Helaba

Landesbank Hessen-Thüringen Girozentrale

(incorporated as a public law institution in the Federal Republic of Germany)

acting through its office in Frankfurt am Main, or, as the case may be, through its London branch

EUR 10,000,000,000

Euro-commercial Paper/Euro-certificate of Deposit Programme

(the "Programme")

Ratings Moody's: P-1 Fitch: F1+

Arranger

Citigroup

Dealers

Helaba Barclays

Citigroup ING

UBS Investment Bank

Issuing and Paying Agent

Citibank, N.A., London Branch

Paying Agent

Helaba

IMPORTANT NOTICE

This Information Memorandum contains information provided by Landesbank Hessen-Thüringen Girozentrale (the "Issuer", "Helaba" or the "Bank") 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") and/or accept deposits and issue certificates of deposit in respect thereof (the "CDs") up to a maximum aggregate amount of EUR 10,000,000,000 or its equivalent in alternative currencies. Under the Programme, the Issuer may issue Notes and/or CDs outside of the United States of America pursuant to Regulation S ("Regulation S") of the United States Securities Act of 1933, as amended (the "Securities Act"). The Issuer has, pursuant to the amended and restated dealer agreement dated 20 October 2020 (the "Dealer Agreement"), appointed Citigroup Global Markets Limited as arranger for the Programme (the "Arranger"), appointed Barclays Bank Ireland PLC, Barclays Bank PLC, Citigroup Global Markets Europe AG, Citigroup Global Markets Limited, ING Bank N.V. and UBS AG London Branch as dealers for the Notes and/or the CDs (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 and/or the CDs.

This Information Memorandum has been submitted to the Short-Term European Paper (STEP) Secretary in order to apply for the STEP label for Euro-commercial Paper Notes and Euro-certificates of Deposit issued under the Programme. The status of STEP compliance can be checked on the STEP market website (www.stepmarket.org).

The Issuer has confirmed to the Arranger and the Dealers that the information contained or incorporated by reference in the Information Memorandum is true and accurate in all material respects and not misleading and that there are no other facts the omission of which makes the Information Memorandum as a whole or any such information contained or incorporated by reference therein misleading.

Neither the Issuer, the Arranger nor any Dealer accepts 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.

No person is authorised by the Issuer to give any information or to make any representation not contained in the Information Memorandum and any information or representation not contained therein must not be relied upon as having been authorised.

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 accuracy or completeness of, or any errors in or omissions from, any information or statement contained in the Information Memorandum or in or from any accompanying or subsequent material or presentation.

The information contained in the Information Memorandum is not and should not be construed as a recommendation by the Arranger, any Dealer or the Issuer that any recipient should purchase Notes and/or CDs. 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.

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 of any information or change in such information coming to the Arranger's or any Dealer's attention.

Neither the Arranger nor any Dealer accepts any liability in relation to this Information Memorandum or its distribution by any other person. This Information Memorandum does not, and is not intended to, constitute an offer or invitation to any person to purchase Notes and/or CDs. The distribution of this Information Memorandum and the offering for sale of Notes and/or CDs or any interest in such Notes

and/or CDs or any rights in respect of such Notes and/or CDs, in certain jurisdictions, may be restricted by law. Persons obtaining this Information Memorandum or any Notes and/or CDs or any interest in such Notes and/or CDs or any rights in respect of such Notes and/or CDs 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/or CDs and on distribution of this Information Memorandum and other information in relation to the Notes and/or the CDs and the Issuer set out under "Selling Restrictions" below.

Solely by virtue of appointment as Arranger or Dealer, as applicable, on this Programme, neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of EU Delegated Directive 2017/593.

THE NOTES AND/OR THE CDS HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT AND, SUBJECT TO CERTAIN EXCEPTIONS, MAY NOT BE OFFERED, SOLD OR DELIVERED WITHIN THE UNITED STATES OF AMERICA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S).

Application has been made to list Notes and/or CDs issued under the Programme on the official list and to trade Notes on the regulated market of the Paris Stock Exchange "Euronext Paris". The Issuer reserves the right to list Notes and/or CDs issued under the Programme on a stock exchange as far as the Notes and/or CDs are suitable with regard to currency and other specific conditions or not to list at all

No comment is made or advice given by the Issuer, the Arranger or any Dealer in respect of taxation matters relating to the Notes and/or CDs and each investor is advised to consult its own professional adviser. In this Information Memorandum references to "U.S. dollar(s)" and "USD" are to the currency of the United States of America and references to "euro" and "EUR" are to the single currency of participating member states of the European Union, as contemplated by the Treaty on European Union. "Pound sterling" and "GBP" denote the lawful currency of the United Kingdom of Great Britain and Northern Ireland, whereas "yen" denotes the lawful currency of Japan.

This Information Memorandum is prepared for the use of professional investors only.

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1		SUMMARY OF THE PROGRAMME
1.1	Name of the Programme:	Landesbank Hessen-Thüringen Girozentrale Multi-Currency Euro-commercial Paper and Euro-certificate of Deposit Programme
1.2	Type of Programme:	Multi-Currency Euro-commercial Paper and Euro-certificate of Deposit Programme
1.3	Name of the Issuer:	Landesbank Hessen-Thüringen Girozentrale, acting through its office in Frankfurt am Main, or, as the case may be, through its London branch ("Helaba" or the "Issuer")
1.4	Type of the Issuer:	Monetary financial institution
1.5	Purpose of the Programme:	General funding purposes of the Issuer
1.6	Programme size:	The aggregate principal amount of Notes and/or CDs together outstanding at any time will not exceed EUR 10,000,000,000 or its equivalent in alternative currencies. The Programme Amount may be increased from time to time in accordance with the Dealer Agreement.
1.7	Characteristics and form of the Notes and/or CDs:	Notes comprised in a series are represented by a global note in bearer form ("Global Note") which will either be in the form of a classical global note ("CGN") or in the form of a new global note ("NGN"). It is anticipated that an NGN will generally be used if the Notes are denominated in euro and are held in a manner which would allow Eurosystem eligibility.
		The CDs will be in bearer form. Each issue of CDs will be represented by one Global CD per tranche or more Global CDs per tranche. It is anticipated that CDs in the form of an NGN will generally be used if the CDs are denominated in euro and are held in a manner which would allow Eurosystem eligibility.
		The right of holders to require printing and delivery of definitive Notes and/or CDs is excluded.
1.8	Yield basis:	The remuneration of the Notes and/or CDs is unrestricted. The Notes and/or CDs may be issued on a discounted, accumulated or interest bearing basis (fixed or floating). Such remuneration formulas shall not result in a below par redemption. The Issuer may not issue Notes and/or CDs with potentially variable principal payments.
1.9	Currencies of issue of the Notes and/or CDs:	Notes and/or CDs may be issued in euro, U.S. dollar, Pound sterling, yen or such other currency as may be agreed between the Issuer and the relevant Dealer, subject in each case to compliance with the laws and regulations of the competent central bank or other competent bodies applicable to the chosen currency.
1.10	Maturity of the Notes and/or CDs:	The term of the Notes and/or CDs issued under this Programme shall be not less than 7 days (or such shorter period as may be agreed between the Issuer, the relevant Dealer or, as the case may be, the Arranger and the Issuing and Paying Agent) and

shall not exceed 364 days, including the date of issue but excluding the maturity date, subject to compliance with any applicable legal and regulatory requirements.

1.11 Minimum Issuance Amount:

EUR 500,000 or equivalent for non-EUR issuances

1.12 Minimum
denomination of the
Notes and/or CDs:

Notes and/or CDs may have any denomination, subject to compliance with any applicable legal and regulatory requirements. The initial minimum denominations for Notes and/or CDs are EUR 100,000 and USD 100,000. The minimum denominations of Notes and/or CDs denominated in yen, Pound sterling or any other currency other than euro and U.S. dollar will be the equivalent of EUR 100,000 (determined by reference to the rate of exchange listed at the website of the European Central Bank on the day of issuance) and otherwise in accordance with any applicable legal and regulatory requirements.

1.13 Status of the Notes and/or CDs:

The obligations under the Notes and/or CDs constitute unsecured and unsubordinated obligations of the Issuer ranking pari passu among themselves and pari passu with all other present and future unsecured and unsubordinated obligations of the Issuer other than obligations which are preferred by virtue of mandatory provisions of law.

1.14 Governing law that applies to the Notes and/or CDs:

The Notes and/or the CDs will be governed by, and construed in accordance with, German law.

Place of jurisdiction:

Non-exclusive place of jurisdiction for all legal disputes arising out of or in connection with the Notes and/or CDs shall be Frankfurt am Main.

1.15 Listing:

Application has been made to list Notes and/or CDs issued under the Programme on the official list and to trade Notes on the regulated market of the Paris Stock Exchange "Euronext Paris". The Issuer reserves the right to list Notes and/or CDs issued under the Programme on a stock exchange as far as the Notes and/or CDs are suitable with regard to currency and other specific conditions or not to list at all. In the case of Notes to be listed, the specific conditions of the Notes will be published, if required, according to § 8 of the Conditions of Issue. In the case of CDs to be listed, the specific conditions of the CDs will be published, if required, in accordance with their terms.

1.16 Settlement system:

The Global Notes and Global CDs shall be deposited with Clearstream Banking AG, Frankfurt am Main ("CBF") or with a common depositary (each, a "Collective Custodian") for Clearstream Banking S.A., Luxembourg ("CBL") and Euroclear Bank SA/NV ("Euroclear") (CBL and Euroclear each in its capacity as international central securities depository referred to as an "ICSD" and together the "ICSDs") or any other clearing system from time to time agreed between the Dealers and the Issuer or any other STEP eligible SSS (as defined in the STEP Market Convention) and, in the case of Notes which are in NGN form, that is authorised to hold such Notes as eligible collateral for Eurosystem monetary policy and intra-day credit operations, in each case as agreed between the Dealers, the Issuer and the

Issuing and Paying Agent. The Notes and/or the CDs are kept in custody by a common depositary on behalf of both ICSDs if they are issued in CGN form and deposited with a Collective Custodian other than CBF. The Notes and/or CDs are kept in custody by a common safekeeper on behalf of both ICSDs if they are issued in NGN form. The Notes may be transferred as co-ownership-participations in the Global Note in accordance with the terms of CBF, CBL or Euroclear.

1.17 Rating(s)¹ of the

Programme:

Rated by Moody's Investors Service Ltd and by Fitch Ratings

respectively.

1.18 Guarantor:

1.19 Issuing and Paying

Agent:

Citibank, N.A., London Branch

1.20 Arranger: Citigroup Global Markets Limited

Nο

1.21 Dealers: Barclays Bank Ireland PLC

Barclays Bank PLC

Citigroup Global Markets Europe AG Citigroup Global Markets Limited

ING Bank N.V.

Landesbank Hessen-Thüringen Girozentrale

UBS AG London Branch

1.22 Selling restrictions: <u>General</u>

Each Dealer has represented and agreed that it will observe all applicable laws and regulations in any jurisdiction in which it may offer, sell or deliver Notes or CDs and it will not directly or indirectly offer, sell, resell, re-offer or deliver Notes or CDs or distribute the Information Memorandum 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.

United States of America ("United States")

The Notes and/or CDs issued under this Programme have not been and will not be registered under the United States Securities Act of 1933, as amended, (the "Securities Act") and the Notes and/or CDs may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons. Each Dealer has represented and agreed that it has offered and sold, and will offer and sell, Notes and/or CDs only outside of the United States to non-U.S. persons in accordance with Rule 903 of Regulation S under the Securities Act ("Regulation S"). Accordingly, each Dealer has represented and agreed 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/or CDs, and that it and they have complied and will comply with the offering

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¹ A rating is not a recommendation to buy, sell or hold Notes or CDs issued under the Programme. The ratings are based on current information furnished to the rating agencies by the Issuer and information obtained by the rating agencies from other sources. A suspension, reduction or withdrawal of a rating assigned to the Notes and/or CDs issued under the Programme may adversely affect the market price of such Notes and/or CDs. The ratings are only accurate as of the date above. Therefore, a prospective purchaser should verify the current ratings before purchasing Notes or CDs.

restrictions requirement of Regulation S. Each Dealer also has agreed that, at or prior to confirmation of sale of Notes and/or CDs, it will have sent to each distributor, dealer or person receiving a selling commission, fee or other remuneration that purchases Notes and/or CDs from it a confirmation or notice to substantially the following effect:

"The Securities covered hereby have not been registered under the United States Securities Act of 1933, as amended (the "Securities Act") and may not be offered or sold within the United States of America or to, or for the account or benefit of, U.S. persons. Terms used above have the meanings given to them by Regulation S under the Securities Act."

Terms used in this paragraph have the meanings given to them by Regulation S.

The United Kingdom of Great Britain and Northern Ireland (the "United Kingdom")

Each Dealer has represented and agreed 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 and/or CDs 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 and/or CDs 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 any 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 and/or CDs in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; 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 and/or CDs in, from or otherwise involving the United Kingdom.

