

Northern Trust Global Services SE

Pillar 3 Regulatory Disclosures

As of and for the year ended December 31, 2022

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1 Introduction

1.1 Overview

The Pillar 3 framework was introduced by the Basel Committee on Banking Supervision (BCBS) in its banking reform package called Basel III in 2010, with the aim to promote market discipline through disclosure requirements for banks.

The disclosures framework has been implemented at the European level through Directive (EU) 2019/878 (CRD V), Regulation (EU) No. 575/2013 (Capital Requirements Regulation or CRR), with amendments made through Regulation (EU) No. 876/2019 (Capital Requirements Regulation 2 or CRR 2).

This document presents the qualitative and quantitative Pillar 3 disclosures for Northern Trust Global Services SE, referred to as “NTGS”, “NTGS SE” or “the Bank” and its branches.

Contact details of the Bank are available in [Annex C](#).

1.2 Scope of application

Northern Trust Global Services SE

Northern Trust Global Services SE (formerly Northern Trust Global Services Limited) was incorporated in the United Kingdom on 11 June 2003. On 1 March 2019, the Bank transferred its registered office from the UK to Luxembourg and became a Luxembourg based credit institution at that point. The Bank is now organised under the Laws of Luxembourg as a "Public limited liability company" for an unlimited period. The registered office of the Bank is established in Luxembourg, at 10 rue du Château d'Eau, L-3364 Leudelange.

NTGS is authorised by the European Central Bank (ECB) to conduct banking activities directly supervised by the ‘Commission de Surveillance du Secteur Financier’ (CSSF), indirectly supervised by the ECB and regulated by the European Banking Authority (EBA). NTGS is wholly owned by Northern Trust Holdings Limited (NTHL), a UK incorporated company and itself a wholly owned subsidiary of The Northern Trust Company (TNTC), a US banking institution. Northern Trust Corporation (NTC), a financial holding company based in Chicago is the ultimate parent of TNTC and its subsidiaries.

NTGS conducts mainly asset servicing and fund administration activities, and other ancillary services. Its core business is the provision of global custody, depositary and fund administration services to institutional clients and fund structures in the EEA and the United Kingdom in accordance with prescribed regulations. NTHL’s sole activity is to act as a holding company for NTGS.

NTGS operates branches in the UK, the Netherlands, Sweden, Norway, Switzerland and Abu Dhabi.

The annual accounts of NTGS are prepared in compliance with laws and regulations of the Grand Duchy of Luxembourg under the historical cost principle and on the basis of accounting principles generally accepted in the banking sector in the Grand Duchy of Luxembourg (Luxembourg Generally Accepted Accounting Principles, referred to as Luxembourg GAAP).

The NTGS structure as at 31 December 2022 is shown below.

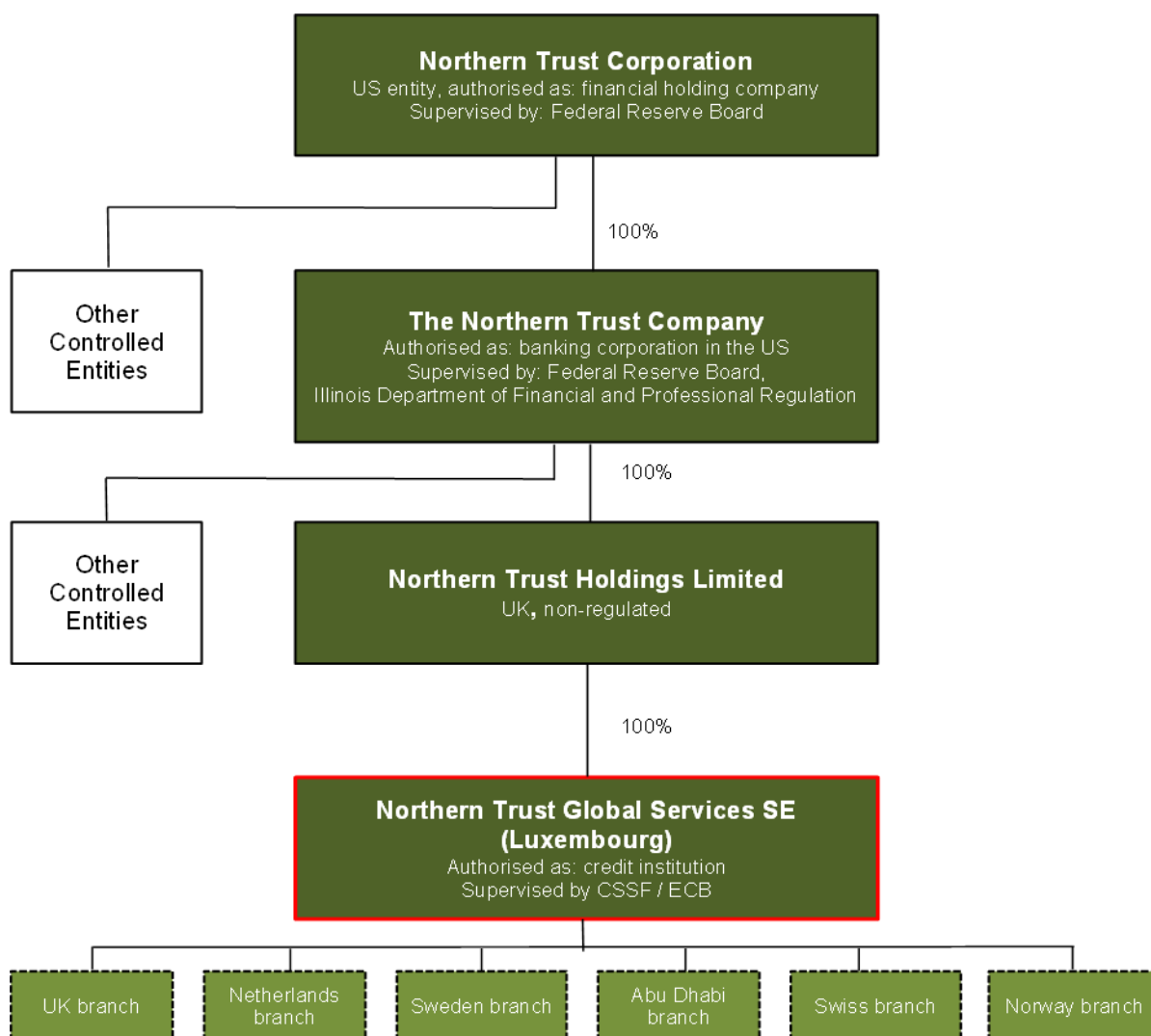


Figure 1 - NTGS Structure

1.3 Regulatory framework

On 1 January 2014, the CRR and the fourth iteration of the Capital Requirements Directive (CRD IV) implemented the Basel III Accord in the EU. From that date, Pillar 3 disclosure requirements are contained in Part Eight of the CRR, supplemented by various Implementing Technical Standards (ITS) and Regulatory Technical Standards (RTS). Under these requirements, NTGS must disclose specific quantitative and qualitative information on capital adequacy and risks.

On 16 April 2019, the European Parliament (EP) approved the final agreement on a package of reforms proposed by the European Commission (EC) to strengthen the resilience and resolvability of European banks. The package of reforms comprises certain amendments to CRR and CRD IV commonly referred to as ‘CRR II’ and CRD V’. On 27 June 2019, the Banking Reform Package came into force, subject to various transitional and staged timetables.

This disclosure document has been prepared in accordance with the applicable Pillar III requirements (regulations, directives, guidelines and circulars) and contains disclosures for regulatory capital requirements, credit risk, including counterparty credit risk, operational risk, market risk, liquidity risk, non-financial risk and compliance risk. Furthermore, the report discusses regulatory exposures and risk weighted assets. Basel III introduced the capital conservation buffer, countercyclical buffer, non-risk based leverage ratio, liquidity coverage ratio and net stable funding ratio. All these elements must

be disclosed with the aim to provide market participants sufficient information to assess the bank's overall capital and liquidity adequacy. To comply with the CRR II disclosure requirements, this report uses the EBA templates published in the final ITS on public disclosures (Pillar III) in June 2021 (CIR (EU) 2021/637).

The European Banking Authority (EBA) has issued guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 ('EBA Guidelines 2016/11) to bridge the gap between the CRR and the revised Pillar III framework. Finally, at a Luxembourg level, Circular CSSF 20/751 and 23/830 also define the sections of the EBA Guidelines 2016/11 to which the Bank is subject.

NTGS has undertaken the following to comply with the three pillars of Basel framework as it applies under the CRR:

- Pillar 1: provides the framework for calculating minimum capital requirements for credit, operational and market risk. NTGS has adopted the standardised approach for calculating Pillar 1 credit and market risk capital requirements and the basic indicator approach for operational risk capital requirements;
- Pillar 2: refers to the Supervisory Review Process – addresses the need for assessing whether additional capital is required over and above Pillar 1 risk calculations in line with the firm's risk profile. NTGS completes an internal capital adequacy assessment process (ICAAP) and an internal liquidity adequacy assessment process (ILAAP) at least annually, focusing on maintaining sufficient capital and liquidity. Results are reviewed and approved by its Board of Directors and the ICAAP/ILAAP documentation is submitted to the CSSF for review; and
- Pillar 3: defines minimum disclosure requirements – requires qualitative and quantitative public disclosures regarding regulatory capital and risk management practices and processes to promote transparency. This Pillar 3 disclosures document provides information on NTGS's risk management objectives and policies, its capital position, approach to assessing adequacy of its capital and exposure to key risks.

1.4 Basis of disclosure

The Pillar 3 disclosures provided in this document are prepared based on the financial information for NTGS on a standalone basis as at 31 December 2022, in accordance with CRR II requirements. The disclosures are reported in Euro (€), NTGS's reporting currency. NTGS's ultimate group holding company NTC publishes quarterly Pillar 3 disclosures at a consolidated level on the Northern Trust website.

In preparing this disclosures document, NTGS has considered CRR II requirements allowing firms to omit one or more disclosures if the relevant information is considered immaterial, or where it is regarded as proprietary or confidential. Materiality constitutes omission or misstatement of information likely to change or influence decisions of users relying on that information for making economic decisions.

The Pillar 3 disclosures have been subject to NTGS's internal governance process to ensure compliance with laws and regulations. The Board of Directors has assessed and approved the accuracy of the Pillar 3 disclosures. This report has not been audited by NTGS's external auditors, does not constitute any form of financial statements and should not be relied upon in making investment decisions in relation to Northern Trust.

Comparative figures are provided for the prior year for ease of comparison, where required. Table name references and row numbering in tables are as prescribed in the relevant EBA guidelines where applicable and where there is a value.

1.5 Disclosure policy and frequency of disclosure

The Pillar 3 disclosures document is updated at least annually as of 31 December and published in the “Investor Relations” section of NTC’s website: [Financial Information and Regulatory Disclosures | Northern Trust](#). The Pillar 3 disclosures document is also published on the Northern Trust Luxembourg website: [Northern Trust Luxembourg | Wealth Management, Asset Management, and Asset Servicing in Grand-Duché de Luxembourg](#).

