal

Reserve as such index appears on the NY Federal Reserve's Website at the SOFR Determination Time; or (ii) if the SOFR Index specified in (i) above does not so appear, unless both a SOFR Transition Event and its related SOFR Replacement Date have occurred, the SOFR Index as published in respect of the first preceding U.S. Government Securities Business Day for which the SOFR Index was published on the NY Federal Reserve's Website;

"**SOFR Index_{Final}**" means, in respect of an Interest Period, the value of the SOFR Index on the date falling the number of U.S. Government Securities Business Days equal to the Observation Shift Days prior to the next occurring Interest Period End Date for such Interest Period;

"**SOFR Index_{Initial}**" means, in respect of an Interest Period, the value of the SOFR Index on the date falling the number of U.S. Government Securities Business Days equal to the Observation Shift Days prior to the first day of such Interest Period (or, in the case of the first Interest Period, the Interest Commencement Date);

"**NY Federal Reserve**" means the Federal Reserve Bank of New York;

"**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;

"**Reuters Page USDSOFR=**" means the Reuters page designated "USDSOFR=" or any successor page or service;

"**SOFR**" means the rate determined by the Calculation Agent in respect of a U.S. Government Securities Business Day, in accordance with the following provisions:

- (i) the Secured Overnight Financing Rate in respect of such U.S. Government Securities Business Day 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 U.S. Government Securities Business Day, as such rate is reported on the Bloomberg Screen SOFRRATE Page for such U.S. Government Securities Business Day 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 U.S. Government Securities Business Day (the "**SOFR Screen Page**"); or
- (ii) if the rate specified in (a) above does not so appear and the Calculation Agent determines that a SOFR Transition Event has 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;

"**SOFR Arithmetic Mean**" means, with respect to an Interest Period, the arithmetic mean of SOFR for each calendar day during such Interest Period, as calculated by the Calculation Agent, **provided that**, SOFR in respect of each calendar day during the period from, and including, the SOFR Cut-Off Date to,

but excluding, the next occurring Interest Period End Date will be SOFR on the SOFR Cut-Off Date. For these purposes, SOFR in respect of any calendar day which is not a U.S. Government Securities Business Day shall, subject to the preceding proviso, be deemed to be SOFR in respect of the U.S. Government Securities Business Day immediately preceding such calendar day;

"**SOFR Cut-Off Date**" means, unless specified as not applicable in the relevant Final Terms, in respect of an Interest Period, the fourth U.S. Government Securities Business Day prior to the next occurring Interest Period End Date for such Interest Period (or such other number of U.S. Government Securities Business Days specified in the relevant Final Terms); and

"**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.

Notwithstanding paragraphs 15(d)(A) to 15(d)(C) above, if the Calculation Agent determines on or prior to the SOFR Determination Time, that a SOFR Transition Event and its related SOFR Replacement Date have occurred with respect to the relevant SOFR Benchmark (as defined below), then the provisions set forth in paragraph 15(d)(D) (*SOFR Replacement Provisions*) below will apply to all determinations of the Rate of Interest for each Interest Period thereafter.

(D) SOFR Replacement Provisions

If the Calculation Agent, failing which the Issuer, determines at any time prior to the SOFR Determination Time on any U.S. Government Securities Business Day that a SOFR Transition Event and the related SOFR Replacement Date have occurred, the Issuer will appoint an agent (the "**Replacement Rate Determination Agent**") which will determine the SOFR Replacement. The Replacement Rate Determination Agent may be a leading bank, broker-dealer or benchmark agent in the principal financial centre of the Specified Currency as appointed by the Issuer, an affiliate of the Issuer or such other entity that the Issuer determines to be competent to carry out such role.

In connection with the determination of the SOFR Replacement, the Replacement Rate Determination Agent will determine appropriate SOFR Replacement Conforming Changes.

Any determination, decision or election that may be made by the Replacement Rate Determination Agent pursuant to these provisions, will (in the absence of manifest error) be conclusive and binding on the Issuer, the Calculation Agent, the Issue and Paying Agent and the Holders.

Following the designation of a SOFR Replacement, the Issuer may subsequently determine that a SOFR Transition Event and a related SOFR Replacement Date have occurred in respect of such SOFR Replacement, **provided that** the SOFR Benchmark has already been substituted by the SOFR Replacement and any SOFR Replacement Conforming Changes in connection with such substitution have been applied. In such circumstances, the SOFR Replacement shall be deemed to be the SOFR Benchmark and all relevant definitions shall be construed accordingly.

In connection with the SOFR Replacement provisions above, the following definitions shall apply:

"**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 2021 ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to SOFR for the applicable tenor;

"ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the 2021 ISDA Definitions to be effective upon the occurrence of a SOFR Transition Event with respect to SOFR for the applicable tenor excluding the applicable ISDA Fallback Adjustment;

"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;

"SOFR Benchmark" means (a) (unless "SOFR Index with Observation Shift" is specified in the relevant Final Terms) SOFR or (b) SOFR Index (each as defined in paragraph 15(f)(C) above);

"SOFR Replacement" means any one (or more) of the SOFR Replacement Alternatives to be determined by the Replacement Rate Determination Agent as of the SOFR Replacement Date if the Issuer, determines that a SOFR Transition Event and its related SOFR Replacement Date have occurred on or prior to the SOFR Determination Time in respect of any determination of the SOFR Benchmark on any U.S. Government Securities Business Day in accordance with:

- (a) the order of priority specified SOFR Replacement Alternatives Priority in the relevant Final Terms; or
- (b) if no such order of priority is specified, in accordance with the priority set forth below:
 - i. Relevant Governmental Body Replacement;
 - ii. ISDA Fallback Replacement; and
 - iii. Industry Replacement,

provided that, in each case, if the Replacement Rate Determination Agent is unable to determine the SOFR Replacement in accordance with the first SOFR Replacement Alternative listed, it shall attempt to determine the SOFR Replacement in accordance with each subsequent SOFR Replacement Alternative until a SOFR Replacement is determined. The SOFR Replacement will replace the then-current SOFR Benchmark for the purpose of determining the relevant Rate of Interest in respect of the relevant Interest Period and each subsequent Interest Period, subject to the occurrence of a subsequent SOFR Transition Event and related SOFR Replacement Date;

"SOFR Replacement Alternatives" means:

- (a) the sum of: (i) the alternative rate that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current SOFR Benchmark for the relevant Interest Period and (ii) the SOFR Replacement Adjustment (the **"Relevant Governmental Body Replacement"**);
- (b) the sum of: (i) the ISDA Fallback Rate and (ii) the SOFR Replacement Adjustment (the **"ISDA Fallback Replacement"**); or
- (c) the sum of: (i) the alternative rate that has been selected by the Replacement Rate Determination Agent as the replacement for the then-current SOFR Benchmark for the relevant Interest Period giving due consideration to any industry-accepted rate as a replacement for the then-

current SOFR Benchmark for U.S. dollar-denominated floating rate securities at such time and (ii) the SOFR Replacement Adjustment (the "**Industry Replacement**");

"**SOFR Replacement Adjustment**" means the first alternative set forth in the order below that can be determined by the Replacement Rate Determination Agent as of the applicable SOFR Replacement Date:

- (a) the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted SOFR Replacement;
- (b) if the applicable Unadjusted SOFR Replacement is equivalent to the ISDA Fallback Rate, the ISDA Fallback Adjustment; or
- (c) the spread adjustment (which may be a positive or negative value or zero) determined by the Replacement Rate Determination Agent giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current SOFR Benchmark with the applicable Unadjusted SOFR Replacement for U.S. dollar-denominated floating rate securities at such time;

"**SOFR Replacement Conforming Changes**" means, with respect to any SOFR Replacement, any technical, administrative or operational changes (including, but not limited to, changes to timing and frequency of determining rates with respect to each interest period and making payments of interest, rounding of amounts or tenors, day count fractions, business day convention and other administrative matters) that the Replacement Rate Determination Agent decides may be appropriate to reflect the adoption of such SOFR Replacement in a manner substantially consistent with market practice (or, if the Replacement Rate Determination Agent determines that adoption of any portion of such market practice is not administratively feasible or if the Replacement Rate Determination Agent determines that no market practice for use of the SOFR Replacement exists, in such other manner as the Replacement Rate Determination Agent determines is reasonably necessary, acting in good faith and in a commercially reasonable manner);

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

- (a) in the case of sub-paragraphs (a) or (b) of the definition of "SOFR Transition Event" the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the SOFR Benchmark permanently or indefinitely ceases to provide the SOFR Benchmark (or such component); or
- (b) in the case of sub-paragraph (c) of the definition of "SOFR Transition Event" the date of the public statement or publication of information referenced therein; or
- (c) in the case of sub-paragraph (d), the last such consecutive U.S. Government Securities Business Day on which the SOFR Benchmark has not been published,

provided that, in the event of any public statements or publications of information as referenced in sub-paragraphs (a) or (b) above, should such event or circumstance referred to in such a public statement or publication occur on a date falling later than three months after the relevant public statement or

publication, the SOFR Transition Event shall be deemed to occur on the date falling three 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 Replacement Date occurs on the same day as, but earlier than, the SOFR Determination Time in respect of any determination, the SOFR Replacement Date will be deemed to have occurred prior to the SOFR Determination Time for such determination.

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

- (a) a public statement or publication of information by or on behalf of the administrator of the SOFR Benchmark (or such component, if relevant) announcing that such administrator has ceased or will cease to provide the SOFR Benchmark (or such component, if relevant), permanently or indefinitely, **provided that**, at the time of such statement or publication, there is no successor administrator that will continue to provide the SOFR Benchmark (or such component, if relevant);
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component, if relevant), the central bank for the currency of the SOFR Benchmark (or such component, if relevant), an insolvency official with jurisdiction over the administrator for the SOFR Benchmark (or such component, if relevant), a resolution authority with jurisdiction over the administrator for SOFR Benchmark (or such component, if relevant) or a court or an entity with similar insolvency or resolution authority over the administrator for the SOFR Benchmark (or such component, if relevant), which states that the administrator of the SOFR Benchmark (or such component, if relevant) has ceased or will cease to provide the SOFR Benchmark (or such component, if relevant) permanently or indefinitely, **provided that**, at the time of such statement or publication, there is no successor administrator that will continue to provide the SOFR Benchmark (or such component, if relevant);
- (c) a public statement or publication of information by the regulatory supervisor for the administrator of the SOFR Benchmark (or such component, if relevant) announcing that the SOFR Benchmark (or such component, if relevant) is no longer representative, the SOFR Benchmark (or such component, if relevant) 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
- (d) the SOFR Benchmark is not published by its administrator (or a successor administrator) for six consecutive U.S. Government Securities Business Days; and

"Unadjusted SOFR Replacement" means the SOFR Replacement prior to the application of any SOFR Replacement Adjustment.

- (e) In the case of a Global Note which specifies €STR as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 15(e)(A), paragraph 15(e)(B) or paragraph 15(e)(C) below, subject to the provisions of paragraph 15(e)(E) and paragraph 15(e)(F) below, as applicable:
 - (A) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily €STR plus or minus (as indicated in the relevant Final

Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

- (B) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily €STR Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
- (C) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average €STR plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
- (D) The following definitions shall apply for the purpose of this paragraph 15(e)

"Compounded Daily €STR" means with respect to an Interest Period, the rate of return of a daily compound interest investment in euro (with the daily euro short-term rate (€STR) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{€STR}_{i-pTBD} \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

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

Where, in each case:

"**d**" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**d₀**" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of TARGET Business Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of TARGET Business Days in the relevant Observation Period;

the "**€STR reference rate**", means, in respect of any TARGET Business Day, a reference rate equal to the daily euro short-term rate as provided by the European Central Bank, as the administrator of such rate (or any successor administrator of such rate) on the website of the European Central Bank (or any successor administrator of such rate) or any successor source, in each case, at the time specified by, or determined in accordance with, the applicable methodology, policies or guidelines, of

the administrator of such rate on the TARGET Business Day immediately following such TARGET Business Day;

"€STR_i" means, in respect of any TARGET Business Day_i:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the €STR reference rate in respect of pTBD in respect of such TARGET Business Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

(1) in respect of any TARGET Business Day_i that is a Reference Day, the €STR reference rate in respect of the TARGET Business Day immediately preceding such Reference Day; otherwise

(2) the €STR reference rate in respect of the TARGET Business Day immediately preceding the €STR Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the €STR reference rate for such TARGET Business Day_i;

"€STR_{i-pTBD}" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a TARGET Business Day_i, €STR_i in respect of the TARGET Business Day falling p TARGET Business Days prior to such TARGET Business Day_i ("**pLBD**"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a TARGET Business_i, €STR_i in respect of such TARGET Business_i;

"i" is a series of whole numbers from one to d₀, each representing the relevant TARGET Business Day in chronological order from, and including, the first TARGET Business Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"**Interest Period End Date**" shall have the meaning specified in the relevant Final Terms;

"**Lock-out Period**" means, in respect of an Interest Period, the period from and including the day following the €STR Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"n_i", for any TARGET Business Day_i, means the number of calendar days from and including such TARGET Business Day_i up to but excluding the following TARGET Business Day;

"**Observation Period**" means the period from and including the date falling "p" TARGET Business Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" TARGET Business Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" TARGET Business Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five TARGET Business Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each TARGET Business Day in the relevant Interest Period that is not a TARGET Business Day falling in the Lock-out Period;

"TARGET Business Day" or "TBD" means any day on which the TARGET System is open;

"TARGET System" means the Trans-European Automated Realtime Gross settlement Express Transfer (known as TARGET2) system which was launched on 19 November 2007 or any successor thereto;

"Compounded Daily €STR Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in euro (with the euro short-term rate (€STR) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily €STR rates administered by the European Central Bank, as the administrator of such rate (or any successor administrator of such rate) that is published or displayed on the website of the European Central Bank (or any successor administrator of such rate) or any successor source from time to time on the relevant €STR Interest Determination Date, as further specified in the relevant Final Terms (the "€STR Compounded Index") and will be calculated as follows:

$$\left(\frac{\text{€STR Compounded Index}_{End}}{\text{€STR Compounded Index}_{Start}} - 1 \right) \times \frac{360}{d}$$

Where, in each case:

"d" is the number of calendar days from (and including) the day in relation to which €STR Compounded Index_{Start} is determined to (but excluding) the day in relation to which €STR Compounded Index_{End} is determined;

"p" means five TARGET Business Days or such larger number of days as specified in the relevant Final Terms;

"€STR Compounded Index_{Start}" means, with respect to an Interest Period, the €STR Compounded Index determined in relation to the day falling "p" TARGET Business Days prior to the first day of such Interest Period; and

"€STR Compounded Index_{End}" means with respect to an Interest Period, the €STR Compounded Index determined in relation to the day falling "p" TARGET Business Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" TARGET Business Days prior to such earlier date, if any, on which the Notes become due and payable);

"TARGET Business Day" or "TBD" means any day on which the TARGET System is open;

"TARGET System" means the Trans-European Automated Realtime Gross settlement Express Transfer (known as TARGET2) system which was launched on 19 November 2007 or any successor thereto; and

"Weighted Average €STR" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the €STR reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the €STR reference rate in respect of any calendar day which is not a TARGET Business Day shall be deemed to be the €STR reference rate in respect of the TARGET Business immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the €STR reference rate in respect of each calendar day during the relevant Interest Period, divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the €STR reference rate for such calendar day will be deemed to be the €STR reference rate in respect of the TARGET Business Day immediately preceding the first day of such Lock-out Period. For these purposes, the €STR reference rate in respect of any calendar day which is not a TARGET Business Day shall, subject to the preceding proviso, be deemed to be the €STR reference rate in respect of the TARGET Business Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 15(e)(B), if the relevant €STR Compounded Index is not published or displayed by the European Central Bank (or any successor administrator of such rate) reference rate or other information service by 5.00 p.m. (Frankfurt time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the European Central Bank (or any successor administrator of €STR) on the relevant €STR Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the €STR Compounded Index is not available in accordance with paragraph 15(e)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
- (F) If, in respect of any TARGET Business Day, €STR is not available, such Reference Rate shall be the €STR reference rate for the first preceding TARGET Business Day on which the €STR reference rate was published by the European Central Bank, as the administrator of the €STR reference rate (or any successor administrator of the €STR reference rate) on the website of the European Central Bank (or of any successor administrator of such rate), and "r" shall be interpreted accordingly.
- (f) In the case of a Global Note which specifies SARON as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 15(f)(A), paragraph 15(f)(B) or paragraph 15(f)(C) below, subject to the provisions of paragraph 15(f)(E), paragraph 15(f)(F) and paragraph 15(f)(G), as applicable:
 - (A) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SARON plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SARON Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (B) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SARON Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation

Agent on the SARON Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

- (C) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average SARON plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SARON Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
- (D) The following definitions shall apply for the purpose of this paragraph 15(f)

"Compounded Daily SARON" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Swiss franc (with the daily Swiss Average Rate Overnight (SARON) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

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

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

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

Where, in each case:

"d" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"d₀" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of Zurich Banking Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of Zurich Banking Days in the relevant Observation Period;

"i" is a series of whole numbers from one to d₀, each representing the relevant Zurich Banking Day in chronological order from, and including, the first Zurich Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"Interest Period End Date" shall have the meaning specified in the relevant Final Terms;

"Lock-out Period" means, in respect of an Interest Period, the period from and including the day following the SARON Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"**n_i**", for any Zurich Banking Day_i, means the number of calendar days from and including such Zurich Banking Day_i up to but excluding the following Zurich Banking Day;

"**Observation Period**" means the period from and including the date falling "p" Zurich Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" Zurich Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Zurich Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"**p**" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five Zurich Banking Days or such larger number of days as specified in the relevant Final Terms;

"**Reference Day**" means each Zurich Banking Day in the relevant Interest Period that is not a Zurich Banking Day falling in the Lock-out Period;

the "**SARON reference rate**", means, in respect of any Zurich Banking Day, a reference rate equal to the Swiss Average Rate Overnight (SARON) rate for such Zurich Banking Day as published by the SARON Administrator on the Relevant Screen Page at the Relevant Time on such Zurich Banking Day;

"**SARON_i**" means, in respect of any Zurich Banking Day_i:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the SARON reference rate in respect of pZBD in respect of such Zurich Banking Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

(1) in respect of any Zurich Banking Day_i that is a Reference Day, the SARON reference rate in respect of the SARON Banking Day immediately preceding such Reference Day; otherwise

(2) the SARON reference rate in respect of the SARON Banking Day immediately preceding the SARON Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the SARON reference rate for such Zurich Banking Day_i;

"**SARON_{i-pZBD}**" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a Zurich Banking Day_i, SARON_i in respect of the Zurich Banking Day falling p Zurich Banking Days prior to such Zurich Banking Day_i ("**pZBD**"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a Zurich Banking Day_i, SARON_i in respect of such Zurich Banking Day_i; and

"**Zurich Banking Day**" or "**ZBD**" means a day on which banks are open in Zurich for the settlement of payments and of foreign exchange transactions;

"Compounded Daily SARON Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Swiss franc (with the daily Swiss Average Rate Overnight (SARON) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily SARON rates administered by the SARON Administrator that is published or displayed by the SARON Administrator or other information service from time to time on the relevant SARON Interest Determination Date, as further specified in the relevant Final Terms (the **"SARON Compounded Index"**) and will be calculated as follows:

$$\left(\frac{SARON\ Compounded\ Index_{End}}{SARON\ Compounded\ Index_{start}} - 1 \right) \times \frac{360}{d}$$

Where, in each case:

"d" is the number of calendar days from (and including) the day in relation to which SARON Compounded Index_{Start} is determined to (but excluding) the day in relation to which SARON Compounded Index_{End} is determined;

"p" means five Zurich Banking Days or such larger number of days as specified in the relevant Final Terms;

"SARON Compounded Index_{Start}" means, with respect to an Interest Period, the SARON Compounded Index determined in relation to the day falling "p" Zurich Banking Days prior to the first day of such Interest Period;

"SARON Compounded Index_{End}" means with respect to an Interest Period, the SARON Compounded Index determined in relation to the day falling "p" Zurich Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Zurich Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"Zurich Banking Day" or **"ZBD"** means a day on which banks are open in Zurich for the settlement of payments and of foreign exchange transactions; and

"Weighted Average SARON" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the SARON reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the SARON reference rate in respect of any calendar day which is not a Zurich Banking Day shall be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the SARON reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the SARON reference rate for such calendar day will be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the SARON reference rate in respect of any calendar day which is not a Zurich Banking Day shall,

subject to the preceding proviso, be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with Condition paragraph 15(f)(B), if the relevant SARON Compounded Index is not published or displayed by the SARON Administrator or other information service by 5.00 p.m. (Zurich time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the SARON Administrator or of such other information service, as the case may be) on the relevant SARON Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the SARON Compounded Index is not available in accordance with paragraph 15(f)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
- (F) If the SARON reference rate is not published on the Relevant Screen Page (the "**SARON Screen Page**") at the Relevant Time on the relevant Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date have not both occurred on or prior to the Relevant Time on the relevant Zurich Banking Day, the SARON reference rate for such Zurich Banking Day shall be the rate equal to the Swiss Average Rate Overnight published by the SARON Administrator on the SARON Administrator Website for the last preceding Zurich Banking Day on which the Swiss Average Rate Overnight was published by the SARON Administrator on the SARON Administrator Website.
- (G) If the SARON reference rate is not published on the Relevant Screen Page at the Relevant Time on the relevant Zurich Banking Day and both a SARON Index Cessation Event and a SARON Index Cessation Effective Date have occurred on or prior to the Relevant Time on the relevant Zurich Banking Day, the Reference Rate shall be:
 - (i) if there is a SARON Recommended Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the SARON Recommended Replacement Rate for such Zurich Banking Day, giving effect to the SARON Recommended Adjustment Spread, if any, published on such Zurich Banking Day; or
 - (ii) if there is no SARON Recommended Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the policy rate of the Swiss National Bank (the "**SNB Policy Rate**") for such Zurich Banking Day, giving effect to the SNB Adjustment Spread, if any.

Any substitution of the SARON reference rate by the SARON Recommended Replacement Rate or the SNB Policy Rate as specified above (the "**SARON Replacement Rate**") will remain effective for the remaining term to maturity of the Notes.

Notwithstanding any other provision of this paragraph (F), if the Rate of Interest cannot be determined in accordance with the foregoing provisions by the Calculation Agent, no SARON Replacement Rate will be adopted by the Calculation Agent, and the SARON Replacement Rate for the relevant Interest Period will be equal to the last SARON available on the SARON Screen Page as determined by the Calculation Agent. Notwithstanding the above, if the provisions of this paragraph fail to provide a means of determining the Rate of Interest, paragraph 15(f)(F) below shall apply.

In connection with the SARON reference rate provisions above, the following definitions apply:

"SARON Administrator" means SIX Swiss Exchange or any successor administrator of the Swiss Average Rate Overnight;

"SARON Administrator Website" means the website of the SARON Administrator;

"SARON Index Cessation Effective Date" means the earliest of:

- (i) in the case of the occurrence of a SARON Index Cessation Event described in sub-paragraph (i) of the definition thereof, the date on which the SARON Administrator ceases to provide the Swiss Average Rate Overnight;
- (ii) in the case of the occurrence of a SARON Index Cessation Event described in sub-section (ii)(x) of the definition thereof, the latest of: (x) the date of such statement or publication, (y) the date, if any, specified in such statement or publication as the date on which the Swiss Average Rate Overnight will no longer be representative, and (z) if a SARON Index Cessation Event described in sub-section (ii)(y) of the definition thereof has occurred on or prior to either or both dates specified in subclauses (x) and (y) of this sub-paragraph (ii), the date as of which the Swiss Average Rate Overnight may no longer be used; and
- (iii) in the case of the occurrence of a SARON Index Cessation Event described in sub-section (ii)(y) of the definition thereof, the date as of which the Swiss Average Rate Overnight may no longer be used;

"SARON Index Cessation Event" means the occurrence of one or more of the following events:

- (i) a public statement or publication of information by or on behalf of the SARON Administrator, or by any competent authority, announcing or confirming that the SARON Administrator has ceased or will cease to provide the Swiss Average Rate Overnight permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Swiss Average Rate Overnight; or
- (ii) a public statement or publication of information by the SARON Administrator or any competent authority announcing that (x) the Swiss Average Rate Overnight is no longer representative or will as of a certain date no longer be representative, or (y) the Swiss Average Rate Overnight may no longer be used after a certain date, which statement, in the case of sub-section (y), is applicable to (but not necessarily limited to) fixed income securities and derivatives;

"SARON Recommended Adjustment Spread" means, with respect to any SARON Recommended Replacement Rate, the spread (which may be positive, negative or zero), or formula or methodology for calculating such a spread,

- (i) that the SARON Recommending Body has recommended be applied to such SARON Recommended Replacement Rate in the case of fixed income securities with respect to which such SARON Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for purposes of determining the applicable rate of interest thereon; or
- (ii) if the SARON Recommending Body has not recommended such a spread, formula or methodology as described in sub-paragraph (ii) above, to be applied to such SARON Recommended Replacement Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to

Holders as a result of the replacement of the Swiss Average Rate Overnight with such SARON Recommended Replacement Rate for purposes of determining SARON, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, and be consistent with industry-accepted practices for fixed income securities with respect to which such SARON Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for purposes of determining the applicable rate of interest thereon;

"SARON Recommended Replacement Rate" means the rate that has been recommended as the replacement for the Swiss Average Rate Overnight by any working group or committee in Switzerland organised 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 (any such working group or committee, the **"SARON Recommending Body"**);

"SIX Swiss Exchange" means SIX Swiss Exchange AG and any successor thereto; and

"SNB Adjustment Spread" means, with respect to the SNB Policy Rate, the spread to be applied to the SNB Policy Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Holders as a result of the replacement of the Swiss Average Rate Overnight with the SNB Policy Rate for purposes of determining SARON, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, taking into account the historical median between the Swiss Average Rate Overnight and the SNB Policy Rate during the two year period ending on the date on which the SARON Index Cessation Event occurred (or, if more than one SARON Index Cessation Event has occurred, the date on which the first of such events occurred).