Japan

The Notes and/or CDs have not been and will not be registered under the Financial Instrument and Exchange Act of Japan (Act no. 25 of 1948, as amended) (the "Financial Instrument and Exchange Act") and each Dealer has agreed and each further Dealer will agree that it will not offer or sell any Notes and/or CDs, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, as defined under Item 5, Paragraph 1,

Article 6 of the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949, as amended)), or to others for re-offering or resale, directly or indirectly, in Japan, or to a resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instrument and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan.

1.23 Taxation

All payments on the Notes shall be made without deduction or withholding at source of any taxes, duties or governmental charges imposed, levied or collected by or in or on behalf of the Federal Republic of Germany or, in the case of Notes issued by the Issuer acting through its London branch, the United Kingdom of Great Britain and Northern Ireland, respectively, or by or on behalf of any political subdivision or authority therein having power to tax (together "Withholding Taxes"), unless such deduction or withholding at source is required by law. In such event, the Issuer shall pay, subject to the exceptions set out in § 7 of the Terms and Conditions of the Notes, such additional amounts as may be necessary in order that the net amounts received by the holders of Notes after such deduction or withholding shall equal the respective amounts which would have been receivable had no such deduction or withholding at source been required.

All payments on the CDs shall be made without deduction or withholding at source of any taxes, duties or governmental charges imposed, levied or collected by or in or on behalf of the Federal Republic of Germany or by or on behalf of any political subdivision or authority therein having power to tax (together "Withholding Taxes"), unless such deduction or withholding at source is required by law. In such event, the Issuer shall pay, subject to the exceptions set out in the CDs, such additional amounts as may be necessary in order that the net amounts received by the holders of CDs after such deduction or withholding shall equal the respective amounts which would have been receivable had no such deduction or withholding at source been required.

1.25 Contact details

Landesbank Hessen-Thüringen Girozentrale Neue Mainzer Strasse 52-58 60311 Frankfurt am Main Federal Republic of Germany

e-mail: frederic.topin@helaba.de telephone: +49 69 9132 1757

London branch e-mail: James.Whitehead@helaba.de telephone: +44 20 73 34-4656

1.26 Additional information on the programme

None

1.27 Auditors of the issuer, who have audited the accounts of the issuer's annual report

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart Branch Eschborn/Frankfurt am Main, Mergenthalerallee 3-5 65760 Eschborn Federal Republic of Germany

2 INFORMATION CONCERNING THE ISSUER

2.1 Legal name:

Landesbank Hessen-Thüringen Girozentrale

2.2 Legal form/status:

The Issuer, which is a credit institution, was founded in the Federal Republic of Germany as a public law institution. It is incorporated under German public law and is subject to the jurisdictions of the courts of the Federal Republic of Germany. Helaba is a legal entity under public law. Within the scope of the "Single Supervisory Mechanism" (SSM: uniform mechanism for banking supervision in the Eurozone, which other EU countries may join as members on a voluntary basis), Helaba has since 4 November 2014 been subject to direct regulation and supervision by the European Central Bank (ECB). The basis for the assumption of direct supervision by the ECB over Helaba is the classification of Helaba as a "significant" institution. In its supervisory function, the ECB is supported by the Federal Financial Supervisory Authority (Bundesanstalt Finanzdienstleistungsaufsicht), an independent authority with supervisory powers, as well as by Deutsche Bundesbank.

In addition to such general banking supervision, Helaba is subject to the statutory supervision of the Federal States of Hesse and Thuringia (Sections 2(1) and 12(1) of the State Treaty).

2.3 Date of incorporation/ establishment:

The Hessische Landesbank Girozentrale was formed in 1953 by the merger of Hessische Landesbank Darmstadt (founded in 1940), Nassauische Landesbank Wiesbaden (founded in 1840) and the Landeskreditkasse zu Kassel (founded in 1832). On 1 July 1992 the Treaty on the Formation of a Joint Savings Bank Organisation between the Federal States of Hesse and Thuringia came into force. Since then Helaba has operated under the name 'Landesbank Hessen-Thüringen Girozentrale'.

The Issuer's legal name is "Landesbank Hessen-Thüringen Girozentrale", the name used for commercial purposes is "Helaba".

Helaba was founded in Germany and is incorporated as an entity under German public law (rechtsfähige Anstalt des öffentlichen Rechts).

2.4 Registered offices:

Registered head offices of the Issuer are located at:

Neue Mainzer Straße 52-58 60311 Frankfurt am Main Federal Republic of Germany Telephone: +49 69 91 32 01 Fax: +49 69 29 15 17

Bonifaciusstraße 16 99084 Erfurt

Federal Republic of Germany Telephone: +49 361 217 71 00

Fax: +49 361 217 71 01

2.5 Registration number, place of registration:

Helaba is registered with the commercial registers of Frankfurt am Main (HRA 29821) and Jena (HRA 102181).

2.6 Issuer's mission:

Helaba is a regional bank.

The Bank shall in particular perform the functions of a central institution for the savings banks in the Federal States of Hesse, Thuringia and North Rhine-Westphalia and the functions of a municipal bank and a state bank in the Federal States of Hesse and Thuringia. The Bank may also assume the functions of a central institution for savings banks in other federal states.

In its capacity as a central institution for savings banks, the Bank shall in particular manage the liquid funds of the savings banks in the federal states specified in sub-section 1 by means of an appropriate investment policy and shall extend appropriate liquidity facilities to the savings banks. It shall also be responsible, in cooperation with the savings banks, for business operations arising from its activities in the aforementioned capacity.

In its capacity as a municipal bank and state bank, the Bank shall conduct the banking operations of local authorities and local authority associations, of the Federal States of Hesse and Thuringia, of other corporations, institutions and foundations under public law and of enterprises associated with them and shall assist them in the realisation of their functions by means of its business operations.

The Bank may perform trustee and public development functions for the Federal States of Hesse and Thuringia and other public authorities. In respect of public development schemes, particularly in the fields of housing and urban development, industry and commerce, agriculture and environmental protection, these functions shall be performed by divisions established within the Bank in Hesse and Thuringia in accordance with section 8 sub-section 4 of the Treaty on the Formation of a Joint Savings Banks Association Hesse-Thuringia.

The Bank shall operate a Building and Loan Association (Bausparkasse), in particular in the Federal States of Hesse and Thuringia, in accordance with the provisions of the German Act on Building and Loan Associations (Gesetz über Bausparkassen). It shall be a legally dependent institution and shall be known as "Landesbausparkasse Hessen-Thüringen". Separate annual accounts and a management report are to be prepared for the Building and Loan Association.

The Bank may conduct banking operations of all kinds and also perform other services and carry out other transactions customary in the banking industry insofar as such banking operations and other services and transactions are directly or indirectly conducive to achieve the Bank's purposes. Subject to this, the Bank may acquire equity holdings, create its own independent institutions and acquire and dispose of developed and undeveloped real property and equivalent titles.

The Bank shall be entitled to issue Pfandbriefe in accordance

with the provisions of the German *Pfandbrief* Act (*Pfandbriefgesetz*) and other bonds.

Within the scope of its functions the Bank may become a member of associations and other organisations.

The Bank's business operations shall be conducted on the basis of good commercial practice taking into account general economic considerations and serving the needs of the savings banks and municipal authorities. In view of the public nature of the Bank's mission, generating profit shall not be the main object of its business operations.

Deposit Protection and Investor Compensation Scheme

Helaba is a member of the Deposit Protection and Investor Compensation Scheme of the Sparkassen-Finanzgruppe (the "Scheme"). The aim of the Scheme is to ensure that the member institutions themselves are protected, in particular their liquidity and solvency. All savings banks, Landesbanks and home loan and savings associations (*Landesbausparkassen*) are members of this Scheme. In accordance with its memorandum and articles of association, the Scheme consists of a joint liability scheme of interconnected assets which are raised by the savings banks, the Landesbanks and Central Giro Institutions and Landesbausparkassen. In the event of a crisis, liquidity and solvency of an institution can be protected by relevant support measures. Institutions affected by the crisis can thus be enabled to continue performing their obligations without restrictions.

In January 2020, the European Central Bank (ECB) and the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) informed the German Savings Banks Association (Deutscher Sparkassen- und Giroverband, DGSV) of certain supervisory expectations regarding further enhancements of DSGV's Institutional Protection Scheme based on an audit of the Institutional Protection Scheme. DSGV is currently in dialogue with the ECB and BaFin on this matter. It is expected that the German Savings Banks Group will, in agreement with the ECB and BaFin, reach an understanding on any necessary adjustments to the Institutional Protection Scheme.

In addition, there is the Reserve Fund of the Savings Banks and Giro Association Hesse-Thuringia, of which Helaba has become a member. Supplementing these Reserve Funds, Rheinischer Sparkassen- und Giroverband - (RSGV) and Westfälisch-Lippischer Sparkassen- und Giroverband (SVWL) each have established an additional reserve fund in favour of Helaba within the scope of their share taken in the ordinary capital of Helaba (4.75% each) in 2012.

2.7 Brief description current activities:

Business Overview

Helaba is authorized to perform any kind of banking operations and to render any kind of financial services, with the exception of operating a Multilateral Trading Facility.

Helaba serves customers in Germany and other countries as a commercial bank. It works with companies, institutional customers, the public sector and municipal corporations.

Helaba and the S-Group Sparkassen in Hesse and Thuringia together constitute the Sparkassen-Finanzgruppe Hessen-Thüringen, which follows a business model based on economic unity and a joint S-Group rating. Comprehensive co-operation and business agreements have been entered into with the Sparkassen and their associations in North Rhine-Westphalia. In addition, there are sales co-operation agreements with the Sparkassen in Brandenburg. The agreements with the Sparkassen in North Rhine-Westphalia and Brandenburg complement the S-Group Concept of the Sparkassen-Finanzgruppe Hessen-Thüringen, which continues in its current form.

Helaba administers public-sector development programmes through WIBank in its capacity as the central development institution of the State of Hesse. As legally dependent entity within Helaba, WIBank enjoys a direct statutory guarantee from the State of Hesse as permitted under EU law. WIBank's business activities are guided by the development objectives of the State of Hesse. Helaba also has stakes in a number of other development institutions in Hesse and Thuringia.

Financing relatively large commercial projects is the Bank's particular speciality in the Real Estate segment: office buildings, retail outlets and residential portfolios make up the bulk of its business in this area, although it also provides finance for retail parks and logistics centres. Outside Germany, Helaba provides finance for real estate in established cities/regional centres and for commercial customers. The New York, London, Paris and Stockholm branch offices are all staffed by people who have a thorough knowledge of their local market.

The Corporates & Markets segment structures and arranges bespoke corporate finance solutions to meet specific customer requirements through its constituent product groups Corporate Loans, Project Finance, Transport Finance, Foreign Trade Finance, Acquisition Finance, Asset Backed Finance, Investment and Leasing Finance and Tax Engineering. The Bank also supports Sparkassen directly – and their customers as well – in the area of finance, including trade finance business. Helaba ranks among the leading providers in payment transactions business through its Cash Management division.

The Corporates & Markets segment additionally covers the range of services associated with the four capital-market-related core functions of risk management, warehousing (including market-making), primary market and money market activities. Helaba's sales units provide carefully tailored advice on risk and strategy in these areas to help customers make effective use of capital market products.

In the Retail and Asset Management segment, Frankfurter Sparkasse offers a full range of financial services products for private customers, the self-employed, small businesses, corporate customers and public authorities in the Rhine-Main area. As a wholly-owned and fully consolidated subsidiary of Helaba organized under public law, Frankfurter Sparkasse is an important retail bank in the Frankfurt region. Via 1822direkt, Frankfurter Sparkasse also has a presence in the nationwide direct banking market.

Frankfurter Bankgesellschaft (Schweiz) AG and its wholly owned subsidiary Frankfurter Bankgesellschaft (Deutschland) AG provide Helaba's products and services for Sparkassen in the Private Banking, Wealth Management and Asset Management segment. Frankfurter Bankgesellschaft (Deutschland) AG, which operates as the private bank of the Sparkassen-Finanzgruppe, acquires high-net-worth customers in Germany through Sparkassen in the S-Group with which it has a collaboration agreement. Frankfurter Bankgesellschaft's Family Office complements its range of professional advisory services in connection with all asset-related matters.

Through the legally dependent Landesbausparkasse Hessen-Thüringen (LBS), Helaba operates the home loans and savings business in both Hesse and Thuringia. LBS also helps the Sparkassen market real estate through Sparkassen-Immobilien-Vermittlungs-GmbH.

Helaba Invest is a capital management company active in institutional asset management, administering and managing both securities and real estate. Its product range includes special funds for institutional investors and retail funds as a management and/or advisory portfolio, comprehensive fund management (including reporting and risk management), advice on strategy and support for indirect investments.

The GWH Group holds residential real estate portfolios in Hesse with close to 50,000 residential units under management. It is active in residential real estate project development as well as the management and optimization of residential property portfolios.