To ensure adequate application of the disclosure requirements, a Pillar 3 Disclosures Policy has been established, which is reviewed and adapted, where necessary, on a yearly basis. This Policy defines the scope, allocates responsibilities and sets out the governance process. The NTGS Board of Directors is ultimately responsible for the application of the Pillar 3 Disclosures Policy for NTGS and must approve any material changes to the policy.

In addition to the Pillar 3 report, information on the NTGS return on assets according to Article 38-4 of the Luxembourg Banking Act (law of 5 April 1993 on the financial sector) is disclosed by NTGS under Note 6.12 in the notes to its annual accounts, which are published in the Luxembourg Trade and Companies Register (Registre de Commerce et des Sociétés).

1.6 Impact of current events

COVID-19 (SARS-COV-2)

Towards the end of 2022 and early 2023, Northern Trust and NTGS moved to a post-pandemic operating model, with staff returning to offices in either a full work from office or hybrid work pattern in most locations. NTGS and the Northern Trust Corporation are continuing to monitor business practices, taking into account guidance from the Centres for the Disease Control and Prevention (“CDC”) and World Health Organization (“WHO”), regulators, governments and local public health departments. The Bank has joined with the Group to implement risk mitigation strategies including alternate work schedules and work from home arrangements.

Russia-Ukraine War

In February 2022, a conflict between Russia and Ukraine led to global governments imposing a range of sanctions on the Russian government, companies and individuals. While the financial sanctions and the overall geopolitical turmoil have impacted global financial markets, they have not had a direct financial impact on the Bank at this time.

NTGS is closely following the events and adapting to market conditions, with certain actions being taken by Northern Trust to mitigate the operational impact and ensure compliance with the sanctions imposed in the EU and worldwide.

The Bank remains well capitalized with a healthy liquidity profile.

2 Key metrics

As outlined in Art. 433c (2) (e), and Art. 447 of (EU) No. 876/2019, Table 1 below discloses information on key metrics including own funds, risk-weighted exposures, capital ratios, leverage ratio, liquidity coverage ratio and net stable funding ratio. Additional information is disclosed in the following chapters.

Template EU KM1 - Key metrics template (€000)	2022	2021
Available own funds (amounts)		
Common Equity Tier 1 (CET1) capital	660,731	648,473
Tier 1 capital	660,731	648,473
Total capital	660,731	648,473
Risk-weighted exposure amounts		
Total risk exposure amount	891,968	967,583
Capital ratios (as a % of risk-weighted exposure amount)		
Common Equity Tier 1 ratio (%)	74.08%	67.02%
Tier 1 ratio (%)	74.08%	67.02%
Total capital ratio (%)	74.08%	67.02%
Additional own funds requirements to address risks other than the risk of excessive leverage (as a % of RW exposure amount)		
Additional own funds requirements to address risks other than the risk of excessive leverage (%)	1.00%	0.00%
of which: to be made up of CET1 capital (percentage points)	0.56%	0.00%
of which: to be made up of Tier 1 capital (percentage points)	0.75%	0.00%
Total SREP own funds requirements (%)	9.00%	8.00%
Combined buffer and overall capital requirement (as a % of risk-weighted exposure amount)		
Capital conservation buffer (%)	2.50%	2.50%
Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-
Institution specific countercyclical capital buffer (%)	0.13%	0.11%
Systemic risk buffer (%)	-	-
Global Systemically Important Institution buffer (%)	-	-
Other Systemically Important Institution buffer (%)	-	-
Combined buffer requirement (%)	2.63%	2.61%
Overall capital requirements (%)	11.63%	10.61%
CET1 available after meeting the total SREP own funds requirements (%)	62.44%	59.02%
Leverage ratio		
Total exposure measure	6,219,925	7,594,542
Leverage ratio (%)	10.62%	8.54%
Additional own funds requirements to address the risk of excessive leverage (as a % of total exposure measure)		
Additional own funds requirements to address the risk of excessive leverage (%)	-	-
of which: to be made up of CET1 capital (percentage points)	-	-
Total SREP leverage ratio requirements (%)	3.00%	3.00%
Leverage ratio buffer and overall leverage ratio requirement (as a % of total exposure measure)		
Leverage ratio buffer requirement (%)	-	-
Overall leverage ratio requirement (%)	3.00%	3.00%
Liquidity Coverage Ratio		
Total high-quality liquid assets (HQLA) (Weighted value -average)	5,029,133	5,786,445
Cash outflows - Total weighted value	2,315,857	3,003,364
Cash inflows - Total weighted value	779,013	1,252,132
Total net cash outflows (adjusted value)	1,536,844	1,751,232
Liquidity coverage ratio (%)	327.24%	330.42%
Net Stable Funding Ratio		
Total available stable funding	2,803,521	3,228,184
Total required stable funding	385,390	505,620
NSFR ratio (%)	727.45%	638.46%

Table 1 – Key Metrics (EU KM1)

3 Risk management

3.1 Overview

Risk management is the responsibility of the NTGS Board of Directors. In discharging this responsibility, the Board leverages the global and regional risk frameworks. Policies and procedures are validated and locally approved and the local risk organisation is structured to provide the Board with the necessary risk reporting and oversight to satisfy its responsibility. The NTGS Management Risk Committee (MRC) is the Authorised Management committee reviewing risk matters pertaining to NTGS on a monthly basis. The NTGS Board Risk Committee (BRC) is a specialised committee of the Board of Directors advising on risk matters, with quarterly occurrence at a minimum. The monthly EMEA Risk Committee (ERC) is the senior risk committee for all activities conducted within the EMEA region.

NTGS's Risk Appetite Statement reflects the expectation that risk is consciously considered as part of day-to-day activities and strategic decisions. The risks that NTGS considers in executing its strategy are defined in the "risk universe", which provides structure to classify the inherent risks faced by the business.

The risk universe represents the major risk categories and sub-categories to which Northern Trust may be exposed through its business activities. It includes a broader set of risk categories than those dictated by the Pillar 1 regulatory capital requirements (which are restricted to credit, operational and market risk). The risk universe is used to help determine risk exposures within NTGS that should be evaluated from a capital adequacy context and hence considered in this ICAAP.

As part of the ongoing evolution of the Risk Management Framework, the risk categories (i.e. credit, market, liquidity, operational, strategic, compliance and fiduciary) and sub-categories are being augmented by "risk themes". Risk themes are defined groupings that share common characteristics, focus on business outcomes and span across risk categories.

The risk profile of NTGS is determined through a point in time assessment of inherent and residual risks across each of the six risk categories. NTGS actively measures and monitors its risk profile using tools including risk-specific stress testing and integrated scenario analysis to understand how changes in risk profile impact its capital position. The following risk types are included in NTGS's capital adequacy assessment:

- Credit, operational and market risk are included in the calculation of Pillar 1 regulatory capital requirements. Risk-specific testing is used to determine whether the Pillar 1 capital allocation is sufficient to cover those risks within NTGS. If the Pillar 1 capital allocation for a risk category is deemed insufficient, then a Pillar 2 allocation (P2A) of capital will be considered to address the shortfall;
- Concentration risk, as part of the credit risk, is a Pillar 2 add-on to Pillar 1;
- Another Pillar 2 add-on is for operational risk, which also includes compliance risk and fiduciary risk components. This Pillar 2 add-on is based both on backward-looking and forward-looking considerations;
- Finally, Pillar 2 capital allocations are also calculated for Interest Rate Risk in the Banking Book (IRRBB). A Pillar 1 capital requirement is not assessed for IRRBB;
- Strategic risk (including strategy, business and reputation risk) is challenging to quantify for capital purposes; therefore, it is difficult to apply a measurable standard similar to regulatory capital. These risk types are considered using relevant experience and expert judgement, in base case projections and integrated stress tests to estimate their potential impact on capital resource levels. The outcome of these stress tests is incorporated in the Pillar 2B capital allocation;

- For NTGS, liquidity effects are not anticipated to drive capital needs, but any liquidity impacts are considered in its base case projections and integrated scenario analysis program.
- A Pillar 2 capital add-on is included in relation to potential losses that could crystallise on sale of group available for sale (AFS) securities.

Northern Trust Global Services SE Governance Framework

The following graphic illustrates the regional risk governance structure supporting NTGS.

NORTHERN TRUST GLOBAL SERVICES SOCIETAS EUROPAEA ("NTGS SE") GOVERNANCE ORGANISATIONAL CHART, 31 DECEMBER 2022

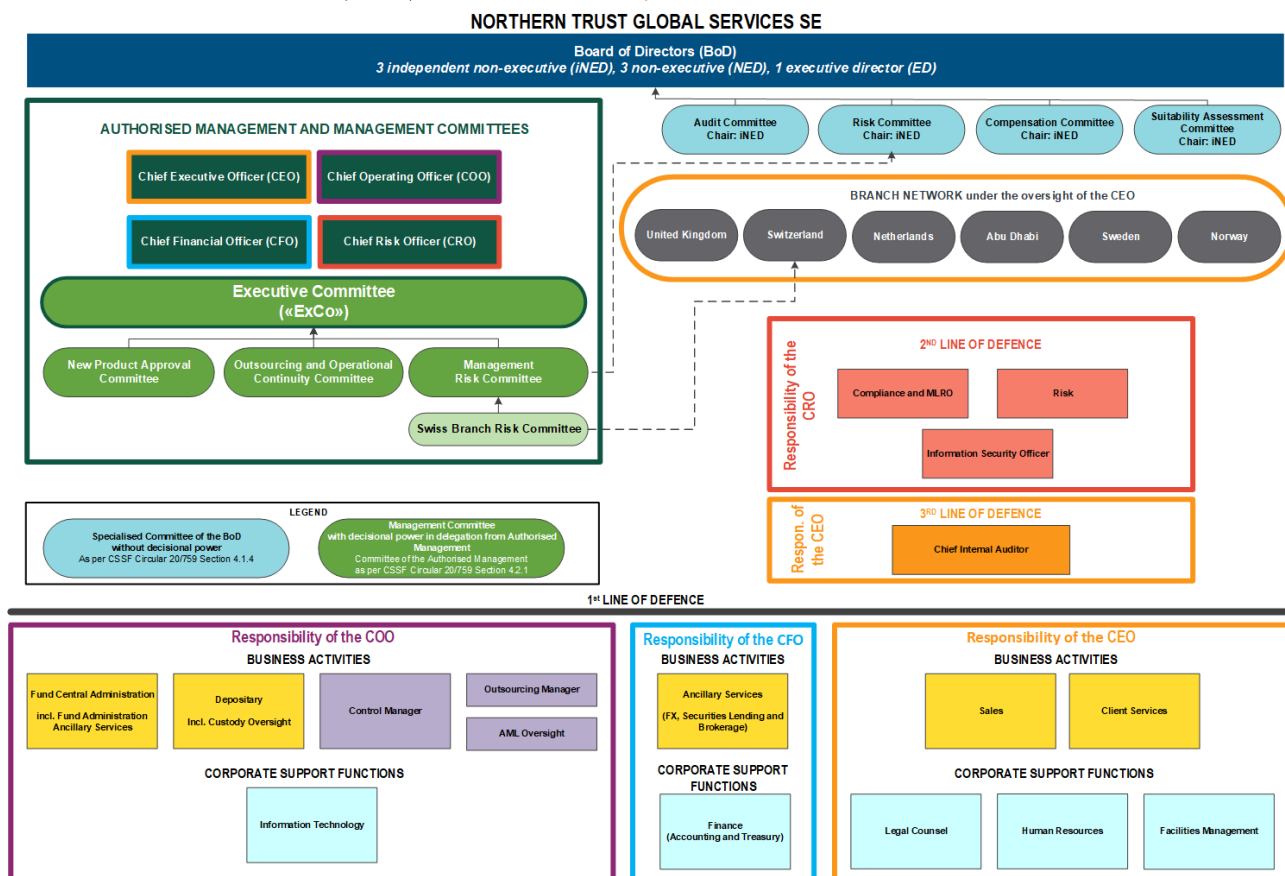


Figure 2 - NTGS Risk Governance Structure

As part of the ongoing operation of the Risk Management Framework, NTGS employs a “three lines of defence” model. The responsibilities across the three lines of defence are fundamental to the design and implementation of the Risk Management Framework and taken together establish an appropriate operating model to control risk taking.