- (g) In the case of a Global Note which specifies TONA as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 15(g)(A), paragraph 15(g)(B) or paragraph 15(g)(C) below, subject to the provisions of paragraph 15(g)(E) and paragraph 15(g)(F) below, as applicable:
- (A) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily TONA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (B) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily TONA Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (C) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average TONA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (D) The following definitions shall apply for the purpose of this paragraph 15(g)

"**Compounded Daily TONA**" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Japanese Yen (with the daily Tokyo Overnight Average (TONA) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{TONA_{i-pTBD} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{TONA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

Where, in each case:

"**d**" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**d₀**" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of Tokyo Banking Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of Tokyo Banking Days in the relevant Observation Period;

"**i**" is a series of whole numbers from one to **d₀**, each representing the relevant Tokyo Banking Day in chronological order from, and including, the first Tokyo Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"**Interest Period End Date**" shall have the meaning specified in the relevant Final Terms;

"**Lock-out Period**" means, in respect of an Interest Period, the period from and including the day following the TONA Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"**n_i**", for any Tokyo Banking Day_i, means the number of calendar days from and including such Tokyo Banking Day_i up to but excluding the following Tokyo Banking Day;

"**Observation Period**" means the period from and including the date falling "p" Tokyo Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" Tokyo Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Tokyo Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"**p**" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five

Tokyo Banking Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each Tokyo Banking Day in the relevant Interest Period that is not a Tokyo Banking Day falling in the Lock-out Period;

"Tokyo Banking Day" or **"TBD"** means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in Tokyo;

the **"TONA reference rate"**, means, in respect of any Tokyo Banking Day, a reference rate equal to the daily Tokyo Overnight Average (TONA) rate for such Tokyo Banking Day as provided by the a Bank of Japan and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors (in each case on the Tokyo Banking Day immediately following such Tokyo Banking Day);

"TONA_i" means, in respect of any Tokyo Banking Day_i:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the TONA reference rate in respect of pTBD in respect of such Tokyo Banking Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

- (1) in respect of any Tokyo Banking Day_i that is a Reference Day, the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such Reference Day; otherwise
- (2) the TONA reference rate in respect of the Tokyo Banking Day immediately preceding the TONA Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the TONA reference rate for such Tokyo Banking Day_i; and

"TONA_{i-pTBD}" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a Tokyo Banking Day_i, TONA_i in respect of the Tokyo Banking Day falling p Tokyo Banking Days prior to such Tokyo Banking Day_i ("**pTBD**"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a Tokyo Banking Day_i, TONA_i in respect of such Tokyo Banking Day_i; and

"Compounded Daily TOKYO Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Japanese Yen (with the daily Tokyo Overnight Average (TONA) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily TONA rates administered by the administrator of the TONA reference rate that is published or displayed by such administrator or other information service from time to time on the relevant TONA Interest Determination Date, as further specified in the relevant Final Terms (the "**TONA Compounded Index**") and will be calculated as follows:

$$\left(\frac{\text{TONA Compounded Index}_{\text{End}}}{\text{TONA Compounded Index}_{\text{Start}}} - 1 \right) \times \frac{365}{d}$$

Where, in each case:

"**d**" is the number of calendar days from (and including) the day in relation to which TONA Compounded Index_{Start} is determined to (but excluding) the day in relation to which TONA Compounded Index_{End} is determined;

"**p**" means five Tokyo Banking Days or such larger number of days as specified in the relevant Final Terms;

"**Tokyo Banking Day**" or "**TBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in Tokyo;

"**TONA Compounded Index_{Start}**" means, with respect to an Interest Period, the TONA Compounded Index determined in relation to the day falling "p" Tokyo Banking Days prior to the first day of such Interest Period; and

"**TONA Compounded Index_{End}**" means with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling "p" Tokyo Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Tokyo Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"**Weighted Average TONA**" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the TONA reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the TONA reference rate in respect of any calendar day which is not a Tokyo Banking Day shall be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the TONA reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the TONA reference rate for such calendar day will be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the TONA reference rate in respect of any calendar day which is not a Tokyo Banking Day shall, subject to the preceding proviso, be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 15(g)(B), if the relevant TONA Compounded Index is not published or displayed by the administrator of the TONA reference rate or other information service by 5.00 p.m. (Tokyo time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the Bank of Japan (or any successor administrator) on the relevant TONA Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the TONA

Compounded Index is not available in accordance with Condition paragraph 15(g)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".

- (F) If the TONA reference rate is not published on the Relevant Screen Page at the Relevant Time on the relevant Tokyo Banking Day, the TONA reference rate for such Tokyo Banking Day shall be the rate equal to the Tokyo Overnight Average published by the administrator of the TONA reference rate on the Relevant Screen Page for the last preceding Tokyo Banking Day on which the Tokyo Overnight Average was published by the administrator of TONA on the Relevant Screen Page.
- (h) the Calculation Agent specified in the Final Terms will:
 - (i) as soon as practicable after 11.00 a.m. (Brussels time) on each EURIBOR Interest Determination Date;
 - (ii) at the Relevant Time specified in the relevant Final Terms on each SONIA Interest Determination Date;
 - (iii) at the Relevant Time specified in the relevant Final Terms on each SOFR Interest Determination Date;
 - (iv) on each €STR Interest Determination Date;
 - (v) at the Relevant Time specified in the relevant Final Terms on each SARON Interest Determination Date;
 - (vi) at the Relevant Time specified in the relevant Final Terms on each TONA Interest Determination Date; or
 - (vii) in the case of ISDA Determination, at the time and on the Reset Date specified in the relevant Final Terms,

determine the Rate of Interest and calculate the amount of interest payable (the "**Amount of Interest**") for the relevant Interest Period. "**Rate of Interest**" means (A) if the Reference Rate is EURIBOR, the rate which is determined in accordance with the provisions of paragraph (a); (B) in the case of a Global Note which specifies ISDA Determination in the Final Terms, the rate which is determined in accordance with the provisions of paragraph (b); (C) if the Reference Rate is SONIA, the rate which is determined in accordance with the provisions of paragraph (c); (D) if the Reference Rate is SOFR, the rate which is determined in accordance with the provisions of paragraph (d); (E) if the Reference Rate is €STR, the rate which is determined in accordance with the provisions of paragraph (e); (F) if the Reference Rate is SARON, the rate which is determined in accordance with the provisions of paragraph (f); and (G) if the Reference Rate is TONA, the rate which is determined in accordance with the provisions of paragraph (g). The Amount of Interest shall be calculated by applying the Rate of Interest to the Nominal Amount of one Note of each Denomination, multiplying such product by the Day Count Convention specified in the Final Terms or, if none is specified, by the actual number of days in the Interest Period concerned divided by 360 or, if this Global Note is denominated in Sterling, by 365 and rounding the resulting figure to the nearest amount of the above-mentioned Specified Currency which is available as legal tender in the country or countries (in the case of the Euro) of the Specified Currency (with halves being rounded upwards). The determination of the Rate of Interest and the Amount of Interest by the Calculation Agent shall (in the absence of manifest error) be final and binding upon all parties;

- (i) a certificate of the Calculation Agent as to the Rate of Interest payable hereon for any Interest Period shall be conclusive and binding as between the Issuer and the bearer hereof;
- (j) the period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an

Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is called an "**Interest Period**" for the purposes of this paragraph; and

- (k) the Issuer will procure that a notice specifying the Rate of Interest payable in respect of each Interest Period be published as soon as practicable after the determination of the Rate of Interest. Such notice will be delivered to the clearing system(s) and/or depositaries in which this Global Note is held at the relevant time or, if this Global Note has been exchanged for bearer definitive Notes pursuant to paragraph 11, will be published in a leading English language daily newspaper published in London (which is expected to be the *Financial Times*).
- (l) If a Benchmark Event occurs in relation to an Original Reference Rate (other than SOFR) when any Rate of Interest (or any component part thereof) remains to be determined by reference to such Original Reference Rate, then the Issuer shall use its reasonable endeavours to appoint an Independent Adviser, as soon as reasonably practicable, with a view to the Issuer determining a Successor Rate (subject to the terms of this paragraph (l)), failing which an Alternative Rate (in accordance with paragraph (l)), and, in either case, an Adjustment Spread if any (in accordance with paragraph (l)) and any Benchmark Amendments (in accordance with paragraph (l)).

An Independent Adviser appointed pursuant to this paragraph (l) shall act in good faith and in a commercially reasonable manner. In the absence of bad faith or fraud, the Independent Adviser shall have no liability whatsoever to the Issuer, the Paying Agent, or the Holders for any advice given to the Issuer in connection with any determination made by the Issuer, pursuant to this paragraph (l).

If (a) the Issuer is unable to appoint an Independent Adviser; or (b) the Issuer fails to determine a Successor Rate or, failing which, an Alternative Rate in accordance with this paragraph (l) prior to the relevant EURIBOR Interest Determination Date, SONIA Interest Determination Date, €STR Interest Determination Date, SARON Interest Determination Date and TONA Interest Determination Date as applicable, the Rate of Interest applicable to the next succeeding Reset Period or Interest Period, as applicable, shall be equal to the Rate of Interest last determined in relation to the Notes in respect of the immediately preceding Interest Period, respectively. For the avoidance of doubt, this paragraph (l) shall apply to the relevant next succeeding Interest Period only and any subsequent Interest Periods are subject to the subsequent operation of, and to adjustment as provided in, this paragraph (l).

If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines that:

- (i) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in paragraph (l)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof), as applicable, for all future payments of interest on the Notes (subject to the operation of this paragraph (l)); or
- (ii) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in paragraph (l)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof), as applicable, for all future payments of interest on the Notes (subject to the operation of this paragraph (l)).

The Adjustment Spread (or the formula or methodology for determining the Adjustment Spread), if any, shall be applied to the Successor Rate or the Alternative Rate (as the case may be). If the Issuer, following consultation with the Independent Adviser is unable to determine the quantum of, or a formula or methodology for determining, such Adjustment Spread, then the Successor Rate or the Alternative Rate (as applicable) will apply without an Adjustment Spread.

If any Successor Rate, Alternative Rate and, in either case, the applicable Adjustment Spread is determined in accordance with this paragraph (l) and the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these terms and conditions are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or (in either case) the applicable Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with paragraph (l), without any requirement for the consent or approval of Holders, vary these terms and conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice.

Notwithstanding any other provision of this paragraph (l), the Calculation Agent or any Paying Agent is not obliged to concur with the Issuer or the Independent Adviser in respect of any changes or amendments as contemplated under this paragraph (l) to which, in the sole opinion of the Calculation Agent or the relevant Paying Agent, as the case may be, would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to the Calculation Agent or the relevant Paying Agent (as applicable) in the Agency Agreement and/or these terms and conditions.

In connection with any such variation in accordance with this paragraph (l), the Issuer shall comply with the rules of any stock exchange on which the Notes are for the time being listed or admitted to trading.

Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this paragraph (l) will be notified promptly by the Issuer to the Calculation Agent, the Paying Agents and the Holders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Amendments, if any.

No later than notifying the Holders of the same, the Issuer shall deliver to the Issue and Paying Agent, the Calculation Agent and the Paying Agents a certificate signed by two authorised signatories of the Issuer:

- (i) confirming (a) that a Benchmark Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate, (iii) the applicable Adjustment Spread and (iv) the specific terms of the Benchmark Amendments (if any), in each case as determined in accordance with the provisions of this paragraph (l); and
- (ii) certifying that the Benchmark Amendments (if any) are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and (in either case) the applicable Adjustment Spread.

The Issue and Paying Agent shall display such certificate at its offices, for inspection by the Holders at all reasonable times during normal business hours.

Each of Issue and Paying Agent, the Calculation Agent and the Paying Agents shall be entitled to rely on such certificate (without liability to any person) as sufficient evidence thereof. The Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) and without prejudice to the Issue and Paying Agent's or the Calculation Agent's or the Paying Agents' ability to rely on such certificate as aforesaid) be binding on the Issuer, the Issue and Paying Agent, the Calculation Agent, the Paying Agents and the Holders.

Notwithstanding any other provision of this paragraph (l), if following the determination of any Successor Rate, Alternative Rate, Adjustment Spread or Benchmark Amendments (if any), in the Calculation Agent's opinion there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this paragraph (l), the Calculation Agent shall promptly notify the Issuer thereof and the Issuer

shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or is otherwise unable (other than due to its own gross negligence, willful default or fraud) to make such calculation or determination for any reason, it shall notify the Issuer thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and (in the absence of such gross negligence, willful default or fraud) shall not incur any liability for not doing so.

Without prejudice to the obligations of the Issuer under the foregoing paragraphs, the Original Reference Rate and the fallback provisions provided for herein will continue to apply unless and until a Benchmark Event has occurred. Upon the occurrence of a Benchmark Event, this paragraph (l) shall prevail.

As used in this paragraph (l):

"Adjustment Spread" means either a spread (which may be positive or negative), or the formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

- (i) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or (if no such recommendation has been made, or in the case of an Alternative Rate)
- (ii) the Issuer, following consultation with the Independent Adviser determines, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry- accepted replacement rate for the Original Reference Rate; or (if the Issuer determines that no such spread is customarily applied)
- (iii) the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); (or if the Issuer determines that no such industry standard is recognised or acknowledged)
- (iv) if no such spread, formula or methodology can be determined in accordance with (i) to (iii) above, the Issuer, in its discretion, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines to be appropriate, having regard to the objective, so far as is reasonably practicable in the circumstances and solely for the purposes of this subclause (iv) only, of reducing or eliminating any economic prejudice or benefit (as the case may be) to the Holders.

"Alternative Rate" means an alternative benchmark or screen rate which the Issuer following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines in accordance with paragraph (l) is customarily applied in international debt capital markets transactions for the purposes of determining rates of interest (or the relevant component part thereof) in the same Specified Currency as the Notes.

"Benchmark Event" means:

- (i) the Original Reference Rate ceasing to exist or ceasing to be published for a period of at least 5 Business Days in relation to a Rate of Interest of Floating Rate Notes; or
- (ii) a public statement by the administrator of the Original Reference Rate that it has ceased or will cease publishing the Original Reference Rate permanently or

- indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or
- (iii) a public statement by the supervisor of the administrator of the Original Reference Rate, that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or
 - (iv) a public statement by the supervisor of the administrator of the Original Reference Rate as a consequence of which the Original Reference Rate will be prohibited from being used either generally, or in respect of the Notes; or
 - (v) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate is or will be (or is or will be deemed by such supervisor to be) no longer representative of its relevant underlying market; or
 - (vi) it has become unlawful for the Issue and Paying Agent, Calculation Agent, the Issuer or other party to calculate any payments due to be made to any holder using the Original Reference Rate;
 - (vii) **provided that** the Benchmark Event shall be deemed to occur (a) in the case of sub-paragraphs (ii) and (iii) above, on the date of the cessation of publication of the Original Reference Rate or the discontinuation of the Original Reference Rate, as the case may be, (b) in the case of sub-paragraph (iv) above, on the date of the prohibition of use of the Original Reference Rate and (c) in the case of sub-paragraph (v) above, on the date with effect from which the Original Reference Rate will no longer be (or will be deemed by the relevant supervisor to no longer be) representative of its relevant underlying market and which is specified in the relevant public statement, and, in each case, not the date of the relevant public statement.
 - (viii) The occurrence of a Benchmark Event shall be determined by the Issuer and promptly notified to the Issue and Paying Agent, the Calculation Agent and the Paying Agents. For the avoidance of doubt, neither the Issue and Paying Agent, the Calculation Agent nor the Paying Agents shall have any responsibility for making such determination.

"Independent Adviser" means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Issuer.

"Original Reference Rate" means the originally-specified benchmark or screen rate (as applicable) used to determine the Rate of Interest (or any component part thereof), as applicable, on the Notes.

"Relevant Nominating Body" means, in respect of a benchmark or screen rate (as applicable):

- (i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or
- (ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof.

"Successor Rate" means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body.

As used in this Global Note:

"**2021 ISDA Definitions**" means the version of the 2021 ISDA Interest Rate Derivative Definitions, including each Matrix (and any successor matrix), as published by the International Swaps and Derivatives Association, Inc. (or any successor) on its website (www.isda.org) as at Issue Date) *provided that* (i) references to a "Confirmation" in the 2021 ISDA Definitions should instead be read as references to this Global Note; (ii) references to an "Calculation Period" in the 2021 ISDA Definitions should instead be read as references to an "Interest Period" and (iii) the "Administrator/Benchmark Event" in the 2021 ISDA Definitions shall be disappplied.

Capitalised terms used but not otherwise defined in this Global Note shall bear the meaning ascribed to them in the 2021 ISDA Definitions.

16. Upon any payment being made in respect of the Notes represented by this Global Note, the Issuer shall procure that:
 - (a) *CGN*: if the Final Terms specify that the New Global Note form is not applicable, details of such payment shall be entered in the Schedule hereto and, in the case of any payment of principal, the aggregate Nominal Amount of the Notes represented by this Global Note shall be reduced by the principal amount so paid; and
 - (b) *NGN*: if the Final Terms specify that the New Global Note form is applicable, details of such payment shall be entered *pro rata* in the records of the ICSDs and, in the case of any payment of principal, the aggregate Nominal Amount of the Notes entered in the records of the ICSDs and represented by this Global Note shall be reduced by the principal amount so paid.
17. This Global Note shall not be validly issued unless manually authenticated by Citibank N.A., London Branch as Issuing and Paying Agent.
18. If the Final Terms specify that the New Global Note form is applicable, this Global Note shall not be valid for any purpose until it has been effectuated for and on behalf of the entity appointed as common safekeeper by the ICSDs.
19. The status of this Global Note, the exercise of the Bail-in Power by the Relevant Resolution Authority, the capacity of the Issuer and the relevant corporate resolutions shall be governed by Spanish law. This Global Note and any non-contractual obligations arising out of or connected with it are governed by, and construed in accordance with, English law.
 - (a) *English courts*: The courts of England have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising from or connected with this Global Note (including a dispute relating to any non-contractual obligations arising out of or in connection with this Global Note or a dispute regarding the existence, validity or termination of this Global Note or the consequences of its nullity).
 - (b) *Appropriate forum*: The Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary.
 - (c) *Rights of the bearer to take proceedings outside England*: Paragraph 19(a) (*English courts*) is for the benefit of the bearer only. As a result, nothing in this paragraph 19 prevents the bearer from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction. To the extent allowed by law, the bearer may take concurrent Proceedings in any number of jurisdictions.
 - (d) *Service of process*: The Issuer agrees that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it by being delivered to Banco Santander, S.A., London Branch at 2 Triton Square, Regent's Place, London NW1 3AN or at any address of the Issuer in Great Britain at which service of process may be served on it. Nothing in this sub-paragraph shall affect the right of the bearer to serve process in any other manner permitted by law.

20. The Notes represented by this Global Note have been admitted to listing on the official list of the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") and to trading on the regulated market of Euronext Dublin (and/or have been admitted to listing, trading and/or quotation on any other listing authority, stock exchange and/or quotation system), all notices required to be published concerning this Global Note shall be published in accordance with the requirements of Euronext Dublin (and/or of the relevant listing authority, stock exchange and/or quotation system). So long as the Notes are represented by this Global Note, and this Global Note has been deposited with a depository or common depository for the ICSDs, or any other relevant clearing system or a Common Safekeeper (which expression has the meaning given in the Agency Agreement), the Issuer may, in lieu of such publication and if so permitted by the rules of Euronext Dublin (and/or of the relevant listing authority, stock exchange and/or quotation system), deliver the relevant notice to the clearing system(s) in which this Global Note is held but only upon a receipt of an undertaking by such intermediaries to ensure the timely delivery of such notifications to such Beneficial Owners.
21. Claims for payment of principal and interest in respect of this Global Note shall become prescribed and void unless made, in the case of principal, within ten years after the Maturity Date (or, as the case may be, the Relevant Date) or, in the case of interest, five years after the relevant Interest Payment Date.

22. **Bail-in**

- (a) *Acknowledgement*: Notwithstanding any other term of this Global Note or any other agreement, arrangement or understanding between the Issuer and the bearer, by its subscription and/or purchase and holding of this Global Note, each bearer (which for the purposes of this paragraph 22 includes each holder of a beneficial interest in this Global Note) acknowledges, accepts, consents to and agrees:
- (i) to be bound by the effect of the exercise of the Bail-in Power by the Relevant Resolution Authority, which may include and result in any of the following, or some combination thereof:
- the reduction of all, or a portion, of the Amounts Due on a permanent basis;
 - the conversion of all, or a portion, of the Amounts Due into shares, other securities or other obligations of the Issuer or another person (and the issue to the bearer of this Global Note of such shares, securities or obligations), including by means of an amendment, modification or variation of the terms of this Global Note, in which case the bearer agrees to accept in lieu of its rights under this Global Note any such shares, other securities or other obligations of the Issuer or another person;
 - the cancellation of this Global Note or Amounts Due;
 - the amendment or alteration of the maturity of this Global Note or amendment of the Amount of Interest payable on this Global Note, or the date on which the interest becomes payable, including by suspending payment for a temporary period; and
- (ii) that the terms of this Global Note are subject to, and may be varied, if necessary, to give effect to, the exercise of the Bail-in Power by the Relevant Resolution Authority.
- (b) *Payment of Interest and Other Outstanding Amounts Due*: No repayment or payment of the Amounts Due will become due and payable or be paid after the exercise of the Bail-in Power by the Relevant Resolution Authority with respect to the Issuer unless, at the time such repayment or payment, respectively, is scheduled to become due, such repayment or payment would be permitted to be made by the Issuer under the laws and regulations in effect in the Kingdom of Spain and the European Union applicable to the Issuer or other members of the Group.

- (c) *Notice to bearer:* Upon the exercise of any Bail-in Power by the Relevant Resolution Authority with respect to this Global Note, the Issuer will make available a written notice to the bearer as soon as practicable regarding such exercise of the Bail-in Power. The Issuer will also deliver a copy of such notice to the Paying Agents for information purposes. Any delay or failure to give notice to the bearer will not affect the validity or enforceability of the Bail-in Power.
- (d) *Duties of the Paying Agents:* Upon the exercise of any Bail-in Power by the Relevant Resolution Authority, (a) the Issue and Paying Agent shall not be required to take any directions from bearer, and (b) the Agency Agreement shall impose no duties upon the Issue and Paying Agent whatsoever, with respect to the exercise of any Bail-in Power by the Relevant Resolution Authority.
- (e) *Proration:* If the Relevant Resolution Authority exercises the Bail-in Power with respect to less than the total Amounts Due, unless any of the Paying Agents is otherwise instructed by the Issuer or the Relevant Resolution Authority, any cancellation, write-off or conversion made in respect of this Global Note pursuant to the Bail-in Power will be made on a pro-rata basis.
- (f) *Conditions Exhaustive:* The matters set forth in this paragraph 22 shall be exhaustive on the foregoing matters to the exclusion of any other agreements, arrangements or understandings between the Issuer and any Holder.

For the purposes of this paragraph 22:

"Amounts Due" means the principal amount or outstanding amount, together with any accrued but unpaid interest, and additional amounts as described in paragraph 3, if any, due on the Notes. References to such amounts will include amounts that have become due and payable, but which have not been paid, prior to the exercise of the Bail-in Power by the Relevant Resolution Authority.

"Bail-In Power": means any powers existing from time to time under, and exercised in compliance with, any laws, regulations, rules or requirements in effect in Spain, relating to (i) the resolution of credit entities and/or transposition of the BRRD (including, but not limited to Law 11/2015, Royal Decree 1012/2015, of 6 November, implementing Law 11/2015, as amended or superseded, and any other implementing regulations); (ii) the SRM Regulation; and (iii) the instruments, rules or standards created thereunder, pursuant to which any obligation of a regulated entity (or other affiliate of such regulated entity) can be reduced, cancelled, modified, transferred or converted into shares, other securities, or other obligations of such regulated entity or any other person.

"Relevant Resolution Authority" means the Fund for Orderly Bank Restructuring (*Fondo de Reestructuración Ordenada Bancaria*), the Single Resolution Board or any other entity with the authority to exercise any the resolution tools and powers contained in Law 11/2015 and the SRM Regulation from time to time.

"SRM Regulation" means Regulation (EU) No. 806/2014 of the European Parliament and the Council of 15th July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of the Single Resolution Mechanism and the Single Resolution Fund and amending Regulation (EU) No. 1093/2010, as amended or replaced from time to time.

23. No person shall have any right to enforce any provision of this Global Note under the Contracts (Rights of Third Parties) Act 1999.

Signed on behalf of:
BANCO SANTANDER S.A.

AUTHENTICATED by
CITIBANK N.A., LONDON BRANCH

without recourse, warranty or liability and for authentication purposes only

By:
(Authorised Signatory)

By:
(Authorised Signatory)

By:
(Authorised Signatory)

EFFECTUATED for and on behalf of

.....
as common safekeeper without recourse, warranty or liability

By:
[*manual signature*]
(duly authorised)

SCHEDULE²

Payments of Interest, Delivery of Definitive Notes and Cancellation of Notes

Date of payment, delivery or cancellation	Amount of interest then paid	Amount of interest withheld	Amount of principal then paid	Aggregate principal amount of Definitive Notes then delivered	Aggregate principal amount of Notes then cancelled	Notes then cancelled with respect to interest	Notes then cancelled with respect to principal	New aggregate Nominal Amount of this Global Note	Authorised signature

² This Schedule should only be completed where the Final Terms specify that the New Global Note form is not applicable.

FINAL TERMS

[Completed Final Terms to be attached]

**PART B – FORM OF MULTICURRENCY DEFINITIVE NOTE IN RESPECT OF BANCO
SANTANDER**

THE SECURITIES COVERED HEREBY HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**") AND MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS. TERMS USED ABOVE HAVE THE MEANINGS GIVEN TO THEM BY REGULATIONS UNDER THE SECURITIES ACT.

BANCO SANTANDER, S.A.
(LEI: 5493006QMFDDMYWIAM13)
(Incorporated with limited liability in the Kingdom of Spain)

€20,000,000,000

EURO-COMMERCIAL PAPER PROGRAMME

Nominal Amount of this Note:

1. For value received, Banco Santander S.A. (the "**Issuer**") promises to pay to the bearer of this Note on the Maturity Date set out in the Final Terms, or on such earlier date as the same may become payable in accordance with paragraph 3 below (the "**Relevant Date**"), the above-mentioned Nominal Amount or, as the case may be, the Redemption Amount set out in the Final Terms, at the rate and at the times (if any) specified herein and in the Final Terms. Terms defined in the Final Terms attached hereto but not otherwise defined in this Note shall have the same meaning in this Note.

All such payments shall be made in accordance with an amended and restated issuing and paying agency agreement (the "**Agency Agreement**") dated 14 March 2023 (as amended and restated or supplemented from time to time) between the Issuer and Citibank N.A., London Branch as issue agent and as principal paying agent (the "**Issuing and Paying Agent**"), a copy of which is available for inspection at the offices of the Issuing and Paying Agent at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, UK, and subject to and in accordance with the terms and conditions set forth below. All such payments shall be made upon presentation and surrender of this Note at the office of the Issuing and Paying Agent referred to above by transfer to an account denominated in the Specified Currency set out in the Final Terms maintained by the bearer in the principal financial centre in the country of that currency or, if this Note is denominated in Euro, by Euro cheque drawn on, or by transfer to a Euro account (or any other account to which Euro may be credited or transferred) maintained by the payee with, a bank in the principal financial centre of any Member State of the European Union.

2. All payments in respect of this Note by or on behalf of the Issuer shall be made without set-off, counterclaim, fees, liabilities or similar deductions, and free and clear of, and without deduction or withholding for or on account of, taxes, levies, duties, assessments or charges of any nature now or hereafter imposed, levied, collected, withheld or assessed by or on behalf of the Kingdom of Spain or any political subdivision thereof or any taxing authority or agency thereof or therein ("**Taxes**"). If the Issuer or any agent thereof is required by law or regulation to make any deduction or withholding for or on account of Taxes, the Issuer shall, to the extent permitted by applicable law or regulation, pay such additional amounts as shall be necessary in order that the net amounts received by the bearer of this Note (the "**holder**") after such deduction or withholding shall equal the amount which would have been receivable hereunder in the absence of such deduction or withholding, except that the Issuer shall not be required to pay any additional amounts in relation to any payment:
 - (i) to, or to a third party on behalf of, a holder of a Note who is liable for such taxes, duties, assessments or governmental charges in respect of such Note by reason of his having some connection with Spain other than the mere holding of such Note; or
 - (ii) to, or to a third party on behalf of, a holder in respect of whose Notes the Issuer does not receive such information as may be required in order to comply with the applicable Spanish tax reporting obligations; or

- (iii) in respect of any Note presented for payment more than fifteen days after the Maturity Date (or, as the case may be, the Relevant Date) or, if applicable, the relevant Interest Payment Date or (in either case) the date on which the payment hereof is duly provided for, whichever occurs later, except to the extent that the relevant holder would have been entitled to such additional amounts on presenting the same for payment on the expiry of such period of fifteen days.
3. This Note may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 14 days' notice to the holders (which notice shall be irrevocable), at the Redemption Amount specified in the Final Terms, together with (if this Note is an interest bearing Note) interest accrued to the date fixed for redemption, if:
- (a) the Issuer has or will become obliged to pay additional amounts as provided or referred to in paragraph 2 as a result of any change in, or amendment to, the laws or regulations of the Kingdom of Spain or any political subdivision thereof or any authority or agency thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the Issue Date specified in the Final Terms; and
 - (b) such obligation cannot be avoided by the Issuer taking reasonable measures available to it;

provided, however, that no such notice of redemption shall be given earlier than 14 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Issuing and Paying Agent:

- (a) a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred; and
- (b) an opinion of independent legal advisers of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Upon the expiry of any such notice as is referred to in this paragraph, the Issuer shall be bound to redeem the Notes in accordance with this paragraph.