Another of the subsidiaries, the OFB Group, provides a full range of services for real estate project development, for land development and for high-value commercial real estate construction and project management with a particular focus on the Rhine-Main region.

The Bank operates a dedicated unit to manage its own real estate and real estate affiliates.

The WIBank segment is home to the business transacted by Wirtschafts- und Infrastrukturbank Hessen (WIBank).

Trend Information

Competitive environment

The German banking sector continued to benefit from the positive (albeit slowing) economic trend in 2019. The requirement for loss allowances still remained at a low level. At the same time, the further fall in interest rates in the euro zone had an adverse impact on the operating business. On top of this, institutional investors (insurance companies, pension funds) are making inroads into the market in response to their own investment pressures and are becoming competitors of the banks. Cut-throat competition continues to put pressure on margins.

More and more areas of economic activity are becoming digitalised, driven by continuous advances in information technology. Online and mobile channels are presenting financial service providers with new ways of offering products and of accessing and exchanging data with customers.

In this way, online banks, high street banks and increasingly non-bank web-based businesses (termed fintech companies or fintechs) too have developed new communication and sales channels in private customer business, in some cases in competition and in other cases in co-operation with one another. To an ever greater extent, attention is now focusing on business with corporate clients, real estate customers and institutional investors as well. Derivative platforms enable currency hedges to be effected using standardised processes, lending portals arrange funding for small corporate customers through banks or directly through institutional investors and banks analyse their customer data in search of more effective ways of offering products. Around the globe, blockchain technology is being refined to find new, faster and more cost-effective methods of exchanging data; besides the handling of promissory note loans, foreign trade finance has also become a focus of attention.

On 31 January 2020, the United Kingdom (UK) left the European Union (EU). The withdrawal act provides for an eleven-month transition period (i.e. until the end of 2020) during which time the relationship between the EU and the UK will remain largely unchanged and the UK will remain a member of the EU single market and customs union. In anticipation of the UK's exit from the EU, the Bank has analysed all key scenarios and possible implications and has also submitted to the British supervisory authorities an application to establish a third-country branch for the Helaba branch in London. Overall, Helaba is therefore well prepared for the UK's withdrawal from the EU, even if this occurs without a deal between the UK and the other EU member states.

Key changes in the regulatory framework were as follows:

Prudential supervision by the ECB (Single Supervisory Mechanism, SSM)

The Helaba Group (within the meaning of the KWG and the CRR), together with its affiliated subsidiaries Frankfurter Sparkasse and Frankfurter Bankgesellschaft (Deutschland) AG, is among the banks classified as "significant" and there-fore subject to direct supervision by the ECB. The ECB sent the Helaba Group a letter dated 10 December 2019 notifying it of

the findings of the Supervisory Review and Evaluation Process (SREP). The ECB has specified that the minimum Common Equity Tier 1 (CET1) capital ratio to be maintained by the Helaba Group in 2020 is initially 9.85%. This requirement comprises the Pillar 1 minimum capital requirement, the Pillar 2 capital requirement and the capital buffers.

By general directive dated 31 March 2020 BaFin has set the domestic anticyclic buffer (**CCvB**) at 0% effective 1 April 2020. In addition, by order dated 8 April 2020 the ECB has adjusted the composition of the supplemental Pillar II requirements so that only 56.25% of requirements must be met with CET1. The minimum Common Equity Tier 1 capital ratio to be maintained by the Helaba Group will thus be reduced to 9.10% CET1.

EU banking package (CRR II, CRD V, BRRD II and SRMR II)

The final legal texts for the EU's package of banking reforms were published in the Official Journal of the European Union on 7 June 2019. CRR II must be applied from 28 June 2021, and SRMR II (Single Resolution Mechanism Regulation II) from 28 December 2020. Compliance with a small number of the provisions in CRR II is required at an earlier point. CRD V and BRRD II (Bank Recovery and Resolution Directive II) must be transposed into national law by 28 December 2020.

Key changes introduced by the CRR II / CRD V package relate to interest rate risk in the banking book, large exposures, the Fundamental Review of the Trading Book (FRTB), the standardised approach for counterparty credit risk (SA-CCR), the leverage ratio, the net-stable-funding-ratio (NSFR), credit valuation adjustment (CVA) risk and the eligibility criteria for capital instruments and fund investments. The minimum requirement for own funds and eligible liabilities (MREL) to absorb losses set out in BRRD II has been revised in CRR II in terms of the eligibility criteria and reference basis for the MREL ratio. In addition to harmonising the MREL and total loss-absorbing capacity (TLAC), BRRD II lays down new rules on creditor protection, moratorium powers and distribution restrictions in the event of failure to comply with the MREL.

The EU banking package provides the European Banking Authority (EBA) with a large number of new mandates to create regulatory standards, guidelines and reports. Helaba will closely monitor EBA activities and take any implications into account in the management of its banking business.

Stress tests

In the first half of 2019, Helaba Group (within the meaning of the KWG and the CRR) underwent the ECB's sensitivity analysis of liquidity risk (LiST), which tests whether a bank has the ability to handle critical liquidity situations. The liquidity stress test at Helaba calculated the impact from idiosyncratic shocks on cash inflows and cash outflows as well as on the liquidity position in different scenarios. Helaba was able to supply all the data required by the banking supervisor in an appropriate format and in a timely manner. The results were fed into this year's SREP

decision. According to the EBA's two-yearly stress testing cycle, the next stress test was scheduled for 2020. Due to the corona pandemic, this EU-wide stress test launched in January 2020 was postponed until 2021.

BaFin guidance notice on dealing with sustainability risks

On 20 December 2019, BaFin published the final version of its guidance notice on dealing with sustainability risks. In this guidance notice, BaFin sets out the principles of good practice in relation to sustainability risks that it expects banks, insurance companies and asset management companies to incorporate into their activities. Helaba is analysing the need for action arising from this BaFin guidance notice and is holding discussions with other member institutions of banking associations about issues relating to the interpretation and implementation of the guidance.

Coronavirus

Despite government assistance, the Corona crisis will have a palpable negative impact on the world's economies. Leading economic research institutions anticipate a significant slowing of developments in the world's real economy. The lock down orders, for example, and other measures will directly impact those industries that, according to OECD estimates, account for up to a third of the gross domestic product in the world's largest economies. In the aftermath, many economies will slide into recession.

To date, the virus has spread predominantly in the strong industrial nations. Right now, the consequences to less developed countries and those with weaker health care systems can hardly be estimated. In addition, there are unresolved trade disputes and the terms of United Kingdom's exit from the EU have yet to be negotiated.

Capital markets and the real economy are also showing signs of uncertainty over the further course of the Corona pandemic. Volatility in the financial markets has sharply increased with negative extremes that sometimes even exceed the levels seen in the financial market crisis.

The consequences of this can also impact the German credit industry. At the moment, it is impossible to responsibly estimate the long term impact of market turbulence on Helaba's loan portfolio and capital market business. For that reason, Helaba is currently unable to provide guidance for current fiscal year results. To what extent the current significant valuation discounts caused by severe capital market fluctuations (in particular the significant widening of spreads) - that also affect Helaba - will experience a rapid return to normalcy is presently not apparent. It will depend upon the length of government ordered public health protection measures as well as the time it takes for capital markets to normalize. If the Corona crisis gives rise to an economic crisis, substantial impacts on Helaba's financial situation and profitability cannot be ruled out.

2.8.1 Amount of capital subscribed and fully paid:

As mentioned on pages 74, 76, and 162 of the Annual Report 2019 of the Helaba Group, as at 31 December 2019, the Issuer has a subscribed and fully paid capital of Euro 2,509 million.

The subscribed capital of Euro 2,509 million comprises the share capital of Euro 589 million paid in by the owners in accordance with the Charter and the capital contributions of Euro 1,920 million paid by the Federal State of Hesse.

2.8.2 Fraction of issued capital not fully paid-up:

Not applicable

2.9 List of main As mentioned on page 6 of the Annual Financial Report 2019 of shareholders:

the Helaba Group the main shareholders of the Issuer are:

Sparkassen- und Giroverband Hessen-Thüringen	68.85%
Federal State of Hesse	8.10%
State of Thuringia	4.05%
Rheinischer Sparkassen- und Giroverband	4.75%
Sparkassenverband Westfalen-Lippe	4.75%
Fides Alpha GmbH	4.75%
Fides Beta GmbH	4.75%

2.10 Listing of the shares of Not applicable

the Issuer:

Composition of 2.11

governing bodies and supervisory bodies:

Members of the Board of Managing Directors:

Thomas Groß (Chairman) Dr. Detlef Hosemann Hans-Dieter Kemler Frank Walter Nickel

Christian Alexander Schmid

Members of the Supervisory Board:

Gerhard Grandke Dr. Werner Henning Reinhard Faulstich Andreas Bausewein Dr. Annette Beller Wilhelm Bechtel Christian Blechschmidt

Marina Heller Nancy Faeser Thomas Will Günter Högner Stefan Hastrich Oliver Klink Hans-Georg Dorst **Uwe Schmidt** Anita Schneider Wolfgang Schuster Alexander Hetjes Dr. Sascha Ahnert Dr. Heiko Wingenfeld André Schellenberg

Michael Boddenberg Frank Lortz

2.16 Ratings of the Issuer: Rated by Moody's, Fitch and S&P

2.17 Additional information on the issuer:

Not applicable

3		CERTIFICATION OF INFORMATION
3.1	Person(s) responsible for the Information Memorandum:	Landesbank Hessen-Thüringen Girozentrale Andreas Möller, Position: Middle Office Clerk Isabell Schmidt, Position: Middle Office Clerk
3.2	Declaration of the person(s) responsible for the Information Memorandum:	To the knowledge of the Issuer, the information contained in this Information Memorandum including its Appendices is true and accurate and does not contain any misrepresentation which would make it misleading.
3.3	Date, Place of signature, Signature:	Frankfurt am Main, 20 October 2020
4	INFORMATION CO	ONCERNING THE ISSUER'S REQUEST OF THE STEP LABEL

An application for a STEP label for this Programme will be made to the STEP Secretariat. Information as to whether the STEP label has been granted for this Programme may be made available on the STEP market website (initially www.stepmarket.org). This website is not sponsored by the Issuer and the Issuer is not responsible for its content or availability.

Unless otherwise specified in this Information Memorandum, the expressions "STEP", "STEP Market Convention", "STEP label", "STEP Secretariat", and "STEP market website" shall have the meaning assigned to them in the Market Convention on Short-Term European Paper dated 19 May 2015 as adopted by ACI-The Financial Markets Association ("Euribor ACI"), the European Money Market Institute and the European Banking Federation ("Euribor FBE") as the same may be amended from time to time or any substitute paper or convention relating to STEP issued by Euribor ACI and Euribor FBE or by the STEP Secretariat (as such term is defined in the STEP Market Convention).

5 APPENDICES:

Appendix 1: Ratings of the Programme

Appendix 2: Terms and Conditions of the Notes

Appendix 3a: Form of Global Note (**CGN**)

Appendix 3b: Form of Global Note (**NGN**)

Appendix 4a: Form of Global CD

Appendix 4b: Form of Global CD (**NGN**)

Appendix 1

The Programme has been rated by Moody's Investors Service Ltd and by Fitch Ratings respectively. As at the publication date of this Information Memorandum, the rating of the Programme is as follows:

Fitch: F1+

The current rating may be obtained from Fitch's website:

https://www.fitchratings.com/entity/landesbank-hessen-thueringen-girozentrale-81203656

Fitch Rating Services identifier for Helaba: 81203656

Moody's: P-1

The current rating may be obtained from Moody's website:

https://www.moodys.com/credit-ratings/Landesbank-Hessen-Thueringen-GZ-credit-rating-370500

Moody's Investors Service identifier for Helaba: 370500

Appendix 2

Terms and Conditions of the Notes

§ 1 General Provisions

- (1) Currency, Aggregate Principal Amount, Number and Denomination. The currency, aggregate principal amount and number of Notes as well as the principal amount of each Note shall be as set forth on the face of the global note (the **"Global Note"**).
- (2) *Terms and Conditions*. The legal relations created by the Notes are governed by these Terms and Conditions.
- (3) Bearer Notes. The Notes are issued in bearer form.
- (4) Global Note. The Notes are represented for their entire life by the Global Note. Definitive Notes and definitive interest coupons will not be issued.
- (5) Form. The Global Note bears the manual signatures of two authorised representatives of the Issuer and a manual authentication signature by or on behalf of the Issuing and Paying Agent.

§ 2 Status

The obligations under the Notes constitute unsecured and unsubordinated obligations of the Issuer ranking pari passu among themselves and pari passu with all other present and future unsecured and unsubordinated obligations of the Issuer other than obligations which are preferred by virtue of mandatory provisions of law.

§ 3 Redemption

The Notes will be redeemed on the maturity date at their redemption amount as specified on the face of the Global Note.