The first line of defence is accountable and responsible for identifying, measuring, controlling and monitoring risks associated with its activities either individually or with the assistance of the second line of defence. The first line of defence is typically engaged in activities designed to generate revenue, reduce expense, provide operational support for delivery of products or services to clients, and provide technology services.

The second line of defence is accountable and responsible for identifying, measuring, monitoring, and controlling risk in aggregate. Risk and compliance practice as independent functions separate and distinct from the business units and are considered NTGS’s second line of defence.

The third line of defence is accountable and responsible for independently assessing the design and ongoing effectiveness of governance, risk management, and internal controls. Audit Services is an

independent control function that assesses and validates controls within Northern Trust's Enterprise Risk Management framework.

Northern Trust's approach to Risk Appetite is based on three inter-related elements, designed to support consistent enterprise risk identification, management and reporting: a comprehensive risk inventory, a static taxonomy of risk categories and a dynamic taxonomy of risk themes. The Risk Inventory is a detailed register of the risks inherently faced by Northern Trust.

For capital purposes, Northern Trust considers risk categories (credit, market, liquidity, operational, strategic, fiduciary and compliance).

The following sections outline NTGS's key sources of risk as identified in Part Eight of CRR, the strategies and processes used to manage those risks and other key risks from the Northern Trust risk universe faced by NTGS.

3.2 Operational risk

Operational risk is the risk of loss from inadequate or failed internal processes, people and systems or from external events. Operational risk reflects the potential that inadequate information systems, operating problems, product design and delivery difficulties, or catastrophes will result in unexpected losses.

At a Northern Trust Group level, the risk universe includes seven operational risk sub-categories (with cyber-risk being integral to considerations of each) inherited from the Basel framework:

- Internal fraud — risk of loss resulting from the intent to defraud, misappropriate property or circumvent regulations, laws or policies. Excludes risk of credit-related fraud;
- External fraud — risk of loss resulting from the intent to defraud, misappropriate property (including identity theft) or circumvent regulations, laws or policies by a third party (non-employees). Excludes risk of credit-related fraud;
- Employment practices and workplace safety — risk of loss from an act inconsistent with employment, health or safety laws or agreements, personal injury claims or from diversity/discrimination events;
- Clients, products and business practices — risk of loss from unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements) or from the nature or design of a product;
- Damage to physical assets — risk of loss resulting from damage to physical assets such as a natural disaster or terrorism;
- Business disruption and system failures — risk of loss arising from disruption of business or system failures including foreign operations risk;
- Execution, delivery and process management — risk of loss from failed transaction processing, process management or relations with counterparties and vendors. Includes potential loss associated with use of models in business decisions.

For NTGS, operational risk typically arises when transaction activity is not executed, settled or recorded on an accurate or timely basis, or where there has been a breach of contractual commitments with clients. The root cause may be individual process failures, external events, system failures or business disruption.

NTGS activities range from trade execution, transaction processing, asset servicing and depository oversight through to fund valuation and client reporting. Consequently, business unit management and the Board of Directors have a key focus on the management of operational risk. These business activities are supported by a global operating model utilizing a Northern Trust-built and supported technology platform, supplemented by third party vended applications.

The operational risk framework documents a series of programs/procedures to identify, classify and manage events subject to operational risk. These include:

- Loss event data collection and analysis;
- Risk and control self-assessment (RCSA);
- Scenario analysis;
- Product & process risk management;
- Business process transition risk management;
- Technology risk management;
- Business continuity and disaster; and
- Physical security.

Other elements of the framework include: operational risk regulatory capital quantification, outsourcing risk management, model risk management, and insurance management.

3.3 Credit risk

Credit risk is the risk to interest income or principal from the failure of a borrower or counterparty to perform on an obligation. It is comprised of five sub-risks:

- Obligor risk — failure of a client/borrower to perform;
- Counterparty risk — failure of a counterparty to perform;
- Issuer risk — failure of a securities issuer to perform;
- Concentration risk — concentration of exposures to a particular entity, sector, region, industry or product that could result in a meaningful loss (applies to obligors, counterparties and issuers);
- Country risk — failure of an entity to perform caused by political, economic, military or social conditions, or other acts, laws or regulations prevailing in the country of the entity (applies to obligors, counterparties and issuers).

The primary sources of credit risk for NTGS are:

- Client overdrafts (either intended or unintended, arising inter-alia from bank errors, timing of internal transfers or wire transfers);
- Client credit facilities typically to meet short-term bridge financing needs with respect to subscriptions and redemptions;
- Money market placements;
- Settlement balances with sub-custodians and “due from” nostro banks;
- Intra-group lending (mainly to the London branch of TNTC);
- Custody services that have been supplied but for which accrued fees have not been settled;
- Provisional credit arising from credits to client accounts for securities sales and income prior to actual receipt of settlement proceeds or income;
- Credit risk arising from NTGS’s securities lending clients with ‘enhanced indemnities’ as NTGS is liable to pay for the realization of the collateral to meet the indemnifications; and
- Investments permitted within NTGS’s ‘Liquidity & Investment Policy’.

Other sources of credit risk within NTGS derive from its foreign exchange activities and accounts receivable.

NTGS benefits from a robust enterprise wide credit risk framework, as well as NTGS specific policies and processes. There are a number of key components to credit risk management at NTGS:

- NTGS credit policy;
- Committee approval process;
- Standardized credit analysis;

- Credit monitoring and surveillance; and
- Credit mitigation.

Credit limits are set in accordance with CRR requirements for large exposures. NTGS exposure to TNTC London and third parties are monitored daily against approved limits. An intra-group exemption has been granted by the CSSF as of 20th March 2020.

3.4 Market risk

Trading market risk is defined as the potential for movements in market prices, foreign exchange and interest rates to cause changes in the value of trading positions. Market risk for NTGS mainly arises as currency risk in net positions in foreign currencies.

In the second half of 2022, a foreign exchange trading desk was established in Luxembourg which allows NTGS's EEA clients to transact directly with a European entity. This does not impact trading risk as NTGS has appointed TNTC London Branch to provide FX services. Clients of NTGS can trade FX directly with NTGS Luxembourg. These FX positions will be covered directly with TNTC London Branch on a back-to-back basis removing market risk.

Whilst there is a theoretical price risk on any foreign exchange position, any such pricing risk arising are closed out with TNTC immediately, with the objective of NTGS not running any significant foreign exchange positions.

Note that NTGS does not transact in any options products and the size of the activity in NTGS, relative to the size of the foreign exchange markets, renders concentration risk, product illiquidity risk and the other trading risk types insignificant.

3.5 Interest Rate Risk in the Banking Book

Interest rate risk in the banking book is the risk to earnings or capital due to significant changes in interest rates.

The four risks that are considered to comprise interest rate risk at the enterprise level are:

- Re-pricing — the risk of loss from differences in the maturity and re-pricing terms of assets and liabilities;
- Yield curve — the risk of loss from changes in the shape of the yield curve;
- Basis — the risk of loss from imperfect correlation in the adjustment of the rates earned and paid on different financial instruments with otherwise similar re-pricing characteristics; and
- Behavioural characteristics / embedded optionality — the risk of loss from customer or counterparty behaviour with respect to optionality embedded in instruments held by the entity (e.g. call, put, conversion features in bond positions). With regards to the embedded optionality, NTGS has not entered into any embedded derivative contracts during the year 2022.

For NTGS, potential interest rate risk in the banking book arises from the mismatch in maturity or re-pricing terms of customer deposits and asset investments. NTGS maintains a prudent approach to interest rate risk, generating net interest income either through spreads or by a moderate amount of gapping.

This risk is somewhat mitigated by a relatively stable base of deposits. The stability of the deposit base is largely due to the fact that a significant proportion of the deposits are from institutional clients to whom NTGS provides services that are ordinarily subject to a minimum termination notice period such as custody or depositary services.

The NTGS liquidity and investment risk policy documents the way in which the interest rate risk is managed and monitored.

On an operating basis, NTGS's balance sheet activities are managed by the Treasury function with independent oversight from the Market and Liquidity Risk Committee (MLRC) within Corporate Risk Management. Interest rate risk is managed by Treasury through limits which are specified in the NTGS liquidity and investment policy. NTGS' balance sheet and interest rate risk management are performed under the oversight of the NTGS risk management function.

NTGS is currently not pursuing a strategy of managing a long-term securities investment portfolio for balance sheet management purposes. NTGS typically holds just one long-term bond in order to fund custody shortfalls in line with UK CASS rules. Additionally, in line with NTGS' practice of placing funds with central banks, NTGS holds some short-term (7-day) certificates of deposit issued by the Swedish Central Bank.

IRRBB exposure at NTGS has historically been quantified using internal models and this was the approach used at the end of 2022. Moving forward, NTGS IRRBB exposure will be quantified using the EBA Standardised Approach (SA) methodology and assumptions. The SA looks at the sensitivity of the bank's Market Value of Equity (MVE) and Net Interest Income (NII) between a modelled base case and various stress scenarios including parallel shocks, a shock involving rotations to the term structure, and uneven shocks.

To calculate the Pillar 2 requirement, the EBA Supervisory Outlier Test (SOT) approach has been used. Moving forward, the EBA SA methodology will be used for this purpose.

The EBA outlier test uses the 7 material currencies of NTGS: EUR, USD, GBP, AUD, CHF, SEK and NOK. Major currency shocks (EUR, USD, GBP, AUD) are built using an internal model while minor currency shocks (CHF, SEK, NOK) are built and updated by the NTGS risk function on a quarterly basis and input into the internal model by the corporate treasury team.

Given the straightforward nature of the NTGS business model and balance sheet, this type of approach is used to assess interest rate risk, but the possibility of running additional scenarios will be reviewed if they provide even more credible stresses on an ongoing basis.

The outlier test approach involves running the following standard shocks against a static NTGS balance sheet for Economic Value of Equity (EVE) impacts:

- (i) parallel shock up;
- (ii) parallel shock down;
- (iii) steeper shock (short rates down and long rates up);
- (iv) flattener shock (short rates up and long rates down);
- (v) short rates shock up; and
- (vi) short rates shock down.

The up/down 200bp stress test and the 6 EBA prescribed outlier tests are computed quarterly in QRM at the head office and is overseen by the NTGS finance and risk functions.