4. The Issuer or any its subsidiaries may at any time purchase Notes in the open market or otherwise and at any price, **provided that** all unmatured interest coupons (if this Note is an interest bearing Note) are purchased therewith.
5. All Notes so purchased by the Issuer otherwise than in the ordinary course of business of dealings in securities or as a nominee shall be cancelled and shall not be reissued or resold. All Notes so purchased by any subsidiary of the Issuer may be cancelled, held by such subsidiary or resold.
6. The payment obligations of the Issuer represented by this Note constitute and at all times shall constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer and upon insolvency of the Issuer (and unless they qualify as subordinated debts (*créditos subordinados*) under article 281 of the restated text of the Spanish Insolvency Law, approved by Legislative Royal Decree 1/2020, of 5 May (the "**Insolvency Law**") or equivalent legal provision which replaces it in the future, and subject to any applicable legal and statutory exceptions), rank (a) *pari passu* and rateably without any preference among other Notes of the same Series (as specified in the Final Terms) and with any Senior Higher Priority Liabilities and (b) senior to (i) Senior Non Preferred Liabilities and (ii) any present and future subordinated obligations (*créditos subordinados*) of the Issuer in accordance with article 281 of the Insolvency Law.

"Law 11/2015" means Law 11/2015 of 18 June on recovery and resolution of credit institutions and investment firms, as amended or superseded from time to time;

"Senior Higher Priority Liabilities" means any obligations in respect of principal of the Issuer under any Notes and any other unsecured and unsubordinated obligations (*créditos ordinarios*) of the Issuer, other than the Senior Non Preferred Liabilities; and

"Senior Non Preferred Liabilities" means any unsubordinated and unsecured senior non preferred obligations (*créditos ordinarios no preferentes*) of the Issuer under Additional Provision 14.2° of Law 11/2015 and any other obligations which, by law and/or by their terms, and to the extent permitted by Spanish law, rank *pari passu* with the Senior Non Preferred Liabilities.

7. If the Maturity Date (or, as the case may be, the Relevant Date) or, if applicable, the relevant Interest Payment Date, is not a Payment Business Day (as defined herein) payment in respect hereof will not be made and credit or transfer instructions shall not be given until the next following Payment Business Day unless that date falls more than 364 days after the Issue Date, in which case payment shall be made on the immediately preceding Payment Business Day, and the bearer of this Note shall not be entitled to any interest or other sums in respect of such postponed payment.

As used herein, **"Payment Business Day"**, shall mean any day, other than a Saturday or a Sunday, which is either (i) if the Specified Currency set out in the Final Terms is any currency other than Euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the Specified Currency set out in the Final Terms (which, if the Specified Currency is Australian dollars, shall be Sydney) or (ii) if the Specified Currency set out in the Final Terms is Euro, a day which is a TARGET Business Day; and

"TARGET2" means the Trans-European Automated Real-time Gross Settlement Express Transfer payment system which utilises a single shared platform and which was launched on 19 November 2007; and

"TARGET Business Day" means any day on which TARGET2 is open for the settlement of payments in Euro.

8. This Note is negotiable and, accordingly, title hereto shall pass by delivery and the bearer shall be treated as being absolutely entitled to receive payment upon due presentation hereof (notwithstanding any notation of ownership or other writing thereon or notice of any previous loss or theft thereof).
9. ³[If this is an interest bearing Note, then:
- (a) notwithstanding the provisions of paragraph 1 above, if any payment of interest in respect of this Note falling due for payment prior to the Maturity Date remains unpaid on the fifteenth day after falling so due, the amount referred to in paragraph 1 shall be payable on such fifteenth day; and
 - (b) upon each payment of interest (if any) prior to the Maturity Date in respect of this Note, the Schedule hereto shall be duly completed by the Issuing and Paying Agent to reflect such payment.
10. If this is a fixed rate interest bearing Note, interest shall be calculated on the above-mentioned Nominal Amount as follows:
- (a) interest shall be payable on the above-mentioned Nominal Amount in respect of each successive Interest Period (as defined below) from (and including) the Issue Date to (but excluding) the Maturity Date (or, as the case may be, to the Relevant Date), in arrears on the relevant Interest Payment Date, on the basis of the Day Count Convention specified in the Final Terms or, if none is specified, on the basis of the actual number of days in such Interest Period and a year of 360 days or, if this Note is denominated in Australian Dollars or Canadian Dollars, 365 days at the Rate of Interest specified in the Final Terms with the resulting figure being rounded to the nearest amount of the Specified Currency which is

³ If this Note is denominated in Sterling, delete paragraphs 9 through 12 inclusive and replace with interest provisions to be included on the reverse of the Note as indicated below.

available as legal tender in the country or countries (in the case of the Euro) of the Specified Currency (with halves being rounded upwards); and

- (b) the period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is an "**Interest Period**" for the purposes of this paragraph.

11. If this is a floating rate interest bearing Note, interest shall be calculated on the above-mentioned Nominal Amount as follows:

- (a) in the case of a Note which specifies EURIBOR as the Reference Rate in the Final Terms, the Rate of Interest will be the aggregate of EURIBOR and the Margin specified in the Final Terms (if any) above or below EURIBOR. The Rate of Interest determined for any Interest Period by reference to EURIBOR shall be subject to a floor of zero to ensure that the Rate of Interest on any Interest Accrual Period for Floating Rate Notes is not negative. Interest shall be payable on the above-mentioned Nominal Amount in respect of each successive Interest Period (as defined below) from (and including) the Issue Date to (but excluding) the Maturity Date (or, as the case may be, to the Relevant Date), in arrears on the relevant Interest Payment Date, on the basis of the Day Count Convention specified in the Final Terms or, if none is specified, on the basis of the actual number of days in such Interest Period and a year of 360 days.

As used in this Note (and unless otherwise specified in the Final Terms):

"**EURIBOR**" shall be equal to EUR-EURIBOR-Reuters (as defined in the 2021 ISDA Definitions) as at 11.00 a.m. (Brussels time) or as near thereto as practicable on the second TARGET Business Day before the first day of the relevant Interest Period (a "**EURIBOR Interest Determination Date**"), as if the Reset Date (as defined in the 2021 ISDA Definitions) were the first day of such Interest Period and the Designated Maturity (as defined in the 2021 ISDA Definitions) were the number of months specified in the Final Terms in relation to the Reference Rate;

If such rate does not appear on that page or if that page is unavailable, the Issuer will request the Relevant Financial Centre office of each of the four major banks selected by the Issuer in the market that are most closely connected with the Reference Rate (excluding the Calculation Agent) to provide a quotation of the Reference Rate at approximately the Relevant Time on the EURIBOR Interest Determination Date offered to leading banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and the Calculation Agent shall determine the arithmetic mean of such quotations.

If fewer than two such quotations are provided as requested, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in such financial centre(s) as the Issuer may select), at approximately 11.00 a.m. (Brussels time) on the first day of the relevant Interest Period for loans in the Specified Currency to leading European banks for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time and the Rate of Interest for such Interest Period shall be the rate or (as the case may be) the arithmetic mean so determined.

If the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest will be the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period, substituting, where a different margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the margin relating to the relevant Interest Period in place of the margin relating to that last preceding Interest Period;

- (b) in the case of a Note which specifies ISDA Determination in the Final Terms, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and

the relevant ISDA Rate where "ISDA Rate" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the 2021 ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the 2021 ISDA Definitions and under which:

- (i) the Floating Rate Option (as defined in the 2021 ISDA Definitions) is as specified in the relevant Final Terms;
- (ii) the Designated Maturity (as defined in the 2021 ISDA Definitions) is a period specified in the relevant Final Terms; and
- (iii) the relevant Reset Date (as defined in the 2021 ISDA Definitions) is as specified in the relevant Final Terms; and
- (iv) if the specified Floating Rate Option is an Overnight Floating Rate Option (as defined in the 2021 ISDA Definitions), Compounding is specified to be applicable in the relevant Final Terms and:
 - (A) if Compounding with Lookback is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Lookback is the number of Overnight Rate Compounding Method and (b) Lookback is the number of Applicable Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms;
 - (B) if Compounding with Observation Period Shift is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Observation Period Shift is the Overnight Rate Compounding Method, (b) Observation Period Shift is the number of Observation Period Shift Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Observation Period Shift Additional Business Days (as defined in the 2021 ISDA Definitions), if applicable, are the days specified in the relevant Final Terms; or
 - (C) if Compounding with Lockout is specified as the Compounding Method in the relevant Final Terms, then (a) Compounding with Lockout is the Overnight Rate Compounding Method, (b) Lockout is the number of Lockout Period Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms;
- (v) if the specified Floating Rate Option is an Overnight Floating Rate Option (as defined in the 2021 ISDA Definitions), Averaging is specified to be applicable in the relevant Final Terms and:
 - (A) if Averaging with Lookback is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Lookback is the Overnight Rate Averaging Method and (b) Lookback is the number of Applicable Business Days (as defined in the 2021 ISDA Definitions) as specified in the relevant Final Terms;
 - (B) if Averaging with Observation Period Shift is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Observation Period Shift is the Overnight Rate Averaging Method, (b) Observation Period Shift is the number of Observation Period Shift Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Observation Period Shift Additional Business Days (as defined in the 2021 ISDA Definitions), if applicable, are the days specified in the relevant Final Terms; or

- (C) if Averaging with Lockout is specified as the Averaging Method in the relevant Final Terms, then (a) Averaging with Lockout is the Overnight Rate Averaging Method, (b) Lockout the number of Lockout Period Business Days (as defined in the 2021 ISDA Definitions) specified in the relevant Final Terms, and (c) Lockout Period Business Days, if applicable, are the days specified in the relevant Final Terms; and
- (vi) references in the 2021 ISDA Definitions to:
 - (A) "Confirmation" shall be references to the relevant Final Terms;
 - (B) "Calculation Period" shall be references to the relevant Interest Period;
 - (C) "Termination Date" shall be references to the Maturity Date;
 - (D) "Effective Date" shall be references to the Interest Commencement Date; and
 - (E) if the Temporary Non-Publication Fallback in respect of any specified Floating Rate Option is specified to be "Temporary Non-Publication Fallback – Alternative Rate" in the Floating Rate Matrix of the 2021 ISDA Definitions the reference to "Calculation Agent Alternative Rate Determination" in the definition of "Temporary Non-Publication Fallback – Alternative Rate" shall be replaced by "Temporary Non-Publication Fallback – Previous Day's Rate".

The Rate of Interest determined for any Interest Period according to ISDA Determination shall be subject to a floor of zero to ensure that the Rate of Interest on any Interest Accrual Period for Floating Rate Notes is not negative.

Notwithstanding anything in the ISDA Definitions to the contrary the Calculation Agent will have no obligation to exercise any discretion (including in determining EURIBOR or the fallback rate), and to the extent the ISDA Definitions requires the Calculation Agent to exercise any such discretion, the Issuer, will provide written direction to the Calculation Agent specifying how such discretion should be exercised, and the Calculation Agent will be entitled to conclusively rely on that direction and will be fully protected if it acts in accordance therewith.

- (c) in the case of a Note which specifies SONIA as the Reference Rate in the Final Terms, the Rate of Interest will be calculated in accordance with paragraph 11(c)(A), paragraph 11(c)(B) or paragraph 11(c)(C) below, subject to the provisions of paragraph 11(c)(E) and paragraph 11(c)(F) below, as applicable:
 - (A) Where the Calculation Method is specified in the relevant Final Terms as being "SONIA Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SONIA Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SONIA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (B) Where the Calculation Method is specified in the relevant Final Terms as being "SONIA Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average SONIA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SONIA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (C) The following definitions shall apply for the purpose of this paragraph 11(c)(C)

"Compounded Daily SONIA" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Sterling (with the daily

Sterling Overnight Index Average (SONIA) as reference rate for the calculation of interest) and will be calculated as follows:

- (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_{i-ipLBD} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}; \text{ or}$$

- (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}; \text{ or}$$

Where, in each case:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{SONIA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

"d" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"d₀" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of London Banking Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of London Banking Days in the relevant Observation Period;

"i" is a series of whole numbers from one to d₀, each representing the relevant London Banking Day in chronological order from, and including, the first London Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"Interest Period End Date" shall have the meaning specified in the relevant Final Terms;

"Lock-out Period" means, in respect of an Interest Period, the period from and including the day following the SONIA Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"London Banking Day" or "LBD" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"n_i", for any London Banking Day_i, means the number of calendar days from and including such London Banking Day_i up to but excluding the following London Banking Day; "Observation Period" means the period from and including the date falling "p" London Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" London Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling

"p" London Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five London Banking Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each London Banking Day in the relevant Interest Period that is not a London Banking Day falling in the Lock-out Period;

the "SONIA reference rate", means, in respect of any London Banking Day, a reference rate equal to the daily Sterling Overnight Index Average (SONIA) rate for such London Banking Day as provided by the administrator of SONIA to authorised distributors and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors (in each case on the London Banking Day immediately following such London Banking Day);

"SONIA_i" means, in respect of any London Banking Day:

- (x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the SONIA reference rate in respect of pLBD in respect of such London Banking Day; or
- (y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:
 - (1) in respect of any London Banking Day_i that is a Reference Day, the SONIA reference rate in respect of the London Banking Day immediately preceding such Reference Day; otherwise
 - (2) the SONIA reference rate in respect of the London Banking Day immediately preceding the SONIA Interest Determination Date for the relevant Interest Period;
- (z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the SONIA reference rate for such London Banking Day;

"SONIA_{i-pLBD}" means:

- (x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a London Banking Day_i, SONIA_i in respect of the London Banking Day falling p London Banking Days prior to such London Banking Day_i ("pLBD"); or
- (y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a London Banking Day_i, SONIA_i in respect of such London Banking Day_i;

"Compounded Daily SONIA Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Sterling (with the daily Sterling Overnight Index Average (SONIA) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily SONIA rates administered by the administrator of the SONIA reference rate that is published or displayed by such administrator or other information service from time to time on

the relevant SONIA Interest Determination Date, as further specified in the relevant Final Terms (the "**SONIA Compounded Index**") and will be calculated as follows:

$$\left(\frac{\text{SONIA Compounded Index}_{\text{End}}}{\text{SONIA Compounded Index}_{\text{Start}}} - 1 \right) \times \frac{365}{d}$$

Where, in each case:

"**d**" is the number of calendar days from (and including) the day in relation to which SONIA Compounded Index_{Start} is determined to (but excluding) the day in relation to which SONIA Compounded Index_{End} is determined;

"**London Banking Day**" or "**LBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in London;

"**p**" means five London Banking Days or such larger number of days as specified in the relevant Final Terms;

"**SONIA Compounded Index_{Start}**" means, with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling "p" London Banking Days prior to the first day of such Interest Period; and

"**SONIA Compounded Index_{End}**" means with respect to an Interest Period, the SONIA Compounded Index determined in relation to the day falling "p" London Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" London Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"**Weighted Average SONIA**" means:

- (x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the SONIA reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the SONIA reference rate in respect of any calendar day which is not a London Banking Day shall be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding such calendar day; or
- (y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the SONIA reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, **provided that**, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the SONIA reference rate for such calendar day will be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the SONIA reference rate in respect of any calendar day which is not a London Banking Day shall, subject to the preceding proviso, be deemed to be the SONIA reference rate in respect of the London Banking Day immediately preceding such calendar day.

- (D) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 11(c)(B), if the relevant SONIA Compounded Index is not

published or displayed by the administrator of the SONIA reference rate or other information service by 5.00 p.m. (London time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the administrator of the SONIA reference rate or of such other information service, as the case may be) on the relevant SONIA Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the SONIA Compounded Index is not available in accordance with paragraph 4 15(c)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".

- (E) If, in respect of any London Banking Day, the Calculation Agent determines that the SONIA reference rate is not available on the Relevant Screen Page or has not otherwise been published by the relevant authorised distributors, such SONIA reference rate shall be:
- a. (A) the Bank of England's Bank Rate (the "**Bank Rate**") prevailing at close of business on the relevant London Banking Day; plus (B) the arithmetic mean of the spread of the SONIA reference rate to the Bank Rate over the previous five London Banking Days on which the SONIA reference rate has been published, excluding the highest spread (or, if there is more than one highest spread, one only of those highest spreads) and lowest spread (or, if there is more than one lowest spread, one only of those lowest spreads) to the Bank Rate, or
 - b. if such Bank Rate is not available, the SONIA reference rate published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors) for the first preceding London Banking Day on which the SONIA reference rate was published on the Relevant Screen Page (or otherwise published by the relevant authorised distributors).

Notwithstanding the foregoing, in the event of the Bank of England publishing guidance as to (i) how the SONIA reference is to be determined or (ii) any rate that is to replace the SONIA reference rate, the Calculation Agent, as applicable, shall follow such guidance to determine the SONIA reference rate for so long as the SONIA reference is not available or has not been published by the authorised distributors.

- (d) in the case of a Note which specifies SOFR as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 11(d)(A) or paragraph 11(d)(B) below, subject to the provisions of paragraph 11(d)(D):
- (A) Where the Calculation Method is specified in the relevant Final Terms as being "SOFR Arithmetic Mean", the Rate of Interest for each Interest Period will be the SOFR Arithmetic Mean plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent as at the relevant SOFR Interest Determination Date, as follows, and the resulting percentage will be rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards.
 - (B) Where the Calculation Method is specified in the relevant Final Terms as being "SOFR Compound", the Rate of Interest for each Interest Period will be the Compounded Daily SOFR on the relevant SOFR Interest Determination Date plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent with the resulting percentage being rounded, if necessary, to the fifth decimal place, with 0.000005 being rounded upwards.
 - (C) The following definitions shall apply for the purpose of this paragraph 11(d):

"**Bloomberg Screen SOFRRATE Page**" means the Bloomberg screen designated "SOFRRATE" or any successor page or service;

"Compounded Daily SOFR" means with respect to an Interest Period, an amount equal to the rate of return for each calendar day during the Interest Period, compounded daily, calculated by the Calculation Agent on the SOFR Interest Determination Date, as follows:

- (i) if "SOFR Compound with Lookback" is specified in the relevant Final Terms:

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

Where:

"**d**" means, in respect of an Interest Period, the number of calendar days in such Interest Period;

"**d₀**" means, in respect of an Interest Period, 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;

"**Lookback Period**" or "**p**" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms;

"**n_i**" means, in respect of a U.S. Government Securities Business Day_i, 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_i**" means, in respect of each U.S. Government Securities Business Day_i, the SOFR in respect of such U.S. Government Securities Business Day; and

"**SOFR_{i-pUSBD}**" means, in respect of a U.S. Government Securities Business Day_i, SOFR_i in respect of the U.S. Government Securities Business Day falling the number of U.S. Government Securities Business Days equal to the Lookback Period prior to such U.S. Government Securities Business Day_i ("**pUSBD**"), **provided that**, unless SOFR Cut-Off Date is specified as not applicable in the relevant Final Terms, SOFR_i in respect of each U.S. Government Securities Business Day_i in the period from, and including, the SOFR Cut-Off Date to, but excluding, the next occurring Interest Period End Date, will be SOFR_i in respect of the SOFR Cut-Off Date for such Interest Period;

- (ii) if "SOFR Compound with Observation Period Shift" is specified in the relevant Final Terms:

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

Where:

"**d**" means, in respect of an Observation Period, the number of calendar days in such Observation Period;

"**d₀**" means, in respect of an Observation Period, the number of U.S. Government Securities Business Days in the relevant Observation Period;

"**i**" means a series of whole numbers from one 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 Observation Period;

"**n_i**" means, in respect of a U.S. Government Securities Business Day_{*i*}, 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;

"**Observation Period**" means, in respect of an Interest Period, the period from, and including, the date falling the number of Observation Shift Days prior to the first day of such Interest Period and ending on, but excluding, the date that is the number of Observation Shift Days prior to the next occurring Interest Period End Date for such Interest Period;

"**Observation Shift Days**" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms; and

"**SOFR_i**" means, in respect of each U.S. Government Securities Business Day_{*i*}, the SOFR in respect of such U.S. Government Securities Business Day;

- (iii) if "SOFR Compound with Payment Delay" is specified in the relevant Final Terms:

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

Where:

"**d**" means, in respect of an Interest Period, the number of calendar days in such Interest Period;

"**d₀**" means, in respect of an Interest Period, the number of U.S. Government Securities Business Days in the relevant Interest Period;

"**i**" means a series of whole numbers from one 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 Interest Period;

"**Interest Period End Dates**" shall have the meaning specified in the relevant Final Terms;

"**Interest Payment Dates**" shall be the dates occurring the number of Business Days equal to the Interest Payment Delay following each Interest Period End Date; **provided that** the Interest Payment Date with respect to the final Interest Period will be the Maturity Date or, if the Notes are to be redeemed prior to the Maturity Date, such earlier date on which the Notes become due and payable;

"**Interest Payment Delay**" means the number of U.S. Government Securities Business Days specified in the relevant Final Terms;

"**SOFR Interest Determination Date**" shall be the Interest Period End Date at the end of each Interest Period; **provided that** the SOFR Interest Determination Date with respect to the final Interest Period will be the SOFR Cut-Off Date;

"**n_i**" means, in respect of a U.S. Government Securities Business Day_i 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_i; and

"**SOFR_i**" means, for any U.S. Government Securities Business Day_i in the relevant Interest Period, the SOFR in respect of such U.S. Government Securities Business Day_i.

For purposes of calculating SOFR Compound with Payment Delay with respect to the final Interest Period, the level of SOFR for each U.S. Government Securities Business Day in the period from and including the SOFR Cut-Off Date to but excluding the Maturity Date or any earlier date on which the Notes become due and payable, as applicable, shall be the level of SOFR in respect of such SOFR Cut-Off Date.

- (iv) if "SOFR Index with Observation Shift" is specified in the relevant Final Terms:

$$\left(\frac{SOFR\ Index_{Final}}{SOFR\ Index_{Initial}} - 1 \right) \times \frac{360}{d_c}$$

Where:

"**d_c**" means, in respect of each Interest Period, the number of calendar days in the relevant Interest Period;

"**Interest Period End Dates**" shall have the meaning specified in the relevant Final Terms;

"**Observation Shift Days**" means five U.S. Government Securities Business Days or such larger number of days as specified in the relevant Final Terms;

"**SOFR Index**" means with respect to any U.S. Government Securities Business Day, (i) the SOFR Index value as published by the NY Federal Reserve as such index appears on the NY Federal Reserve's Website at the SOFR Determination Time; or (ii) if the SOFR Index specified in (i) above does not so appear, unless both a SOFR Transition Event and its related SOFR Replacement Date have occurred, the SOFR Index as published in respect of the first preceding U.S. Government Securities Business Day for which the SOFR Index was published on the NY Federal Reserve's Website;

"**SOFR Index_{Final}**" means, in respect of an Interest Period, the value of the SOFR Index on the date falling the number of U.S. Government Securities Business Days equal to the Observation Shift Days prior to the next occurring Interest Period End Date for such Interest Period;

"**SOFR Index_{Initial}**" means, in respect of an Interest Period, the value of the SOFR Index on the date falling the number of U.S. Government Securities Business Days equal to the Observation Shift Days prior to the first day of such Interest Period (or, in the case of the first Interest Period, the Interest Commencement Date);

"**NY Federal Reserve**" means the Federal Reserve Bank of New York;

"**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;

"Reuters Page USDSOFR=" means the Reuters page designated "USDSOFR=" or any successor page or service;

"SOFR" means the rate determined by the Calculation Agent in respect of a U.S. Government Securities Business Day, in accordance with the following provisions:

- (i) the Secured Overnight Financing Rate in respect of such U.S. Government Securities Business Day 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 U.S. Government Securities Business Day, as such rate is reported on the Bloomberg Screen SOFRRATE Page for such U.S. Government Securities Business Day 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 U.S. Government Securities Business Day (the **"SOFR Screen Page"**); or
- (ii) if the rate specified in (a) above does not so appear and the Calculation Agent determines that a SOFR Transition Event has 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;

"SOFR Arithmetic Mean" means, with respect to an Interest Period, the arithmetic mean of SOFR for each calendar day during such Interest Period, as calculated by the Calculation Agent, **provided that**, SOFR in respect of each calendar day during the period from, and including, the SOFR Cut-Off Date to, but excluding, the next occurring Interest Period End Date will be SOFR on the SOFR Cut-Off Date. For these purposes, SOFR in respect of any calendar day which is not a U.S. Government Securities Business Day shall, subject to the preceding proviso, be deemed to be SOFR in respect of the U.S. Government Securities Business Day immediately preceding such calendar day;

"SOFR Cut-Off Date" means, unless specified as not applicable in the relevant Final Terms, in respect of an Interest Period, the fourth U.S. Government Securities Business Day prior to the next occurring Interest Period End Date for such Interest Period (or such other number of U.S. Government Securities Business Days specified in the relevant Final Terms); and

"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.

Notwithstanding paragraphs 11(d)(A) to 11(d)(C) above, if the Calculation Agent determines on or prior to the SOFR Determination Time, that a SOFR Transition Event and its related SOFR Replacement Date have occurred with respect to the relevant SOFR Benchmark (as defined below), then the provisions set forth in paragraph 11(d)(D)

(SOFR Replacement Provisions) below will apply to all determinations of the Rate of Interest for each Interest Period thereafter.

(D) SOFR Replacement Provisions

If the Calculation Agent, failing which the Issuer, determines at any time prior to the SOFR Determination Time on any U.S. Government Securities Business Day that a SOFR Transition Event and the related SOFR Replacement Date have occurred, the Issuer will appoint an agent (the "**Replacement Rate Determination Agent**") which will determine the SOFR Replacement. The Replacement Rate Determination Agent may be a leading bank, broker-dealer or benchmark agent in the principal financial centre of the Specified Currency as appointed by the Issuer, an affiliate of the Issuer or such other entity that the Calculation Agent determines to be competent to carry out such role.

In connection with the determination of the SOFR Replacement, the Replacement Rate Determination Agent will determine appropriate SOFR Replacement Conforming Changes.

Any determination, decision or election that may be made by the Replacement Rate Determination Agent pursuant to these provisions, will (in the absence of manifest error) be conclusive and binding on the Issuer, the Calculation Agent, the Issue and Paying Agent and the Holders.

Following the designation of a SOFR Replacement, the Issuer may subsequently determine that a SOFR Transition Event and a related SOFR Replacement Date have occurred in respect of such SOFR Replacement, **provided that** the SOFR Benchmark has already been substituted by the SOFR Replacement and any SOFR Replacement Conforming Changes in connection with such substitution have been applied. In such circumstances, the SOFR Replacement shall be deemed to be the SOFR Benchmark and all relevant definitions shall be construed accordingly.