§ 4 Interest

- (1) Fixed Rate Notes. In the case of Notes bearing fixed interest, the Notes will bear interest at the rate specified on the face of the Global Note. The amount of such interest shall be payable at redemption of the Notes on the maturity date (as specified on the face of the Global Note) and shall be as specified on the face of the Global Note.
- (2) Floating Rate Notes.
- (a) EONIA. In the case of Notes bearing a floating rate of interest depending on the EONIA reference rate, the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will be, except as provided below, be the rate of return of a daily compound interest investment with the arithmetic mean of the daily rates of the day-to-day Euro-zone interbank euro money market as reference rate plus/minus the Margin, if any, as specified on the face of the Global Note and will be calculated by the Calculation Agent on the last TARGET Business Day (as defined below) of the relevant Interest Period, as follows, and the resulting percentage

will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards:

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

where

"do", for any Interest Period, is the number of TARGET Business Days in the relevant Interest Period;

"i" is a series of whole numbers from one to d_o, each representing the relevant TARGET Business Day in chronological order from, and including, the first TARGET Business Day, in the relevant Interest Period;

"EONIAi", for any day "i" in the relevant Interest Period, is a reference rate equal to the overnight rate as calculated by the European Central Bank and appearing on the Screen Page (as defined below) in respect of that day;

"ni" is the number of calendar days in the relevant Interest Period on which the rate is EONIA;

"d" is the number of calendar days in the relevant Interest Period.

"Interest Period" means each period from (and including) the Interest Commencement Date as specified on the face of the Global Note to (but excluding) the first Interest Payment Date as specified on the face of the Global Note and from (and including) each Interest Payment Date to (but excluding) the following Interest Payment Date.

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified on the face of the Global Note.

"Interest Determination Date" means the last TARGET Business Day of the relevant Interest Period.

"Screen Page" means Reuters screen page Eonia or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or if no such quotation appears as at such time, the Calculation Agent shall request the principal office of each of the Reference Banks (as defined below) in the Euro-Zone to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits of the relevant currency for the relevant Interest Period to leading banks in the interbank market of the Euro-Zone at approximately 6.00 p.m. (Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent in consultation with the Issuer, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination

Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (a), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

As used in this § 4 (2)(a), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

(2) (b) EURIBOR. In the case of Notes bearing a floating rate of interest depending on the EURIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate per annum) for deposits in the relevant currency for that Interest Period which appears on the Screen Page (as defined below) as of 11:00 a.m. (Brussels time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, as specified on the face of the Global Note, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified on the face of the Global Note.

"Interest Determination Date" means the second TARGET Business Day prior to the commencement of the relevant Interest Period.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

"Screen Page" means Reuters screen page EURIBOR01 or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation for the Reference Rate appears as at such time and provided that no Rate Replacement Event pursuant to § 4(2)(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the interbank market in the Euro-Zone at approximately 11.00 a. m. (Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent in consultation with the Issuer, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (b), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 4 (2)(b), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

(2) (c) LIBOR. In the case of Notes bearing a floating rate of interest depending on the LIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate per annum) for deposits in the relevant currency for that Interest Period which appears on the Screen Page as of 11:00 a.m. (London time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, as specified on the face of the Global Note, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a London Business Day it shall be postponed in accordance with the convention specified on the face of the Global Note.

"Interest Determination Date" means the first London Business Day prior to the commencement of the relevant Interest Period. "London Business Day" means a day which is a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in London.

"Screen Page" means Reuters screen page LIBOR01 or LIBOR02, as the case may be, or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation for the Reference Rate appears as at such time and provided that no Rate Replacement Event pursuant to § 4(2)(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for

deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the London interbank market at approximately 11.00 a. m. (London time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the London interbank market, selected by the Calculation Agent in consultation with the Issuer, at which such banks offer, as at 11.00 a.m. (London time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (c), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 4 (2)(c), "Reference Banks" means four major banks in the London interbank market selected by the Calculation Agent in consultation with the Issuer.

(2) (d) €STR. In the case of Notes bearing a floating rate of interest depending on the €STR reference rate, the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the Compounded €STR (as defined below) plus/minus the Margin, if any.

"Compounded €STR" means the rate of return of a daily compound interest investment based on the Euro short-term rate (€STR) as the reference rate for the calculation of interest. The Compounded €STR will be calculated by the Calculation Agent on each Interest Determination Date in accordance with the provisions set out below and the following formula (with the resulting percentage being rounded to the nearest one ten-thousandth of a percentage point, with 0.00005 % being rounded upwards):

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{\in STR_{i-5TBD} \times n_i}{360}\right) - 1\right] \times \frac{360}{d}$$
 Compounded \notin STR =

where:

"€STR" means, in respect of any TARGET Business Day, the interest rate representing the wholesale Euro unsecured overnight borrowing costs of banks located in the Euro area provided by the European Central Bank as administrator of such rate (or any successor administrator) and published on the Website of the European Central Bank (as defined below) at or before 9:00 a.m. (Frankfurt time) (or, in case a revised euro short-term rate is published as provided in Article 4 subsection 3 of the ECB €STR Guideline at or before 11:00 a.m. (Frankfurt time), such revised interest rate) on the TARGET Business Day immediately following such TARGET Business Day;

"d₀" means the number of TARGET Business Days in the relevant Interest Period;

"i" means a series of whole numbers from one to d_o, each representing the relevant TARGET Business Day in chronological order from (and including) the first TARGET Business Day to (but excluding) the Interest Payment Date in the relevant Interest Period;

" $\mathbf{n_i}$ " for any TARGET Business Day "i" means the number of calendar days from (and including) the relevant TARGET Business Day "i" up to (but excluding) the immediately following TARGET Business Day;

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

"€STR_{i-5TBD}" means the €STR in respect of the fifth TARGET Business Day (being a TARGET Business Day in the relevant Observation Period) prior to the relevant TARGET Business Day "i"

"Observation Period" means, in respect of the first Interest Period, the period beginning (and including) 5 TARGET Business Days prior to the Interest Commencement Date and ending (but excluding) 5 TARGET Business Days prior to the first Interest Payment Date; and in respect of any subsequent Interest Period, the period beginning (and including) 5 TARGET Business Days prior to the first day of the relevant Interest Period and ending (but excluding) 5 TARGET Business Days prior the relevant Interest Payment Date.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

"Interest Determination Date" means the fifth TARGET Business Day prior to the Interest Payment Date of the relevant Interest Period.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

"Website of the European Central Bank" means the website of the European Central Bank currently at http://www.ecb.europa.eu or any successor website officially designated by the European Central Bank.

"ECB €STR Guideline" means Guideline (EU) 2019/1265 of the European Central Bank of 10 July 2019 on the euro short-term rate (€STR) (ECB/2019/19), as amended from time to time.

If the €STR is not published, as specified above, on any particular TARGET Business Day and no €STR Index Cessation Event (as defined below) has occurred, the €STR for such TARGET Business Day shall be the rate equal to €STR in respect of the last TARGET Business Day for which such rate was published on the Website of the European Central Bank.

If the €STR is not published, as specified above, on any particular TARGET Business Day and both an €STR Index Cessation Event and an €STR Index Cessation Effective Date have occurred, the rate of €STR for each TARGET Business Day in the relevant Observation Period on or after such €STR Index Cessation Effective Date will be determined as if references to €STR were references to the ECB Recommended Rate.

If no ECB Recommended Rate has been recommended before the end of the first TARGET Business Day following the date on which the €STR Index Cessation Event occurs, then the rate of €STR for each TARGET Business Day in the relevant Observation Period on or after the €STR Index Cessation Effective Date will be determined as if references to €STR were references to the Modified EDFR.

If an ECB Recommended Rate has been recommended and both an ECB Recommended Rate Index Cessation Event and an ECB Recommended Rate Index Cessation Effective Date subsequently occur, then the rate of €STR for each TARGET Business Day in the relevant Observation Period occurring on or after that ECB Recommended Rate Index Cessation Effective Date will be determined as if references to €STR were references to the Modified EDFR.

Any substitution of the €STR, as specified above, will remain effective for the remaining term to maturity of the Notes and shall be published by the Issuer in accordance with § 8.

"ECB Recommended Rate" means a rate (inclusive of any spreads or adjustments) recommended as the replacement for €STR by the European Central Bank (or any successor administrator of €STR) and/or by a committee officially endorsed or convened by the European Central Bank (or any successor administrator of €STR) for the purpose of recommending a replacement for €STR (which rate may be produced by the European Central Bank or another administrator), as determined by the Issuer and notified by the Issuer to the Calculation Agent.

"EDFR" means the Eurosystem Deposit Facility Rate, the rate on the deposit facility, which banks may use to make overnight deposits with the Eurosystem (comprising the European Central Bank and the national central banks of those countries that have adopted the Euro) as published on the Website of the European Central Bank.

"Modified EDFR" means a reference rate equal to the EDFR plus the EDFR Spread as determined by the Issuer and notified by the Issuer to the Calculation Agent.

"EDFR Spread" means

- (a) if no ECB Recommended Rate is recommended before the end of the first TARGET Business Day following the date on which the €STR Index Cessation Event occurs, the arithmetic mean of the daily difference between the €STR and the EDFR for each of the 30 TARGET Business Days immediately preceding the date on which the €STR Index Cessation Event occurred; or
- (b) if an ECB Recommended Rate Index Cessation Event occurs, the arithmetic mean of the daily difference between the ECB Recommended Rate and the EDFR for each of the 30 TARGET Business Days immediately preceding the date on which the ECB Recommended Rate Index Cessation Event occurred.

"€STR Index Cessation Event" means the occurrence of one or more of the following events, as determined by the Issuer and notified by the Issuer to the Calculation Agent:

- (a) a public statement or publication of information by or on behalf of the European Central Bank (or any successor administrator of €STR) announcing that it has ceased or will cease to provide €STR permanently or indefinitely, provided that, at the time of the statement or the publication, there is no successor administrator that will continue to provide €STR; or
- (b) a public statement or publication of information by the regulatory supervisor for the administrator of €STR, the central bank for the currency of €STR, an insolvency official with jurisdiction over the administrator of €STR, a resolution authority with jurisdiction over the administrator of €STR or a court or an entity with similar insolvency or resolution authority over the administrator of €STR, which states that the administrator of €STR has ceased or will cease to provide €STR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide €STR.

"€STR Index Cessation Effective Date" means, in respect of an €STR Index Cessation Event, the first date on which €STR is no longer provided by the European Central Bank (or any successor administrator of €STR), as determined by the Issuer and notified by the Issuer to the Calculation Agent.

"ECB Recommended Rate Index Cessation Event" means the occurrence of one or more of the following events, as determined by the Issuer and notified by the Issuer to the Calculation Agent:

(a) a public statement or publication of information by or on behalf of the administrator of the ECB Recommended Rate announcing that it has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or the publication, there is no successor administrator that will continue to provide the ECB Recommended Rate; or (b) a public statement or publication of information by the regulatory supervisor for the administrator of the ECB Recommended Rate, the central bank for the currency of the ECB Recommended Rate, an insolvency official with jurisdiction over the administrator of the ECB Recommended Rate, a resolution authority with jurisdiction over the administrator of the ECB Recommended Rate or a court or an entity with similar insolvency or resolution authority over the administrator of the ECB Recommended Rate, which states that the administrator of the ECB Recommended Rate has ceased or will cease to provide the ECB Recommended Rate permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide the ECB Recommended Rate.

"ECB Recommended Rate Index Cessation Effective Date" means, in respect of an ECB Recommended Rate Index Cessation Event, the first date on which the ECB Recommended Rate is no longer provided, as determined by the Issuer and notified by the Issuer to the Calculation Agent.

(2) (e) Rate Replacement. If the Issuer determines that a Rate Replacement Event has occurred on or prior to an Interest Determination Date, the Relevant Determining Party shall determine and inform the Issuer, if relevant, and the Calculation Agent of (i) the Replacement Rate, (ii) the Adjustment Spread, if any, and (iii) the Replacement Rate Adjustments (each as defined below) for purposes of determining the Rate of Interest for the Interest Period related to that Interest Determination Date and each Interest Period thereafter (subject to the subsequent occurrence of any further Rate Replacement Event). The Terms and Conditions shall be deemed to have been amended by the Replacement Rate Adjustments with effect from (and including) the relevant Interest Determination Date (including any amendment of such Interest Determination Date if so provided by the Replacement Rate Adjustments). The Rate of Interest shall then be the Replacement Rate (as defined below) adjusted by the Adjustment Spread, if any, plus/minus the Margin, if any.

The Issuer shall notify the Holders pursuant to § 8 as soon as practicable (*unverzüglich*) after such determination of the Replacement Rate, the Adjustment Spread, if any, and the Replacement Rate Adjustments.