These scenarios are applied to IRRBB exposures in each currency separately for which NTGS has material positions (USD, EUR, GBP, AUD, CHF, SEK and NOK). The impact of each shock is then obtained by summing impacts on all currencies. The Pillar 2 amount for IRRBB is then the worst-case outcome of these shocks computed as a variation of NTGS' capital.

Exceptions to limits and thresholds are escalated to local and/or corporate governance committees depending on the severity of the breach.

For 2022, the outcome of the supervisory outlier test according to paragraph 113 of the EBA/GL/2018/02 shows a sensitivity of -€1.4m (0.21% of Tier 1 capital), driven by the short-term shock up on EUR currency. This is also equivalent to the worst outcome of the six scenarios in the supervisory outlier test according to paragraph 114 of the EBA/GL/2018/02, driven by the parallel shock up on EUR currency.

3.6 Compliance risk

Compliance risk - is defined as the risk of legal or regulatory sanctions, material financial loss, or loss to reputation a bank may suffer as a result of its failure to comply with laws, regulations, rules, related self-regulatory organization standards, and codes of conduct applicable to its activities.

Northern Trust's risk universe includes two compliance sub-categories:

- Regulatory risk — the risk arising from failure to comply with prudential and business conduct regulatory requirements. Prudential requirements are intended to ensure financial safety and soundness, as well as maintain the stability of the financial system. Conduct requirements seek to protect the interests of customers and the integrity of the market;
- Financial crime risk — risk arising from financial crime (e.g., money laundering, sanctions violations, fraud, insider dealing, theft, etc.) in relation to the products, services, or accounts of the institution, its clients, or others associated with same.

NTGS is authorized to carry out certain businesses in other jurisdictions and, therefore, has to observe not only Luxembourg but other applicable overseas regulations. As a subsidiary of TNTC, NTGS is also subject to certain US regulations. In all instances NTGS must act with integrity and in an open and honest way with its regulators.

Pillar 2 capital requirements for compliance risk are considered within the operational risk methodology, however, compliance risk is subject to separate governance and monitoring.

Annual compliance risk assessments are completed outside of the ICAAP process and will be used to assess whether there needs to be any adjustment made to the program of NTGS risk specific stress testing.

Regulatory risk

The NTGS Chief Risk Officer (CRO) is a member of NTGS authorized management and reports/escalates matters to:

- The risk committee of the NTGS Board; and
- The ERC, the senior risk committee for all activities conducted within the EMEA region.

The CRO is supported by the NTGS Chief Compliance Officer and the compliance team (including the compliance officers of the branches), a team of compliance professionals within the UK, as well as by the Global Compliance team in Chicago.

Financial crime risk

NTGS has a Money Laundering Reporting Officer (MLRO) who reports to the NTGS Chief Compliance Officer and the NT EMEA MLRO, the NTGS Board and NTGS Risk Committee.

Procedures and controls are in place to manage financial crime risk. These include but are not limited to:

- Sanction screening processes;
- Transaction monitoring;
- A global anti-fraud program which includes a suite of electronic fraud detection tools;
- Anti-bribery & corruption; and

- Compliance monitoring and testing.

3.7 Strategic risk

Strategic risk is the vulnerability of the firm to internal or external developments that render the firm's strategy ineffective or unachievable. The consequences of strategic risk can diminish long-term earnings and capital as well as reputational damage to the firm.

Strategic risk is considered a key inherent risk, as reflected in the quarterly NTGS risk reporting and NTGS risk assessment. Both the risk report and the risk assessment reflect that the key strategic risk driver remains business risk, with the external stresses of the geopolitical and adverse macro-economic conditions, applying pressures upon the current business model and earnings.

NTGS defines strategic risk across 3 sub-components: strategy risk, business risk, reputation risk.

Strategy risk

Strategy risk is the risk to the expansion plans that determine the desired future profile of NTGS or to the intended changes that must be made to realise those plans.

Strategy risk represents the risk that NTGS:

- Cannot grow its revenues and earnings as planned due to failure of executing its organic growth plans or an acquisition;
- Is unable to gain new clients and retain its existing clients due to aggressive competitive pricing, a lack of innovation or similar factors;
- Is impacted by government regulation or intervention; and
- Is unable to attract and retain appropriate staff, to develop and deliver new products or to control costs.

Business risk

Business risk is the risk arising from general economic conditions and external factors that could adversely affect NTGS's revenues, profits and capital. More specifically, business risk encompasses the risk of adverse economic conditions, including changes in equity market levels, interest and foreign exchange rates; a slowdown of the globalisation of investing activities or pension reform; and instability or disruption of political, economic, legal or regulatory systems in NTGS's markets, including changes in the monetary or other policies of regulatory authorities and central banks.

The risk types within business risk are:

- Contracting markets risk – the risk to earnings from reduced business volumes due to contracting markets or client base;
- Revenue risk including foreign exchange translation risk – the risk to earnings from reduced fees through declining equity markets and other capital market drivers of fee based revenues;
- Unattractive products risk – the risk to earnings from changes in market sentiment rendering a product unattractive to clients;
- Pension obligations risk – the risk from an underfunded pension plan; and
- Business concentration risk – the risk resulting from concentration of net income sources to certain business units, products, services or clients.

The demand for NTGS's services can be affected by broad economic conditions. Weakness of economic conditions can adversely affect NTGS's ability to generate new business and maintain existing business volumes.

A weakening of equity markets and/or decrease in value of some debt-related investments, as a result of market disruption or illiquidity, reduces the valuations of assets that NTGS services for its clients.

Such a weakening can result in a reduction of earnings, since a proportion of the fees NTGS earns are based on asset values.

Reputation risk

Reputation risk is the risk arising from negative perception on the part of clients, counterparties, shareholders, investors, debtholders, market analysts, regulators or other relevant parties that could adversely affect an entity's ability to maintain existing or establish new business relationships and access to funding. Reputation risk is usually connected to another risk or risk related event such as credit, operational or business.

The three risk types within reputation risk are:

- Product/client support;
- Third-party; and
- Adverse publicity risk.

The reputation of NTGS is closely correlated to the reputation of the Corporation which has been captured as an indicator in the NTGS recovery plan. Equally an adverse reputational event within NTGS can impact the reputation of Northern Trust as a whole.

NTGS's planning processes are focused on establishing goals for revenue, net income and balance sheet growth. All the above risk types could affect future revenue, net income or balance sheet growth and are therefore important components of the capital adequacy assessment.

The key strategy risk driver for NTGS is the ever-growing regulatory change (both volume and complexity) that may give rise to unintended and/or undesired changes to its business or operating model; and divert resources away from strategic initiatives.

The key programs used to manage various components of strategy risk are as follows:

- Business or expansion plan execution risk;
- Group risk;
- Cost management;
- New business and client service;
- Compliance.

3.8 Liquidity risk

Liquidity risk is the risk of not being able to raise sufficient funds to meet cash flow obligations because of firm-specific or market-wide events.

NTGS's liquidity risk arises as the exposure to a range of liquidity risk drivers:

- Funding risk - risk of losing access to short- or long-term funds during periods of market or idiosyncratic stress; this includes the risk of client deposit run-off;
- Marketable assets risk - risk that monetary assets cannot be sold, pledged or otherwise converted to cash as needed;
- Non-marketable assets risk – risk to liquidity from assets that cannot be monetised through immediate outright sales or repurchase agreements, such as interbank money market placements;
- Cross-currency risk - risk that funds in one currency cannot be converted to another currency when required;
- Intercompany liquidity Risk - risk to earnings and/or capital availability from the performance of the parent or other group companies; this includes forced dividend risk, parent insolvency risk, trapped liquidity risk and legal restrictions risk;

- Intraday risk - risk that funds cannot be provided during the business day to meet time-specific payment deadlines; and
- Off-balance sheet risk - risk from funding commitments or other obligations, especially during periods of market or idiosyncratic stress.

Funding risk is the most significant liquidity risk at NTGS SE. NTGS runs liquidity stress test exercises assuming clients manage their cash balances more tightly in a stress, and ensures sufficient liquidity is available to fund the associated deposit run-offs.

Intraday liquidity is also a key liquidity risk. It arises primarily in relation to its obligations towards depository, clearing and settlement systems across a large sub-custodial network with varying market and settlement requirements.

Intraday liquidity risk would crystallise in a situation where NTGS could not tap into its usual intraday liquidity pools, or where these pools were not sufficiently funded, to support payment obligations during a business day to a point that would precipitate a liquidity shortfall resulting in NTGS being unable to continue to meet its obligations.

The NTGS liquidity and investment policy contains a section on the management of collateral and asset encumbrance. Additionally, as a banking subsidiary of a wider corporation, NTGS is subject to the NTC collateral management standard, which establishes the controls and procedures for calculating and monitoring collateral pledged by NTC in accordance with relevant regulatory requirements. Treasury is responsible for the practices surrounding Northern Trust's collateral management, in coordination with Operations. Collateral is managed globally by Treasury and Finance. Market and liquidity risk management periodically performs an independent review of the standard. Treasury operations continuously monitors the amount of collateral pledged to financial market utilities to ensure that a sufficient amount is maintained to ensure smooth settlement activity.

Liquidity risk management

NTGS keeps the majority of its assets in highly liquid form. As a result, the entity operates with liquidity ratios well in excess of regulatory minimums and funding risk is primarily limited to the risk of client deposit run-off during stressed conditions.

NTGS manages its liquidity risk in accordance with a Board approved liquidity and investment policy, leveraging the methodology of Northern Trust Corporation's risk management framework.

Liquidity Coverage Ratio (LCR)

The LCR is designed to ensure the Bank maintains a sufficient level of liquid assets to meet liquidity needs in a stress scenario. The LCR is the ratio between the stock of High Quality Liquid Assets (HQLA) and total net cash outflows under stress conditions, with cash inflows limited to 75% of cash outflows. In accordance with the LCR regulations, the level of the ratio between high quality liquid assets and total net cash outflows must at least comply with a 100 % regulatory limit.

High Quality Liquid Assets

HQLA (liquidity buffer) are assets that maintain their market liquidity in periods of stress and that meet the minimum requirements established by the CSSF in particular, that are free from any legal impediment or restriction; suffer little or no loss in market value when converted into cash; have low credit risk; are easy and accurate to price; are actively traded at volume with little difference between purchase and sale price. These assets are subject to weighting factors which may reduce their value, for example in accordance with the risk rating of the security issuer or the historic variation in their market price.

Cash outflows and inflows

Cash outflows are primarily the result of a reduction in deposits and any scheduled contractual obligations that may exist within the next 30 days; cash inflows are the expected cash receipts from loans, overdrafts, deposits and securities during the same period.

Liquidity risk management objectives and policies

Referring to CRR Art. 451a(2)(3), NTGS discloses liquidity metrics in **Annex B**.

Strategies and processes in the management of the liquidity risk, including policies on diversification in the sources and tenor of planned funding

The NTGS liquidity risk management framework is embedded in its business activities and is integral to strategic and business decision making. Ongoing liquidity risk management measures include:

- Limits and thresholds covering both LCR and internal liquidity stress tests, with escalation processes and procedures should triggers be breached. These thresholds are monitored daily by the first line and second line functions and are reported to the relevant committees and the Board on a periodic basis.
- A liquidity adequacy assessment that is completed at least once each calendar year to identify, measure, manage and monitor liquidity risk.