In connection with the SOFR Replacement provisions above, the following definitions shall apply:

"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 2021 ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to SOFR for the applicable tenor;

"ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the 2021 ISDA Definitions to be effective upon the occurrence of a SOFR Transition Event with respect to SOFR for the applicable tenor excluding the applicable ISDA Fallback Adjustment;

"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;

"SOFR Benchmark" means (a) (unless "SOFR Index with Observation Shift" is specified in the relevant Final Terms) SOFR or (b) SOFR Index (each as defined in paragraph 11(d)(C) above);

"SOFR Replacement" means any one (or more) of the SOFR Replacement Alternatives to be determined by the Replacement Rate Determination Agent as of the SOFR Replacement Date if the Issuer,

determines that a SOFR Transition Event and its related SOFR Replacement Date have occurred on or prior to the SOFR Determination Time in respect of any determination of the SOFR Benchmark on any U.S. Government Securities Business Day in accordance with:

- (a) the order of priority specified SOFR Replacement Alternatives Priority in the relevant Final Terms; or
- (b) if no such order of priority is specified, in accordance with the priority set forth below:
 - i. Relevant Governmental Body Replacement;
 - ii. ISDA Fallback Replacement; and
 - iii. Industry Replacement,

provided that, in each case, if the Replacement Rate Determination Agent is unable to determine the SOFR Replacement in accordance with the first SOFR Replacement Alternative listed, it shall attempt to determine the SOFR Replacement in accordance with each subsequent SOFR Replacement Alternative until a SOFR Replacement is determined. The SOFR Replacement will replace the then-current SOFR Benchmark for the purpose of determining the relevant Rate of Interest in respect of the relevant Interest Period and each subsequent Interest Period, subject to the occurrence of a subsequent SOFR Transition Event and related SOFR Replacement Date;

"SOFR Replacement Alternatives" means:

- (a) the sum of: (i) the alternative rate that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current SOFR Benchmark for the relevant Interest Period and (ii) the SOFR Replacement Adjustment (the **"Relevant Governmental Body Replacement"**);
- (b) the sum of: (i) the ISDA Fallback Rate and (ii) the SOFR Replacement Adjustment (the **"ISDA Fallback Replacement"**); or
- (c) the sum of: (i) the alternative rate that has been selected by the Replacement Rate Determination Agent as the replacement for the then-current SOFR Benchmark for the relevant Interest Period giving due consideration to any industry-accepted rate as a replacement for the then-current SOFR Benchmark for U.S. dollar- denominated floating rate securities at such time and (ii) the SOFR Replacement Adjustment (the **"Industry Replacement"**);

"SOFR Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Replacement Rate Determination Agent as of the applicable SOFR Replacement Date:

- (a) the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted SOFR Replacement;

- (b) if the applicable Unadjusted SOFR Replacement is equivalent to the ISDA Fallback Rate, the ISDA Fallback Adjustment; or
- (c) the spread adjustment (which may be a positive or negative value or zero) determined by the Replacement Rate Determination Agent giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current SOFR Benchmark with the applicable Unadjusted SOFR Replacement for U.S. dollar-denominated floating rate securities at such time;

"SOFR Replacement Conforming Changes" means, with respect to any SOFR Replacement, any technical, administrative or operational changes (including, but not limited to, changes to timing and frequency of determining rates with respect to each interest period and making payments of interest, rounding of amounts or tenors, day count fractions, business day convention and other administrative matters) that the Replacement Rate Determination Agent decides may be appropriate to reflect the adoption of such SOFR Replacement in a manner substantially consistent with market practice (or, if the Replacement Rate Determination Agent determines that adoption of any portion of such market practice is not administratively feasible or if the Replacement Rate Determination Agent determines that no market practice for use of the SOFR Replacement exists, in such other manner as the Replacement Rate Determination Agent determines is reasonably necessary, acting in good faith and in a commercially reasonable manner);

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

- (a) in the case of sub-paragraphs (a) or (b) of the definition of **"SOFR Transition Event"** the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the SOFR Benchmark permanently or indefinitely ceases to provide the SOFR Benchmark (or such component); or
- (b) in the case of sub-paragraph (c) of the definition of **"SOFR Transition Event"** the date of the public statement or publication of information referenced therein; or
- (c) in the case of sub-paragraph (d), the last such consecutive U.S. Government Securities Business Day on which the SOFR Benchmark has not been published,

provided that, in the event of any public statements or publications of information as referenced in sub-paragraphs (a) or (b) above, should such event or circumstance referred to in such a public statement or publication occur on a date falling later than three months after the relevant public statement or publication, the SOFR Transition Event shall be deemed to occur on the date falling three 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 Replacement Date occurs on the same day as, but earlier than, the SOFR Determination Time in respect of any determination, the SOFR Replacement Date will be deemed to have occurred prior to the SOFR Determination Time for such determination.

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

- (a) a public statement or publication of information by or on behalf of the administrator of the SOFR Benchmark (or such component, if relevant) announcing that such administrator has ceased or will cease to provide the SOFR Benchmark (or such component, if relevant), permanently or indefinitely, **provided that**, at the time of such statement or publication, there is no successor administrator that will continue to provide the SOFR Benchmark (or such component, if relevant);
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component, if relevant), the central bank for the currency of the SOFR Benchmark (or such component, if relevant), an insolvency official with jurisdiction over the administrator for the SOFR Benchmark (or such component, if relevant), a resolution authority with jurisdiction over the administrator for SOFR Benchmark (or such component, if relevant) or a court or an entity with similar insolvency or resolution authority over the administrator for the SOFR Benchmark (or such component, if relevant), which states that the administrator of the SOFR Benchmark (or such component, if relevant) has ceased or will cease to provide the SOFR Benchmark (or such component, if relevant) permanently or indefinitely, **provided that**, at the time of such statement or publication, there is no successor administrator that will continue to provide the SOFR Benchmark (or such component, if relevant);
- (c) a public statement or publication of information by the regulatory supervisor for the administrator of the SOFR Benchmark (or such component, if relevant) announcing that the SOFR Benchmark (or such component, if relevant) is no longer representative, the SOFR Benchmark (or such component, if relevant) 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
- (d) the SOFR Benchmark is not published by its administrator (or a successor administrator) for six consecutive U.S. Government Securities Business Days; and

"Unadjusted SOFR Replacement" means the SOFR Replacement prior to the application of any SOFR Replacement Adjustment.

- (e) In the case of a Note which specifies €STR as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 11(e)(A), paragraph 11(e)(B) or paragraph 11(e)(C) below, subject to the provisions of paragraph 11(e)(E) and paragraph 11(e)(F) below, as applicable:
 - (A) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily €STR plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

- (B) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily €STR Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
- (C) Where the Calculation Method is specified in the relevant Final Terms as being "€STR Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average €STR plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the €STR Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
- (D) The following definitions shall apply for the purpose of this paragraph 11(e)

"Compounded Daily €STR" means with respect to an Interest Period, the rate of return of a daily compound interest investment in euro (with the daily euro short-term rate (€STR) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\text{€STR}_{i-pTBD} \times n_i}{360} \right) - 1 \right] \times \frac{360}{d}$$

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

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

Where, in each case:

"d" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"d₀" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of TARGET Business Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of TARGET Business Days in the relevant Observation Period;

the **"€STR reference rate"**, means, in respect of any TARGET Business Day, a reference rate equal to the daily euro short-term rate as provided by the European Central Bank, as the administrator of such rate (or any successor administrator of such rate) on the website of the European Central Bank (or any successor administrator of such rate) or any successor source, in each case, at the time specified by, or determined in accordance with, the applicable methodology, policies or guidelines, of the administrator of such rate on the TARGET Business Day immediately following such TARGET Business Day;

"€STR_i" means, in respect of any TARGET Business Day;

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the €STR reference rate in respect of pTBD in respect of such TARGET Business Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

- (1) in respect of any TARGET Business Day_i that is a Reference Day, the €STR reference rate in respect of the TARGET Business Day immediately preceding such Reference Day; otherwise
- (2) the €STR reference rate in respect of the TARGET Business Day immediately preceding the €STR Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the €STR reference rate for such TARGET Business Day_i;

"€STR_{i-pTBD}" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a TARGET Business Day_i, €STR_i in respect of the TARGET Business Day falling p TARGET Business Days prior to such TARGET Business Day_i ("**pLBD**"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a TARGET Business_i, €STR_i in respect of such TARGET Business_i;

"**i**" is a series of whole numbers from one to d₀, each representing the relevant TARGET Business Day in chronological order from, and including, the first TARGET Business Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"Interest Period End Date" shall have the meaning specified in the relevant Final Terms;

"Lock-out Period" means, in respect of an Interest Period, the period from and including the day following the €STR Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"n_i", for any TARGET Business Day_i, means the number of calendar days from and including such TARGET Business Day_i up to but excluding the following TARGET Business Day;

"Observation Period" means the period from and including the date falling "p" TARGET Business Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" TARGET Business Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" TARGET Business Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five TARGET Business Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each TARGET Business Day in the relevant Interest Period that is not a TARGET Business Day falling in the Lock-out Period;

"TARGET Business Day" or **"TBD"** means any day on which the TARGET System is open;

"TARGET System" means the Trans-European Automated Realtime Gross settlement Express Transfer (known as TARGET2) system which was launched on 19 November 2007 or any successor thereto;

"Compounded Daily €STR Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in euro (with the euro short-term rate (€STR) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily €STR rates administered by the European Central Bank, as the administrator of such rate (or any successor administrator of such rate) that is published or displayed on the website of the European Central Bank (or any successor administrator of such rate) or any successor source from time to time on the relevant €STR Interest Determination Date, as further specified in the relevant Final Terms (the **"€STR Compounded Index"**) and will be calculated as follows:

$$\left(\frac{\text{€STR Compounded Index}_{End}}{\text{€STR Compounded Index}_{Start}} - 1 \right) \times \frac{360}{d}$$

Where, in each case:

"d" is the number of calendar days from (and including) the day in relation to which €STR Compounded Index_{Start} is determined to (but excluding) the day in relation to which €STR Compounded Index_{End} is determined;

"p" means five TARGET Business Days or such larger number of days as specified in the relevant Final Terms;

"€STR Compounded Index_{Start}" means, with respect to an Interest Period, the €STR Compounded Index determined in relation to the day falling "p" TARGET Business Days prior to the first day of such Interest Period; and

"€STR Compounded Index_{End}" means with respect to an Interest Period, the €STR Compounded Index determined in relation to the day falling "p" TARGET Business Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" TARGET Business Days prior to such earlier date, if any, on which the Notes become due and payable);

"TARGET Business Day" or **"TBD"** means any day on which the TARGET System is open;

"TARGET System" means the Trans-European Automated Realtime Gross settlement Express Transfer (known as TARGET2) system which was launched on 19 November 2007 or any successor thereto; and

"Weighted Average €STR" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the €STR reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the €STR reference rate in respect of any calendar day which

is not a TARGET Business Day shall be deemed to be the €STR reference rate in respect of the TARGET Business immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the €STR reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the €STR reference rate for such calendar day will be deemed to be the €STR reference rate in respect of the TARGET Business Day immediately preceding the first day of such Lock-out Period. For these purposes, the €STR reference rate in respect of any calendar day which is not a TARGET Business Day shall, subject to the preceding proviso, be deemed to be the €STR reference rate in respect of the TARGET Business Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 11(e)(B), if the relevant €STR Compounded Index is not published or displayed by the European Central Bank (or any successor administrator of such rate) reference rate or other information service by 5.00 p.m. (Frankfurt time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the European Central Bank (or any successor administrator of €STR) on the relevant €STR Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the €STR Compounded Index is not available in accordance with paragraph 11(e)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
 - (F) Where "€STR" is specified as the relevant Reference Rate in the relevant Final Terms, if, in respect of any TARGET Business Day, €STR is not available, such Reference Rate shall be the €STR reference rate for the first preceding TARGET Business Day on which the €STR reference rate was published by the European Central Bank, as the administrator of the €STR reference rate (or any successor administrator of the €STR reference rate) on the website of the European Central Bank (or of any successor administrator of such rate), and "r" shall be interpreted accordingly.
- (f) In the case of a Note which specifies SARON as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 11(f)(A), paragraph 11(f)(B) or paragraph 11(f)(C) below, subject to the provisions of paragraph 11(f)(E), paragraph 11(f)(F) and paragraph 11(f)(G), as applicable:
- (A) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SARON plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SARON Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (B) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily SARON Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SARON Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.
 - (C) Where the Calculation Method is specified in the relevant Final Terms as being "SARON Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average SARON plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the SARON Interest

Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(D) The following definitions shall apply for the purpose of this paragraph 11(f)

"Compounded Daily SARON" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Swiss franc (with the daily Swiss Average Rate Overnight (SARON) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

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

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

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

Where, in each case:

"d" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"d₀" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of Zurich Banking Days in the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of Zurich Banking Days in the relevant Observation Period;

"i" is a series of whole numbers from one to d₀, each representing the relevant Zurich Banking Day in chronological order from, and including, the first Zurich Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"Interest Period End Date" shall have the meaning specified in the relevant Final Terms;

"Lock-out Period" means, in respect of an Interest Period, the period from and including the day following the SARON Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"n_i", for any Zurich Banking Day_i, means the number of calendar days from and including such Zurich Banking Day_i up to but excluding the following Zurich Banking Day;

"Observation Period" means the period from and including the date falling "p" Zurich Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" Zurich Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Zurich Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five Zurich Banking Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each Zurich Banking Day in the relevant Interest Period that is not a Zurich Banking Day falling in the Lock-out Period;

the "SARON reference rate", means, in respect of any Zurich Banking Day, a reference rate equal to the Swiss Average Rate Overnight (SARON) rate for such Zurich Banking Day as published by the SARON Administrator on the Relevant Screen Page at the Relevant Time on such Zurich Banking Day;

"SARON_i" means, in respect of any Zurich Banking Day_i:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the SARON reference rate in respect of pZBD in respect of such Zurich Banking Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

- (1) in respect of any Zurich Banking Day_i that is a Reference Day, the SARON reference rate in respect of the SARON Banking Day immediately preceding such Reference Day; otherwise
- (2) the SARON reference rate in respect of the SARON Banking Day immediately preceding the SARON Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the SARON reference rate for such Zurich Banking Day_i;

"SARON_{i-pZBD}" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a Zurich Banking Day_i, SARON_i in respect of the Zurich Banking Day falling p Zurich Banking Days prior to such Zurich Banking Day_i ("pZBD"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a Zurich Banking Day_i, SARON_i in respect of such Zurich Banking Day_i; and

"Zurich Banking Day" or "ZBD" means a day on which banks are open in Zurich for the settlement of payments and of foreign exchange transactions;

"Compounded Daily SARON Index" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Swiss franc (with the daily Swiss Average Rate Overnight (SARON) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily SARON rates administered by the SARON Administrator that is published or displayed by the SARON Administrator or other information service from time to time on the relevant SARON Interest Determination Date, as further specified in the relevant Final Terms (the "SARON Compounded Index") and will be calculated as follows:

$$\left(\frac{SARON\ Compounded\ Index_{End}}{SARON\ Compounded\ Index_{Start}} - 1 \right) \times \frac{360}{d}$$

Where, in each case:

"d" is the number of calendar days from (and including) the day in relation to which SARON Compounded Index_{Start} is determined to (but excluding) the day in relation to which SARON Compounded Index_{End} is determined;

"p" means five Zurich Banking Days or such larger number of days as specified in the relevant Final Terms;

"**SARON Compounded Index_{Start}**" means, with respect to an Interest Period, the SARON Compounded Index determined in relation to the day falling "p" Zurich Banking Days prior to the first day of such Interest Period;

"**SARON Compounded Index_{End}**" means with respect to an Interest Period, the SARON Compounded Index determined in relation to the day falling "p" Zurich Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Zurich Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"**Zurich Banking Day**" or "**ZBD**" means a day on which banks are open in Zurich for the settlement of payments and of foreign exchange transactions; and

"**Weighted Average SARON**" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the SARON reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the SARON reference rate in respect of any calendar day which is not a Zurich Banking Day shall be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the SARON reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the SARON reference rate for such calendar day will be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the SARON reference rate in respect of any calendar day which is not a Zurich Banking Day shall, subject to the preceding proviso, be deemed to be the SARON reference rate in respect of the Zurich Banking Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 11(f)(B), if the relevant SARON Compounded Index is not published or displayed by the SARON Administrator or other information service by 5.00 p.m. (Zurich time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the SARON Administrator or of such other information service, as the case may be) on the relevant SARON Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the SARON Compounded Index is not available in accordance with Condition paragraph 11(f)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
- (F) If the SARON reference rate is not published on the Relevant Screen Page (the "**SARON Screen Page**") at the Relevant Time on the relevant Zurich Banking Day and a SARON Index Cessation Event and a SARON Index Cessation Effective Date have not both occurred on or prior to the Relevant Time on the relevant Zurich Banking Day, the SARON reference rate for such Zurich Banking Day shall be the rate equal to the Swiss Average Rate Overnight published by the SARON Administrator on the SARON Administrator Website for the last preceding Zurich Banking Day on which the Swiss Average Rate Overnight was published by the SARON Administrator on the SARON Administrator Website.
- (G) If the SARON reference rate is not published on the Relevant Screen Page at the Relevant Time on the relevant Zurich Banking Day and both a SARON Index

Cessation Event and a SARON Index Cessation Effective Date have occurred on or prior to the Relevant Time on the relevant Zurich Banking Day, the Reference Rate shall be:

- (i) if there is a SARON Recommended Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the SARON Recommended Replacement Rate for such Zurich Banking Day, giving effect to the SARON Recommended Adjustment Spread, if any, published on such Zurich Banking Day; or
- (ii) if there is no SARON Recommended Replacement Rate within one Zurich Banking Day of the SARON Index Cessation Effective Date, the policy rate of the Swiss National Bank (the "**SNB Policy Rate**") for such Zurich Banking Day, giving effect to the SNB Adjustment Spread, if any.

Any substitution of the SARON reference rate by the SARON Recommended Replacement Rate or the SNB Policy Rate as specified above (the "**SARON Replacement Rate**") will remain effective for the remaining term to maturity of the Notes.

Notwithstanding any other provision of this paragraph (F), if the Rate of Interest cannot be determined in accordance with the foregoing provisions by the Calculation Agent, no SARON Replacement Rate will be adopted by the Calculation Agent, and the SARON Replacement Rate for the relevant Interest Period will be equal to the last SARON available on the SARON Screen Page as determined by the Calculation Agent. Notwithstanding the above, if the provisions of this paragraph fail to provide a means of determining the Rate of Interest, paragraph 11(f)(F) below shall apply.

In connection with the SARON reference rate provisions above, the following definitions apply:

"SARON Administrator" means SIX Swiss Exchange or any successor administrator of the Swiss Average Rate Overnight;

"SARON Administrator Website" means the website of the SARON Administrator;

"SARON Index Cessation Effective Date" means the earliest of:

- (i) in the case of the occurrence of a SARON Index Cessation Event described in sub-paragraph (i) of the definition thereof, the date on which the SARON Administrator ceases to provide the Swiss Average Rate Overnight;
- (ii) in the case of the occurrence of a SARON Index Cessation Event described in sub-section (ii)(x) of the definition thereof, the latest of: (x) the date of such statement or publication, (y) the date, if any, specified in such statement or publication as the date on which the Swiss Average Rate Overnight will no longer be representative, and (z) if a SARON Index Cessation Event described in sub-section (ii)(y) of the definition thereof has occurred on or prior to either or both dates specified in subclauses (x) and (y) of this sub-paragraph (ii), the date as of which the Swiss Average Rate Overnight may no longer be used; and
- (iii) in the case of the occurrence of a SARON Index Cessation Event described in sub-section (ii)(y) of the definition thereof, the date as of which the Swiss Average Rate Overnight may no longer be used;

"SARON Index Cessation Event" means the occurrence of one or more of the following events:

- (i) a public statement or publication of information by or on behalf of the SARON Administrator, or by any competent authority, announcing or confirming that the SARON Administrator has ceased or will cease to provide the Swiss Average Rate Overnight permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Swiss Average Rate Overnight; or
- (ii) a public statement or publication of information by the SARON Administrator or any competent authority announcing that (x) the Swiss Average Rate Overnight is no longer representative or will as of a certain date no longer be representative, or (y) the Swiss Average Rate Overnight may no longer be used after a certain date, which statement, in the case of sub-section (y), is applicable to (but not necessarily limited to) fixed income securities and derivatives;

"SARON Recommended Adjustment Spread" means, with respect to any SARON Recommended Replacement Rate, the spread (which may be positive, negative or zero), or formula or methodology for calculating such a spread,

- (i) that the SARON Recommending Body has recommended be applied to such SARON Recommended Replacement Rate in the case of fixed income securities with respect to which such SARON Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for purposes of determining the applicable rate of interest thereon; or
- (ii) if the SARON Recommending Body has not recommended such a spread, formula or methodology as described in sub-paragraph (i) above, to be applied to such SARON Recommended Replacement Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Holders as a result of the replacement of the Swiss Average Rate Overnight with such SARON Recommended Replacement Rate for purposes of determining SARON, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, and be consistent with industry-accepted practices for fixed income securities with respect to which such SARON Recommended Replacement Rate has replaced the Swiss Average Rate Overnight as the reference rate for purposes of determining the applicable rate of interest thereon;

"SARON Recommended Replacement Rate" means the rate that has been recommended as the replacement for the Swiss Average Rate Overnight by any working group or committee in Switzerland organised 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 (any such working group or committee, the **"SARON Recommending Body"**);

"SIX Swiss Exchange" means SIX Swiss Exchange AG and any successor thereto; and

"SNB Adjustment Spread" means, with respect to the SNB Policy Rate, the spread to be applied to the SNB Policy Rate in order to reduce or eliminate, to the extent reasonably practicable under the circumstances, any economic prejudice or benefit (as applicable) to Holders as a result of the replacement of the Swiss Average Rate Overnight with the SNB Policy Rate for purposes of determining SARON, which spread will be determined by the Calculation Agent, acting in good faith and a commercially reasonable manner, taking into account the historical median between the Swiss Average Rate Overnight and the SNB Policy

Rate during the two year period ending on the date on which the SARON Index Cessation Event occurred (or, if more than one SARON Index Cessation Event has occurred, the date on which the first of such events occurred).

(g) In the case of a Note which specifies TONA as the Reference Rate in the Final Terms, the Rate of Interest for each Interest Period will be calculated in accordance with paragraph 11(g)(A), paragraph 11(g)(B) or paragraph 11(g)(C) below, subject to the provisions of paragraph 11(g)(E) and paragraph 11(g)(F) below, as applicable:

(A) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily TONA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(B) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Index Compounded Daily", the Rate of Interest for each Interest Period will be the Compounded Daily TONA Index plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(C) Where the Calculation Method is specified in the relevant Final Terms as being "TONA Weighted Average", the Rate of Interest for each Interest Period will be the Weighted Average TONA plus or minus (as indicated in the relevant Final Terms) the Margin (if any), all as determined by the Calculation Agent on the TONA Interest Determination Date and the resulting percentage being rounded (if necessary) to the fifth decimal place, with 0.000005 being rounded upwards.

(D) The following definitions shall apply for the purpose of this paragraph 11(g)

"**Compounded Daily TONA**" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Japanese Yen (with the daily Tokyo Overnight Average (TONA) as reference rate for the calculation of interest) and will be calculated as follows:

(x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{TONA_{i-pTBD} \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

(y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in accordance with the following formula:

$$\left[\prod_{i=1}^{d_0} \left(1 + \frac{TONA_i \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

Where, in each case:

"**d**" is the number of calendar days in (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, the relevant Interest Period, or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, the relevant Observation Period;

"**d₀**" means (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of an Interest Period, the number of Tokyo Banking Days in the relevant Interest Period, or (y) if

"Shift" is specified as the Observation Method in the relevant Final Terms, in respect of an Observation Period, the number of Tokyo Banking Days in the relevant Observation Period;

"i" is a series of whole numbers from one to d_0 , each representing the relevant Tokyo Banking Day in chronological order from, and including, the first Tokyo Banking Day (x) if "Lag" or "Lock-out" is specified as the Observation Method in the relevant Final Terms, in the relevant Interest Period or (y) if "Shift" is specified as the Observation Method in the relevant Final Terms, in the relevant Observation Period;

"Interest Period End Date" shall have the meaning specified in the relevant Final Terms;

"Lock-out Period" means, in respect of an Interest Period, the period from and including the day following the TONA Interest Determination Date to, but excluding, the Interest Period End Date falling at the end of such Interest Period;

"n_i", for any Tokyo Banking Day_i, means the number of calendar days from and including such Tokyo Banking Day_i up to but excluding the following Tokyo Banking Day;

"Observation Period" means the period from and including the date falling "p" Tokyo Banking Days prior to the first day of the relevant Interest Period (and the first Interest Period shall begin on and include the Interest Commencement Date) and ending on, but excluding, the date falling "p" Tokyo Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Tokyo Banking Days prior to such earlier date, if any, on which the Notes become due and payable);

"p" means, in respect of an Interest Period where "Lag" or "Shift" is specified as the Observation Method in the relevant Final Terms, five Tokyo Banking Days or such larger number of days as specified in the relevant Final Terms;

"Reference Day" means each Tokyo Banking Day in the relevant Interest Period that is not a Tokyo Banking Day falling in the Lock-out Period;

"Tokyo Banking Day" or **"TBD"** means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in Tokyo;

the **"TONA reference rate"**, means, in respect of any Tokyo Banking Day, a reference rate equal to the daily Tokyo Overnight Average (TONA) rate for such Tokyo Banking Day as provided by the a Bank of Japan and as then published on the Relevant Screen Page or, if the Relevant Screen Page is unavailable, as otherwise published by such authorised distributors (in each case on the Tokyo Banking Day immediately following such Tokyo Banking Day);

"TONA_i" means, in respect of any Tokyo Banking Day_i:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, the TONA reference rate in respect of pTBD in respect of such Tokyo Banking Day_i; or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms:

(1) in respect of any Tokyo Banking Day_i that is a Reference Day, the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such Reference Day; otherwise

(2) the TONA reference rate in respect of the Tokyo Banking Day immediately preceding the TONA Interest Determination Date for the relevant Interest Period;

(z) if "Shift" is specified as the Observation Method in the relevant Final Terms, the TONA reference rate for such Tokyo Banking Day_i; and

"TONA_{i-pTBD}" means:

(x) if "Lag" is specified as the Observation Method in the relevant Final Terms, in respect of a Tokyo Banking Day_i, TONA_i in respect of the Tokyo Banking Day falling p Tokyo Banking Days prior to such Tokyo Banking Day_i ("pTBD"); or

(y) if "Lock-out" is specified as the Observation Method in the relevant Final Terms, in respect of a Tokyo Banking Day_i, TONA_i in respect of such Tokyo Banking Day_i; and

"**Compounded Daily TOKYO Index**" means with respect to an Interest Period, the rate of return of a daily compound interest investment in Japanese Yen (with the daily Tokyo Overnight Average (TONA) as a reference rate for the calculation of interest) by reference to the screen rate or index for compounded daily TONA rates administered by the administrator of the TONA reference rate that is published or displayed by such administrator or other information service from time to time on the relevant TONA Interest Determination Date, as further specified in the relevant Final Terms (the "**TONA Compounded Index**") and will be calculated as follows:

$$\left(\frac{TONA \text{ Compounded Index}_{End}}{TONA \text{ Compounded Index}_{Start}} - 1 \right) \times \frac{365}{d}$$

Where, in each case:

"d" is the number of calendar days from (and including) the day in relation to which TONA Compounded Index_{Start} is determined to (but excluding) the day in relation to which TONA Compounded Index_{End} is determined;

"p" means five Tokyo Banking Days or such larger number of days as specified in the relevant Final Terms;

"**Tokyo Banking Day**" or "**TBD**" means any day on which commercial banks are open for general business (including dealing in foreign exchange and foreign currency deposits) in Tokyo;

"**TONA Compounded Index_{Start}**" means, with respect to an Interest Period, the TONA Compounded Index determined in relation to the day falling "p" Tokyo Banking Days prior to the first day of such Interest Period; and

"**TONA Compounded Index_{End}**" means with respect to an Interest Period, the TONA Compounded Index determined in relation to the day falling "p" Tokyo Banking Days prior to the Interest Period End Date for such Interest Period (or the date falling "p" Tokyo Banking Days prior to such earlier date, if any, on which the Notes become due and payable); and

"Weighted Average TONA" means:

(x) where "Lag" is specified as the Observation Method in the relevant Final Terms, the sum of the TONA reference rate in respect of each calendar day during the relevant Observation Period divided by the number of calendar days during such Observation Period. For these purposes, the TONA reference rate in respect of any calendar day which is not a Tokyo Banking Day shall be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such calendar day; or

(y) where "Lock-out" is specified as the Observation Method in the relevant Final Terms, the sum of the TONA reference rate in respect of each calendar day during the relevant Interest Period divided by the number of calendar days in the relevant Interest Period, provided that, for any calendar day of such Interest Period falling in the Lock-out Period for the relevant Interest Period, the TONA reference rate for such calendar day will be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding the first day of such Lock-out Period. For these purposes, the TONA reference rate in respect of any calendar day which is not a Tokyo Banking Day shall, subject to the preceding proviso, be deemed to be the TONA reference rate in respect of the Tokyo Banking Day immediately preceding such calendar day.