"Rate Replacement Event" means, with respect to the Reference Rate each of the following events:

- (i) the Reference Rate not having been published on the Screen Page for the last ten Business Days prior to and including the relevant Interest Determination Date; or
- (ii) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate on which (x) the administrator will cease to publish the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate), or (y) the Reference Rate will permanently or indefinitely be discontinued; or
- (iii) the occurrence of the date, as publicly announced by the regulatory supervisor for the administrator of the Reference Rate, the central bank for the Specified Currency, an insolvency official with jurisdiction over the administrator for the Reference Rate, a resolution authority with jurisdiction over the administrator for the Reference Rate or a court (unappealable final decision) or an entity with similar insolvency or resolution authority over the administrator for the Reference Rate, on which the administrator of the Reference Rate has ceased or will cease to provide the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate); or
- (iv) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the supervisor of the administrator of the Reference Rate, from which the Reference Rate will be prohibited from being used; or
- (v) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate, of a material change in the methodology of determining the Reference Rate; or

(vi) the publication of a notice by the Issuer pursuant to § 8 that it has become unlawful for the Issueror the Calculation Agent to calculate any Rate of Interest using the Reference Rate.

"Replacement Rate" means a publicly available substitute, successor, alternative or other rate designed to be referenced by financial instruments or contracts, including the Notes, to determine an amount payable under such financial instruments or contracts, including, but not limited to, an amount of interest. In determining the Replacement Rate, the Relevant Guidance (as defined below) shall be taken into account.

"Adjustment Spread" means a spread (which may be positive or negative), or the formula or methodology for calculating a spread, which the Relevant Determining Party determines is required to be applied to the Replacement Rate to reduce or eliminate, to the extent reasonably practicable, any transfer of economic value between the Issuer and the holders of the Notes that would otherwise arise as a result of the replacement of the Reference Rate against the Replacement Rate (including, but not limited to, as a result of the Replacement Rate being a risk-free rate). In determining the Adjustment Spread, the Relevant Guidance (as defined below) shall be taken into account.

"Relevant Determining Party" means

- (i) the Issuer if in its opinion the Replacement Rate is obvious and as such without any reasonable doubt determinable by an investor that is knowledgeable in the respective type of bonds, such as the Notes; or
- (ii) failing which, an Independent Advisor, to be appointed by the Issuer at commercially reasonable terms, using reasonable endeavours, as its agent to make such determinations.

"Independent Advisor" means an independent financial institution of international repute or any other independent advisor of recognised standing and with appropriate expertise.

"Relevant Guidance" means (i) any legal or supervisory requirement applicable to the Issuer or the Notes or, if none, (ii) any applicable requirement, recommendation or guidance of a Relevant Nominating Body or, if none, (iii) any relevant recommendation or guidance by industry bodies (including by ISDA), or, if none, (iv) any relevant market practice.

"Relevant Nominating Body" means

- (i) the central bank for the relevant currency, or any central bank or other supervisor which is responsible for supervising either the Replacement Rate or the administrator of the Replacement Rate; or
- (ii) any working group or committee officially endorsed, sponsored or convened by or chaired or co-chaired by (w) the central bank for the relevant currency, (x) any central bank or other supervisor which is responsible for supervising either the Reference Rate or the administrator of the Reference Rate, (y) a group of the aforementioned central banks or other supervisors or (z) the Financial Stability Board or any part thereof.

"Replacement Rate Adjustments" means such adjustments to the Terms and Conditions as are determined consequential to enable the operation of the Replacement Rate (which may include, without limitation, adjustments to the applicable business day convention, the definition of Business Day, the Interest Determination Date, the Day Count Fraction and any methodology or definition for obtaining or calculating the Replacement Rate). In determining any Replacement Rate Adjustments the Relevant Guidance shall be taken in account.

If a Replacement Rate, an Adjustment Spread, if any, or the Replacement Rate Adjustments cannot be determined pursuant to the foregoing, the Reference Rate in respect of the relevant Interest Determination Date shall be the Reference Rate determined for the last preceding Interest Period. The Issuer will inform the Calculation Agent accordingly.

The Calculation Agent will, on or as soon as practicable after each time at which the Rate of Interest is to be determined, calculate the amount of interest (the "Interest Amount") payable on the Notes for the relevant Interest Period. Each Interest Amount shall be calculated by applying the Rate of Interest and the Day Count Fraction specified on the face of the Global Note to the denomination of the Notes and rounding the resultant figure to the nearest unit of the relevant currency, with 0.5 of such unit being rounded upwards. Subject to Condition 2(e) (Rate Replacement), the Calculation Agent will cause the Rate of Interest, each Interest Amount for each Interest Period, each Interest Period and the

relevant Interest Payment Date to be notified to the Issuer and to the holders of the Notes in accordance with § 8 as soon as possible after their determination. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to the holders of the Notes in accordance with § 8.

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this § 4 by the Calculation Agent shall (in the absence of manifest error) be binding on the Issuer, the Issuing and Paying Agent and the holders of the Notes.

§ 5 Payments

- (1) *General.* Payments in respect of the Notes shall be made through the Issuing and Paying Agent specified in the Global Note to, or to the order of, the bearer of the Global Note for credit to the accounts of the relevant account holders of the Clearing System.
- (2) Currency. Payments in respect of the Notes shall be made in the currency in which the Notes are denominated.
- (3) No Periodic Payments of Interest. In the case of Notes other than interest bearing Notes, there will be no periodic payments of interest on the Notes. In the case of interest bearing Notes, payments of interest on the Notes will be made in accordance with § 4.
- (4) *Discharge*. All payments made by the Issuer to, or to the order of, the bearer of the Global Note shall discharge the liability of the Issuer under the Notes to the extent of the sums so paid.
- (5) *Default.* Should the Issuer fail to redeem the Notes when due (or, where the due date is not a Banking Day, on the next succeeding Banking Day), and only in this event, interest shall continue to accrue on the redemption amount from the due date (inclusive) until the date of redemption of the Notes (exclusive) at the default rate of interest established by law.
- (6) Banking Day. "Banking Day" shall:
- (i) where the Global Note is deposited with Clearstream Banking AG, Frankfurt am Main, ("CBF"), be a day (other than a Saturday or a Sunday) on which CBF and banks settle payments in Frankfurt am Main, or
- (ii) where the Global Note is deposited with a depositary common to Clearstream Banking S.A., Luxembourg, ("CBL") and Euroclear Bank SA/NV, as operator of the Euroclear System ("Euroclear") be a day (other than a Saturday or a Sunday) on which such depositary, or
- (iii) where the Global Note is deposited with any other recognised clearing system, be a day (other than a Saturday or a Sunday) on which such clearing system, as well as
 - (a) where the Notes are denominated in a currency other than euro, banks (1) in London and (2) if applicable, in Frankfurt am Main, and (3) in the principal financial centre (in the case of Australia, in both principal financial centres) of the country of the currency in which the Notes are denominated; or
 - (b) where the Notes are denominated in euro, all relevant parts of the Trans-European Automated Real-time Gross Settlement Express Transfer System 2 ("TARGET2"),

settle(s) payments.

(7) Maturity Date is not a Banking Day. If the maturity date (as specified on the face of the Global Note) is not a Banking Day, then the holders of Notes shall not be entitled to payment until the next succeeding day which is a Banking Day and shall not be entitled to any interest or other payment in respect of such delay.

§ 6 Agent of the Issuer

Each of the Issuing and Paying Agent and the Calculation Agent, each as specified on the face of the Global Note, in such capacity is acting solely as agent of the Issuer and no relationship of agency or trust exists between the Issuing and Paying Agent and the Calculation Agent and the holders of the Notes. The Issuer may replace the Issuing and Paying Agent and the Calculation Agent by another agent by giving notice in accordance with § 8 hereof.

§ 7 Taxation

All payments on the Notes are to be made without deduction or withholding at source of any taxes, duties or governmental charges imposed, levied or collected by or in or on behalf of [the United Kingdom of Great Britain and Northern Ireland]² [the Federal Republic of Germany]³ or by or on behalf of any political subdivision or authority therein having power to tax ("Withholding Taxes"), unless such deduction or withholding at source is required by law.

In such event, the Issuer shall pay such additional amounts as may be necessary in order that the net amounts received by the holders of Notes after such deduction or withholding shall equal the respective amounts which would have been receivable had no such deduction or withholding at source been required. No such additional amounts shall, however, be payable on account of any taxes, duties or governmental charges which:

- (a) are payable by any person acting as custodian bank or collecting agent on behalf of a holder of a Note, or otherwise in any manner which does not constitute a deduction or withholding by the Issuer from payment of principal or interest made by it, or
- (b) are payable otherwise than by deduction or withholding at source from payments on the Notes, or are payable by reason of the holder of a Note having, or having had, some personal or business connection with [the United Kingdom of Great Britain and Northern Ireland]² [the Federal Republic of Germany]³ and not merely by reason of the fact that payments on the Notes are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, [the United Kingdom of Great Britain and Northern Ireland]² [the Federal Republic of Germany]³ or
- (c) are deducted or withheld pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty or understanding relating to such taxation and to which [the United Kingdom of Great Britain and Northern Ireland]² [the Federal Republic of Germany]³ or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty or understanding, or
- (d) are payable by reason of a change of law that becomes effective more than 15 days after the relevant payment becomes due or is duly provided for, whichever occurs later.

§ 8 Notices

² In case of Notes issued by Landesbank Hessen-Thüringen Girozentrale acting through its London branch.

³ In case of Notes issued by Landesbank Hessen-Thüringen Girozentrale acting through its office in Frankfurt am Main.

All notices relating to the Notes shall be made by way of notification through the Clearing System. Any such notice shall become effective for all purposes on the seventh day following the day on which the notice was delivered to the Clearing System. If all holders of Notes are known to the Issuer by name and address, such notices may, additionally or in lieu of the publication or notification pursuant to sentence 1, also be given directly to the holders of the Notes. If the Notes are listed on any stock exchange all notices relating to the Notes shall be made in accordance with the rules and regulations of such stock exchange.

§ 9 Presentation Period

The presentation period provided in § 801(1), sentence 1, German Civil Code (*Bürgerliches Gesetzbuch*) shall, in respect of the Notes, be reduced to five years.

§ 10 Applicable Law, Place of Jurisdiction, Enforcement

- (1) Applicable Law. The Notes shall be governed by, and construed in accordance with, German law.
- (2) *Place of Jurisdiction.* Non-Exclusive place of jurisdiction for all legal disputes arising out of or in connection with these Notes shall be Frankfurt am Main.
- (3) Enforcement. Any Holder of Notes may in any proceedings against the Issuer or to which such Holder and the Issuer are parties, protect and enforce in his own name his rights arising under such Notes on the basis of (i) a statement issued by the Custodian with whom such Holder maintains a securities account in respect of the Notes (a) stating the full name and address of the Holder. (b) specifying the aggregate principal amount of Notes credited to such securities account on the date of such statement and (c) confirming that the Custodian has given written notice to the Clearing System containing the information pursuant to (a) and (b) which has been confirmed by the Clearing System and (ii) a copy of the Note in global form certified as being a true copy by a duly authorised officer of the Clearing System or a depositary of the Clearing System, without the need for production in such proceedings of the actual records or the global note representing the Notes. For purposes of the foregoing, "Custodian" means any bank or other financial institution of recognised standing authorised to engage in securities custody business with which the Holder maintains a securities account in respect of the Notes and which maintains an account with the Clearing System, and includes the Clearing System. Each Holder may, without prejudice to the foregoing, protect and enforce his rights under these Notes also in any other way which is admitted in proceedings in the country in which the proceedings take place.

Appendix 3a Form of Global Note (CGN)

ISIN ◆ Common Code ◆

LANDESBANK HESSEN-THÜRINGEN GIROZENTRALE [acting through its London branch]¹ (the "Issuer")

Global Note No.: • / Series No.: •

1.	Aggregate principal amount:	•
2.	Currency:	•
3.	Number of Notes:	•
4.	Denomination of each Note:	•
5.	Redemption amount ² :	Principal Amount ³
		●% of Principal Amount ⁴
6.	Fixed interest notes ⁵ :	yes □
		Interest rate: ●% p.a.
7.	Floating interest notes ⁶ :	yes □
		Reference rate: EONIA \square EURIBOR \square LIBOR \square
		€STR□
		Interest commencement date: •
		Interest payment dates: ●
		Margin: ∙% p.a.
		Business day convention: ●
		Day Count Fraction:●
8.	Amount of Interest payable	
	at redemption on Maturity Date:	•
9.	Rate of discount:	●% p.a.
10.	Rate of accumulation:	● % p.a.
		Day Count Fraction: ●
	Value date:	•
	Maturity date:	•
	Issuing and Paying Agent:	Citibank, N.A. London Branch □ [Other] ⁷ □
14.	Calculation Agent:	

¹ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

² Any Notes, the proceeds of which are to be accepted by the Issuer in the United Kingdom of Great Britain and Northern Ireland, shall (a) have a redemption value of not less than GBP 100,000 (or an amount of equivalent value denominated wholly or partly in a currency other than Pound sterling), and (b) provide that no part of any such Note may be transferred unless the redemption value of that part is not less than GBP 100,000 (or such an equivalent amount).