Structure and organisation of the liquidity risk management function

The liquidity adequacy assessment process and day-to-day liquidity management is managed by Treasury, with governance oversight by local and corporate risk teams, the Authorised Management risk committee and delegated partners from the Asset and Liability Committee (ALCO) and MLRC (ALCO and MLRC delegates).

The Board of NTGS allocates responsibility to Northern Trust's Head of International Liquidity Management to:

- Manage the day-to-day and intraday liquidity positions of NTGS and ensure that it is in compliance with its liquidity and investment policy;
- Provide the NTGS Board with updates on NTGS' liquidity position and reporting any material liquidity issues that may arise;
- Ensure that sufficient activity and exception reports are provided to the ALCO/MLRC delegates for it to perform its governance;
- Present the NTGS ILAAP document to ERC and ALCO and MLRC delegates, or their designated sub-committees, for review and challenge. Present the ILAAP document to the NTGS Board for review, challenge and approval, at least once per calendar year;
- Ensure that internal liquidity stress tests are undertaken, at least once per calendar year and presented to ERC or its relevant sub-committee, the ALCO and MLRC delegates and to the NTGS Board; and
- Ensure that the NTGS Contingency Funding Plan (CFP) is updated at least once per calendar year.

The Board of NTGS allocates responsibility to the Head of Financial Risk EMEA or their delegate to:

- Ensure that the liquidity and investment policy is kept up to date and consistent with the risk profile of NTGS and that its systems and controls are adequate to meet internal and regulatory requirements; and
- Provide oversight of the implementation of this policy and report any material liquidity issues to MLRC delegates, ERC, or designated sub-committee, MRC and the NTGS Board.

Degree of centralisation of liquidity management and interaction between the group's units

The liquidity risk management process is overseen by first- and second-line committees, with NT's corporate ALCO serving as the first line and corporate MLRC serving as the second-line. MLRC provides effective challenge to ALCO in respect of policies, key assumptions and practices.

Ultimate responsibility for ensuring NTGS maintains an adequate framework for managing liquidity risk rests with the NTGS Board.

Scope and nature of liquidity risk reporting and measurement systems

Liquidity monitoring is an ongoing process, with reporting on a daily, monthly and annual basis. Escalation protocols are in place to ensure the relevant stakeholders are appropriately informed at all times with regard to the entity's liquidity position. Internal limits are set to ensure sufficient liquidity is available to meet NTGS's minimum regulatory and internal liquidity requirements on a daily basis. Monitoring thresholds are set on both a percentage basis for the LCR and on an absolute basis for the liquid asset buffer. Key liquidity metrics are monitored daily and reported to a range of stakeholders including finance, treasury and management, with escalation where appropriate.

Policies for hedging and mitigating the liquidity risk

NTGS's liquidity risk exposure is monitored throughout the day by Cash Management and Treasury teams. System-enabled mitigating controls including sufficiency checks and control of payment release form part of NTGS's framework for the management of liquidity risk. Other risk mitigating tools include a CFP providing the ability to take funding actions, including drawing on the liquidity buffer in a timely fashion.

Contingency funding plan

NTGS's CFP is designed to help recognize, manage through, and respond quickly to a potential liquidity event or crisis. The CFP is a key component of NTGS's liquidity risk management framework and includes defined roles and responsibilities of the parties involved, detailed action steps for assessing the situation and invoking the CFP, defined liquidity events/triggers, funding considerations and decision points supported by quantitative analysis and operational testing. The primary goal of the CFP is to provide a clear process map (playbook) to follow in the event of a liquidity crisis.

Stress testing

Internal liquidity stress tests are undertaken at least once per calendar year and the results presented to the ERC or its relevant sub-committee and to the ALCO and MLRC delegates, for review and challenge. Stress test results are also reported to the NTGS Board, highlighting any vulnerabilities identified and proposing appropriate remedial action.

Overall adequacy of liquidity risk management arrangements

As part of the annual ILAAP review process, the Authorised Management of NTGS acknowledges that NTGS's liquidity risk management framework and resources are proportionate and adequate in relation to internally assessed and regulatory requirements.

Liquidity risk appetite statement

NTGS's liquidity risk appetite is to ensure that the liquidity resources and liquidity ratios meet or exceed internal and regulatory limits at all times. Authorised Management have established monitoring and reporting processes to ensure the entity continues to operate within risk appetite.

NTGS's Risk Appetite Statement encompasses measures designed to maintain risk-taking within liquidity constraints. For measures relating to liquidity, stress testing activities may be used to determine and establish measures related tolerances and limits to maintain aggregate exposure within liquidity constraints and regulatory guidelines. These measures are included within the liquidity risk theme.

NTGS defines a liquidity limit to serve as a quantitative measure of risk appetite. This limit (and associated thresholds) measures the availability of liquidity resources that can be employed, if necessary, during periods of stress to cover on and off-balance sheet cash flow obligations.

Risk Appetite for liquidity at NTGS is set using two complementary indicators: one regulatory indicator (Liquidity Coverage Ratio) and one internal indicator (Liquidity Stress Test). Setting early warning (for both indicators), contingency and recovery thresholds (for the regulatory threshold) on these indicators allow NTGS to define the appetite of the Bank based on both regulatory and internal standards.

As part of its quarterly review of NTGS risk themes and underlying measures, NTGS Management will consider the impact of events/business developments (if relevant) to the entity's liquidity. This is also captured within the liquidity risk theme.

The assessment against liquidity risk appetite is incorporated within the NTGS risk report. In the event of a liquidity risk appetite breach, NTGS management, leveraging the CFP and Recovery Plan would determine what liquidity actions need to be taken to bring the entity back into appetite.

3.9 Climate-related and environmental risk

Climate risk continues to be a growing area of focus at NTGS. Climate risk refers to the potential negative impacts of climate change on an organisation. It includes the potential for adverse effects of climate change and the transition to a low carbon economy as presenting emerging risks to banks and the financial system. Banks are likely to be affected by both the physical risks and transition risks associated with climate change. There are three categories of climate risk:

- Physical climate risk refers to risks to banks and the financial system emanating from the increased severity of extreme (acute) weather events (e.g. cyclones, droughts, floods, and fires). It can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g. sea level rise):
 - Acute physical risk arises from changes in event-driven hazards, such as an increased severity of cyclones, hurricanes or floods; and
 - Chronic physical risk refers to longer-term, incremental shifts in climate patterns, such as changing annual average rainfall or temperature.
- Transition climate risk reflects the risks to banks and financial systems of transitioning to a lower carbon economy that may entail extensive policy, legal, technological, and market changes. Depending on the nature, speed and focus of these changes transition risks may pose varying levels of financial and reputational risk to banks and the financial system;
- Liability risk stems from potential litigation where institutions and boards do not adequately consider or respond to the impacts of climate change;

These risks can impact both financial and non-financial risk types and can have broad impacts on operations, supply chains, distribution networks, customers and markets.

Effective management of climate risk requires coordinated governance, clearly defined roles and responsibilities and well-developed processes to identify, measure, monitor and control risks. We continue to build out and enhance our climate risk management capabilities.

Our climate risk management efforts are overseen by the NTGS Chief Risk Officer who coordinates with the global Chief Climate and Sustainability Risk Officer. The NTGS Board of Directors engages in active oversight of ESG matters of significance to the entity, including climate-related risk.

We will continue to integrate climate considerations into the NTGS risk management framework as these risks evolve.

3.10 Adequacy of risk management arrangements (CRR2 art. 435(1)(e))

NTGS defines risk appetite as the amount and type of risk it is willing to assume in order to achieve its strategic and financial objectives. NTGS continuously strives to balance its desire to meet these objectives with an acceptable level of risk. The risk tolerance thresholds applicable to NTGS's business activities are contained in its risk appetite statement, which is approved by the Board.

NTGS's approach to Risk Appetite is based on the concept of risk themes. The entity establishes individual Risk Appetite Statements and measures by the following risk themes: liquidity risk, credit risk, operational execution, data integrity and reporting, information security and cyber risk, operational resiliency and recovery, global conduct & internal fraud, significant regulation compliance, fiduciary duty risk, investment risk, workforce risk and strategic business risk.

The NTGS Board is satisfied with the existing risk management arrangements and the thresholds in place are considered adequate with regard to the profile and strategy of NTGS.

The Board also confirms that the disclosures contained within this document accurately reflect the risk profile of NTGS based on the activities it undertakes.

4 Financial statements reconciliations

4.1 Overview

Art. 436(b) of CRR requires institutions to disclose an outline of the differences in the basis of consolidation for accounting and prudential purposes. NTGS is not under the scope of any prudential consolidation as at 31 December 2022, and therefore these Pillar 3 disclosures are prepared on a standalone basis, similar to the accounting basis. NTGS does not prepare consolidated financial statements.

4.2 Balance sheet reconciliation

Table 2 below shows a breakdown as at 31 December 2022 of the assets and liabilities classes according to the balance sheet in the published annual accounts (accounting under Luxembourg GAAP), in comparison to their carrying values under the regulatory scope (FINREP based on IFRS accounting). In addition, it also allocates the different amounts to the regulatory risk categories (credit risk, counterparty credit risk and market risk), as well as the part that is not subject to capital requirements or is subject to deduction from own funds.

The main differences between the financial statements (annual accounts under Luxembourg GAAP) and the regulatory scope (FINREP reporting under IFRS) presented in Table 2 below arise due to the following reasons:

- Differences in balance sheet layout and classification of assets/liabilities:
 - Nostro accounts are classified as Loans and advances in the annual accounts, and as Other demand deposits in the regulatory scope;
 - Accrued interest is classified as Prepayments and accrued income/Accruals and deferred income in the annual accounts, and along the related asset class in the regulatory scope; and
 - Other minor reclassifications;
- Different accounting treatment/valuation between the two accounting frameworks:
 - Intangible assets: goodwill is amortised over 5 years in the annual accounts, while no amortisation is applied in the regulatory scope;
 - Tangible assets: lease accounting under IFRS gives rise to right-of-use (ROU) assets in the regulatory scope, which are not recognized in the annual accounts;
 - Tax assets and liabilities: deferred tax is not recognized in the annual accounts, which is shown in the regulatory scope;
 - Financial assets and financial liabilities held for trading: only unrealised losses are recognized in the annual accounts, while both unrealised gains and unrealised losses are recognised in the regulatory scope; and
 - Other minor accounting differences (e.g. IFRS 9 application in the regulatory scope).