- (E) Where the Rate of Interest for each Interest Period is calculated in accordance with paragraph 11(g)(B), if the relevant TONA Compounded Index is not published or displayed by the administrator of the TONA reference rate or other information service by 5.00 p.m. (Tokyo time) (or, if later, by the time falling one hour after the customary or scheduled time for publication thereof in accordance with the then-prevailing operational procedures of the Bank of Japan (or any successor administrator) on the relevant TONA Interest Determination Date, the Rate of Interest shall be calculated for the Interest Period for which the TONA Compounded Index is not available in accordance with paragraph 11(g)(A) above and for these purposes the "Observation Method" shall be deemed to be "Shift".
- (F) If the TONA reference rate is not published on the Relevant Screen Page at the Relevant Time on the relevant Tokyo Banking Day, the TONA reference rate for such Tokyo Banking Day shall be the rate equal to the Tokyo Overnight Average published by the administrator of the TONA reference rate on the Relevant Screen Page for the last preceding Tokyo Banking Day on which the Tokyo Overnight Average was published by the administrator of TONA on the Relevant Screen Page.

- (h) the Calculation Agent specified in the Final Terms will:
- (i) as soon as practicable after 11.00 a.m. (Brussels time) on each EURIBOR Interest Determination Date;
 - (ii) at the Relevant Time specified in the relevant Final Terms on each SONIA Interest Determination Date;
 - (iii) at the Relevant Time specified in the relevant Final Terms on each SOFR Interest Determination Date;
 - (iv) on each €STR Interest Determination Date;
 - (v) at the Relevant Time specified in the relevant Final Terms on each SARON Interest Determination Date;
 - (vi) at the Relevant Time specified in the relevant Final Terms on each TONA Interest Determination Date;
 - (vii) or in the case of ISDA Determination, at the time and on the Reset Date specified in the relevant Final Terms,

determine the Rate of Interest and calculate the amount of interest payable (the "**Amount of Interest**") for the relevant Interest Period. "**Rate of Interest**" means (A) if the Reference Rate is EURIBOR, the rate which is determined in accordance with the provisions of paragraph (a); (B) in the case of a Global Note which specifies ISDA Determination in the Final Terms, the rate which is determined in accordance with the provisions of paragraph (b); (C) if the Reference Rate is SONIA, the rate which is determined in accordance with the provisions of paragraph (c); (D) if the Reference Rate is SOFR, the rate which is determined in accordance with the provisions of paragraph (d); (E) if the Reference Rate is €STR, the rate which is determined in accordance with the provisions of paragraph (e); (F) if the Reference Rate is SARON, the rate which is determined in accordance with the provisions of paragraph (f); and (G) if the Reference Rate is TONA, the rate which is determined in accordance with the provisions of paragraph (g). The Amount of Interest shall be calculated by applying the Rate of Interest to the Nominal Amount of one Note of each Denomination, multiplying such product by the Day Count Convention specified in the Final Terms or, if none is specified, by the actual number of days in the Interest Period concerned divided by 360 or, if this Note is denominated in Sterling, by 365 and rounding the resulting figure to the nearest amount of the above-mentioned Specified Currency which is available as legal tender in the country or countries (in the case of the Euro) of the Specified Currency (with halves being rounded upwards). The determination of the Rate of Interest and the Amount of Interest by the Calculation Agent shall (in the absence of manifest error) be final and binding upon all parties;

- (i) a certificate of the Calculation Agent as to the Rate of Interest payable hereon for any Interest Period shall be conclusive and binding as between the Issuer and the bearer hereof;
- (j) the period beginning on (and including) the Issue Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date is called an "**Interest Period**" for the purposes of this paragraph; and
- (k) the Issuer will procure that a notice specifying the Rate of Interest payable in respect of each Interest Period be published as soon as practicable after the determination of the Rate of Interest. Such notice will be delivered to the bearer of this Note, or if that is not practicable, will be published in a leading English language daily newspaper published in London (which is expected to be the *Financial Times*).
- (l) If a Benchmark Event occurs in relation to an Original Reference Rate when any Rate of Interest (or any component part thereof) remains to be determined by reference to such Original Reference Rate, then the Issuer shall use its reasonable endeavours to appoint an Independent Adviser, as soon as reasonably practicable, with a view to the Issuer determining a Successor Rate (subject to the terms of this paragraph (l)), failing which an Alternative Rate (in accordance with paragraph (l)) and, in either case, an Adjustment Spread if any (in accordance with paragraph (l)) and any Benchmark Amendments (in accordance with paragraph (l)).

An Independent Adviser appointed pursuant to this paragraph (l) shall act in good faith and in a commercially reasonable manner. In the absence of bad faith or fraud, the Independent Adviser shall have no liability whatsoever to the Issuer, the Issue and Paying Agent, or the holders for any advice given to the Issuer in connection with any determination made by the Issuer, pursuant to this paragraph (l).

If (a) the Issuer is unable to appoint an Independent Adviser; or (b) the Issuer fails to determine a Successor Rate or, failing which, an Alternative Rate in accordance with this paragraph (l) prior to the relevant EURIBOR Interest Determination Date, SONIA Interest Determination Date, €STR Interest Determination Date, SARON Interest Determination Date and TONA Interest Determination Date as applicable, the Rate of Interest applicable to the next succeeding Interest Period, as applicable, shall be equal to the Rate of Interest last determined in relation to the Notes in respect of the immediately preceding Interest Period, respectively. For the avoidance of doubt, this paragraph (l) shall apply to the relevant next succeeding Interest Period only and any subsequent Interest Periods are

subject to the subsequent operation of, and to adjustment as provided in, this paragraph (l).

If the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines that:

- (i) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in paragraph (l)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof), as applicable, for all future payments of interest on the Notes (subject to the operation of this paragraph (l)); or
- (ii) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in paragraph (l)) subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof), as applicable, for all future payments of interest on the Notes (subject to the operation of this paragraph (l)).

The Adjustment Spread (or the formula or methodology for determining the Adjustment Spread), if any, shall be applied to the Successor Rate or the Alternative Rate (as the case may be). If the Issuer, following consultation with the Independent Adviser is unable to determine the quantum of, or a formula or methodology for determining, such Adjustment Spread, then the Successor Rate or the Alternative Rate (as applicable) will apply without an Adjustment Spread.

If any Successor Rate, Alternative Rate and, in either case, the applicable Adjustment Spread is determined in accordance with this paragraph (l) and the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines (i) that amendments to these terms and conditions are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or (in either case) the applicable Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with paragraph (l), without any requirement for the consent or approval of Holders, vary these terms and conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice.

Notwithstanding any other provision of this paragraph (l), the Calculation Agent or any Paying Agent is not obliged to concur with the Issuer or the Independent Adviser in respect of any changes or amendments as contemplated under this paragraph (l) to which, in the sole opinion of the Calculation Agent or the relevant Paying Agent, as the case may be, would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to the Calculation Agent or the relevant Paying Agent (as applicable) in the Agency Agreement and/or these terms and conditions.

In connection with any such variation in accordance with this paragraph (l), the Issuer shall comply with the rules of any stock exchange on which the Notes are for the time being listed or admitted to trading.

Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this paragraph (l) will be notified promptly by the Issuer to the Calculation Agent, the Paying Agents and the Holders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Amendments, if any.

No later than notifying the Holders of the same, the Issuer shall deliver to the Issue and Paying Agent, the Calculation Agent and the Paying Agents a certificate signed by two authorised signatories of the Issuer:

- (i) confirming (a) that a Benchmark Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate, (iii) the applicable Adjustment Spread and (iv) the specific terms of the Benchmark Amendments (if any), in each case as determined in accordance with the provisions of this paragraph (1); and
- (ii) certifying that the Benchmark Amendments (if any) are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and (in either case) the applicable Adjustment Spread.

The Issue and Paying Agent shall display such certificate at its offices, for inspection by the Holders at all reasonable times during normal business hours.

Each of Issue and Paying Agent, the Calculation Agent and the Paying Agents shall be entitled to rely on such certificate (without liability to any person) as sufficient evidence thereof. The Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) and without prejudice to the Issue and Paying Agent's or the Calculation Agent's or the Paying Agents' ability to rely on such certificate as aforesaid) be binding on the Issuer, the Issue and Paying Agent, the Calculation Agent, the Paying Agents and the Holders.

Notwithstanding any other provision of this paragraph (1), if following the determination of any Successor Rate, Alternative Rate, Adjustment Spread or Benchmark Amendments (if any), in the Calculation Agent's opinion there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this paragraph (1), the Calculation Agent shall promptly notify the Issuer thereof and the Issuer shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or is otherwise unable (other than due to its own gross negligence, willful default or fraud) to make such calculation or determination for any reason, it shall notify the Issuer thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and (in the absence of such gross negligence, willful default or fraud) shall not incur any liability for not doing so.

Without prejudice to the obligations of the Issuer under the foregoing paragraphs, the Original Reference Rate and the fallback provisions provided herein will continue to apply unless and until a Benchmark Event has occurred. Upon the occurrence of a Benchmark Event, this paragraph (1) shall prevail.

As used in this paragraph (1):

"Adjustment Spread" means either a spread (which may be positive or negative), or the formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

- (i) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or (if no such recommendation has been made, or in the case of an Alternative Rate)
- (ii) the Issuer, following consultation with the Independent Adviser determines, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Original Reference Rate; or (if the Issuer determines that no such spread is customarily applied)

- (iii) the Issuer, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); (or if the Issuer determines that no such industry standard is recognised or acknowledged)
- (iv) if no such spread, formula or methodology can be determined in accordance with (i) to (iii) above, the Issuer, in its discretion, following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines to be appropriate, having regard to the objective, so far as is reasonably practicable in the circumstances and solely for the purposes of this subclause (iv) only, of reducing or eliminating any economic prejudice or benefit (as the case may be) to the Holders.

"Alternative Rate" means an alternative benchmark or screen rate which the Issuer following consultation with the Independent Adviser and acting in good faith and in a commercially reasonable manner, determines in accordance with paragraph (I) is customary applied in international debt capital markets transactions for the purposes of determining rates of interest (or the relevant component part thereof) in the same Specified Currency as the Notes.

"Benchmark Event" means:

- (i) the Original Reference Rate ceasing to exist or ceasing to be published for a period of at least 5 Business Days in relation to a Rate of Interest of Floating Rate Notes; or
- (ii) a public statement by the administrator of the Original Reference Rate that it has ceased or will cease publishing the Original Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or
- (iii) a public statement by the supervisor of the administrator of the Original Reference Rate, that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or
- (iv) a public statement by the supervisor of the administrator of the Original Reference Rate as a consequence of which the Original Reference Rate will be prohibited from being used either generally, or in respect of the Notes; or
- (v) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate is or will be (or is or will be deemed by such supervisor to be) no longer representative of its relevant underlying market; or
- (vi) it has become unlawful for the Issue and Paying Agent, Calculation Agent, the Issuer or other party to calculate any payments due to be made to any holder using the Original Reference Rate;
- (vii) **provided that** the Benchmark Event shall be deemed to occur (a) in the case of sub- paragraphs (ii) and (iii) above, on the date of the cessation of publication of the Original Reference Rate or the discontinuation of the Original Reference Rate, as the case may be, (b) in the case of sub-paragraph (iv) above, on the date of the prohibition of use of the Original Reference Rate and (c) in the case of sub-paragraph (v) above, on the date with effect from which the Original Reference Rate will no longer be (or will be deemed by the relevant supervisor to no longer be) representative of its relevant underlying market and which is specified in the relevant public statement, and, in each case, not the date of the relevant public statement.
- (viii) The occurrence of a Benchmark Event shall be determined by the Issuer and promptly notified to the Issue and Paying Agent, the Calculation Agent and the

Paying Agents. For the avoidance of doubt, neither the Issue and Paying Agent, the Calculation Agent nor the Paying Agents shall have any responsibility for making such determination.

"Independent Adviser" means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Issuer under paragraph (l).

"Original Reference Rate" means the originally-specified benchmark or screen rate (as applicable) used to determine the Rate of Interest (or any component part thereof), as applicable, on the Notes.

"Relevant Nominating Body" means, in respect of a benchmark or screen rate (as applicable):

- (i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or
- (ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof.

"Successor Rate" means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body.

As used in this Note:

"2021 ISDA Definitions" means the version of the 2021 ISDA Interest Rate Derivative Definitions, including each Matrix (and any successor matrix), as published by the International Swaps and Derivatives Association, Inc. (or any successor) on its website (www.isda.org) as at Issue Date) provided that (i) references to a "Confirmation" in the 2021 ISDA Definitions should instead be read as references to this Note; (ii) references to an "Calculation Period" in the 2021 ISDA Definitions should instead be read as references to an "Interest Period" and (iii) the "Administrator/Benchmark Event" in the 2021 ISDA Definitions shall be disappplied.

Capitalised terms used but not otherwise defined in this Note shall bear the meaning ascribed to them in the 2021 ISDA Definitions.

12. Instructions for payment must be received at the office of the Issuing and Paying Agent referred to above together with this Note as follows:

- (a) if this Note is denominated in Australian dollars, New Zealand dollars, Hong Kong dollars or Japanese Yen, at least two Business Days prior to the relevant payment date;
- (b) if this Note is denominated in United States dollars, Canadian dollars or Euro, on or prior to the relevant payment date; and
- (c) in all other cases, at least one Business Day prior to the relevant payment date.

As used in this paragraph, **"Business Day"** means:

- (i) a day other than a Saturday or Sunday on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London;
- (ii) in the case of payments in Euro, a TARGET Business Day; and

- (iii) in all other cases, a day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in the principal financial centre in the country of the Specified Currency set out in the Final Terms.
13. This Note shall not be validly issued unless manually authenticated by Citibank N.A., London Branch as Issuing and Paying Agent.
14. The status of this Definitive Note, the exercise of the Bail-in Power by the Relevant Resolution Authority, the capacity of the Issuer and the relevant corporate resolutions shall be governed by Spanish law. This Definitive Note and any non-contractual obligations arising out of or connected with it are governed by, and construed in accordance with, English law.
- (a) *English courts:* The courts of England have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising from or connected with this Definitive Note (including a dispute relating to any non-contractual obligations arising out of or in connection with this Definitive Note or a dispute regarding the existence, validity or termination of this Definitive Note or the consequences of its nullity).
- (b) *Appropriate forum:* The Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary.
- (c) *Rights of the bearer to take proceedings outside England:* Paragraph (a) (*English courts*) is for the benefit of the bearer only. As a result, nothing in this paragraph 14 prevents the bearer from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction. To the extent allowed by law, the bearer may take concurrent Proceedings in any number of jurisdictions.
- (d) *Service of process:* The Issuer agrees that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it by being delivered to Banco Santander, S.A., London Branch at 2 Triton Square, Regent's Place, London NW1 3AN or at any address of the Issuer in Great Britain at which service of process may be served on it. Nothing in this sub paragraph shall affect the right of the bearer to serve process in any other manner permitted by law.
15. If this Note has been admitted to listing on the official list of the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") and to trading on the regulated market of Euronext Dublin (and/or has been admitted to listing, trading and/or quotation on any other listing authority, stock exchange and/or quotation system), all notices required to be published concerning this Note shall be published in accordance with the requirements of Euronext Dublin (and/or of the relevant listing authority, stock exchange and/or quotation system).
16. Claims for payment of principal and interest in respect of this Note shall become prescribed and void unless made, in the case of principal, within ten years after the Maturity Date (or, as the case may be, the Relevant Date) or, in the case of interest, five years after the relevant Interest Payment Date.
17. **Bail-in**
- (a) *Acknowledgement:* Notwithstanding any other term of this Note or any other agreement, arrangement or understanding between the Issuer and the bearer, by its subscription and/or purchase and holding of this Note, each bearer (which for the purposes of this paragraph 17 includes each holder of a beneficial interest in this Note) acknowledges, accepts, consents to and agrees:
- (i) to be bound by the effect of the exercise of the Bail-in Power by the Relevant Resolution Authority, which may include and result in any of the following, or some combination thereof:
- the reduction of all, or a portion, of the Amounts Due on a permanent basis;

- the conversion of all, or a portion, of the Amounts Due into shares, other securities or other obligations of the Issuer or another person (and the issue to the bearer of this Note of such shares, securities or obligations), including by means of an amendment, modification or variation of the terms of this Note, in which case the bearer agrees to accept in lieu of its rights under this Note any such shares, other securities or other obligations of the Issuer or another person;
 - the cancellation of this Note or Amounts Due;
 - the amendment or alteration of the maturity of this Note or amendment of the Amount of Interest payable on this Note, or the date on which the interest becomes payable, including by suspending payment for a temporary period; and
- (ii) that the terms of this Note are subject to, and may be varied, if necessary, to give effect to, the exercise of the Bail-in Power by the Relevant Resolution Authority.
- (b) *Payment of Interest and Other Outstanding Amounts Due:* No repayment or payment of the Amounts Due will become due and payable or be paid after the exercise of the Bail-in Power by the Relevant Resolution Authority with respect to the Issuer unless, at the time such repayment or payment, respectively, is scheduled to become due, such repayment or payment would be permitted to be made by the Issuer under the laws and regulations in effect in the Kingdom of Spain and the European Union applicable to the Issuer or other members of the Group.
- (c) *Notice to bearer:* Upon the exercise of any Bail-in Power by the Relevant Resolution Authority with respect to this Note, the Issuer will make available a written notice to the bearer as soon as practicable regarding such exercise of the Bail-in Power. The Issuer will also deliver a copy of such notice to the Paying Agents for information purposes. Any delay or failure to give notice to the bearer will not affect the validity or enforceability of the Bail-in Power.
- (d) *Duties of the Paying Agents:* Upon the exercise of any Bail-in Power by the Relevant Resolution Authority, (a) the Issue and Paying Agent shall not be required to take any directions from bearer, and (b) the Agency Agreement shall impose no duties upon the Issue and Paying Agents whatsoever, with respect to the exercise of any Bail-in Power by the Relevant Resolution Authority.
- (e) *Proration:* If the Relevant Resolution Authority exercises the Bail-in Power with respect to less than the total Amounts Due, unless any of the Paying Agents is otherwise instructed by the Issuer or the Relevant Resolution Authority, any cancellation, write-off or conversion made in respect of this Note pursuant to the Bail-in Power will be made on a pro-rata basis.
- (f) *Conditions Exhaustive:* The matters set forth in this paragraph 17 shall be exhaustive on the foregoing matters to the exclusion of any other agreements, arrangements or understandings between the Issuer and any holder of an Note.

For the purposes of this paragraph 17:

"Amounts Due" means the principal amount or outstanding amount, together with any accrued but unpaid interest, and additional amounts as described in paragraph 3, if any, due on the Notes. References to such amounts will include amounts that have become due and payable, but which have not been paid, prior to the exercise of the Bail-in Power by the Relevant Resolution Authority.

"Bail-In Power": means any powers existing from time to time under, and exercised in compliance with, any laws, regulations, rules or requirements in effect in Spain, relating to (i) the resolution of credit entities and/or transposition of the BRRD (including, but not limited to Law 11/2015, Royal Decree 1012/2015, of 6 November, implementing Law 11/2015, as amended or superseded, and any other implementing regulations); (ii) the SRM Regulation; and (iii) the instruments, rules or

standards created thereunder, pursuant to which any obligation of a regulated entity (or other affiliate of such regulated entity) can be reduced, cancelled, modified, transferred or converted into shares, other securities, or other obligations of such regulated entity or any other person.

"Relevant Resolution Authority" means the Fund for Orderly Bank Restructuring (*Fondo de Reestructuración Ordenada Bancaria*), the Single Resolution Board or any other entity with the authority to exercise any the resolution tools and powers contained in Law 11/2015 and the SRM Regulation from time to time.

"SRM Regulation" means Regulation (EU) No. 806/2014 of the European Parliament and the Council of 15th July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of the Single Resolution Mechanism and the Single Resolution Fund and amending Regulation (EU) No. 1093/2010, as amended or replaced from time to time.

18. No person shall have any right to enforce any provision of this Note under the Contracts (Rights of Third Parties) Act 1999.

FORM OF FINAL TERMS

Set out below is the form of Final Terms which will be completed in respect of each issue of Notes issued under the Programme and will be attached to the relevant Global or Definitive Notes on issue.

[MIFID II product governance / Professional investors and Eligible Counterparties only target market – Solely for the purposes of [the/each] manufacturer's product approval process in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[UK MIFIR product governance / Professional investors and Eligible Counterparties only target market – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("**COBS**"), and professional clients, as defined in Regulation (EU) No. 600/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**UK MiFIR**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[Singapore Securities and Futures Act Product Classification – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act 2001 (the "**SFA**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the Notes are ["prescribed capital markets products"/[capital markets products other than "prescribed capital markets products"] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018)]⁴

Final Terms dated [•]

Banco Santander, S.A.

€20,000,000,000 Euro-Commercial Paper Programme (the "Programme")

Legal entity identifier (LEI): 5493006QMFDDMYWIAM13

Issue of [Aggregate nominal amount of Notes] [Title of Notes]

PART A – CONTRACTUAL TERMS

This document constitutes the Final Terms (as referred to in the Information Memorandum dated 14 March 2023 (as amended, updated or supplemented from time to time, the "**Information Memorandum**") in relation to the Programme) in relation to the issue of Notes referred to above (the "**Notes**"). Terms defined in the Information Memorandum, unless indicated to the contrary, have the same meanings where used in these Final Terms. Reference is made to the Information Memorandum for a description of Banco Santander, S.A., the Programme and certain other matters. These Final Terms are supplemented to and must be read in conjunction with the full terms and conditions of the Notes. These Final Terms are also a summary of the terms and conditions of the Notes for the purpose of listing.

⁴ Legend to be included on front of the Final Terms if the Notes do not constitute prescribed capital markets products as defined under the CMP Regulations 2018.

Full information on Banco Santander, S.A. and the offer of the Notes described herein is only available on the basis of the combination of these Final Terms and the Information Memorandum [as so supplemented]. The Information Memorandum [and the supplemental Information Memorandum] [is][are] available for viewing during normal business hours at the office of Banco Santander, S.A. at Ciudad Grupo Santander, Avenida Cantabria s/n, 28660 Boadilla del Monte, Madrid, Spain and at the offices of the Issuing and Paying Agent at Citibank N.A., London Branch, Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB. The Information Memorandum has been published on the websites of the Issuer (www.santander.com) and of Euronext Dublin (https://live.euronext.com).

The particulars to be specified in relation to the issue of the Notes are as follows:

[Include whichever of the following apply or specify as "Not applicable" (N/A). Note that the numbering should remain as set out below, even if "Not applicable" is indicated for individual paragraphs or subparagraphs. Italics denote guidance for completing the Final Terms.]

- | | | |
|-----|---|---|
| 1. | Issuer: | Banco Santander S.A. |
| 2. | Type of Note: | Euro commercial paper |
| 3. | Series No: | [] |
| 4. | Dealer(s) | [] |
| 5. | Specified Currency: | [] |
| 6. | Aggregate Nominal Amount: | [] |
| 7. | Issue Date: | [] |
| 8. | Maturity Date: | [] [May not be less than 1 day nor more than 364 days] |
| 9. | Issue Price (for interest bearing Notes) or discount rate (for discount Notes): | [] |
| 10. | Denomination: | [] |
| 11. | Redemption Amount: | Redemption at par |
| 12. | Delivery: | [Free of/against] payment |

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

- | | | |
|-------|---|---|
| 13. | Fixed Rate Note Provisions | [Applicable/Not applicable]

<i>(If not applicable, delete the remaining sub- paragraphs of this paragraph)</i> |
| (i) | Rate[(s)] of Interest: | [] [per cent. per annum] |
| (ii) | Interest Payment Date(s): | [] |
| (iii) | Day Count Convention (if different from that specified in the terms and conditions of the Notes): | [Not applicable/ <i>other</i>]

[The above-mentioned Day Count Convention shall have the meaning given to it in the 2021 ISDA Definitions published by the International Swaps and Derivatives Association, Inc., as |

amended, updated or replaced at the Issue Date.]⁵

- (iv) Other terms relating to the method of calculating interest for Fixed Rate Notes (if different from those specified in the terms and conditions of the Notes): [Not applicable/give details]

14. **Floating Rate Note Provisions**

[Applicable/Not applicable]

(If not applicable, delete the remaining sub- paragraphs of this paragraph)

- (i) Interest Payment Dates: []
- (ii) Calculation Agent (party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s): [[the Issuing and Paying Agent]/[Name] shall be the Calculation Agent]
- (iii) Reference Rate: [] months
[EURIBOR/SONIA/SOFR/€STR/
SARON/TONA]
[Not applicable]
- (iv) Manner in which the Rate(s) of Interest is/are to be determined: [Screen Rate Determination/ISDA Determination]
- (v) Screen Rate Determination:
- Reference Rate: [SONIA][SOFR][€STR][SARON][TONA]
 - SONIA Interest Determination Date(s): []/[] London Banking Days prior to the end of each Interest Period] [Not Applicable]
(Include where the Reference Rate is SONIA)
 - SOFR Interest Determination Date(s): [] U.S. Government Securities Business Days prior to each Interest Payment Date] [Not Applicable]
(Include where the Reference Rate is SOFR)
 - €STR Interest Determination Date(s): [] TARGET Business Days prior to each Interest Payment Date]
(Include where the Reference Rate is €STR)
 - SARON Interest Determination Date(s): [] Zurich Banking Days prior to each Interest Payment Date]
(Include where the Reference Rate is SARON)

⁵ Delete text in square brackets unless a Day Count Convention which is different from that specified in the terms and conditions of the Notes is used.

- TONA Interest Determination Date(s): Tokyo Banking Days prior to each Interest Payment Date
(Include where the Reference Rate is TONA)
 - Relevant Screen Page:
 - Relevant Time:
- (i) [Calculation Method: *[Include where the Reference Rate is SONIA: [SONIA Compounded Daily]/[SONIA Index Compounded Daily]/[SONIA Weighted Average]]*
- [Include where the Reference Rate is SOFR: [SOFR Arithmetic Mean]/[SOFR Compound: [SOFR Compound with Lookback]/[SOFR Compound with Observation Period Shift]/ [SOFR Compound with Payment Delay]/[SOFR Index with Observation Shift]]*
- [Include where the Reference Rate is €STR: [€STR Compounded Daily]/[€STR Index Compounded Daily]/[€STR Weighted Average]]*
- [Include where the Reference Rate is SARON: [SARON Compounded Daily]/[SARON Index Compounded Daily]/[SARON Weighted Average]]*
- [Include where the Reference Rate is TONA: [TONA Compounded Daily]/[TONA Index Compounded Daily]/[TONA Weighted Average]]*
- (ii) Observation Method: *[Include where the Calculation Method is SONIA/€STR/SARON/TONA Compounded Daily: [Lag]/[Lock-out]/[Shift]]*
- (iii) p: *[[specify] [London Banking Days]/[U.S. Government Securities Business Days]/[TARGET Business Days]/[Zurich Banking Days]/[Tokyo Banking Days]/[As per the terms and conditions of the Notes]/[Not applicable]]*
(Include where the Reference Rate is SONIA, €STR, SARON, TONA or SOFR (where the Calculation Method is SOFR Compound: SOFR Compound with Lookback))

- (iv) [Observation Shift Days: [[specify] U.S. Government Securities Business Days]/[As per the terms and conditions of the Notes]/[Not applicable]]
- (v) Interest Payment Delay:: [Not Applicable / [] U.S. Government Securities Business Day(s)]

(Include where the Reference Rate is SOFR)
- (vi) Interest Period End Dates: [specify] [The Interest Payment Date for such Interest Period] [Not Applicable]

(Include where the Reference Rate is SONIA, €STR, SARON or TONA and the Observation Method is "Shift" or SOFR and the Calculation Method is Compound with Payment Delay)
- (vii) [SOFR Cut-Off Date: [As per the terms and conditions of the Notes]/[[specify] U.S. Government Securities Business Days]/[Not applicable]]

(Include where the Reference Rate is SOFR. Must apply where the Calculation Method is SOFR Arithmetic Mean)
- (viii) [SOFR Replacement Alternatives Priority: [As per the terms and conditions of the Notes]/[specify order of priority of SOFR Replacement Alternatives listed in the terms and conditions of the Notes.]]
- (vi) ISDA Determination: [Not applicable]
- Floating Rate Option: []
 - Designated Maturity: []
 - Reset Date and time: [] [Not applicable] *[in the case of self-compounding overnight interest rate commercial paper, the Reset Date will be the date prior to each Interest Payment Date]*^o
 - Compounding: [Applicable/Not Applicable] *(If not applicable delete the remaining subparagraphs of this paragraph)*
 - [Compounding Method: [Compounding with Lookback
Lookback: [] Applicable Business Days

[Compounding with Observation Period Shift
Observation Period Shift: [] Observation Period Shift Business Days

- Observation Period Shift Additional Business Days: []/[Not Applicable]]
- [Compounding with Lockout
Lockout: [] Lockout Period Business Days]
Lockout Period Business Days: []/[Applicable Business Days]]
- Averaging: [Applicable/Not Applicable] *(If not applicable delete the remaining subparagraphs of this paragraph)*
 - Averaging Method: [Averaging with Lookback
Lookback: [] Applicable Business Days]

[Averaging with Observation Period Shift
Observation Period Shift: [] Observation Period Shift Business Days
Observation Period Shift Additional Business Days: []/[Not Applicable]]

[Averaging with Lockout
Lockout: [] Lockout Period Business Days
Lockout Period Business Days: []/[Applicable Business Days]]
- (vii) Margin(s): [+/-] [] per cent. per annum
- (viii) Day Count Convention if different from that specified in the terms and conditions of the Notes: [Not applicable/other]

[The above-mentioned Day Count Convention shall have the meaning given to it in the 2021 ISDA Definitions published by the International Swaps and Derivatives Association, Inc., as amended, updated or replaced at the Issue Date.]⁶
- (ix) Any other terms relating to the method of calculating interest on floating rate Notes, if different from those set out in the terms and conditions of the Notes: []

GENERAL PROVISIONS APPLICABLE TO THE NOTES

15. Relevant Financial Centre []
16. Listing and admission to trading: [Dublin (Euronext Dublin). Application [has been made/is expected to be made] by the Issuer (or on its behalf) for the

⁶ Delete text in square brackets unless a Day Count Convention which is different from that specified in the terms and conditions of the Notes is used.