³ Complete for discounted Notes and specify the rate of discount in item 9.

⁴ Complete for accumulated Notes and specify the rate of accumulation in item 10.

⁵ Complete for Notes bearing fixed interest and specify the amount of interest payable upon redemption in item 8.

⁶ Complete for Notes bearing floating interest.

⁷ If Issuing and Paying Agent is not Citibank, N.A., London Branch specify other Issuing and Paying Agent.

	shall be the Issuing and Paying Agent unless specified otherwise	[Other] ⁸ □
15.	Clearing System ⁹ :	CBF \Box CBL \Box Euroclear \Box [Other Clearing System] \Box
Cor Hes	ditions of the Notes annexed to this Gesen-Thüringen Girozentrale[, acting thro	entioned Notes. The Notes are subject to the Terms and Global Note (the "Conditions"). Accordingly, Landesbank ough its London branch] ¹⁰ undertakes to pay to, or to the amounts payable in respect of the Notes represented by ditions.
(Pla	ice/Date)	
		LANDESBANK HESSEN-THÜRINGEN GIROZENTRALE [, acting through its London branch] ¹¹
Citi	bank, N.A., London Branch	
	out recourse, warranty or liability for authentication purposes only	
(Au	thentication Signature)	

⁸ If Calculation Agent is not the Issuing and Paying Agent specify other Calculation Agent.

⁹ Indicate the relevant Clearing System.

¹⁰ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

¹¹ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

Appendix 3b Form of Global Note (NGN)

ISIN ◆ Common Code ◆

LANDESBANK HESSEN-THÜRINGEN GIROZENTRALE [acting through its London branch]¹ (the "Issuer")

Global Note No.: • / Series No.: •

1. Aggregate principal amount:

The aggregate principal 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 means the records that each ICSD holds for its customers which reflect the amount of such customer's interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by this Global Note and, for these purposes, a statement issued by an ICSD stating the amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or payment of an instalment or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by this Global Note, the Issuer shall procure that details of any redemption, payment or purchase and cancellation (as the case may be) in respect of this Global Note shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by this Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled or by the aggregate amount of such instalment so paid.

2.	Currency:	•		
3.	Number of Notes:	•		
4.	Denomination of each Note:	•		
5.	Redemption amount ² :	Principal Amount ³		
		●% of Principal Amount⁴		
6.	Fixed interest notes ⁵ :	yes □		
		Interest rate: ∙% p.a.		
7.	Floating interest notes6:	yes □		
		Reference rate: EONIA □	EURIBOR □	LIBOR □
		€STR □		
		Interest commencement da	te: ∙	
		Interest payment dates: •		
		Margin: ∙% p.a.		

-

¹ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

² Any Notes, the proceeds of which are to be accepted by the Issuer in the United Kingdom of Great Britain and Northern Ireland, shall (a) have a redemption value of not less than GBP 100,000 (or an amount of equivalent value denominated wholly or partly in a currency other than Pound sterling), and (b) provide that no part of any such Note may be transferred unless the redemption value of that part is not less than GBP 100,000 (or such an equivalent amount).

³ Complete for discounted Notes and specify the rate of discount in item 9.

⁴ Complete for accumulated Notes and specify the rate of accumulation in item 10.

⁵ Complete for Notes bearing fixed interest and specify the amount of interest payable upon redemption in item 8.

⁶ Complete for Notes bearing floating interest.

		Business day convention: •
		Day Count Fraction:●
8.	Amount of Interest payable	
	at redemption on Maturity Date:	•
9.	Rate of discount:	●% p.a.
10.	Rate of accumulation:	•% p.a.
		Day Count Fraction:●
11.	Value date:	•
12.	Maturity date:	•
13.	Issuing and Paying Agent:	Citibank, N.A., London Branch □ [Other] ⁷ □
14.	Calculation Agent: shall be the Issuing and Paying Agent unless specified otherwise	[Other] ⁸ □
15.	Clearing System ⁹ :	CBF □ CBL □ Euroclear □ [Other Clearing System] □
16.	Intended to be held in a manner	
	which would allow Eurosystem	
	eligibility:	[yes]/[no] [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 recognized 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.] [Whilst the designation is specified as "no" at the date of this Global Note, 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.]
Con Hes	ditions of the Notes annexed to this osen-Thüringen Girozentrale [, acting thr	entioned Notes. The Notes are subject to the Terms and Global Note (the "Conditions"). Accordingly, Landesbank ough its London branch] ¹⁰ undertakes to pay to, or to the amounts payable in respect of the Notes represented by ditions.
	s Global Note shall require to be effectua Ds in order to be valid.	tted by the entity appointed as common safekeeper by the
(Pla	ice/Date)	
		LANDESBANK HESSEN-THÜRINGEN GIROZENTRALE [, acting through its London branch] ¹¹

⁷ If Issuing and Paying Agent is not Citibank, N.A., London Branch specify other Issuing and Paying Agent.

⁸ If Calculation Agent is not the Issuing and Paying Agent specify other Calculation Agent.

⁹ Indicate the relevant Clearing System.

¹⁰ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

 $^{^{\}rm 11}$ Delete, if Landesbank Hessen-Thüringen Girozentrale does not act through its London branch.

·	
Citibank, N.A., London Branch	
without recourse, warranty or liability and for authentication purposes only	
(Authentication Signature)	
Effectuated without recourse, warranty or liability by	
as common safekeeper	

Appendix 4a FORM OF GLOBAL CD

WKN ISIN Common Code

Negotiable Fixed Rate Global Non-London Certificate of Deposit Landesbank Hessen-Thüringen Girozentrale

Global Bearer Certificate No. [•]/Series No. [•]

Maturity Date: Value Date:

Specified Currency: Number of Certificates:

Aggregate Principal Amount: Denomination:

(words and figures)

Relevant Financial Centre: Redemption Amount: at par
Fixed Interest Rate: Interest Commencement Date:

•% per annum (words and figures)

Floating Interest Rate:Interest Commencement Date:Reference Rate:Interest Payment Date(s):Margin: ●% p.a.Business day convention:

Day Count Fraction: Calculation Agent:

Paying Agents: Clearing System:

- 1. Landesbank Hessen-Thüringen Girozentrale (the **"Issuer"**) certifies that a sum equivalent to the above Aggregate Principal Amount has been deposited with it at the above address upon terms that the Aggregate Principal Amount specified above is payable to bearer of this Global Certificate on the Maturity Date specified above (the **"Certificates"**).
- 2. In the case of Fixed Rate Certificates:

The deposit represented by this Global Certificate bears fixed rate interest at the above rate per cent. per annum, calculated on a 360 day year basis (or, in the case of a Global Certificate denominated in Pound sterling, 365 days) from the date hereof to the Maturity Date and shall be payable on the above Maturity Date.

In the case of Floating Rate Certificates:

(a) In the case of EONIA the following applies:

In the case of Certificates bearing a floating rate of interest depending on the EONIA reference rate, the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will be, except as provided below, be the rate of return of a daily compound interest investment with the arithmetic mean of the daily rates of the day-to-day Euro-zone interbank euro money market as reference rate plus/minus the Margin, if any, and will be calculated by the Calculation Agent on the last TARGET Business Day (as defined below) of the relevant Interest Period, as follows, and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards:

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

where

"do", for any Interest Period, is the number of TARGET Business Days in the relevant Interest Period:

"i" is a series of whole numbers from one to d_o , each representing the relevant TARGET Business Day in chronological order from, and including, the first TARGET Business Day, in the relevant Interest Period;

"EONIA_i", for any day "i" in the relevant Interest Period, is a reference rate equal to the overnight rate as calculated by the European Central Bank and appearing on the Screen Page (as defined below) in respect of that day;

"n_i" is the number of calendar days in the relevant Interest Period on which the rate is EONIA;

"d" is the number of calendar days in the relevant Interest Period.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from (and including) each Interest Payment Date to (but excluding) the following Interest Payment Date.

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the last TARGET Business Day of the relevant Interest Period.

"Screen Page" means Reuters screen page Eonia or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or if no such quotation appears as at such time, the Calculation Agent shall request the principal office of each of the Reference Banks (as defined below) in the Euro-Zone to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits of the relevant currency for the relevant Interest Period to leading banks in the interbank market of the Euro-Zone at approximately 6.00 p.m. (Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one tenthousandth of a percentage point, with 0.00005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (a), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such

offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

As used in this § 2 (a), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

(b) In the case of EURIBOR the following applies:

In the case of Certificates bearing a floating rate of interest depending on the EURIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for that Interest Period which appears on the Screen Page (as defined below) as of 11:00 a.m. (Brussels time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the second TARGET Business Day prior to the commencement of the relevant Interest Period.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

"Screen Page" means Reuters screen page EURIBOR01 or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation of the Reference Rate appears as at such time and provided that no Rate Replacement Event pursuant to clause 2(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the interbank market in the Euro-Zone at approximately 11.00 a. m. (Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the

Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (b), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 2 (b), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

(c) In the case of LIBOR the following applies:

In the case of Certificates bearing a floating rate of interest depending on the LIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for that Interest Period which appears on the Screen Page as of 11:00 a.m. (London time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a London Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the first London Business Day prior to the commencement of the relevant Interest Period. "London Business Day" means a day which is a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in London.

"Screen Page" means Reuters screen page LIBOR01 or LIBOR02, as the case may be, or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation of the Reference Rate appears as at such time and provided that no Rate Replacement Event pursuant to clause 2(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the London interbank market at approximately 11.00 a. m. (London time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period

shall be the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the London interbank market, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (London time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (c), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 2 (c), "Reference Banks" means four major banks in the London interbank market selected by the Calculation Agent in consultation with the Issuer.

- (d) In the case of €STR the following applies: [to be inserted once agreed]
- (e) If the Issuer determines (in consultation with the Calculation Agent) that a Rate Replacement Event has occurred on or prior to an Interest Determination Date, the Relevant Determining Party shall determine and inform the Issuer, if relevant, and the Calculation Agent of (i) the Replacement Rate, (ii) the Adjustment Spread, if any, and (iii) the Replacement Rate Adjustments (each as defined below) for purposes of determining the Rate of Interest for the Interest Period related to that Interest Determination Date and each Interest Period thereafter (subject to the subsequent occurrence of any further Rate Replacement Event). The Certificates shall be deemed to have been amended by the Replacement Rate Adjustments with effect from (and including) the relevant Interest Determination Date (including any amendment of such Interest Determination Date if so provided by the Replacement Rate Adjustments). The Rate of Interest shall then be the Replacement Rate (as defined below) adjusted by the Adjustment Spread, if any, plus/minus the Margin, if any.

The Issuer shall notify the Holders pursuant to clause 10 as soon as practicable (*unverzüglich*) after such determination of the Replacement Rate, the Adjustment Spread, if any, and the Replacement Rate Adjustments. In addition, the Issuer shall request the Clearing System to supplement or amend the Certificates to reflect the Replacement Rate Adjustments by attaching the documents submitted to the Global Note in an appropriate manner.

"Rate Replacement Event" means, with respect to the Reference Rate each of the following events:

- (i) the Reference Rate not having been published on the Screen Page for the last ten Business Days prior to and including the relevant Interest Determination Date; or
- (ii)the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate on which (x) the administrator will cease to publish the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate), or (y) the Reference Rate will permanently or indefinitely be discontinued; or
- (iii) the occurrence of the date, as publicly announced by the regulatory supervisor for the

administrator of the Reference Rate, the central bank for the Specified Currency, an insolvency official with jurisdiction over the administrator for the Reference Rate, a resolution authority with jurisdiction over the administrator for the Reference Rate or a court (unappealable final decision) or an entity with similar insolvency or resolution authority over the administrator for the Reference Rate, on which the administrator of the Reference Rate has ceased or will cease to provide the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate); or

- (iv) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the supervisor of the administrator of the Reference Rate, from which the Reference Rate will be prohibited from being used; or
- (v) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate, of a material change in the methodology of determining the Reference Rate; or
- (vi) the publication of a notice by the Issuer pursuant to clause 10 that it has become unlawful for the Issuer, the Calculation Agent or any Paying Agent to calculate any Rate of Interest using the Reference Rate.
- **"Replacement Rate"** means a publicly available substitute, successor, alternative or other rate designed to be referenced by financial instruments or contracts, including the Certificates, to determine an amount payable under such financial instruments or contracts, including, but not limited to, an amount of interest. In determining the Replacement Rate, the Relevant Guidance (as defined below) shall be taken into account.
- "Adjustment Spread" means a spread (which may be positive or negative), or the formula or methodology for calculating a spread, which the Relevant Determining Party determines is required to be applied to the Replacement Rate to reduce or eliminate, to the extent reasonably practicable, any transfer of economic value between the Issuer and the holders of the Certificates that would otherwise arise as a result of the replacement of the Reference Rate against the Replacement Rate (including, but not limited to, as a result of the Replacement Rate being a risk-free rate). In determining the Adjustment Spread, the Relevant Guidance (as defined below) shall be taken into account.