Template EU LI1 - Differences between the accounting scope and the scope of prudential consolidation and mapping of financial statement categories with regulatory risk categories (€000)

	Carrying values as reported in published financial statements	Carrying values under scope of prudential consolidation	Carrying values of items				
			Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to own funds requirements or subject to deduction from own funds
Breakdown by asset classes according to the balance sheet in the published financial statements							
Cash, cash balances at central banks and other demand deposits	5,090,132	5,333,218	5,333,218			5,333,218	
<i>of which Cash at central banks</i>	5,090,132	5,091,565	5,091,565			5,091,565	
<i>of which Other demand deposits</i>	-	241,653	241,653			241,653	
Financial assets held for trading	-	1,876		1,876		1,876	
Non-trading financial assets mandatorily at fair value through profit or loss - Equity instruments	288	289	289			289	
Financial assets at amortized cost	787,751	549,807	549,807			549,807	
<i>of which Treasury bills and debt securities</i>	15,081	15,105	15,105			15,105	
<i>of which Loans and advances</i>	772,670	534,702	534,702			534,702	
Tangible assets	13,096	34,026	34,026				
Intangible assets	77,241	138,822					138,822
<i>of which Goodwill</i>	6,532	68,081					68,081
<i>of which Other intangible assets</i>	70,709	70,741					70,741
Tax assets	-	16,768					16,768
Other assets	140,411	135,757	135,757			135,757	
<i>of which Prepayments and accrued income</i>	57,847	-	-			-	
<i>of which Other assets</i>	82,564	135,757	135,757			135,757	
Total assets	6,108,919	6,210,563	6,053,097	1,876	-	6,020,947	155,590
Breakdown by liability classes according to the balance sheet in the published financial statements							
Financial liabilities held for trading	-	5,577				5,577	5,577
Financial liabilities measured at amortised cost	5,126,461	5,131,914				5,131,914	5,131,914
Tax liabilities	38,667	47,423					47,423
<i>of which Current tax liabilities</i>	38,667	38,784					38,784
<i>of which Deferred tax liabilities</i>	-	8,639					8,639
Other liabilities	141,918	156,484				156,484	156,484
<i>of which Accruals and deferred income</i>	27,111	-				-	-
<i>of which Other accrued liabilities</i>	12,567	-				-	-
<i>of which Other liabilities</i>	102,240	156,484				156,484	156,484
Total liabilities	5,307,046	5,341,398	-	-	-	5,293,975	5,341,398

Table 2 – Balance Sheet reconciliation (EU LI1)

4.3 Regulatory exposures reconciliation

In addition, Table 3 below presents information on the main sources of differences between the carrying values under regulatory scope (as disclosed in Table 2 above for FINREP) and regulatory exposure amounts in the COREP reporting.

The main differences between the carrying amounts under regulatory scope and the risk exposures considered in COREP presented in Table 3 below arise due to the following reasons:

- Differences due to the use of credit risk mitigation (CRM) techniques corresponding to collateral used for intercompany exposures (after volatility adjustments); and
- Intangible assets and deferred tax are directly deducted from own funds, therefore they are not considered credit risk exposures in the COREP.

Template EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements (€000)					
	Total	Items subject to			
		Credit risk framework	Securitisation framework	CCR framework	Market risk framework
Assets carrying value amount under the scope of prudential consolidation (as per template LI1)	6,054,973	6,053,097	-	1,876	6,020,947
Liabilities carrying value amount under the scope of prudential consolidation (as per template LI1)	-	-	-	-	5,293,975
Total net amount under the scope of prudential consolidation	6,054,973	6,053,097	-	1,876	726,972
Off-balance-sheet amounts	322,066	322,066	-	-	
<i>Differences in valuations</i>					
<i>Differences due to different netting rules, other than those already included in row 2</i>					
<i>Differences due to consideration of provisions</i>					
<i>Differences due to the use of credit risk mitigation techniques (CRMs)</i>	(484,781)	(484,781)			
<i>Differences due to credit conversion factors</i>					
<i>Differences due to Securitisation with risk transfer</i>					
<i>Other differences</i>	(3,608)	(2,423)		(1,185)	
Exposure amounts considered for regulatory purposes	5,888,650	5,887,959	-	691	8,110

Table 3 – Regulatory exposures reconciliation (EU LI2)

4.4 Balance sheet reconciliation – including own funds

Template EU CC2.1 - reconciliation of regulatory own funds to balance sheet in the audited financial statements (€000)		
	Balance sheet as in published financial statements	Under regulatory scope of consolidation
Assets - Breakdown by asset classes according to the balance sheet in the published financial statements		
Cash, cash balances at central banks and other demand deposits	5,090,132	5,333,218
<i>of which Cash at central banks</i>	5,090,132	5,091,565
<i>of which Other demand deposits</i>	-	241,653
Financial assets held for trading	-	1,876
Non-trading financial assets mandatorily at fair value through profit or loss - Equity instruments	288	289
Financial assets at amortized cost	787,751	549,807
<i>of which Treasury bills and debt securities</i>	15,081	15,105
<i>of which Loans and advances</i>	772,670	534,702
Tangible assets	13,096	34,026
Intangible assets	77,241	138,822
<i>of which Goodwill</i>	6,532	68,081
<i>of which Other intangible assets</i>	70,709	70,741
Tax assets	-	16,768
Other assets	140,411	135,757
<i>of which Prepayments and accrued income</i>	57,847	-
<i>of which Other assets</i>	82,564	135,757
Total assets	6,108,919	6,210,563
Liabilities - Breakdown by liability classes according to the balance sheet in the published financial statements		
Financial liabilities held for trading	-	5,577
Financial liabilities measured at amortised cost	5,126,461	5,131,914
Tax liabilities	38,667	47,423
<i>of which Current tax liabilities</i>	38,667	38,784
<i>of which Deferred tax liabilities</i>	-	8,639
Other liabilities	141,918	156,484
<i>of which Accruals and deferred income</i>	27,111	-
<i>of which Other accrued liabilities</i>	12,567	-
<i>of which Other liabilities</i>	102,240	156,484
Total liabilities	5,307,046	5,341,398
Shareholders' Equity		
Issued capital	393,068	393,068
Share premium account	23,446	-
Retained earnings	277,835	330,681
Other reserves	53,421	81,547
<i>of which Legal reserve</i>	10,908	10,908
<i>of which Net wealth tax reserve</i>	42,513	42,513
<i>of which Restructuring reserve</i>	-	23,446
<i>of which Other IFRS reserves</i>	-	4,680
Accumulated other comprehensive income	-	3,312
Profit for the financial year	54,103	60,557
Total Shareholders' Equity	801,873	869,165

Table 4 – Balance sheet reconciliation - including own funds (EU CC2-1)

The main differences between the annual accounts and the FINREP regulatory scope presented for shareholder's equity in Table 4 above arise due to the following reasons:

- Different accounting treatment/valuation for goodwill, deferred taxes, and unrealised gains;
- Reclassification of the Luxembourg GAAP share premium as other reserves under IFRS; and
- Other reclassifications in reserves (e.g. Luxembourg GAAP lumpsum provision).

Referring to CRR Art, 437 (1)(a), a reconciliation of own funds to financial statements is presented in Table 5 below.

Template EU CC2.2 - reconciliation of regulatory own funds to balance sheet in the audited financial statements (€000)	
Own Funds in the Annual Accounts	
Subscribed capital	393,068
Share premium account	23,446
Reserves	53,421
<i>of which Legal reserve</i>	10,908
<i>of which Net wealth tax reserve</i>	42,513
Profit brought forward	277,835
Profit for the financial year	54,103
Total own funds in the Annual Accounts	801,873
Eligible Capital (CET1) before regulatory adjustments	
Total own funds in the Annual Accounts	801,873
Accounting adjustments (Luxembourg GAAP to IFRS)	67,292
<i>related to goodwill amortisation</i>	38,371
<i>related to IFRS merger reserves</i>	23,117
<i>related to IFRS defined benefit plan liability</i>	(10,163)
<i>related to deferred tax</i>	9,089
<i>related to IFRS 9 and IFRS 16</i>	(2,131)
<i>related to unrealised gains</i>	1,877
<i>other</i>	7,132
Total own funds in the regulatory scope (FINREP)	869,165
Profits for the financial year not eligible	(60,557)
Total eligible capital (CET1) before regulatory adjustments	808,608
Common Equity Tier 1 Capital	
Total eligible capital (CET1) before regulatory adjustments	808,608
Regulatory adjustments	(147,877)
<i>of which goodwill T1 deduction</i>	(60,360)
<i>of which other intangibles T1 deduction</i>	(70,742)
<i>of which deferred tax asset deduction</i>	(16,768)
<i>of which related to prudential filters</i>	(7)
Total Common Equity Tier 1 Capital	660,731

Table 5 – Own funds reconciliation (EU CC2-2)

As presented in Table 5 above, the 2022 financial year profits are included in the annual accounts and regulatory scope (FINREP reporting), which have been allocated to reserves at the date of approval of the annual accounts. As these profits were not yet audited, and prior permission was not granted by the CSSF according to CRR Art. 26 (2), the 2022 profits are not eligible for inclusion as CET1 capital as at 31 December 2022.

5 Own funds and capital resources

5.1 Overview

As at 31 December 2022 NTGS had own funds totalling €661 million, which consists entirely of Tier 1 capital of €809 million (share capital, audited retained earnings and eligible reserves) and Tier 1 deductions of €148 million (intangible assets and deferred tax). No dividend was proposed out of the 2022 net profit or accumulated retained earnings as of 31 December 2022.

5.2 Own funds composition

The capital composition of NTGS is presented in Table 6 below, as required by CRR Art. 437.

Template EU CC1 - Composition of regulatory own funds (€000)		
	Amounts	Reference
Common Equity Tier 1 (CET1) capital: instruments and reserves		
Capital instruments and the related share premium accounts	393,068	
Retained earnings	330,681	
Accumulated other comprehensive income (and other reserves)	84,859	
Funds for general banking risk	-	
Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	Table 5 – Own funds reconciliation (EU CC2-2)
Minority interests (amount allowed in consolidated CET1)	-	
Independently reviewed interim profits net of any foreseeable charge or dividend	-	
Common Equity Tier 1 (CET1) capital before regulatory adjustments	808,608	
Common Equity Tier 1 (CET1) capital: regulatory adjustments		
Additional value adjustments (negative amount)		
Intangible assets (net of related tax liability) (negative amount)	(131,102)	
Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	(16,768)	Table 5 – Own funds reconciliation (EU CC2-2)
Other regulatory adjustments	(7)	
Total regulatory adjustments to Common Equity Tier 1 (CET1)	(147,877)	
Common Equity Tier 1 (CET1) capital	660,731	
Additional Tier 1 (AT1) capital: instruments		
Additional Tier 1 (AT1) capital before regulatory adjustments	-	
Additional Tier 1 (AT1) capital: regulatory adjustments		
Other regulatory adjustments to AT1 capital	-	
Total regulatory adjustments to Additional Tier 1 (AT1) capital	-	
Additional Tier 1 (AT1) capital	-	
Tier 1 capital (T1 = CET1 + AT1)	660,731	Table 5 – Own funds reconciliation (EU CC2-2)
Tier 2 (T2) capital: instruments		
Tier 2 (T2) capital before regulatory adjustments	-	
Tier 2 (T2) capital: regulatory adjustments		
Total regulatory adjustments to Tier 2 (T2) capital	-	
Tier 2 (T2) capital	-	
Total capital (TC = T1 + T2)	660,731	Table 5 – Own funds reconciliation (EU CC2-2)
Total Risk exposure amount	891,968	Table 8 – Risk-weighted exposures (EU OV1)
Capital ratios and requirements including buffers		
Common Equity Tier 1 capital	74.08%	
Tier 1 capital	74.08%	
Total capital	74.08%	
Institution CET1 overall capital requirements	7.69%	
of which: capital conservation buffer requirement	2.50%	
of which: countercyclical capital buffer requirement	0.13%	
of which: systemic risk buffer requirement		
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer requirement		
of which: additional own funds requirements to address the risks other than the risk of excessive leverage		
Common Equity Tier 1 capital (as a percentage of risk exposure amount) available after meeting the minimum capital requirements	62.44%	minimum capital requirement of 11.63% as at 31 December 2022 (based on the SREP received in December 2021).