- Notes to be admitted to trading on the regulated market of Euronext Dublin with effect from [] [other]
17. Ratings: [The Notes to be issued under the Programme have been rated:]
- [Standard & Poor's: []] [Fitch Ratings: []]
- [Moody's Investors Service España, S.A.: []]
- [Need to include a brief explanation of the meaning of the ratings if this has previously been published by the rating provider.]*
- [Not Applicable]
18. Clearing System(s): Euroclear Bank SA/NV [./and] Clearstream Banking S.A.
19. Issuing and Paying Agent: Citibank N.A., London Branch
20. Listing Agent: [[A&L Listing Limited]/[Not applicable]/[Give name]]
21. ISIN: []
22. Common code: []
23. Any clearing system(s) other than or in addition to Euroclear Bank SA/NV, Clearstream Banking S.A and the relevant identification number(s): [Not applicable/give name(s) and number(s)]
24. New Global Note: [Yes][No]
25. Intended to be held in a manner which would allow Eurosystem eligibility: [Yes.][No.][Not applicable.]
- [Note that the designation "yes" simply means that the Notes are intended upon issue to be deposited with one of the ICSDs as common safekeeper and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.][include this text if "yes" selected in which case the Notes must be issued in NGN form]*

[Whilst the designation is specified as "No" at the date of these Final Terms, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safekeeper. Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra day credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.].] *[Include this text if "No" selected in which case the Notes must be issued in CGN form]*

26. Relevant Benchmark[s]:

[[Specify benchmark] is provided by *[[administrator legal name]]**[[repeat as necessary]*. As at the date hereof, *[[administrator legal name]]**[[appears]/[does not appear]]**[[repeat as necessary]* in the register of administrators and benchmarks established and maintained by ESMA pursuant to Article 36 (*Register of administrators and benchmarks*) of the EU Benchmark Regulation/*[As far as the Issuer is aware, as at the date hereof, [specify benchmark] does not fall within the scope of the EU Benchmark Regulation]/ [Not Applicable]*

LISTING AND ADMISSION TO TRADING APPLICATION

These Final Terms comprise the final terms required to list and have admitted to trading the issue of Notes described herein pursuant to the €20,000,000,000 Euro-Commercial Paper Programme of Banco Santander, S.A.

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in these Final Terms.

Signed on behalf of **BANCO SANTANDER, S.A.**

By:
(duly authorised)
Dated:

By:
(duly authorised)

PART B – OTHER INFORMATION

1. INTEREST OF NATURAL AND LEGAL PERSONS INVOLVED IN THE [ISSUE/OFFER]

Need to include a description of any interest, including a conflict of interest, that is material to the issue/offer, detailing the persons involved and the nature of the interest. May be satisfied by the inclusion of the following statement:

["Save as discussed in paragraph 1 of "Subscription and Sale", so far as the Issuer is aware, no person involved in the offer of the Notes has an interest material to the offer."]

2. ESTIMATED TOTAL EXPENSES RELATED TO THE ADMISSION TO TRADING

Estimated total expenses: []

3. [Fixed Rate Notes only - YIELD

Indication of yield: []

4. [Floating Rate Notes only – HISTORIC INTEREST RATES

Details of historic [EURIBOR/SONIA/SOFR/€STR/SARON/TONA/other] rates can be obtained from [Reuters]]

5. [Additional Selling Restriction for placements of Notes in Japan- JAPAN

[In the case where the Japanese offerees are limited to Qualified Institutional Investors only, and therefore the Issuer relies upon the Qualified Institutional Investor private placement exemption (the Issuer must appoint its attorney in Japan):

[The Notes have not been and will not be registered in Japan pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "FIEA") in reliance upon the exemption from the registration requirements since the offering constitutes the private placement to qualified institutional investors only.

A transferor of the Notes shall not transfer or resell them except where a transferee is a qualified institutional investor under Article 10 of the Cabinet Office Ordinance concerning Definitions provided in Article 2 of the Financial Instruments and Exchange Act of Japan (the Ministry of Finance Ordinance No. 14 of 1993, as amended).]]

[In the case where the Japanese offerees are fewer than 50, and therefore the Issuer relies upon the small number private placement exemption:

[The Notes have not been and will not be registered in Japan pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "FIEA") in reliance upon the exemption from the registration requirements since the offering constitutes the small number private placement.

A transferor of the Notes shall not transfer or resell the Notes except where the transferor transfers or resells all the Notes en bloc to one transferee.]]

[Replace second paragraph above with the following if, in addition to fewer than 50 offerees, the numbers of the notes to be sold in Japan is fewer than 50:

[The Note is not permitted to be divided into any unit less than the minimum denomination.]]

REGULATION

The following is a summary of the most relevant aspects of the regulatory framework applicable to the Santander Group, as well as the main factors that have directly or indirectly affected or are currently affecting its operations in a significant way.

In addition, see "Risk Factors", which includes the specific and significant factors that the Group believes could significantly affect its operations.

EU fiscal and banking union

The project of achieving a European banking union was launched in the summer of 2012. Its main goal is to resume progress towards the European single market for financial services by restoring confidence in the European banking sector and ensuring the proper functioning of monetary policy in the eurozone.

The banking union is expected to be achieved through new harmonised banking rules (the single rulebook) and a new institutional framework with stronger systems for both banking supervision and resolution that will be managed at the European level. Its two main pillars are the Single Supervision Mechanism (the "SSM") and the Single Resolution Mechanism (the "SRM").

The SSM (comprised by both the ECB and the national competent authorities) is designed to assist in making the banking sector more transparent, unified and safer. In accordance with the SSM Regulation, the ECB fully assumed its new supervisory responsibilities within the SSM, in particular direct supervision of the largest European banks (including the Group), on 4 November 2014.

The SSM represented a significant change in the approach to bank supervision at a European and global level, and resulted in the direct supervision by the ECB of the largest financial institutions, including the Group, and indirect supervision of around 3,500 financial institutions and is now one of the largest in the world in terms of assets under supervision. In the coming years, the SSM is expected to continue working on the establishment of a new supervisory culture importing best practices from the 19 national competent authorities that are part of the SSM and promoting a level playing field across participating Member States. Several steps have already been taken in this regard such as the publication of the Supervisory Guidelines; the approval of the Regulation (EU) No 468/2014 of the ECB of 16 April 2014, establishing the framework for cooperation within the SSM between the ECB and national competent authorities and with national designated authorities (the "**SSM Framework Regulation**"); the approval of a Regulation (Regulation (EU) 2016/445 of the European Central Bank of 14 March 2016 on the exercise of options and discretions available in Union law) and a set of guidelines on the application of CRR's national options and discretions, etc. In addition, the SSM represents an extra cost for the financial institutions that funds it through payment of supervisory fees.

The other main pillar of the EU banking union is the SRM, the main purpose of which is to ensure a prompt and coherent resolution of failing banks in Europe at minimum cost for the taxpayers and the real economy. The SRM Regulation establishes uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of the SRM and a Single Resolution Fund (the "**SRF**"). Under the intergovernmental agreement (IGA) signed by 26 EU member states on 21 May 2014, contributions by banks raised at national level were transferred to the SRF. The new Single Resolution Board (SRB), which is the central decision-making body of the SRM, started operating on 1 January 2015 and has fully assumed its resolution powers on 1 January 2016. The SRB is responsible for managing the SRF and its mission is to ensure that credit institutions and other entities under its oversight, which face serious difficulties, are resolved effectively with minimal costs to taxpayers and the real economy. From that date onwards, the SRF is also in place, funded by contributions from European banks in accordance with the methodology approved by the Council of the EU. The SRF is expected to reach a total amount of €80 billion by 2024 and to be used as a separate backstop only after an 8 per cent. bail-in of a bank's liabilities has been applied to cover capital shortfalls (in line with the BRRD).

In order to complete such banking union, a single deposit guarantee scheme is still needed, which may require a change to the existing European treaties. This is the subject of continued negotiation by European leaders to ensure further progress is made in European fiscal, economic and political integration.

Regulations adopted towards achieving a banking and/or fiscal union in the EU and decisions adopted by the ECB in its capacity as the main supervisory authority of the Group may have a material impact on its business, financial condition and results of operations.

Moreover, regulations adopted on structural measures to improve the resilience of EU credit institutions may have a material impact on the business, financial condition, results of operations and prospects of the Group. These regulations, if adopted, may also cause the Group to invest significant management attention and resources to make any necessary changes.

Capital, liquidity and funding requirements

Overview

As a Spanish financial institution, the Bank is subject to the Capital Requirements Regulation (Regulation (EU) No 575/2013) ("**CRR**") and the Capital Requirements Directive (Directive 2013/36/EU) ("**CRD IV**"), through which the EU began implementing the Basel III capital reforms from 1 January 2014. While the CRD IV required national transposition, the CRR was directly applicable in all the EU member states. This regulation is complemented by several binding technical standards and guidelines issued by the European Banking Authority ("**EBA**"), directly applicable in all EU member states, without the need for national implementation measures. The implementation of the CRD IV into Spanish law has taken place through Royal Decree Law 14/2013 and Law 10/2014, Royal Decree 84/2015, Bank of Spain Circular 2/2014 and Bank of Spain Circular 2/2016.

On 27 June 2019, a comprehensive package of reforms amending CRR, CRD IV, European Bank Recovery and Resolution Directive (Directive 2014/59/EU) ("**BRRD**") and Regulation (EU) No 1093/2010 (the "**SRM Regulation**") came into force: (i) Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending CRD IV with respect to exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures ("**CRD V**"); (ii) Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending BRRD with respect to the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC ("**BRRD II**"); (iii) Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending CRR with respect to the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) 648/2012 ("**CRR II**"); and (iv) Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May 2019 amending the SRM Regulation with respect to the loss-absorbing and recapitalisation capacity of credit institutions and investment firms ("**SRMR II**", and, together with CRD V, BRRD II and CRR II, the "**EU Banking Reforms**").

The EU Banking Reforms cover multiple areas, including the Pillar 2 framework, the leverage ratio, mandatory restrictions on distributions, permission for reducing own funds and eligible liabilities, macroprudential tools, a new category of "non-preferred" senior debt that should only be bailed-in after junior ranking instruments but before other senior liabilities, changes to the definitions of Tier 2 and Additional Tier 1 instruments, the MREL framework and the integration of the TLAC standard into EU legislation as mentioned above. With respect to the European Commission's proposal to create a new asset class of "non-preferred" senior debt, on 27 December 2017, Directive 2017/2399 amending Directive 2014/59/EU with respect to the ranking of unsecured debt instruments in insolvency hierarchy was published in the Official Journal of the EU and sets forth a harmonised national insolvency ranking of unsecured debt instruments to facilitate the issuance by credit institutions of senior "non-preferred" instruments. Before that, Royal Decree-Law 11/2017, of 23 June, approving urgent measures on financial matters created in Spain the new asset class of senior-non preferred debt.

CRD V Directive and BRRD II were partially implemented into Spanish law through Royal Decree-Law 7/2021, of 27 April, ("**RDL 7/2021**") which has amended, amongst others, Law 10/2014 and Law 11/2015, of 18 June, on the Recovery and Resolution of Credit Institutions and Investment Firms ("**Law 11/2015**"). Furthermore, Royal Decree 970/2021, of 8 November, which amended Royal Decree 84/2015, and Circulars 5/2021 and 3/2022 of the Bank of Spain, which amended Circular 2/2016, completed the implementation into Spanish law of CRD V. In addition, Royal Decree 1041/2021, of 23 November, amended Royal Decree 1012/2015, of 6 November, which implemented Law 11/2015 ("**Royal Decree 1012/2015**") and completed the implementation of BRRD II into Spanish law. Given such recent implementation of CRD V and BRRD II. Of note, however, is the uncertainty regarding how the EU Banking Reforms will be applied by the relevant authorities.

On 27 October 2021, the European Commission published legislative proposals to amend CRR and the CRD IV, as well as a separate legislative proposal to amend CRR and BRRD in the area of resolution. In

particular, the main objectives of the European Commission's legislative proposals are to strengthen the risk-based capital framework, enhance the focus on environmental, social and governance (ESG) risks in the prudential framework, further harmonise supervisory powers and tools and reduce institutions' administrative costs related to public disclosures and to improve access to institutions' prudential data. Moreover, these legislative proposals include the following: (i) a directive of the European Parliament and of the Council amending CRD IV with respect to supervisory powers, sanctions, third-country branches, and environmental, social and governance risks; (ii) a regulation of the European Parliament and of the Council and its annex amending CRR with respect to requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor; and (iii) a regulation of the European Parliament and of the Council amending CRR and BRRD with respect to the prudential treatment of global systemically important institutions with a multiple point of entry resolution strategy and a methodology for the indirect subscription of instruments eligible for meeting the minimum requirement for own funds and eligible liabilities (the so-called "daisy chain" proposal). The European Parliament and the Council adopted on 19 October 2022 Regulation (EU) 2022/2036 amending CRR and BRRD, which partially started to apply on 14 November 2022. Although the final report by the European Parliament is expected during the first quarter of 2023, the timing for the final implementation of the legislative proposals referred to in limbs (i) and (ii) above is unclear as of the date of this Information Memorandum and new or amended elements may be introduced through the course of the legislative process. Furthermore, with respect to (i) above, the Directive will need to be implemented in each of the Member States, and the way it will be implemented may vary depending on the relevant Member State.

Capital requirements

Credit institutions, such as the Bank, are required, on a standalone and consolidated basis, to hold a minimum amount of regulatory capital of 8 per cent. of risk weighted assets (of which at least 4.5 per cent. must be CET1 capital and at least 6 per cent. must be Tier 1 Capital). In addition to the minimum regulatory capital requirements, the CRD IV also introduced five capital buffer requirements that must be met with CET1 capital: (1) the capital conservation buffer for unexpected losses, requiring additional CET1 of up to 2.5 per cent. of total risk weighted assets; (2) the institution-specific counter-cyclical capital buffer (consisting of the weighted average of the counter-cyclical capital buffer rates that apply in the jurisdictions where the relevant credit exposures are located), which may require as much as additional CET1 capital of 2.5 per cent. of total risk weighted assets or higher pursuant to the requirements set by the competent authority; (3) the G-SIIs buffer requiring additional CET1 which shall be no less than 1 per cent. of risk weighted assets; (4) the other systemically important institutions buffer, which may be as much as 3 per cent. of risk weighted assets; and (5) the CET1 systemic risk buffer to prevent systemic or macro prudential risks of at least 1 per cent. of risk weighted assets (to be set by the competent authority). Entities are required to comply with the "combined buffer requirement" (broadly, the combination of the capital conservation buffer, the institution-specific counter-cyclical buffer and the higher of (depending on the institution) the systemic risk buffer, the G-SIIs buffer and the other systemically important institutions ("**O-SII**") buffer, in each case as applicable to the institution). Under the CRD V, where an institution is subject to a systemic risk buffer, that buffer will be cumulative with the applicable G-SIIs buffer or the other systemically important institution buffer.

While the capital conservation buffer and the G-SII buffer are mandatory, the Bank of Spain has greater discretion in relation to the counter-cyclical capital buffer, the O-SII buffer and the systemic risks buffer. The ECB also has the ability to provide certain recommendations in this respect.

As of the date of this Information Memorandum, the Bank is required to maintain a capital conservation buffer of additional CET1 capital of 2.5 per cent. of risk weighted assets, a G-SII buffer of additional CET1 capital of 1 per cent. of risk weighted assets and a counter-cyclical capital buffer of additional CET1 capital of 0.0253 per cent. of risk weighted assets. On 14 December 2022 the Bank of Spain agreed to maintain the counter-cyclical buffer applicable to credit exposures in Spain at 0 per cent. for the first quarter of 2023.

Moreover, Article 104 of the CRD IV, as implemented by Article 68 of Law 10/2014 and similarly Article 16 of the SSM Regulation, also contemplate that in addition to the minimum Pillar 1 capital requirements and any applicable capital buffer, supervisory authorities may impose further Pillar 2 capital requirements to cover other risks, including those risks incurred by the individual institutions due to their activities not considered to be fully captured by the minimum capital requirements under the CRD IV and CRR, which should be set according to the specific situation of an institution excluding macroprudential or systemic risks, but including the risks incurred by individual institutions due to their activities (including those reflecting the impact of certain economic and market developments on the risk profile of an individual

institution). This may result in the imposition of additional capital requirements on the Bank and/or the Group pursuant to this Pillar 2 framework.

In accordance with Articles 104a and b of the CRD V, as implemented in Spain by Article 69 and 69bis of Law 10/2014, the specific Pillar 2 capital shall consist of two parts: Pillar 2 requirements and Pillar 2 guidance. Pillar 2 requirements are binding and breaches can have direct legal consequences for banks, while Pillar 2 guidance is not directly binding and a failure to meet Pillar 2 guidance does not automatically trigger legal action, even though the ECB expects banks to meet Pillar 2 guidance. Failure to comply with the Pillar 2 guidance is not relevant for the purposes of triggering the automatic restriction of the distribution and calculation of the Maximum Distributable Amount (as defined below) but, in addition to certain other measures, competent authorities are entitled to impose further Pillar 2 capital requirements where an institution repeatedly fails to follow the Pillar 2 capital guidance previously imposed.

Although CRR and CRD V do not require disclosure of the Pillar 2 guidance, the Market Abuse Regulation (MAR) ESMA Guidelines on delay in the disclosure of inside information and interaction with prudential supervision, as amended on 5 January 2022, provide that Pillar 2 guidance may be inside information if, for example, the difference between the Pillar 2 guidance and the institution's level of capital is not minor and is likely to involve a major reaction by the institution, such as a capital increase; or if the institution's Pillar 2 guidance is not in line with market expectations. To the extent that Pillar 2 guidance constitutes inside information, it will need to be disclosed pursuant to the obligations applicable to the Bank contained in Regulation (EU) No 596/2014 of April 16, 2014, on market abuse.

In addition to the above, the EBA published on 19 December 2014 its final guidelines for common procedures and methodologies in respect of its SREP, as revised on 14 March 2022 with the aim of implementing the amendments to the CRD V Directive and CRR II and promoting convergence towards best supervisory practices (the "**EBA SREP Guidelines**"). Included in this were the EBA's proposed guidelines for a common approach to determining the amount and composition of additional Pillar 2 capital requirements implemented on 1 January 2016. Under these guidelines, national supervisors must set a composition requirement for the Pillar 2 additional capital requirements to cover certain specified risks of at least 56 per cent. CET1 capital and at least 75 per cent Tier 1 Capital. Under Article 104(a) of CRD V (implemented into Spanish law by Article 94.6 of Royal Decree 84/2015), EU banks are now allowed to meet Pillar 2 requirements with these minimum proportions of CET1 capital and Tier 1 Capital.

The EBA SREP Guidelines also contemplate that national supervisors should not set additional capital requirements in respect of risks which are already covered by capital buffer requirements and/or additional macro-prudential requirements; and, accordingly, the above "combined buffer requirement" is in addition to the Pillar 1 and Pillar 2 capital requirements. Therefore capital buffers would be the first layer of capital to be eroded pursuant to the applicable stacking order, as set out in the "Opinion of the EBA on the interaction of Pillar 1, Pillar 2 and combined buffer requirements and restrictions on distributions" published on 16 December 2015. In this regard, under Article 141 of the CRD IV, Member States of the EU must require that an institution that fails to meet the "combined buffer requirement" be prohibited from paying any Discretionary Payments (which are defined broadly by the CRD IV as payments relating to CET1, variable remuneration and discretionary pension benefits and distributions relating to Additional Tier 1 Instruments), until it calculates its applicable restrictions and communicates them to the regulator. Thereafter, any such discretionary payments shall be subject to such restrictions. The restrictions shall be scaled according to the extent of the breach of the "combined buffer requirement" and calculated as a percentage of the profits of the institution since the last distribution of profits or Discretionary Payment. Such calculation shall result in a "**Maximum Distributable Amount**" in each relevant period. As an example, the scaling is such that in the bottom quartile of the "combined buffer requirement", no "discretionary distributions" will be permitted to be paid. Articles 43 to 49 of Law 10/2014 and Chapter II of Title II of Royal Decree 84/2015 implement the above provisions in Spain. In particular, Article 48 of Law 10/2014 and Articles 73 and 74 of Royal Decree 84/2014 deal with restrictions on distributions. Furthermore, pursuant to article 48ter of Law 10/2014 and article 16bis of Law 11/2015, the calculation of the Maximum Distributable Amount, as well as consequences of, and pending, such calculation could also take place as a result of the breach of the leverage ratio buffer requirement or when the "combined buffer requirement" in addition to its own funds requirements are met but there is a breach of "combined buffer requirement" when considered in addition to the MREL requirements.

CRD V further clarifies that Pillar 2 requirements should be positioned in the relevant stacking order of own funds requirements above the Pillar 1 capital requirements and below the "combined buffer requirement" or the leverage ratio buffer requirement, as applicable. In addition, CRD V also clarifies that Pillar 2 requirements should be set in relation to the specific situation of an institution excluding

macroprudential or systemic risks, but including the risks incurred by individual institutions due to their activities (including those reflecting the impact of certain economic and market developments on the risk profile of an individual institution). Under Article 104(a) of CRD V (implemented into Spanish law by Article 94.6 of Royal Decree 84/2015), EU banks are now allowed to meet Pillar 2 requirements with these minimum proportions of CET1 capital and Tier 1 Capital.

The Bank announced on 22 December 2022 that it had received from the ECB its decision regarding the prudential minimum capital requirements effective as of 1 January 2023, following the results of SREP. The ECB decision required the Group to maintain a CET1 ratio of at least 8.91 per cent. on a consolidated basis. This 8.91 per cent. capital requirement includes: the minimum Pillar 1 requirement (4.5 per cent.); the Pillar 2 requirements (0.89 per cent.); the capital conservation buffer (2.5 per cent.); the requirement deriving from its consideration of the Bank as a G-SII (1.0 per cent.) and the counter-cyclical buffer (0.0253 per cent.). The ECB decision also requires that the Group maintains a CET1 capital ratio of at least 7.85 per cent. on an individual basis. As of 31 December 2022, on a consolidated basis, the Group's total capital ratio was 15.99 per cent. while its CET1 ratio was 12.18 per cent. If the Group did not apply the transitory IFRS 9 provisions, nor the subsequent amendments introduced by Regulation 2020/873 of the EU, the fully-loaded CET1 ratio would have been 12.04 per cent.

As described above, Santander maintains a surplus of capital over these requirements, both at a consolidated and an individual level. Therefore, these capital requirements do not imply any limitation on discretionary payments, including to holders of Santander's Additional Tier 1 Instruments.

In addition to the above, the CRR also contains a binding 3 per cent. Tier 1 leverage ratio ("LR") requirement, and which institutions must meet in addition and separately to their risk-based requirements.

Moreover, article 92.1a of CRR include a leverage ratio buffer for G-SIIs to be met with Tier 1 Capital and set at 50 per cent. of the applicable risk weighted G-SIIs buffer and that is in force since 1 January 2023. Pursuant to Article 141b of the CRD IV and Article 48ter of Law 10/2014, G-SIIs are also obliged since 1 January 2023, to determine their Maximum Distributable Amount and restrict Discretionary Payments where they do not meet the leverage ratio buffer requirement under Article 92.1a of CRR.

MREL requirements

Under article 92a of CRR, institutions such as the Bank that are identified as resolution entities and are G-SII shall satisfy the following requirements for own funds and eligible liabilities: (a) 18 per cent of risk weighted assets, and (b) 6.75 per cent. of its leverage ratio exposure (the Pillar 1 TLAC/MREL Requirements for G-SIIs). On top of that, Article 45 of the BRRD provides that Member States shall ensure that institutions meet, at all times, a minimum MREL requirement (the "**TLAC/MREL Requirements**"). The EU Banking Reforms integrate the total loss absorbing capacity ("**TLAC**") standard into the existing MREL rules and to ensure that both requirements are met with the largely similar instruments, with the exception of the subordination requirement, which will be partially institution-specific and determined by the resolution authority. Therefore, institutions such as the Bank could be subject to an institution-specific TLAC/MREL Requirement, which may be higher than the Pillar 1 TLAC/MREL Requirements for G-SIIs.

Although the specific MREL requirements may vary depending on the specific characteristics of the credit entity (its application falls on resolution institution or resolution group, being entities subject to resolution following a Single Point of Entry or Multiple Point of Entry resolution strategy) and the resolution process, BRRD II together with CRR II introduce a relevant change for complying with MREL which now includes two different ratios (i) a risk ratio (percentage of total risk weighted assets of the resolution entity) and (ii) a non-risk ratio (percentage of the resolution entity's total exposure), as well as empower the relevant resolution authority to authorise or require (a) complying with additional CET1, Additional Tier 1 or Tier 2 capital ratios (which was not foreseen in the previous MREL rules) and (b) that certain level of senior liabilities issued by the resolution entity can be subject to Bail-in.

MREL application is also subject to a different regime depending on the nature of the entity based on its resource volume and systemic profile. Thus, the MREL requirements are different for G-SIIs, "top tier" entities (which are not G-SIIs with aggregated asset volume of over €100 billion), O-SIIs (which are institutions that, due to their systemic importance, are more likely to create risks to financial stability) and the rest of the resolution institutions. In particular, G-SIIs, "top tier" banks and O-SIIs are subject to Pillar 1 requirements: 18 per cent. (including the combined buffer requirements under CRD IV), and 13 per cent. of risk weighted assets and 6.75 per cent. and 5 per cent. of leverage exposure, respectively for G-SIIs and "top tier" banks and O-SIIs. These requirements are complemented by further Pillar 2 requirements, which would be determined on a case-by-case basis for the rest of the resolution institutions.