"Relevant Determining Party" means

- (i) the Issuer if in its opinion the Replacement Rate is obvious and as such without any reasonable doubt determinable by an investor that is knowledgeable in the respective type of bonds, such as the Certificates; or
- (ii)failing which, an Independent Advisor, to be appointed by the Issuer at commercially reasonable terms, using reasonable endeavours, as its agent to make such determinations.
- "Independent Advisor" means an independent financial institution of international repute or any other independent advisor of recognised standing and with appropriate expertise.
- "Relevant Guidance" means (i) any legal or supervisory requirement applicable to the Issuer or the Certificates or, if none, (ii) any applicable requirement, recommendation or guidance of a Relevant Nominating Body or, if none, (iii) any relevant recommendation or guidance by industry bodies (including by ISDA), or, if none, (iv) any relevant market practice.

"Relevant Nominating Body" means

- (i) the central bank for the relevant currency, or any central bank or other supervisor which is responsible for supervising either the Replacement Rate or the administrator of the Replacement Rate; or
- (ii) any working group or committee officially endorsed, sponsored or convened by or chaired or co-chaired by (w) the central bank for the relevant currency, (x) any central bank or other supervisor which is responsible for supervising either the Reference Rate or the administrator of the Reference Rate, (y) a group of the aforementioned central banks or other supervisors or (z) the Financial Stability Board or any part thereof.
- "Replacement Rate Adjustments" means such adjustments to the Certificates as are

determined consequential to enable the operation of the Replacement Rate (which may include, without limitation, adjustments to the applicable business day convention, the definition of Business Day, the Interest Determination Date, the Day Count Fraction and any methodology or definition for obtaining or calculating the Replacement Rate). In determining any Replacement Rate Adjustments the Relevant Guidance shall be taken in account.

If a Replacement Rate, an Adjustment Spread, if any, or the Replacement Rate Adjustments cannot be determined pursuant to the foregoing, the Reference Rate in respect of the relevant Interest Determination Date shall be the Reference Rate determined for the last preceding Interest Period. The Issuer will inform the Calculation Agent accordingly.

The Calculation Agent will, on or as soon as practicable after each time at which the Rate of Interest is to be determined, calculate the amount of interest (the "Interest Amount") payable on the Certificates for the relevant Interest Period. Each Interest Amount shall be calculated by applying the Rate of Interest and the Day Count Fraction specified above to the denomination of the Certificates and rounding the resultant figure to the nearest unit of the relevant currency, with 0.5 of such unit being rounded upwards. The Calculation Agent will cause the Rate of Interest, each Interest Amount for each Interest Period, each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and to the holders of the Certificates in accordance with § 10 as soon as possible after their determination. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to the holders of the Certificates in accordance with § 10.

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this § 2 by the Calculation Agent shall (in the absence of manifest error) be binding on the Issuer, the Issuing and Paying Agent and the holders of the Certificates.

- 3. Payments of principal and interest will be made upon presentation and, in the case of principal, surrender of this Global Certificate, through an Authorised Institution, to Citibank, N.A., London Branch, Citigroup Centre 2, 33 Canada Square, Canary Wharf, London E14 5LB, United Kingdom, acting as Issuing and Paying Agent, or the Issuer at its Offenbach office, Strahlenberger Straße 15, 63067 Offenbach am Main, Federal Republic of Germany, acting as Paying Agent. Such payment shall be made by telegraphic transfer on a bank account, which is to be specified, in the above Relevant Financial Centre.
- 4. All payments on the Global Certificate are to be made without deduction or withholding at source of any taxes, duties or governmental charges imposed, levied or collected by or in or on behalf of the Federal Republic of Germany or by or on behalf of any political subdivision or authority therein having power to tax ("Withholding Taxes"), unless such deduction or withholding at source is required by law.
 In such event, the Issuer shall pay such additional amounts as may be necessary in order that the net amounts received by the holders of the Global Certificate after such deduction or withholding shall equal the respective amounts which would have been receivable had no such deduction or withholding at source been required. No such additional amounts shall, however, be payable on account of any taxes, duties or governmental charges which:
- (a) are payable by any person acting as custodian bank or collecting agent on behalf of a holder of the Global Certificate, or otherwise in any manner which does not constitute a deduction or withholding by the Issuer from payment of principal or interest made by it, or
- (b) are payable otherwise than by deduction or withholding at source from payments on the Global Certificate, or are payable by reason of the holder of the Global Certificate having, or having had, some personal or business connection with the Federal Republic of Germany and not merely by reason of the fact that payments on the Global Certificate are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, the Federal Republic of Germany or

- (c) are deducted or withheld pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty or understanding relating to such taxation and to which the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty or understanding, or
- (d) are payable by reason of a change of law that becomes effective more than 15 days after the relevant payment becomes due or is duly provided for, whichever occurs later.
- 5. The obligations under this Global Certificate constitute unsecured and unsubordinated obligations of the Issuer ranking pari passu among themselves and pari passu with all other unsecured and unsubordinated obligations of the Issuer other than obligations which are preferred by virtue of mandatory provisions of law.
- 6. This Global Certificate is issued in respect of an issue of certificates of deposit of the Issuer in the aggregate Principal Amount specified above.
- 7. This Global Certificate shall not be validly issued unless authenticated by the Citibank, N.A., London Branch, acting as Issuing and Paying Agent.
- 8. This Global Certificate and the obligations represented hereby shall be governed by and construed in accordance with German law.
- 9. The presentation period provided in § 801(1) sentence 1 German Civil Code (*Bürgerliches Gesetzbuch*) is reduced to five years for this Global Certificate.
- All notices relating to this Global Certificate shall be made by way of notification through the Clearing System. Any such notice shall become effective for all purposes on the seventh day following the day on which the notice was delivered to the Clearing System. If all holders of this Global Certificate are known to the Issuer by name and address, such notices may, additionally or in lieu of the publication or notification pursuant to sentence 1, also be given directly to the holders of this Global Certificate. If the Certificates are listed on any stock exchange all notices relating to the Certificates shall be made in accordance with the rules and regulations of such stock exchange.
- 11. The District Court (*Landgericht*) in Frankfurt am Main shall have non-exclusive jurisdiction for any action or other legal proceedings ("**Proceedings**") arising out of or in connection with this Global Certificate.

Authenticated by	For and on behalf of
Citibank, N.A., London Branch	Landesbank Hessen-Thüringen Girozentrale
without recourse, warranty or liability and for authentication purposes only	
Authorised Signatory	Authorised Signatory
Authorised Signatory	Authorised Signatory

FIXED RATE INTEREST PAYMENT

Maturity

Date	Amount	Payment made on	Initials

(to be completed at time of issue)

Appendix 4b FORM OF GLOBAL CD (NGN)

WKN ISIN Common Code

Negotiable Fixed Rate Global Non-London Certificate of Deposit Landesbank Hessen-Thüringen Girozentrale

Global Bearer Certificate No. [•]/Series No. [•]

Maturity Date: Value Date:

Specified Currency: Number of Certificates:

Aggregate Principal Amount: Denomination:

(words and figures)

Relevant Financial Centre: Redemption Amount: at par
<u>Fixed Interest Rate:</u> Interest Commencement Date:

% per annum (words and figures)

Paying Agents: Clearing System:

Floating Interest Rate:Interest Commencement Date:Reference Rate: ●Interest Payment Date(s):Margin: ●% p.a.Business day convention: ●Day Count Fraction: ●Calculation Agent: ●

Intended to be held in a manner which would allow Eurosystem eligibility:

[yes]/[no]

[Note that the designation "yes" simply means that the CDs are intended upon issue to be deposited with one of the ICSDs as common safekeeper and does not necessarily mean that the CDs will be recognized 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.],

[Whilst the designation is specified as "no" at the date of this Global Certificate, should the Eurosystem eligibility criteria be amended in the future such that the CDs are capable of meeting them the CDs may then be deposited with one of the ICSDs as common safekeeper. Note that this does not necessarily mean that the CDs 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.]

1. Landesbank Hessen-Thüringen Girozentrale (the **"Issuer"**) certifies that a sum equivalent to the above Aggregate Principal Amount has been deposited with it at the above address upon terms that the Aggregate Principal Amount specified above is payable to bearer of this Global Certificate on the Maturity Date specified above (the **"Certificates"**).

2. In the case of Fixed Rate Certificates:

The deposit represented by this Global Certificate bears fixed rate interest at the above rate per cent. per annum, calculated on a 360 day year basis (or, in the case of a Global Certificate denominated in Pound sterling, 365 days) from the date hereof to the Maturity Date and shall be payable on the above Maturity Date.

In the case of Floating Rate Certificates:

(a) In the case of EONIA the following applies:

In the case of Certificates bearing a floating rate of interest depending on the EONIA reference rate, the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will be, except as provided below, be the rate of return of a daily compound interest investment with the arithmetic mean of the daily rates of the day-to-day Euro-zone interbank euro money market as reference rate plus/minus the Margin, if any, and will be calculated by the Calculation Agent on the last TARGET Business Day (as defined below) of the relevant Interest Period, as follows, and the resulting percentage will be rounded, if necessary, to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards:

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

where

"do", for any Interest Period, is the number of TARGET Business Days in the relevant Interest Period:

"i" is a series of whole numbers from one to do, each representing the relevant TARGET Business Day in chronological order from, and including, the first TARGET Business Day, in the relevant Interest Period;

"EONIA_i", for any day "i" in the relevant Interest Period, is a reference rate equal to the overnight rate as calculated by the European Central Bank and appearing on the Screen Page (as defined below) in respect of that day;

"n_i" is the number of calendar days in the relevant Interest Period on which the rate is EONIA_i;

"d" is the number of calendar days in the relevant Interest Period.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from (and including) each Interest Payment Date to (but excluding) the following Interest Payment Date.

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the last TARGET Business Day of the relevant Interest Period.

"Screen Page" means Reuters screen page Eonia or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or if no such quotation appears as at such time, the Calculation Agent shall request the principal office of each of the Reference Banks (as defined below) in the Euro-Zone to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits of the relevant currency for the relevant Interest Period to leading banks in the interbank market of the Euro-Zone at approximately 6.00 p.m.

(Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one tenthousandth of a percentage point, with 0.00005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one ten-thousandth of a percentage point, with 0.00005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (a), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

As used in this § 2 (a), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

(b) In the case of EURIBOR the following applies:

In the case of Certificates bearing a floating rate of interest depending on the EURIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for that Interest Period which appears on the Screen Page (as defined below) as of 11:00 a.m. (Brussels time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a TARGET Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the second TARGET Business Day prior to the commencement of the relevant Interest Period.

"TARGET Business Day" means a day on which all relevant parts of TARGET (Trans-European Automated Real-time Gross Settlement Express Transfer System 2) are open to effect payments.

"Screen Page" means Reuters screen page EURIBOR01 or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation of the Reference rate appears as at such time and provided that no Rate Replacement Event pursuant to clause 2(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the interbank market in the Euro-Zone at approximately 11.00 a. m. (Brussels time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one thousandth of a percentage point, with 0.0005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the interbank market in the Euro-Zone, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (b), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Euro-Zone" means the region comprised of those member states of the European Union that have adopted, or will have adopted from time to time, the single currency in accordance with the Treaty establishing the European Community (signed in Rome on 25 March 1957), as amended by the Treaty on European Union (signed in Maastricht on 7 February 1992), the Amsterdam Treaty of 2 October 1997 and the Treaty of Lisbon of 13 December 2007, as further amended from time to time.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 2 (b), "Reference Banks" means four major banks in the interbank market in the Euro-Zone selected by the Calculation Agent in consultation with the Issuer.

(c) In the case of LIBOR the following applies:

In the case of Certificates bearing a floating rate of interest depending on the LIBOR reference rate (the "Reference Rate"), the rate of interest (the "Rate of Interest") for each Interest Period (as defined below) will, except as provided below, be the offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for that Interest Period which appears on the Screen Page as of 11:00 a.m. (London time) on the Interest Determination Date (as defined below) plus/minus the Margin, if any, all as determined by the Calculation Agent.

"Interest Period" means each period from (and including) the Interest Commencement Date to (but excluding) the first Interest Payment Date and from each Interest Payment Date (and including) to the following Interest Payment Date (but excluding).

If any Interest Payment Date would otherwise fall on a day which is not a London Business Day it shall be postponed in accordance with the convention specified above.

"Interest Determination Date" means the first London Business Day prior to the commencement of the relevant Interest Period. "London Business Day" means a day which is a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in London.

"Screen Page" means Reuters screen page LIBOR01 or LIBOR02, as the case may be, or the relevant successor page on that service or on any other service as may be nominated as the information vendor for the purposes of displaying rates or prices comparable to the relevant offered quotation.