Table 6 – Composition of regulatory own funds (EU CC1)

Referring to CRR Art. 437 (1)(a), a reconciliation of own funds to financial statements is disclosed in Table 5 as laid out in section 4.5.

5.3 Main features of own funds

Referring to CRR Art 437 (b), information on the main features of NTGS's own funds is disclosed in Table 7 below.

Template EU CCA: Main features of regulatory own funds instruments and eligible liabilities instruments	
	Qualitative / quantitative information
Issuer	Northern Trust Global Services SE
Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	N/A
Public or private placement	N/A
Governing law(s) of the instrument	Luxembourg Company Law: Law of 10th August 1915 on commercial companies, as amended, Council Regulation (EC) No 2157 /2001 of 8 October 2001 on the Statute for a European company (SE), by the law of 5 April 1993 on the financial sector, as amended.
Contractual recognition of write down and conversion powers of resolution authorities	No
Regulatory treatment	
Current treatment taking into account, where applicable, transitional CRR rules	Common Equity Tier 1
Post-transitional CRR rules	Common Equity Tier 1
Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	Solo
Instrument type (types to be specified by each jurisdiction)	Ordinary shares
Amount recognised in regulatory capital or eligible liabilities (Currency in million, as of most recent reporting date)	€ 393
Nominal amount of instrument	€ 1
Accounting classification	Shareholders' equity
Original date of issuance	2003
Perpetual or dated	Perpetual
Original maturity date	No maturity
Issuer call subject to prior supervisory approval	No
Optional call date, contingent call dates and redemption amount	N/A
Subsequent call dates, if applicable	N/A
Coupons / dividends	
Fixed or floating dividend/coupon	Floating
Coupon rate and any related index	N/A
Existence of a dividend stopper	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary
Existence of step up or other incentive to redeem	No
Noncumulative or cumulative	Non-cumulative
Convertible or non-convertible	Non-convertible
If convertible, conversion trigger(s)	N/A
If convertible, fully or partially	N/A
If convertible, conversion rate	N/A
If convertible, mandatory or optional conversion	N/A
If convertible, specify instrument type convertible into	N/A
If convertible, specify issuer of instrument it converts into	N/A
Write-down features	No
If write-down, write-down trigger(s)	N/A
If write-down, full or partial	N/A
If write-down, permanent or temporary	N/A
If temporary write-down, description of write-up mechanism	N/A
Type of subordination (only for eligible liabilities)	N/A
Ranking of the instrument in normal insolvency proceedings	Rank 1
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	N/A
Non-compliant transitioned features	No
If yes, specify non-compliant features	N/A
Link to the full term and conditions of the instrument (signposting)	N/A

Table 7 – Main features of own funds (EU CCA)

6 Capital adequacy

6.1 Overview

The NTGS Board reviews the capital position of NTGS on a regular basis to ensure it is sufficient to meet its strategic goals and risk profile. Pillar 1 capital requirements are calculated on a daily basis as outlined below and the ongoing ICAAP process provides further assessment for any additional risk capital requirement under Pillar 2.

With a Tier 1 capital ratio and a Total capital ratio at 74.08% (2021: 67.02%), NTGS is sufficiently capitalised to meet the regulatory capital requirements under Pillar 1 and Pillar 2.

The internal capital adequacy assessment process

NTGS undertakes an ICAAP as required by the CSSF (see notably 07/301). The ICAAP assesses the adequacy of NTGS's capital resources to cover Pillar 1 risks as well as other risks not captured within the Pillar 1 assessment. These assessments are supported by scenario analysis and stress testing. The ICAAP also provides detail on the risk management framework and contains a risk assessment across all risk categories.

The ICAAP includes key input from NTGS and the EMEA region's risk professionals, business management and the finance group. For each risk category the inherent risk level is documented, along with risk mitigation practices in place to derive an overall residual risk profile.

For the material inherent risks faced by NTGS, quantitative methods, scenarios and stress testing have been used to evaluate the potential capital demands. Business management and the Board have provided input to the scenarios and stress testing process to ensure all appropriate information and experience is brought to this evaluation exercise.

The ICAAP has identified the need for NTGS to hold capital in addition to its Pillar 1 requirement and confirms this additional requirement is met by available capital resources.

The ICAAP is an ongoing process. Scenario and stress testing are revisited at least annually and more frequently should material events (external and/or internal) warrant a re-assessment. The ICAAP document is formally reviewed and approved by the NTGS Board on an annual basis.

The ICAAP has been prepared in accordance with the CSSF Circular 07/301 guidance and has been made available to the CSSF.

Pillar 1 capital requirement

NTGS calculates the minimum capital requirements in accordance with the requirements of CRR and the CSSF, being the higher of the following:

1. €8.7m, being the base case capital resources requirement; and
2. the sum of the credit risk capital requirement, market risk capital requirement and operational risk capital requirement calculated in accordance with CRR.

In accordance with CRR Art. 438, Table 8 below discloses an overview of the total RWA and the related minimum capital requirements. In addition this table also breaks down the types of risks and the relevant calculation methods.

Template EU OV1 – Overview of total risk exposure amounts (€000)	2022	2021	2022
	Total risk exposure amounts (TREA)		Total own funds requirements
Credit risk (excluding CCR)	472,425	585,490	37,794
Of which the standardised approach	472,425	585,490	37,794
Of which the Foundation IRB (F-IRB) approach	-	-	-
Of which slotting approach	-	-	-
Of which equities under the simple risk weighted approach	-	-	-
Of which the Advanced IRB (A-IRB) approach	-	-	-
Counterparty credit risk - CCR	887	208	71
Of which the standardised approach	-	-	-
Of which internal model method (IMM)	-	-	-
Of which exposures to a CCP	-	-	-
Of which credit valuation adjustment - CVA	196	46	16
Of which other CCR	691	162	55
Settlement risk	-	-	-
Securitisation exposures in the non-trading book (after the cap)	-	-	-
Position, foreign exchange and commodities risks (Market risk)	8,110	2,598	649
Of which the standardised approach	8,110	2,598	649
Of which IMA	-	-	-
Large exposures	-	-	-
Operational risk	410,547	379,287	32,844
Of which basic indicator approach	410,547	379,287	32,844
Of which standardised approach	-	-	-
Of which advanced measurement approach	-	-	-
Amounts below the thresholds for deduction (subject to 250% risk weight)	-	-	-
Total	891,968	967,583	71,357

Table 8 – Risk-weighted exposures (EU OV1)

The following sub-sections numbered 6.2, 6.3, 6.4 and 6.5 cover the capital requirement measurement for credit risk, counterparty credit risk, operational risk and market risk.

6.2 Credit risk capital requirement

All credit exposures arise as a result of NTGS's operations. NTGS's minimum credit risk capital requirement is calculated using the standardised approach and is expressed as 8% of risk weighted exposures.

In relation to Circular CSSF 20/751 as amended by Circular CSSF 23/830 on management of non-performing (NPE) and forborne exposures, NTGS did not have any exposures classified as NPE or forborne exposures as at 31 December 2022 (2021: nil). NTGS also had no past due or defaulted exposures as of 31 December 2022 (2021: nil).

As of 31 December 2022 NTGS does not have any securitisation exposures, nor any collaterals obtained by taking possession (2021: nil).

Overall, NTGS's credit portfolio is predominantly short-term in respect of tenors with most exposures being overnight, and of high credit quality in terms of counterparties (both central and commercial banks) and issuers.

Where available, issuer ratings from the External Credit Assessment Institutions (ECAIs) Moody's and Standard & Poor's (S&P) are used in the determination of the relevant risk weighting across all

exposure classes. Where ECAI ratings differ, the lower issuer rating is applied. NTGS complies with the risk weighting as defined in CRR.

A breakdown of NTGS's credit risk exposures by exposure class and risk weight allocations as at 31 December 2022 is provided in Table 9 below.

Template EU CR5 – standardised approach (€000)

Exposure classes	Risk weight							Total
	0%	10%	20%	50%	100%	150%	Others	
Central governments or central banks	5,108,538	-	-	-	-	-	-	5,108,538
Regional government or local authorities	-	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-
Institutions	-	-	27,918	-	-	-	-	27,918
Corporates	-	-	0	91,067	124,181	-	-	215,249
Retail exposures	-	-	-	-	-	-	-	-
Exposures secured by mortgages on immovable property	-	-	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-	-	-
Exposures associated with particularly high risk	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-
Exposures to institutions and corporates with a short-term credit assessment	-	-	165,579	215,226	0	3,277	-	384,081
Units or shares in collective investment undertakings	-	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-	-
Other items	-	-	-	-	151,483	-	-	151,483
TOTAL	5,108,538	-	193,497	306,293	275,665	3,277	-	5,887,269

Table 9 – Standardised approach with risk weights (EU CR5)

Credit risk mitigation

To help manage its balance sheet, NTGS is using collateral and risk participation arrangements with The Northern Trust Company as credit risk mitigation techniques.

Table 10 below presents a breakdown of the secured and unsecured exposures by mitigation technique used as at 31 December 2022.

Template EU CR3 – CRM techniques overview: Disclosure of the use of credit risk mitigation techniques (€000)

	Unsecured carrying amount	Secured carrying amount	Of which secured by collateral	Of which secured by financial guarantees	Of which secured by credit derivatives
Cash balances at central banks	5,091,565	-	-	-	-
Other demand deposits	241,653	-	-	-	-
Loans and advances	85,586	449,116	449,116	-	-
Debt securities	15,105	-	-	-	-
Total	5,433,909	449,116	449,116	-	-
<i>Of which non-performing exposures</i>	-	-	-	-	-
<i>Of which defaulted</i>	-	-	-	-	-

Table 10 – Credit risk mitigation techniques (EU CR3)

In addition, Table 11 below discloses a breakdown of the total credit risk exposures in the standardised approach, before and after applying credit risk mitigation technique, as well as the RWA applied for each class.

Template EU CR4 – standardised approach – Credit risk exposure and CRM effects (€000)						
Exposure classes	Exposures before CCF and before CRM		Exposures post CCF and post CRM		RWAs and RWAs density	
	On-balance sheet exp.	Off-balance sheet exp.	On-balance sheet exp.	Off-balance sheet exp.	RWAs	RWAs density (%)
Central governments or central banks	5,108,538	-	5,108,538	-	-	-
Regional government or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	168,010	15,543	12,375	15,543	5,583	20%
Corporates	454,144	90,942	124,307	90,942	169,715	79%
Retail	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-
Exposures associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Institutions and corporates with a short-term credit assessment	168,500	215,581	168,500	215,581	145,644	38%
Collective investment undertakings	-	-	-	-	-	-
Equity	-	-	-	-	-	-
Other items	151,483	-	151,483	-	151,483	100%
TOTAL	6,050,674	322,066	5,565,203	322,066	472,425	8%

Table 11 – Credit risk exposures and CRM effects (EU CR4)

Finally, table 12 below presents a breakdown of exposures by maturity as at 31 December 2022.