The EU Banking Reforms have introduced limited adjustments to the existing MREL Rules ensuring technical consistency with the structure of any requirements for G-SIIs. Since 1 January 2022, the TLAC/MREL Requirements are fully applicable (a 18 per cent. minimum TLAC requirement).

According to Article 16.a) of the BRRD, any failure by an institution to meet the "combined buffer requirement" when considered in addition to the applicable minimum TLAC/MREL Requirements is intended to be treated in a similar manner as a failure to meet the "combined buffer requirement" on top of its minimum regulatory capital requirements (i.e. a resolution authority will have the power to impose restrictions or prohibitions on discretionary payments by the Bank). The referred Article 16.a) of the BRRD includes a potential nine-month grace period whereby the resolution authority will assess on a monthly basis whether to exercise its powers, after such nine-month period the resolution authority is compelled to exercise its power to restrict discretionary payments (subject to certain limited exceptions). These restrictions have been implemented in Spain by means of Article 16bis of Law 11/2015.

The Bank announced on 20 May 2022 that it had received formal notification from the Bank of Spain of its binding minimum MREL requirement, both total and subordinated, for the Resolution Group at a sub-consolidated level, as determined by the SRB. The requirement became effective on 1 January 2022 and replaced the previously applicable one. The total MREL requirement was set at 30.32 per cent. for 2024 and at 28.95 per cent. as intermediate target for 2022 of the Resolution Group's total risk weighted assets. The subordination requirement was set at 9.05 per cent. for 2024 and at 9.04 per cent. as intermediate target for 2022. As of 31 December 2022 the structure of own funds and eligible liabilities of the Resolution Group met the intermediate target of the requirement determined by the SRB effective 1 January 2022, and its funding plan has been built to further strengthen MREL ratio and to comply with the final requirement determined by the SRB. Future requirements are subject to ongoing review by the resolution authority.

Additionally, the Basel Committee is currently in the process of reviewing and issuing recommendations in relation to risk asset weightings which may lead to increased regulatory scrutiny of risk asset weightings in the jurisdictions that are members of the Basel Committee.

Deposit Guarantee Fund ("DGF") and Single Resolution Fund ("SRF")

The Group belongs to the DGF, which is aimed at guaranteeing the return of guaranteed deposits when the depository institution has been declared bankrupt (*concurso de acreedores*) or when deposits are not returned, provided an agreement has not been reached to commence a resolution process of the institution up to the limit contemplated in Royal Decree-Law 16/2011, of 14 October 2011, creating the Deposit Guarantee Fund for Credit Institutions. The standard annual contribution to be made by institutions to the fund is determined by the DGF Management Committee, pursuant to the provisions of Bank of Spain Circular 5/2016 of 27 May on the calculation method to ensure that the contributions by member institutions of the Deposit Guarantee Fund are proportional to their risk profile, as amended by Circular 1/2018 of 31 January 2018.

In addition, in March 2014, the European Parliament and the Council reached a political agreement on the creation of the second pillar of the banking union, the Single Resolution Mechanism ("SRM"). The main objective of the SRM is to ensure that all possible bankruptcies that occur in the future in the banking union are managed efficiently, at a minimum cost to taxpayers and the actual economy. The SRM's scope of activity is identical to that of the SSM, being a central authority.

The regulations governing the banking union are aimed at ensuring that the banks and their shareholders (primarily) and, if required, the bank's creditors (partly), are those that finance resolutions. Nevertheless, another source of finance must also be available, if the contributions by shareholders and bank creditors are insufficient. This is the SRF, administered by the SRB, which is the ultimate entity responsible for deciding whether or not the resolution of the bank should be initiated, while the operating decisions are made in conjunction with the national resolution authorities. The regulations establish that banks must contribute to the SRF for eight years.

The SRB calculates the contributions to be made by each entity to the SRF, in accordance with the provisions of Regulation (EU) 806/2014 of the European Parliament and of the Council of 15 July 2014. The calculation is based on:

- (a) contributions that are calculated in proportion to the individual entity's liabilities, excluding net worth and guaranteed deposits, with respect to the total liabilities minus net worth and guaranteed deposits of all the authorised entities in the participating Member States («annual base contribution»); and

(b) contributions that are calculated according the entity's risk profile («risk-adjusted contribution»).

The expense accounted for in financial years 2022 and 2021 for contributions by the Bank to the Deposit Guarantee Fund and the SRF amounted to €1,258 million and €1,016 million, respectively.

Non-performing exposures

On 15 March 2018, the ECB published its supervisory expectations on prudent levels of provision for non-performing loans ("NPLs"). The document was published as a subsequent addendum (the "Addendum") to the ECB's guidance on non-performing loans for credit institutions of 20 March 2017, which clarified the ECB's supervisory expectations with regard to the identification, measurement, management and write-off of NPLs. The ECB states that the Addendum sets out what it considers to be prudential provisioning of non-performing exposures ("NPEs"), in order to avoid an excessive build-up of non-covered aged NPLs on banks' balance sheets in the future, which would require specific supervisory measures.

In this respect, the ECB states that it will assess any differences between banks' practices and the prudential provisioning expectations laid out in the Addendum at least annually and will link the supervisory expectations in this Addendum to new NPLs classified as such from 1 April 2018 onwards. In addition, banks will therefore be asked to inform the ECB of any differences between their practices and the prudential provisioning expectations, as part of the SREP supervisory dialogue, as from early 2021. This could ultimately result in the ECB requiring banks to apply specific adjustments to their net worth calculations when the accounting treatment applied by the bank is not considered prudent from a supervisory perspective which, in turn, could have an impact on the banks' capital position.

In August 2019, the ECB further revised its supervisory expectations for prudential provisioning of new NPEs taking into account the adoption of the new Regulation (EU) 2019/630, which outlines the Pillar 1 treatment for NPEs, complements existing prudential rules and requires a deduction from own funds when NPEs are not sufficiently covered by provisions or other adjustments.

Notwithstanding the foregoing, on 20 March 2020 among the package of measures adopted in reaction to the covid-19 pandemic outbreak, the ECB announced further measures introducing supervisory flexibility regarding the treatment of NPLs, in particular to allow banks to fully benefit from guarantees and moratoriums put in place by public authorities to tackle the current distress. In light of that scenario, the EBA has also issued statements regarding the prudential framework in relation to the classification of loans in default, classification of exposures under the definition of forbearance or as defaulted under distressed restructuring, and their accounting treatment. In particular, the EBA has clarified that generalised payment delays due to legislative initiatives and addressed to all borrowers do not lead to any automatic classification in default, forbore or unlikeliness to pay (individual assessments of the likeliness to pay should be prioritised) and has clarified the requirements for public and private moratoria, which if fulfilled, are expected to help avoid the classification of exposures under the definition of forbearance or as defaulted under distressed restructuring.

Loss absorbing powers by the Relevant Resolution Authority

The BRRD (which has been implemented in Spain through Law 11/2015 and Royal Decree 1012/2015) is designed to provide authorities with tools to intervene sufficiently early and quickly in unsound or failing institutions so as to ensure the continuity of the institution's critical financial and economic functions, while minimising the impact of an institution's failure on the economy and financial system.

See "*Risk Factors – Risks in relation to the Notes – The taking of actions under Law 11/2015, which partially implements BRRD, and/or the SRM Regulation could materially affect the value of any Notes*" for additional information.

New rules on real estate loans

Law 5/2019 of 15 March 2019 regulating real estate credit agreements and Royal Decree 309/2019 of 26 April 2019 ("**Real Estate Credit Regulations**") implemented Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014, with the aim of strengthening the legal protection, transparency and prudential regime of real estate credit agreements.

In short, the protection regime of the Real Estate Credit Regulations extends to all natural persons, regardless of whether they are consumers or not, in conjunction with the current regulations on transparency in mortgage credit established by Order EHA/2899/2011, of 28 October, on the transparency and protection

of customer banking services and Bank of Spain Circular 5/2012 and related regulations, in three areas: (i) establishment of rules of transparency and conduct that impose obligations upon lenders and credit intermediaries, as well as upon their appointed representatives; (ii) establishment of the legal regime governing real estate credit intermediaries and real estate lenders; and (iii) establishment of the penalty regime applicable in the event of a breach of the obligations contained therein.

The protection regime of the Real Estate Credit Regulations exceeds the level of protection established by Directive 2014/47/EU and has a direct impact on the granting and intermediation of real estate credit, imposing additional operating requirements that must be fulfilled by lenders (mainly to produce documents, such as the European Standardised Information Sheet, considered a binding offer during the agreed term until the signing of the agreement with at least 10 days' notice, the Standardised Warning Sheet, which contains relevant clauses or elements, the Separate Document (*Documento Separado*) and a copy of the draft agreement with a breakdown of all the costs), protective measures (limitation of default interest, in-depth assessment of the borrower's capacity, definition of financial concepts, determining of the regime governing related practices and cross-practices, accuracy of the content of the basic information that must appear in advertising materials) and the redistribution of the financial costs between lender and borrower (including the payment of stamp duty (*Actos Jurídicos Documentados*) by the lender, the cost of the property valuation and payment of the copies of the deed requested by the borrower).

The foreclosure regime is regulated by Article 24, which establishes the cumulative requirements for foreclosure:

- (i) Absolute Requirement – refers to the borrower's default on payment of part of the loan principal or interest;
- (ii) Quantitative requirement – taking into account the life of the loan (first or second half of the repayment period) the amount of instalments due and not paid shall be (i) in the first half of the loan (a) 3 per cent. of the principal granted or (b) 12 instalments (or the equivalent amount); or (ii) in the second half of the loan (a) 7 per cent. or (b) 15 instalments (or the equivalent amount);
- (iii) Subjective requirement – the lender has claimed payment from the borrower, granting the borrower at least one month to comply and stating that if the borrower fails to comply, the lender will demand full repayment of the outstanding amount of the loan.

This mandatory regime differs from the regime established by the Spanish Law of Civil Procedure ("*Ley de Enjuiciamiento Civil*") (the "**Law of Civil Procedure**"), which required default of at least three monthly instalments to enable early termination of the loan by the lender, although this requirement has been extensively qualified by a number of court judgments, until the entry into force of Law 5/2019 on 16 June 2019. The Supreme Court ruling of 11 September 2019 on the effects of the annulment of an early maturity clause in mortgage loans clarified the regime, stating that (a) the annulment of a certain early maturity clause of a mortgage loan agreement does not imply the automatic annulment of the agreement; and (b) the early maturity clause annulled is replaced by Article 24 (which is mandatory).

In addition to the above, a limit on default interest is established in Article 25, which is also mandatory, as the interest of the loan plus three percentage points during the term of repayment of the loan and accrued only on the principal due and payable, without the possibility of capitalisation (except in the case of Article 579.2.a) of the Law of Civil Procedure). This mandatory regime thus differs from the previous regime, in which there was margin of choice, subject to a maximum limit (mainly determined by case law and ranging from 2 points above the loan interest rate to 2.5 times the statutory interest rate).

Furthermore, the Supreme Court judgment of 11 September 2019 on the effects of the annulment of early maturity clauses in mortgage loans amended the conditions of early maturity, stating that (a) the annulment of a certain early maturity clause in a mortgage loan does not imply the automatic annulment of the loan agreement; (b) alternatively, the early maturity clause annulled must be replaced by Article 24 of Law 5/2019 (mandatory), which imposes minimum terms that must be respected by the lending institution for foreclosure of the mortgage, referenced to percentages of the capital (3 per cent. and 7 per cent.).

On 24 November 2022, Royal Decree-Law 19/2022, of 22 of November 2022, came into force with the purpose of protecting certain mortgage debtors and prevent difficulties to make

payments on their debt as a result of the rise in interest rates. Among other measures, Royal Decree-Law 19/2022 sets up a new Code of Good Practice which will be in force for a two-year period for the restructuring of the mortgage debt of mortgagors at risk of vulnerability due to rising interest rates, and amending the former Code of Good Practice established by Royal Decree-Law 6/2012.

The Bank acceded to the new Code of Good Practice on 30 November 2022 and will benefit individuals with mortgage loans secured by their first residence and a purchase price not exceeding €300,000 who request the novation of the loan no later than 24 November 2024 if such individual: (i) has a household income which does not exceed by 3.5 times the annual 14-payment IPREM (Public Income Index); (ii) has been subject to a mortgage burden increase of 1.2 times during the four years prior to the request for novation; and (iii) has seen its monthly mortgage payment exceed 30 per cent. of its household income.

Under these circumstances, the new Code of Good Practice contemplates either: (i) the extension of the maturity of the loan for up to seven years with the option of applying a grace period of 12 months for payment of principal (provided that the outstanding principal of the loan will accrue interest at a rate representing a reduction of 0.5 per cent. of the net present value of the loan and the extension cannot result in a reduction of mortgage monthly payments below what was being paid on 1 June 2022); or (ii) a conversion of the loan to fixed rate. The novation of the loan as a result of any of such alternatives may not result in the maturity exceeding 40 years.

Digital Service Tax in Spain

On 15 October 2020, Spain enacted the Law 4/2020 that introduced a new tax on certain digital services. This law entered into force on 16 January 2021. The Digital Services Tax ("**DST**") is an indirect tax applicable to the provision of certain digital services when users are located in Spain (online advertising services targeted at users, online intermediary services and data transmissions) at a rate of 3 per cent. over gross income. Companies will be subject to the tax if (i) net turnover is over €750 million (globally), and (ii) total revenues from taxable digital services in Spain are over €3 million. The Preamble of the Law states the provisional nature of the DST until an international consensus on the taxation of digital business models is reached.

PSD2

Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market (the "**PSD2 Directive**") has been fully transposed into Spanish law, which took place after the deadline for PSD2 transposition (13 January 2018); notwithstanding the additional transitional period until 31 December 2020 in relation to the requirements on security measures (mainly due to their potential negative impact on electronic commerce)) by means of Royal Decree-Law 19/2018 of 23 November 2018 on payment services and other urgent measures in financial matters, Royal Decree 736/2019 of 20 December 2019 on the legal regime for payment services and payment institutions and Order ECE/1263/2019 of 26 December 2019 on transparency of conditions and information requirements applicable to payment services. The PSD2 Directive essentially regulates (a) transparency conditions and (b) the rights and obligations in contracts between payment service providers and users, applying its regime to the objective scope of payment services provided by credit institutions, payment service entities and electronic money institutions. In addition, it provides for a set of precautionary measures (prohibition of surcharges for the use of payment instruments at commercial establishments or online, unconditional right to the return for direct debits in euros, reduction of liability for unauthorised payments), security requirements (protection of consumer financial data and enhanced security requirements for electronic payments).

In particular, the new payment services introduced by PSD2 feature the services of (a) payment initiation; and (b) account information. Both services involve access by third parties (suppliers to third parties) to payment service users' accounts held with credit institutions. This means the opening up of the payment market to these new competitors ("third-party providers"), who can operate directly through the payment service user's account at their credit institution, without having to open an account themselves to operate. This PSD2 Directive regime and the operational and technological efforts made to adapt it, together with the introduction of the so-called "open banking", will have a substantial impact on the business model for payment services offered by credit institutions, by allowing third parties not related to credit institutions to access their infrastructure, for the purposes of obtaining account information and initiating payment services with bank customers/potential new users of third-party payment services, subject to specific limitations under Articles 66, 67 et seq. In essence, this leads to an increase in the regulatory cost of adaptation of credit institutions, a strengthening of their technological systems for operational and integration purposes and an intensification of competition in the payment services sector, represented mainly by non-credit institution providers subject to a less onerous regulatory regime or, directly, not subject to a prudential supervision regime.

Temporary Banking Tax in Spain

On 29 December 2022, Spain enacted Law 38/2022 for the establishment of temporary levies on energy and credit institutions and the creation of the temporary solidarity tax for high-net-worth individuals (*Ley 38/2022, de 27 de diciembre, para el establecimiento de gravámenes temporales energético y de entidades de crédito y establecimientos financieros de crédito y por la que se crea el impuesto temporal de solidaridad de las grandes fortunas, y se modifican determinadas normas tributarias*). This law creates a temporary levy for credit institutions operating in Spain with a total interest and commission income in the year ended 31 December 2019 equal to or greater than €800 million (on an individual or a consolidated basis). This bank levy will apply during the years 2023 and 2024 (unless the Spanish Government decides to make this levy permanent) and taxes, at a rate of 4.8 per cent., the sum of the net interest income and commission income and expenses derived from the activity carried out in Spain. Amounts payable for the proposed levy will not be tax deductible in the taxable base for the purposes of the Corporate Income Tax (*Impuesto sobre Sociedades*). Moreover, the law expressly prohibits the direct or indirect pass-through of payments of the levy and failure to comply with this obligation would result in sanctions to the corresponding credit institution in the amount of 150 per cent. of the amount passed through.

New accounting framework

The Bank of Spain Circular 4/2017, of 27 November 2017, to credit institutions, on public and confidential financial reporting rules and standard financial statements ("**Circular 4/2017**"), which repealed the former Bank of Spain Circular 4/2004 of 22 December 2004, after successive amendments, adapts the accounting system of Spanish credit institutions to the changes resulting from the adoption of International Financial Reporting Standards (IFRS) - IFRS 9 and IFRS 15, applicable as from 1 January 2018, in relation to the accounting criteria applicable to financial instruments and ordinary revenue.

Annex IX of Circular 4/2017 ("**Annex IX**") develops the general framework for credit risk management in accounting terms, essentially maintaining the amendments introduced by Circular 4/2016, of 27 April 2016 and mainly regulates the policies for the granting, modifying, evaluating, monitoring and controlling of transactions, which include their accounting and the estimation of credit risk loss hedging. In addition, a generally stricter regime is introduced for revaluation, mainly with respect to the general procedures of valuation and monitoring of real estate collateral and the valuation of properties used as collateral for mortgage loans (supplemented by the application of automatic methods to obtain Automated Valuation Model valuations and specific criteria applicable to valuations performed by valuation companies, with strict requirements).

Adaptation to the accounting criteria of IFRS 9 and IFRS 15 since 2018 has had a substantial influence on the accounting plans of credit institutions, mainly due to the effects of the impairment of financial assets, which are subject to new classification criteria and the move from the "incurred losses" model to the "expected credit losses" model, applicable to financial assets measured at amortised cost and to financial assets valued at fair value, with changes in other overall results. This has had a significant impact on credit institutions' provisioning models, leading to accounting adjustments/reduced reserves, in addition to the major regulatory costs that credit institutions had to bear in 2018.

Data privacy and cybersecurity

The Group receives, maintains, transmits, stores and otherwise processes proprietary, sensitive and confidential data, including public and non-public personal information of its customers, employees, counterparties and other third parties, including, but not limited to, personally identifiable information and personal financial information. The collection, sharing, use, retention, disclosure, protection, transfer and other processing of this information is governed by stringent federal, state, local and foreign laws, rules and regulations, and the regulatory framework for data privacy and cybersecurity is in considerable flux and evolving rapidly. As data privacy and cybersecurity risks for banking organisations and the broader financial system have significantly increased in recent years, data privacy and cybersecurity issues have become the subject of increasing legislative and regulatory focus.

Internationally, virtually every jurisdiction in which the Group operates has established its own data privacy and cybersecurity legal framework with which the Group must comply. For example, on 25 May 2018, the Regulation (EU) 2016/279 of the European Parliament and of the Council of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (the "**General Data Protection Regulation**" or "**GDPR**") became directly applicable in all

Member States of the EU. To align the Spanish legal regime with the GDPR, Spain has enacted the Organic Law 3/2018, of 5 December, on Data Protection and the safeguarding of digital rights which has repealed the Spanish Organic Law 15/1999, of 13 December, on data protection. Additionally, following the UK's withdrawal from the EU, the Group is also subject to the UK General Data Protection Regulation ("**UK GDPR**").

Although a number of basic existing principles have remained the same, the GDPR and the UK GDPR introduced extensive new obligations on both data controllers and processors, as well as rights for data subjects.

The GDPR and UK GDPR, together with national legislation, regulations and guidelines of the EU Member States governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, retain, protect, disclose, transfer and otherwise process personal data. In particular, the GDPR and UK GDPR include obligations and restrictions concerning the consent and rights of individuals to whom the personal data relates, the transfer of personal data out of the European Economic Area ("**EEA**"), security breach notifications and the security and confidentiality of personal data. The GDPR and UK GDPR also impose significant fines and penalties for non-compliance of up to the higher of 4 per cent. of annual worldwide turnover or €20 million (or £17.5 million under the UK GDPR), whichever is greater. While the UK GDPR currently imposes substantially the same obligations as the GDPR, the UK GDPR will not automatically incorporate changes to the GDPR going forward (which would need to be specifically incorporated by the UK government). Moreover, the UK government has publicly announced plans to reform the UK GDPR in ways that, if formalised, are likely to deviate from the GDPR, all of which creates a risk of divergent parallel regimes and related uncertainty, along with the potential for increased compliance costs and risks for affected businesses.

The implementation of the GDPR, UK GDPR and other data protection regimes has required substantial amendments to the procedures and policies of the Group. The changes have impacted, and could further adversely impact, its business by increasing its operational and compliance costs. The Group expects the number of jurisdictions adopting their own data privacy and cybersecurity laws to increase, which will likely require the Group to devote additional significant operational resources for its compliance efforts and incur additional significant expenses. It is also likely to increase its exposure to risk of claims that the Group has not complied with all applicable data privacy and cybersecurity laws, rules and regulations.

Recent legal developments in the EEA, including recent rulings from the CJEU and from various EU Member State data protection authorities, have created complexity and uncertainty regarding transfers of personal data from the EEA to the United States and other so-called third countries outside the EEA. While the European Commission announced in March 2022 that an agreement in principle had been reached between EU and US authorities regarding a new transatlantic data privacy framework, no formal agreement has been finalised, and any such agreement, if formalised, is likely to face challenge at the CJEU. Similar complexities and uncertainties also apply to transfers from the UK to third countries. While the Group has taken steps to mitigate the impact of such complexities and uncertainties, such as implementing the supplementary measures applicable in accordance with the regulatory risk of the country of destination of the personal data, the efficacy and longevity of these mechanisms remains uncertain.

Data privacy and cybersecurity laws, rules and regulations continue to evolve and may result in ever-increasing public scrutiny and escalating levels of enforcement and sanctions. The Group may become subject to new legislation or regulations concerning data privacy or cybersecurity, which could require to incur significant additional costs and expenses in an effort to comply. The Group could also be adversely affected if new legislation or regulations are adopted or if existing legislation or regulations are modified or interpreted such that the Group is required to alter its systems or require changes to its business practices, processes or privacy policies. If cybersecurity, data privacy, data protection, data transfer or data retention laws, rules or regulations are implemented, interpreted or applied in a manner inconsistent with the Group's current practices or policies, or if it fails to comply (or is perceived to have failed to comply) with applicable laws, rules and regulations relating to data privacy and cybersecurity, the Group may be subject to substantial fines, civil or criminal penalties, costly litigation (including class actions), claims, proceedings, judgments, awards, penalties, sanctions, regulatory enforcement actions, government investigations or inquiries, or other adverse impacts, or be ordered to change its business practices, policies or systems in a manner that adversely impacts the Group's operating results, any of which could have a material adverse effect on its business.

TAXATION

The following is a general description of certain tax considerations. The information provided below does not purport to be a complete summary of tax law and practice currently applicable and is subject to any changes in law and the interpretation and application thereof, which could be made with retroactive effect. The following summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to acquire, hold or dispose of the Notes, and does not purport to deal with the tax consequences applicable to all categories of investors, some of whom (such as dealers in securities) may be subject to special rules. Prospective investors who are in any doubt as to their position should consult with their own professional advisers.

The Spanish Financial Transactions Tax (the "Spanish FTT")

Law 5/2020 of 15 October, on the FTT (*Ley del Impuesto sobre las Transacciones Financieras*) entered into force on 16 January 2021. The Spanish FTT applies on the acquisition of shares (including transfer or conversion) of Spanish companies with a market capitalisation of more than €1 billion, at a tax rate of 0.2 per cent.. In principle, the Spanish FTT does not affect transactions involving bonds or similar instruments.

Prospective holders of Notes are advised to seek their own professional advice in relation to the Financial Transactions Tax.

Taxation in Spain

Introduction

This information has been prepared in accordance with the following Spanish tax legislation in force at the date of this Information Memorandum:

- (a) of general application, Additional Provision One of Law 10/2014, of 26 June on regulation, supervision and solvency of credit entities and Royal Decree 1065/2007 of 27 July, as amended, approving the General Regulations of the tax inspection and management procedures and developing the common rules of the procedures to apply taxes;
- (b) for individuals resident for tax purposes in Spain which are subject to the Individual Income Tax ("IIT"), Law 35/2006 of 28 November, on the IIT and on the Partial Amendment of the Corporate Income Tax Law, the Non-Residents Income Tax Law and the Net Wealth Tax Law and Royal Decree 439/2007 of 30 March promulgating the IIT Regulations, along with Law 29/1987, of 18 December on the Inheritance and Gift Tax and Law 38/2002, for the establishment of temporary levies on energy and on financial credit institutions and introducing a temporary solidarity tax on large fortunes;
- (c) for legal entities resident for tax purposes in Spain which are subject to the Corporate Income Tax ("CIT"), Law 27/2014, of 27 November 2014 of the CIT Law, and Royal Decree 634/2015, of 10 July, promulgating the CIT Regulations; and
- (d) for individuals and entities who are not resident for tax purposes in Spain which are subject to the Non-Resident Income Tax ("NRIT"), Royal Legislative Decree 5/2004, of 5 March, promulgating the Consolidated Text of the NRIT Law and Royal Decree 1776/2004, of 30 July, promulgating the NRIT Regulations, along with Law 29/1987, of 18 December, on the Inheritance and Gift Tax and Law 38/2002, for the establishment of temporary levies on energy and on financial credit institutions and introducing a temporary solidarity tax on large fortunes.

Whatever the nature and residence of the Beneficial Owner (as defined in the Notes), the acquisition and transfer of the Notes will be exempt from indirect taxes in Spain, for example, exempt from Transfer Tax and Stamp Duty, in accordance with the Consolidated Text of such tax promulgated by Royal Legislative Decree 1/1993, of 24 September, and exempt from Value Added Tax, in accordance with Law 37/1992, of 28 December, regulating such tax.

1. **Individuals with Tax Residency in Spain**

(a) **Individual Income Tax (Impuesto sobre la Renta de las Personas Físicas)**

Both interest payments periodically received and income derived from the transfer, redemption or repayment of the Notes obtained by individuals who are resident in Spain constitute a return on investment obtained from the transfer of a person's own capital to third parties in accordance with the provisions of Section 25 of the PIT Law, and therefore must be included in the investor's PIT savings taxable base pursuant to the provisions of the aforementioned law, and taxed according to the then-applicable rate. The savings taxable base will be taxed at the rate of 19 per cent. for taxable income up to €6,000.00, 21 per cent. for taxable income between €6,000.01 and €50,000.00, 23 per cent. for taxable income between €50,000.01 and €200,000.00, 27 per cent. for taxable income between €200,000.01 and €300,000.00, and 28 per cent. for taxable income in excess of €300,000.00.

According to Section 44.5 of Royal Decree 1065/2007, of 27 July, as amended, and in the opinion of the Issuer will pay interest without withholding to individual Holders who are resident for tax purposes in Spain **provided that** the information about the Notes required by Exhibit I is submitted, notwithstanding the information obligations of the Issuer under general provisions of Spanish tax legislation, by virtue of which identification of Spanish investors may be provided to the Spanish tax authorities. In addition, income obtained upon transfer, redemption or exchange of the Notes may also be paid without withholding.

However, in the case of Notes held by Spanish resident individuals and deposited with a Spanish resident entity acting as depositary or custodian, payments of interest under the Notes may be subject to withholding tax at the current rate of 19 per cent. which will be made by the depositary or custodian.

(b) **Net Wealth Tax (Impuesto sobre el Patrimonio)**

Individuals with tax residency in Spain would be subject to Wealth Tax to the extent that their net worth exceeds a certain limit. This limit has been set at €700,000. Therefore, they should take into account the value of the Notes which they hold as of 31 December in each year, the applicable rates ranging between 0.2 per cent. and 3.5 per cent. The autonomous communities may have different provisions on this respect.