If the Screen Page is not available or no quotation of the Reference Rate appears as at such time and provided that no Rate Replacement Event pursuant to clause 2(e) below has occurred, the Calculation Agent shall request each of the Reference Banks (as defined below) to provide the Calculation Agent with its offered quotation (expressed as a percentage rate *per annum*) for deposits in the relevant currency for the relevant Interest Period and in a representative amount to prime banks in the London interbank market at approximately 11.00 a. m. (London time) on the Interest Determination Date. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of such offered quotations plus/minus the Margin, if any, all as determined by the Calculation Agent.

If on any Interest Determination Date only one or none of the Reference Banks provides the Calculation Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate *per annum* which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the nearest one hundred-thousandth of a percentage point, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Calculation Agent by major banks in the London interbank market, selected by the Calculation Agent acting in good faith, at which such banks offer, as at 11.00 a.m. (London time) on the relevant Interest Determination Date, loans in the relevant currency for the relevant Interest Period and in a representative amount to leading European banks plus/minus the Margin, if any. If the Rate of Interest cannot be determined in accordance with the foregoing provisions of this subparagraph (c), the Rate of Interest shall be the offered quotation on the Screen Page, as described above, on the last day preceding the Interest Determination Date on which such offered quotation was displayed plus/minus the Margin, if any, all as determined by the Calculation Agent.

"representative amount" means an amount that is representative for a single transaction in the relevant market at the relevant time.

As used in this § 2 (c), "Reference Banks" means four major banks in the London interbank market selected by the Calculation Agent in consultation with the Issuer.

(d) In the case of €STR the following applies: [to be inserted once agreed]

(e) If the Issuer determines (in consultation with the Calculation Agent) that a Rate Replacement Event has occurred on or prior to an Interest Determination Date, the Relevant Determining Party shall determine and inform the Issuer, if relevant, and the Calculation Agent of (i) the Replacement Rate, (ii) the Adjustment Spread, if any, and (iii) the Replacement Rate Adjustments (each as defined below) for purposes of determining the Rate of Interest for the Interest Period related to that Interest Determination Date and each Interest Period thereafter (subject to the subsequent occurrence of any further Rate Replacement Event). The Certificates shall be deemed to have been amended by the Replacement Rate Adjustments with effect from (and including) the relevant Interest Determination Date (including any amendment of such Interest Determination Date if so provided by the Replacement Rate

Adjustments). The Rate of Interest shall then be the Replacement Rate (as defined below) adjusted by the Adjustment Spread, if any, plus/minus the Margin, if any.

The Issuer shall notify the Holders pursuant to clause 10 as soon as practicable (*unverzüglich*) after such determination of the Replacement Rate, the Adjustment Spread, if any, and the Replacement Rate Adjustments. In addition, the Issuer shall request the common depositary on behalf of both ICSDs to supplement or amend the Certificates to reflect the Replacement Rate Adjustments by attaching the documents submitted to the Global Note in an appropriate manner.

"Rate Replacement Event" means, with respect to the Reference Rate each of the following events:

- (i) the Reference Rate not having been published on the Screen Page for the last ten Business Days prior to and including the relevant Interest Determination Date; or
- (ii)the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate on which (x) the administrator will cease to publish the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate), or (y) the Reference Rate will permanently or indefinitely be discontinued; or
- (iii) the occurrence of the date, as publicly announced by the regulatory supervisor for the administrator of the Reference Rate, the central bank for the Specified Currency, an insolvency official with jurisdiction over the administrator for the Reference Rate, a resolution authority with jurisdiction over the administrator for the Reference Rate or a court (unappealable final decision) or an entity with similar insolvency or resolution authority over the administrator for the Reference Rate, on which the administrator of the Reference Rate has ceased or will cease to provide the Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue the publication of the Reference Rate); or
- (iv) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the supervisor of the administrator of the Reference Rate, from which the Reference Rate will be prohibited from being used; or
- (v) the occurrence of the date, as publicly announced by or, as the case may be, determineable based upon the public announcement of the administrator of the Reference Rate, of a material change in the methodology of determining the Reference Rate; or
- (vi) the publication of a notice by the Issuer pursuant to clause 10 that it has become unlawful for the Issuer, the Calculation Agent or any Paying Agent to calculate any Rate of Interest using the Reference Rate.
- **"Replacement Rate"** means a publicly available substitute, successor, alternative or other rate designed to be referenced by financial instruments or contracts, including the Certificates, to determine an amount payable under such financial instruments or contracts, including, but not limited to, an amount of interest. In determining the Replacement Rate, the Relevant Guidance (as defined below) shall be taken into account.
- "Adjustment Spread" means a spread (which may be positive or negative), or the formula or methodology for calculating a spread, which the Relevant Determining Party determines is required to be applied to the Replacement Rate to reduce or eliminate, to the extent reasonably practicable, any transfer of economic value between the Issuer and the holders of the Certificates that would otherwise arise as a result of the replacement of the Reference Rate against the Replacement Rate (including, but not limited to, as a result of the Replacement Rate being a risk-free rate). In determining the Adjustment Spread, the Relevant Guidance (as defined below) shall be taken into account.

"Relevant Determining Party" means

(i) the Issuer if in its opinion the Replacement Rate is obvious and as such without any reasonable doubt determinable by an investor that is knowledgeable in the respective type of bonds, such as the Certificates; or

(ii)failing which, an Independent Advisor, to be appointed by the Issuer at commercially reasonable terms, using reasonable endeavours, as its agent to make such determinations.

"Independent Advisor" means an independent financial institution of international repute or any other independent advisor of recognised standing and with appropriate expertise.

"Relevant Guidance" means (i) any legal or supervisory requirement applicable to the Issuer or the Certificates or, if none, (ii) any applicable requirement, recommendation or guidance of a Relevant Nominating Body or, if none, (iii) any relevant recommendation or guidance by industry bodies (including by ISDA), or, if none, (iv) any relevant market practice.

"Relevant Nominating Body" means

- (i) the central bank for the relevant currency, or any central bank or other supervisor which is responsible for supervising either the Replacement Rate or the administrator of the Replacement Rate; or
- (ii) any working group or committee officially endorsed, sponsored or convened by or chaired or co-chaired by (w) the central bank for the relevant currency, (x) any central bank or other supervisor which is responsible for supervising either the Reference Rate or the administrator of the Reference Rate, (y) a group of the aforementioned central banks or other supervisors or (z) the Financial Stability Board or any part thereof.

"Replacement Rate Adjustments" means such adjustments to the Certificates as are determined consequential to enable the operation of the Replacement Rate (which may include, without limitation, adjustments to the applicable business day convention, the definition of Business Day, the Interest Determination Date, the Day Count Fraction and any methodology or definition for obtaining or calculating the Replacement Rate). In determining any Replacement Rate Adjustments the Relevant Guidance shall be taken in account.

If a Replacement Rate, an Adjustment Spread, if any, or the Replacement Rate Adjustments cannot be determined pursuant to the foregoing, the Reference Rate in respect of the relevant Interest Determination Date shall be the Reference Rate determined for the last preceding Interest Period. The Issuer will inform the Calculation Agent accordingly.

The Calculation Agent will, on or as soon as practicable after each time at which the Rate of Interest is to be determined, calculate the amount of interest (the "Interest Amount") payable on the Certificates for the relevant Interest Period. Each Interest Amount shall be calculated by applying the Rate of Interest and the Day Count Fraction specified above to the denomination of the Certificates and rounding the resultant figure to the nearest unit of the relevant currency, with 0.5 of such unit being rounded upwards. The Calculation Agent will cause the Rate of Interest, each Interest Amount for each Interest Period, each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and to the holders of the Certificates in accordance with § 10 as soon as possible after their determination. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to the holders of the Certificates in accordance with § 10.

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this § 2 by the Calculation Agent shall (in the absence of manifest error) be binding on the Issuer, the Issuing and Paying Agent and the holders of the Certificates.

3. Payments of principal and interest will be made upon presentation and, in the case of principal, surrender of this Global Certificate, through an Authorised Institution, to Citibank, N.A., London Branch, Citigroup Centre 2, 33 Canada Square, Canary Wharf, London E14 5LB, United Kingdom, acting as Issuing and Paying Agent, or the Issuer at its Offenbach office, Strahlenberger Straße 15, 63067 Offenbach am Main, Federal Republic of Germany, acting as Paying Agent. Such payment shall be made by telegraphic transfer on a bank account, which is to be specified, in the above Relevant Financial Centre.

4. The aggregate principal amount of deposit represented by this Global Certificate 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 means the records that each ICSD holds for its customers which reflect the amount of such customer's interest in this Global Certificate) shall be conclusive evidence of the aggregate principal amount of deposit represented by this Global Certificate and, for these purposes, a statement issued by an ICSD stating the amount of deposit represented by this Global Certificate so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or payment of an instalment or interest being made in respect of, or purchase and cancellation of this Global Certificate, the Issuer shall procure that details of any redemption, payment or purchase and cancellation (as the case may be) in respect of this Global Certificate shall be entered *pro rata* in the records of the ICSDs and, upon any such entry being made, the principal amount of deposit represented by this Global Certificate recorded in the records of the ICSDs and represented by this Global Certificate shall be reduced by the aggregate principal amount of deposit represented by this Global Certificate so redeemed or purchased and cancelled or by the aggregate amount of such instalment so paid.

- 5. All payments on the Global Certificate are to be made without deduction or withholding at source of any taxes, duties or governmental charges imposed, levied or collected by or in or on behalf of the Federal Republic of Germany or by or on behalf of any political subdivision or authority therein having power to tax ("Withholding Taxes"), unless such deduction or withholding at source is required by law.
 In such event, the Issuer shall pay such additional amounts as may be necessary in order that the net amounts received by the holders of the Global Certificate after such deduction or withholding shall equal the respective amounts which would have been receivable had no such deduction or withholding at source been required. No such additional amounts shall, however, be payable on account of any taxes, duties or governmental charges which:
- (a) are payable by any person acting as custodian bank or collecting agent on behalf of a holder of the Global Certificate, or otherwise in any manner which does not constitute a deduction or withholding by the Issuer from payment of principal or interest made by it, or
- (b) are payable otherwise than by deduction or withholding at source from payments on the Global Certificate, or are payable by reason of the holder of the Global Certificate having, or having had, some personal or business connection with the Federal Republic of Germany and not merely by reason of the fact that payments on the Global Certificate are, or for purposes of taxation are deemed to be, derived from sources in, or are secured in, the Federal Republic of Germany or
- (c) are deducted or withheld pursuant to (i) any European Union Directive or Regulation concerning the taxation of interest income, or (ii) any international treaty or understanding relating to such taxation and to which the Federal Republic of Germany or the European Union is a party, or (iii) any provision of law implementing, or complying with, or introduced to conform with, such Directive, Regulation, treaty or understanding, or
- (d) are payable by reason of a change of law that becomes effective more than 15 days after the relevant payment becomes due or is duly provided for, whichever occurs later.
- 6. The obligations under this Global Certificate constitute unsecured and unsubordinated obligations of the Issuer ranking pari passu among themselves and pari passu with all other unsecured and unsubordinated obligations of the Issuer other than obligations which are preferred by virtue of mandatory provisions of law.
- 7. This Global Certificate is issued in respect of an issue of certificates of deposit of the Issuer in the aggregate Principal Amount specified above.

- 8. This Global Certificate shall not be validly issued unless authenticated by the Citibank, N.A., London Branch, acting as Issuing and Paying Agent. This Global Certificate shall require to be effectuated by the entity appointed as common safekeeper by the ICSDs in order to be valid.
- 9. This Global Certificate and the obligations represented hereby shall be governed by and construed in accordance with German law.
- 10. The presentation period provided in § 801(1) sentence 1 German Civil Code (*Bürgerliches Gesetzbuch*) is reduced to five years for this Global Certificate.
- All notices relating to this Global Certificate shall be made by way of notification through the Clearing System. Any such notice shall become effective for all purposes on the seventh day following the day on which the notice was delivered to the Clearing System. If all holders of this Global Certificate are known to the Issuer by name and address, such notices may, additionally or in lieu of the publication or notification pursuant to sentence 1, also be given directly to the holders of this Global Certificate. If the Certificates are listed on any stock exchange all notices relating to the Certificates shall be made in accordance with the rules and regulations of such stock exchange.
- 12. The District Court (*Landgericht*) in Frankfurt am Main shall have non-exclusive jurisdiction for any action or other legal proceedings ("**Proceedings**") arising out of or in connection with this Global Certificate.

Authenticated by	For and on behalf of
Citibank, N.A., London Branch	Landesbank Hessen-Thüringen Girozentrale
without recourse, warranty or liability and for authentication purposes only	
Authorised Signatory	Authorised Signatory
Authorised Signatory	Authorised Signatory
Effectuated without recourse, warranty or liability b	ру
as common safekeeper	

FIXED RATE INTEREST PAYMENT

Maturity

Date	Amount	Payment made on	Initials

(to be completed at time of issue)

ISSUER

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