Notwithstanding the above, the so-called "solidarity tax" was approved in December 2022, which is a two-year direct wealth tax that, in general terms, applies, under certain conditions, to those residents in an autonomous region where the Wealth Tax is partial or fully exempt (as Madrid and Andalusia).

The rates of the "solidarity tax" are (i) 1.7 per cent. on a net worth between €3 million and €5 million, (ii) 2.1 per cent. on a net worth between €5 million and €10 million and (iii) 3.5 per cent. on a net worth of more than €10 million. Note that the regulation lays down a minimum exempt amount of €700,000.00 which means that its effective impact, in general, will occur when the net wealth, not tax exempt, is greater than €3.7 million.

(c) **Inheritance and Gift Tax (Impuesto sobre Sucesiones y Donaciones)**

Individuals resident in Spain for tax purposes who acquire ownership or other rights over any Notes by inheritance, gift or legacy will be subject to the Inheritance and Gift Tax in accordance with the applicable Spanish regional or State rules. The effective tax rates currently may range between 7.65 per cent. and 34 per cent.. Relevant factors applied (such as previous net wealth or family relationship among transferor and transferee) do determine the final effective tax rate that currently range between 0 per cent. and 81.6 per cent..

2. **Legal Entities with Tax Residence in Spain**

(a) **Corporate Income Tax (Impuesto sobre Sociedades)**

Both interest received periodically and income derived from the transfer, redemption or repayment of the Notes are subject to CIT in accordance with the rules for this tax. The current general tax rate of 25 per cent., however, does not apply to all corporate income tax payers and, for instance, does not apply to banking institutions.

In accordance with Section 44.5 of Royal Decree 1065/2007, of 27 July, as amended, and in the opinion of the Issuer, there is no obligation to withhold on income payable to Spanish CIT taxpayers (which for the sake of clarity, include Spanish tax resident investment funds and Spanish tax resident pension funds). Consequently, the Issuer will not withhold tax on interest payments to Spanish CIT taxpayers **provided that** the information about the Notes required by Exhibit I is submitted, notwithstanding the information obligations of the Issuer under general provisions of Spanish tax legislation, by virtue of which identification of Spanish investors may be provided to the Spanish tax authorities.

However, in the case of Notes held by Spanish resident entity and deposited with a Spanish resident entity acting as depositary or custodian, payments of interest under the Notes may be subject to withholding tax at the current rate of 19 per cent., withholding that will be made by the depositary or custodian, if the Notes do not comply with exemption requirements specified in the Reply to the Consultation of the Directorate General for Taxation (Dirección General de Tributos) dated 27 July 2004 and require a withholding to be made.

(b) **Wealth Tax (Impuesto sobre el Patrimonio)**

Legal entities resident in Spain for tax purposes are not subject to Wealth Tax.

(c) **Inheritance and Gift Tax (Impuesto sobre Sucesiones y Donaciones)**

Legal entities resident in Spain for tax purposes which acquire ownership or other rights over the Notes by inheritance, gift or legacy are not subject to the Spanish Inheritance and Gift Tax but must include the market value of the Notes in their taxable income for Spanish CIT purposes.

3. **Individuals and Legal Entities with no tax Residency in Spain**

(a) **Non-Resident Income Tax (Impuesto sobre la Renta de no Residentes)**

(i) *Non-Spanish resident investors acting through a permanent establishment in Spain*

Ownership of the Notes by investors who are not resident for tax purposes in Spain will not in itself create the existence of a permanent establishment in Spain.

If the Notes form part of the assets of a permanent establishment in Spain of a person or legal entity who is not resident in Spain for tax purposes, the tax rules applicable to income deriving from such Notes are the same as those previously set out for Spanish CIT taxpayers.

See "Taxation in Spain—Legal Entities with Tax Residency in Spain—Corporate Income Tax (Impuesto sobre Sociedades)".

(ii) *With no permanent establishment in Spain*

Both interest payments received periodically and income derived from the transfer, redemption or repayment of the Notes, obtained by individuals or entities who are not resident in Spain for tax purposes and who do not act, with respect to the Notes, through a permanent establishment in Spain, are exempt from NRIT.

In order for the exemption to apply, it is necessary to comply with certain information obligations relating to the Notes, in the manner detailed under "*Information about the Notes in Connection with Payments*" as laid down in section 44 of Royal Decree 1065/2007, as amended. If these information obligations are not complied with in the manner indicated, the Issuer will withhold 19 per cent. and will not pay additional amounts.

Holders not resident in Spain for tax purposes and entitled to exemption from NRIT but where the Issuer does not receive the information about the Notes in a timely fashion in accordance with the procedure described in detail as set forth in Exhibit I hereto would have to apply directly to the Spanish tax authorities for any refund to which they may be entitled, according to the procedures set forth in the Spanish Non Resident Income Tax Law.

(b) **Net Wealth Tax (*Impuesto sobre el Patrimonio*)**

Non-Spanish resident individuals whose properties and rights located in Spain, or that can be exercised within the Spanish territory exceed €700,000 would be subject to Wealth Tax, the applicable rates ranging between 0.2 per cent. and 3.5 per cent.

Individuals resident in a country with which Spain has entered into a double tax treaty in relation to Wealth Tax would generally not be subject to such tax.

Non-Spanish tax resident individuals may apply the rules approved by the autonomous region where the assets and rights with more value are situated. As such, prospective investors should consult their tax advisers.

Notwithstanding the above, the so-called "solidarity tax" was approved in December 2022, which is a two-year direct wealth tax that, in general terms, applies, under certain conditions, to those residents in an autonomous region where the Wealth Tax is partial or fully exempt (as Madrid and Andalusia).

The rates of the "solidarity tax" are (i) 1.7 per cent. on a net worth between €3 million and €5 million, (ii) 2.1 per cent. on a net worth between €5 million and €10 million and (iii) 3.5 per cent. on a net worth of more than €10 million. Note that the regulation lays down a minimum exempt amount of €700,000.00 which means that its effective impact, in general, will occur when the net wealth, not tax exempt, are greater than €3.7 million.

Non-Spanish resident legal entities are not subject to Wealth Tax.

(c) **Inheritance and Gift Tax (*Impuesto sobre Sucesiones y Donaciones*)**

Individuals not resident in Spain for tax purposes who acquire ownership or other rights over Notes by inheritance, gift or legacy, and who reside in a country with which Spain has entered into a double tax treaty in relation to Inheritance and Gift Tax will be subject to the relevant double tax treaty

If the provisions of the foregoing paragraph do not apply, such individuals will be subject to Inheritance and Gift Tax in accordance with the Spanish legislation applicable in the relevant autonomous region (*Comunidad Autónoma*).

Generally, non-Spanish tax resident individuals are subject to the Spanish Inheritance and Gift Tax according to the rules set forth in the Spanish State law. However, pursuant to recent rulings issued by the EU Courts and the Spanish Supreme Court, individuals who are non-resident in Spain for tax purposes may be able to apply the rules corresponding to the relevant Spanish autonomous regions. As such, prospective investors should consult their tax advisers.

Non-Spanish resident legal entities which acquire ownership or other rights over the Notes by inheritance, gift or legacy are not subject to the Spanish Inheritance and Gift Tax. Such acquisitions will be subject to NRIT (as described above), except as provided in any

applicable double tax treaty entered into by Spain. In general, double tax treaties provide for the taxation of this type of income in the country of tax residence of the Holder.

4. **Tax Rules for Notes not Listed on an Organised Market in an OECD Country**

(a) **Withholding on Account of IIT, CIT and NRIT**

If the Notes are not listed on an organised market in an OECD country on any Payment Date, payments to Holders in respect of the Notes will be subject to withholding tax at the current rate of 19 per cent., except in the case of Holders which are: (a) resident in a Member State of the European Union or the European Economic Area, other than Spain and obtain the interest income either directly or through a permanent establishment located in another Member State of the European Union or the European Economic Area, provided that such Holders (i) do not obtain the interest income on the Notes through a permanent establishment in Spain and (ii) are not resident of, or are not located in, nor obtain income through, a non-cooperative jurisdiction (in the terms of the First Additional Provision of Law 26/2006, as amended through Law 11/2021, of 9 July) or (b) resident for tax purposes of a country which has entered into a convention for the avoidance of double taxation with Spain which provides for an exemption from Spanish tax or a reduced withholding tax rate with respect to interest payable to any Holder.

(b) **Net Wealth Tax (Impuesto sobre el Patrimonio)**

See "*Taxation – Taxation in Spain – Individuals with Tax Residency in Spain – Net Wealth Tax (Impuesto sobre el Patrimonio)*" and "*Taxation – Taxation in Spain – Individuals and legal entities with no tax residency in Spain – Net Wealth Tax (Impuesto sobre el Patrimonio)*".

5. **Information about the Notes in Connection with Payments**

As described above, interest and other income paid with respect to the Notes will not be subject to Spanish withholding tax unless the procedures for delivering to the Issuer the information described in Exhibit I of this Information Memorandum are not complied with.

The information obligations to be complied with in order to apply the exemption are those laid down in Section 44 of Royal Decree 1065/2007, as amended ("**Section 44**").

In accordance with Section 44 paragraph 5, before the close of business on the Business Day (as defined in the Notes) immediately preceding the date on which any payment of interest, principal or of any amounts in respect of the early redemption of the Notes (each, a "**Payment Date**") is due, the Issuer must receive from the Issue and Paying Agent the following information about the Notes:

- (a) the identification of the Notes with respect to which the relevant payment is made;
- (b) the date on which the relevant payment is made;
- (c) the total amount of the relevant payment;
- (d) the amount of the relevant payment paid to each entity that manages a clearing and settlement system for securities situated outside of Spain.

In particular, the Issue and Paying Agent must certify the information above about the Notes by means of a certificate, the form of which is attached as Exhibit I of this Information Memorandum.

In light of the above, the Issuer and the Issue and Paying Agent have arranged certain procedures to facilitate the collection of information concerning the Notes by the close of business on the Business Day immediately preceding each relevant Payment Date. If, despite these procedures, the relevant information is not received by the Issuer on each Payment Date, the Issuer will instruct the Issue and Paying Agent to withhold tax at the then-applicable rate (as at the date of this Information Memorandum 19 per cent.) from any payment in respect of the relevant Notes. The Issuer will not pay any additional amounts with respect to any such withholding.

If, before the tenth day of the month following the month in which the relevant payment is paid, the Issue and Paying Agent provides such information, the Issuer will instruct the Issue and Paying Agent to immediately transfer the relevant withholding tax (currently, 19 per cent) deducted in respect of the relevant payment pursuant to the above by way of reimbursement of the amounts withheld on the relevant payment date and completion of the corresponding payment in respect of payments under the Notes. If the Issue and Paying Agent fails or for any reason is unable to provide such information to the Issuer by the tenth day of the month following the month in which interest is paid, the Issue and Paying Agent shall immediately return (but in any event no later than the tenth day of the month immediately following the relevant payment) to the Issuer any remaining amount of the withholding tax (currently, 19 per cent) deducted in respect of the relevant payment, and investors will have to apply directly to the Spanish tax authorities for any refund to which they may be entitled.

Prospective Holders of Notes should note that neither the Issuer nor the Dealers accepts any responsibility relating to the procedures established for the collection of information concerning the Notes. Accordingly, neither the Issuer nor the Dealers will be liable for any damage or loss suffered by any Holder who would otherwise be entitled to an exemption from Spanish withholding tax but whose income payments are nonetheless paid net of Spanish withholding tax because these procedures prove ineffective. Moreover, the Issuer will not pay any additional amounts with respect to any such withholding. See "*Risk Factors—Risks in relation to the Notes—Risks in relation to Spanish Taxation*".

Set out below is Exhibit I. Sections in English have been translated from the original Spanish and such translations constitute direct and accurate translations of the Spanish language text. In the event of any discrepancy between the Spanish language version of the certificate contained in Exhibit I and the corresponding English translation, the Spanish tax authorities will give effect to the Spanish language version of the relevant certificate only.

Any foreign language text included in this Information Memorandum is for convenience purposes only and does not form part of this Information Memorandum.

EXHIBIT 1

Anexo al Reglamento General de las actuaciones y los procedimientos de gestión e inspección tributaria y de desarrollo de las normas comunes de los procedimientos de aplicación de los tributos, aprobado por Real Decreto 1065/2007, as amended.

Modelo de declaración a que se refieren los apartados 3, 4 y 5 del artículo 44 del Reglamento General de las actuaciones y los procedimientos de gestión e inspección tributaria y de desarrollo de las normas comunes de los procedimientos de aplicación de los tributos

Annex to Royal Decree 1065/2007, of 27 July, as amended, approving the General Regulations of the tax inspection and management procedures and developing the common rules of the procedures to apply taxes

Declaration form referred to in paragraphs 3, 4 and 5 of Article 44 of the General Regulations of the tax inspection and management procedures and developing the common rules of the procedures to apply taxes

Don (nombre), con número de identificación fiscal (...) ⁽¹⁾, en nombre y representación de (entidad declarante), con número de identificación fiscal (...) ⁽¹⁾ y domicilio en (...) en calidad de (marcar la letra que proceda):

Mr. (name), with tax identification number (...) ⁽¹⁾, in the name and on behalf of (entity), with tax identification number (...) ⁽¹⁾ and address in (...) as (function - mark as applicable):

- (a) Entidad Gestora del Mercado de Deuda Pública en Anotaciones.**
 - (a) Management Entity of the Public Debt Market in book entry form.
- (b) Entidad que gestiona el sistema de compensación y liquidación de valores con sede en el extranjero.**
 - (b) Entity that manages the clearing and settlement system of securities resident in a foreign country.
- (c) Otras entidades que mantienen valores por cuenta de terceros en entidades de compensación y liquidación de valores domiciliadas en territorio español.**
 - (c) Other entities that hold securities on behalf of third parties within clearing and settlement systems domiciled in the Spanish territory.
- (d) Agente de pagos designado por el emisor.**
 - (d) Issuing and Paying Agent appointed by Banco Santander.

Formula la siguiente declaración, de acuerdo con lo que consta en sus propios registros:

Makes the following statement, according to its own records:

- 1. En relación con los apartados 3 y 4 del artículo 44:**
 - 1. In relation to paragraphs 3 and 4 of Article 44:
 - 1.1 Identificación de los valores.....**
 - 1.1 Identification of the securities.....
 - 1.2 Fecha de pago de los rendimientos (o de reembolso si son valores emitidos al descuento o segregados)**
 - 1.2 Income payment date (or refund if the securities are issued at discount or are segregated)
 - 1.3 Importe total de los rendimientos (o importe total a reembolsar, en todo caso, si son valores emitidos al descuento o segregados).....**

- 1.3 Total amount of income (or total amount to be refunded, in any case, if the securities are issued at discount or are segregated)
- 1.4 Importe de los rendimientos correspondiente a contribuyentes del Impuesto sobre la Renta de las Personas Físicas, excepto cupones segregados y principales segregados en cuyo reembolso intervenga una Entidad Gestora**
- 1.4 Amount of income corresponding to Personal Income Tax taxpayers, except segregated coupons and segregated principals for which reimbursement an intermediary entity is involved.....
- 1.5 Importe de los rendimientos que conforme al apartado 2 del artículo 44 debe abonarse por su importe íntegro (o importe total a reembolsar si son valores emitidos al descuento o segregados).**
- 1.5 Amount of income which according to paragraph 2 of Article 44 must be paid gross (or total amount to be refunded if the securities are issued at discount or are segregated).
- 2. En relación con el apartado 5 del artículo 44.**
2. In relation to paragraph 5 of Article 44.
- 2.1 Identificación de los valores.....**
- 2.1 Identification of the securities.....
- 2.2 Fecha de pago de los rendimientos (o de reembolso si son valores emitidos al descuento o segregados)**
- 2.2 Income payment date (or refund if the securities are issued at discount or are segregated)
- 2.3 Importe total de los rendimientos (o importe total a reembolsar si son valores emitidos al descuento o segregados**
- 2.3 Total amount of income (or total amount to be refunded if the securities are issued at discount or are segregated)
- 2.4 Importe correspondiente a la entidad que gestiona el sistema de compensación y liquidación de valores con sede en el extranjero A.**
- 2.4 Amount corresponding to the entity that manages the clearing and settlement system of securities resident in a foreign country A.
- 2.5 Importe correspondiente a la entidad que gestiona el sistema de compensación y liquidación de valores con sede en el extranjero B.**
- 2.5 Amount corresponding to the entity that manages the clearing and settlement system of securities resident in a foreign country B.
- 2.6 Importe correspondiente a la entidad que gestiona el sistema de compensación y liquidación de valores con sede en el extranjero C.**
- 2.6 Amount corresponding to the entity that manages the clearing and settlement system of securities resident in a foreign country C.

Lo que declaro ena dede

I declare the above in on the.. of of ..

- (1) **En caso de personas, físicas o jurídicas, no residentes sin establecimiento permanente se hará constar el número o código de identificación que corresponda de conformidad con su país de residencia**
- (1) In case of non-residents (individuals or corporations) without permanent establishment in Spain it shall be included the number or identification code which corresponds according to their country of residence.

SUBSCRIPTION AND SALE

1. **General**

Each Dealer has represented, warranted and agreed that it will observe all applicable laws and regulations in any jurisdiction in which it may offer, sell, or deliver Notes and it will not directly or indirectly offer, sell, resell, re-offer or deliver Notes or distribute the Information Memorandum, circular, advertisement or other offering material in any country or jurisdiction except under circumstances that will result, to the best of its knowledge and belief, in compliance with all applicable laws and regulations.

2. **United States of America**

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons. The Dealers have represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and sold, and will not offer and sell, Notes (i) as part of their distribution at any time and (ii) otherwise until 40 days after the completion of the distribution of the Notes comprising the relevant Tranche within the United States or to, or for the account or benefit of, U.S. persons. Accordingly, the Dealers have represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that neither it, nor its affiliates nor any person acting on its or their behalf has engaged or will engage in any directed selling efforts with respect to the Notes, and that it and they have complied and will comply with the offering restrictions requirement of Regulation S. Each Dealer has also agreed, and each further Dealer appointed under the Programme will be required to agree, that, at or prior to confirmation of sale of Notes, it will have sent to each distributor, dealer or person receiving a selling commission, fee or other remuneration that purchases Notes from it a confirmation or notice to substantially the following effect:

"The Securities covered hereby have not been registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**"), and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution of the Securities as determined and certified by the relevant Dealer, in the case of a non-syndicated issue, or the Lead Manager, in the case of a syndicated issue, and except in either case in accordance with Regulation S under the Securities Act. Terms used above have the meanings given to them by Regulation S."

In addition, until 40 days after the commencement of the offering, an offer or sale of Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

Terms used in this section have the meanings given to them by Regulation S.

3. **United Kingdom**

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree to the Issuer, that:

(a)

(i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and

(ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of section 19 of the Financial Services and Markets Act 2000 (the "**FSMA**") by the Issuer;

- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA would not apply to the Issuer if it was not an authorised person; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to such Notes in, from or otherwise involving the United Kingdom.

4. **Japan**

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "**FIEA**") and, accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan or to others for re-offering or resale, directly or indirectly, in Japan or to any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and other relevant laws and regulations of Japan. As used in this paragraph, "**resident of Japan**" means any person resident in Japan, including any corporation or other entity organised under the laws of Japan.

5. **Singapore**

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that the Information Memorandum has not been registered as a prospectus with the Monetary Authority of Singapore (the "**MAS**"), and the Notes will be offered pursuant to exemptions under the SFA. Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Information Memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (a) to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, (b) to a relevant person (as defined in Section 275(2) of the SFA pursuant to Section 275(1) of the SFA), or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:
- (c) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;
- (d) where no consideration is or will be given for the transfer;
- (e) where the transfer is by operation of law;

- (f) as specified in Section 276(7) of the SFA; or
- (g) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Notification under Section 309B(1)(c) of the SFA - Unless otherwise stated in the applicable Final Terms, all Notes shall be prescribed capital markets products (as defined in the CMP Regulations 2018).

6. **Kingdom of Spain**

This Information Memorandum will not be registered with the Spanish Securities Market Commission (*Comisión Nacional del Mercado de Valores*). Each Dealer and the Issuer has represented and agreed and each further Dealer appointed under the Programme will be required to represent and agree that the offers of the Notes in Spain will be directed specifically at or made to professional clients (*clientes profesionales*) as this term is defined in Article 205 of the Restated Text of the Spanish Securities Market Law approved by Legislative Royal Decree 4/2015 (*Real Decreto Legislativo 4/2015, de 23 de octubre, por el que se aprueba el texto refundido de la Ley del Mercado de Valores*) as amended (the "**Spanish Securities Market Law**"), and Article 58 of Royal Decree 217/2008, of 15 February, and eligible counterparties (*contrapartes elegibles*) as defined in Article 207 of the Spanish Securities Market Law, and in accordance with the provision of the Spanish Securities Market Law and further secondary legislation.

7. **Switzerland**

The offering of the Notes in Switzerland is exempt from requirement to prepare and publish a prospectus under the Swiss Financial Services Act ("**FinSA**"). This Information Memorandum does not constitute a prospectus pursuant to the FinSA, and no such prospectus has been or will be prepared for or in connection with the offering of the Notes.

8. **Belgium**

This Information Memorandum has not been submitted for approval to the Belgian Financial Services and Markets Authority. Accordingly, Notes that have a maturity of less than 12 months and qualify as money market instruments (and that therefore fall outside the scope of the Prospectus Regulation) may not be distributed in Belgium by way of an offer of securities to the public, as defined in Article 4, 2° of the Belgian law of 11 July 2018 on the offer of investment instruments to the public and the admission of investment instruments to trading on a regulated market.

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that it has not advertised, offered, sold or delivered and will not advertise, offer, sell or deliver, directly or indirectly, Notes to any Belgian Consumers, and has not distributed or caused to be distributed and will not distribute or cause to be distributed, any prospectus, memorandum, information circular, brochure or any similar documents in relation to the Notes, directly or indirectly, to any Belgian Consumer. For these purposes, a "**Belgian Consumer**" has the meaning provided by the Belgian Code of Economic Law, as amended from time to time (*Wetboek van 28 februari 2013 van economisch recht/Code du 28 février 2013 de droit économique*), being any natural person resident or located in Belgium and acting for purposes which are outside his/her trade, business or profession.

9. **Italy**

The offering of the Notes has not been registered pursuant to Italian securities legislation and, accordingly, no Notes may be offered, sold or delivered, nor may copies of this Information Memorandum (including, without limitation, any supplement to the Information Memorandum) or any other document relating to the Notes be distributed in the Republic of Italy ("**Italy**"), except in accordance with any Italian securities, tax and other applicable laws and regulations.

Each Dealer has represented and agreed and each further Dealer appointed under the Programme will be required to represent and agree that it has not offered, sold or delivered, and will not offer, sell or deliver any Notes or distribute any copy of this Information Memorandum or any other document relating to the Notes in Italy except:

- (a) to qualified investors (*investitori qualificati*), as defined pursuant to Article 2 of Regulation (EU) No. 1129 of 14 June 2017 (the "**Prospectus Regulation**"); or
- (b) in other circumstances which are exempted from the rules on public offerings pursuant to the Prospectus Regulation, CONSOB Regulation No. 11971 of 14 May 1999, as amended from time to time, any applicable provision of Legislative Decree No. 58 of 24 February 1998, as amended (the "**Financial Services Act**") and the applicable Italian laws.

In any event, any offer, sale or delivery of the Notes or distribution of copies of the Information Memorandum (including, without limitation, any supplement to the Information Memorandum) or any other document relating to the Notes in Italy under (a) or (b) above must:

- (i) be made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Italy in accordance with the Financial Services Act, CONSOB Regulation No. 20307 of 15 February 2018 (as amended from time to time) and Legislative Decree No. 385 of 1 September 1993, as amended (the "**Banking Act**"); and
- (ii) comply with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy (including the reporting requirements, where applicable, pursuant to Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy, as amended from time to time) and/or any other Italian authority.

10. **France**

Each Dealer has represented and agreed that it has only offered or sold and will only offer or sell, directly or indirectly, Notes in France to qualified investors (*investisseurs qualifiés*) as defined in Article L.411-2 1° of the French Code *monétaire et financier* and it has only distributed or caused to be distributed and will only distribute or cause to be distributed in France to such qualified investors the Information Memorandum, the relevant Final Terms or any other offering material relating to the Notes.

GENERAL INFORMATION

Clearing of the Notes

The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg and may from time to time be made eligible via other clearing systems. The appropriate common code (if held at Euroclear and Clearstream, Luxembourg) and International Securities Identification Number in relation to each issue of Notes and any other clearing system as shall have accepted the relevant Notes for clearance will be specified in the Final Terms relating thereto.

Admission to Listing and Trading

It is expected that Notes issued under the Programme may be admitted to listing on the Official List and to trading on the regulated market of Euronext Dublin after 14 March 2023. The admission of the Notes to trading on the regulated market of Euronext Dublin will be expressed as a percentage of their principal amount. Any Notes intended to be admitted to listing on the Official List and admitted to trading on the regulated market of Euronext Dublin will be so admitted to listing and trading upon submission to Euronext Dublin of the relevant Final Terms and any other information required by Euronext Dublin, subject in each case to the issue of the relevant Notes.

However, Notes may be issued pursuant to the Programme which will be admitted to listing, trading and or quotation by such other listing authority, stock exchange and/or quotation system as the Issuer and the relevant Dealer(s) may agree. No Notes may be issued pursuant to the Programme on an unlisted basis.

No Significant or Material Change

There has been no significant change in the financial or trading position of, and no material adverse change in the prospects of, Banco Santander or the Group since 31 December 2022.

Litigation

Save as disclosed in the 2022 Annual Report, there are no governmental, legal or arbitration proceedings, (including any such proceedings which are pending or threatened, of which the Issuer is aware), which may have, or have had during the 12 months prior to the date of this Information Memorandum, a significant effect on the financial position or profitability of the Issuer and its subsidiaries.

Material Contracts

During the two years prior to the date of this Information Memorandum, the Issuer has not been a party to any contracts that were not entered into in the ordinary course of business of the Issuer and which was material to the Group as a whole.

Documents on Display

Electronic or physical copies and, where appropriate, English translations of the following documents may be inspected during normal business hours at the office of the Issuing and Paying Agent at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, UK, at the registered office of S and the head office of Banco Santander (being Ciudad Grupo Santander, Avenida de Cantabria s/n, 28660 Boadilla del Monte, Madrid, Spain) and on the website of Banco Santander at www.santander.com for the life of this Information Memorandum:

1. the *estatutos* (constitutive documents) of Banco Santander, as the same may be updated from time to time;
2. the audited financial statements incorporated by reference herein;
3. this Information Memorandum, together with any supplements thereto and the information incorporated by reference therein;
4. the Agency Agreement;
5. the Deed of Covenant; and

6. the Issuer-ICSDs Agreement (which is entered into between Banco Santander and Euroclear and/or Clearstream, Luxembourg with respect to the settlement in Euroclear and/or Clearstream, Luxembourg of Notes in New Global Note form).

Statutory Auditors

The Spanish language consolidated annual financial statements of Banco Santander for the years ended 31 December 2022 and 31 December 2021 were audited by PricewaterhouseCoopers Auditores, S.L., the Group's current independent auditors. In case of any discrepancy between the English language version (incorporated by reference in this Information Memorandum) and the Spanish language version of the consolidated annual financial statements of Banco Santander for the years ended 31 December 2022 and 31 December 2021, the Spanish language version shall prevail. PricewaterhouseCoopers Auditores, S.L. is registered under number S0242 in the Official Register of Auditors (*Registro Oficial de Auditores de Cuentas*) and is a member of the *Instituto de Censores Jurados de Cuentas de España*. The registered office of PricewaterhouseCoopers Auditores, S.L. is Torre PwC, Paseo de la Castellana 259 B, 28046, Madrid, Spain.

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