Template EU CR1-A: Maturity of exposures (€000)						
	Net exposure value					Total
	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	
Cash balances at central banks	5,091,565	-	-	-	-	5,091,565
Other demand deposits	241,653	-	-	-	-	241,653
Loans and advances	-	534,702	-	-	-	534,702
Debt securities*	-	-	15,105	-	-	15,105
Total	5,333,218	534,702	15,105	-	-	5,883,025

Table 12 – Maturity of exposures (EU CR1-A)

*NTGS SE is also investing in short-term Certificates of Deposit (CDs) issued by the Swedish Central Bank (Riksbank) that are recorded as securities in the balance sheet. These investments are not systematically renewed and vary in size depending on the level of SEK customer deposits and on market conditions. That leads to some volatility in that balance sheet line. These are short-term in nature (usually 7 days maturity CDs) and are eligible for inclusion in NTGS's liquid asset buffer. There were no outstanding investments in Riksbank CDs as at 31 December 2022.

Securities are accounted for at amortised cost, as they are intended to be held until maturity to collect contractual cash-flows, helping to mitigate the potential price volatility arising from FX and market movements.

6.3 Counterparty credit risk

Pillar 1 capital requirements for NTGS include counterparty credit risk (CCR) and credit value adjustment (CVA) amounts calculated in accordance with CRR rules, by applying the original exposure method (OEM) approach.

As of 31 December 2022, NTGS continues to leverage its usage of currency swap transactions to facilitate its placement of cash with the parent TNTC. This allows the exposure to be collateralised with cash without the need to rely on other collateral pledges (i.e. securities). These swaps are typically of an overnight nature, and the notional is recorded off-balance sheet. Given the hedged nature of these instruments (swaps), NTGS is not exposed to FX rate fluctuations, the amounts in other currencies (mainly USD) to be received back at maturity as well as the currencies returned to TNTC are known from the outset.

Referring to CRR Art. 439, 444 and 452, Table 13 below presents the CCR exposures of NTGS as at 31 December 2022.

Template EU CCR1 – Analysis of CCR exposure by approach (€000)

	Replace- ment cost (RC)	Potential future exposure (PFE)	EE PE	Alpha used for computing regulatory exposure value	Exposure value pre- CRM	Exposure value post- CRM	Expo- sure value	RWEA
EU - Original Exposure Method (for derivatives)	1,877	119,016		1.4	169,250	691	691	691
EU - Simplified SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
SA-CCR (for derivatives)	-	-		1.4	-	-	-	-
IMM (for derivatives and SFTs)			-	-	-	-	-	-
Total					169,250	691	691	691

Table 13 – CCR exposures by approach (EU CCR1)

CRM method used for CCR is the same as applied for credit risk (NTGS is using securities as collateral pledged by TNTC as credit risk mitigation techniques for intragroup exposures).

The next table summarizes the related CVA regulatory calculations.

Template EU CCR2 – Transactions subject to own funds requirements for CVA risk (€000)

	Exposure value	RWEA
Total transactions subject to the Advanced method	-	-
(i) VaR component (including the 3× multiplier)		-
(ii) stressed VaR component (including the 3× multiplier)		-
Transactions subject to the Standardised method	674	196
Transactions subject to the Alternative approach (Based on the Original Exposure Method)	-	-
Total transactions subject to own funds requirements for CVA risk	674	196

Table 14 – Transactions subject to CVA risk (EU CCR2)

As at 31 December 2022, NTGS did not hold any credit derivatives, or any exposures to central counterparties.

6.4 Operational risk capital requirement

Pillar 1 capital requirements for NTGS also include operational risk amounts calculated in accordance with CRR rules. NTGS uses the basic indicator approach (BIA) approach to determine the Pillar 1 operational risk capital requirements. Table 15 shows the NTGS operational risk own funds requirements for the year 2022.

Template EU OR1 - Operational risk own funds requirements and risk-weighted exposure amounts (€000)					
Banking activities	Relevant indicator			Own funds requirements	Risk exposure amount
	Year-3	Year-2	Last year		
Banking activities subject to basic indicator approach (BIA)	191,931	199,807	265,136	32,844	410,547
Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	-	-	-	-	-
<u>Subject to TSA:</u>	-	-	-		
<u>Subject to ASA:</u>	-	-	-		
Banking activities subject to advanced measurement approaches AMA	-	-	-	-	-

Table 15 – Operational risk (EU OR1)

6.5 Market risk capital requirement

Finally, Pillar 1 capital requirements for NTGS include market risk calculated in accordance with CRR rules, by applying the standardised approach for foreign exchange risk. As NTGS does not maintain a trading book within the meaning of CRR, the only market risk exposure addressed in this section is the foreign exchange risk in the banking book. The FX risk net exposure subject to capital charge does not exceed the threshold, therefore the market risk templates related to trading book are not presented. However Table 16 below presents a breakdown of long and short FX positions as at 31 December 2022, with the related exposure amount and own funds requirement.

Market risk - foreign exchange risk (€000)								
	ALL POSITIONS		NET POSITIONS		POSITIONS SUBJECT TO CAPITAL CHARGE		Own funds requirement	Risk exposure amount
	LONG	SHORT	LONG	SHORT	LONG	SHORT		
All positions	44,107,986	44,112,917	1,590	6,520	1,590	6,520	8,110	649

Table 16 – Market risk (foreign exchange)

7 Capital buffers

In addition to meeting the applicable minimum Pillar 1 and Pillar 2 capital requirements described above, NTGS is required to hold additional Common Equity Tier 1 capital to cover capital to meet CRR/CRD capital buffer requirements.

These buffers, comprising the capital conservation buffer (CCoB) and the counter-cyclical capital buffer (CCyB), are designed to ensure that banks accumulate sufficient high quality capital that is capable of absorbing losses in stressed periods.

7.1 Capital conservation buffer

From 1 January 2019 NTGS is required to calculate a CCoB at the rate of 2.5% applied against risk weighted assets. The CCoB objective is to conserve capital. When a bank breaches the buffer, automatic safeguards apply to limit the amount of dividend and bonus payments it can make.

7.2 Counter-cyclical buffer

NTGS is required to calculate an institution-specific CCyB based on a weighted average of the CCyB rates applied in the countries where its relevant credit exposures are located.

A designated authority in each EU member state is responsible for setting the CCyB rate in that member state on a quarterly basis, taking into account various macro-prudential indicators including the growth in the provision of credit and changes in the ratio of credit to GDP. The European Systemic Risk Board (ESRB) is an independent body of the EU and is part of the European System of Financial Supervision (ESFS), the purpose of which is to ensure the supervision of the EU's financial system. The ESRB is responsible for setting the rate in Luxembourg. The ESRB may also recognise the CCyB rates applied by responsible authorities in other EU member states and other foreign authorities.

Referring to CRR Art. 440(b), the amount of the NTGS countercyclical capital buffer is disclosed in Table 17 below.

Template EU CCyB2 - Amount of institution-specific countercyclical capital buffer (€000)	
Total risk exposure amount	891,968
Institution specific countercyclical capital buffer rate	0.13%
Institution specific countercyclical capital buffer requirement	1,168

Table 17 – Countercyclical capital buffer (EU CCyB2)

NTGS will continue to calculate its CCyB in accordance with the rates prescribed by the ESRB.

Referring to CRR 2 Art. 440(a), NTGS's relevant credit exposures to counterparties in those jurisdictions where a CCyB has been set is disclosed in Table 18 below.

Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (€000)

	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures	Total exposure value	Own fund requirements			Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)	
	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for non-trading book		Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book				Total
Breakdown by country:													
ARGENTINA	248	-	-	-	-	248	10	-	-	10	124	0.0%	0.00%
AUSTRALIA	3,636	-	-	-	-	3,636	145	-	-	145	1,814	0.3%	0.00%
AUSTRIA	16	-	-	-	-	16	1	-	-	1	8	0.0%	0.00%
BANGLADESH	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
BELGIUM	28,863	-	-	-	-	28,863	462	-	-	462	5,773	0.8%	0.00%
BERMUDA	2,673	-	-	-	-	2,673	214	-	-	214	2,673	0.4%	0.00%
BRAZIL	7,816	-	-	-	-	7,816	313	-	-	313	3,908	0.6%	0.00%
CANADA	44,727	-	-	-	-	44,727	716	-	-	716	8,945	1.3%	0.00%
CAYMAN ISLANDS	692	-	-	-	-	692	55	-	-	55	692	0.1%	0.00%
CHILE	2,689	-	-	-	-	2,689	108	-	-	108	1,345	0.2%	0.00%
CHINA	74	-	-	-	-	74	1	-	-	1	15	0.0%	0.00%
COLOMBIA	625	-	-	-	-	625	50	-	-	50	625	0.1%	0.00%
CZECH REPUBLIC	579	-	-	-	-	579	23	-	-	23	289	0.0%	0.50%
DENMARK	260	-	-	-	-	260	4	-	-	4	56	0.0%	2.00%
EGYPT	1,243	-	-	-	-	1,243	50	-	-	50	621	0.1%	0.00%
FINLAND	2	-	-	-	-	2	0	-	-	0	3	0.0%	0.00%
FRANCE	162,332	-	-	-	-	162,332	6,493	-	-	6,493	81,166	11.3%	0.00%
GERMANY	5,197	-	-	-	-	5,197	208	-	-	208	2,598	0.4%	0.00%
GHANA	1	-	-	-	-	1	0	-	-	0	1	0.0%	0.00%
GUERNSEY	20,497	-	-	-	-	20,497	1,392	-	-	1,392	17,402	2.4%	0.00%
HONG KONG	7,114	-	-	-	-	7,114	114	-	-	114	1,423	0.2%	1.00%
HUNGARY	1	-	-	-	-	1	0	-	-	0	1	0.0%	0.00%
ICELAND	-	-	-	-	-	-	-	-	-	0	0	0.0%	2.00%
INDIA	1,731	-	-	-	-	1,731	69	-	-	69	866	0.1%	0.00%
INDONESIA	4,041	-	-	-	-	4,041	162	-	-	162	2,020	0.3%	0.00%
IRELAND	392	-	-	-	-	392	31	-	-	31	392	0.1%	0.00%
ISRAEL	4,496	-	-	-	-	4,496	180	-	-	180	2,248	0.3%	0.00%

Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (€000) - continued

	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures	Total exposure value	Own fund requirements			Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)	
	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for non-trading book		Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book				Total
Breakdown by country – continued:													
JAPAN	3,411	-	-	-	-	3,411	83	-	-	83	1,032	0.1%	0.00%
JORDAN	1	-	-	-	-	1	0	-	-	0	0	0.0%	0.00%
KENYA	100	-	-	-	-	100	8	-	-	8	100	0.0%	0.00%
KOREA, REPUBLIC OF	4,934	-	-	-	-	4,934	79	-	-	79	987	0.1%	0.00%
KUWAIT	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
LUXEMBOURG	74,724	-	-	-	-	74,724	5,568	-	-	5,568	69,598	9.7%	0.50%
MALAYSIA	4,197	-	-	-	-	4,197	67	-	-	67	839	0.1%	0.00%
MAURITIUS	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
MEXICO	1,274	-	-	-	-	1,274	51	-	-	51	637	0.1%	0.00%
MOROCCO	169	-	-	-	-	169	14	-	-	14	169	0.0%	0.00%
NETHERLANDS	9,536	-	-	-	-	9,536	922	-	-	922	11,519	1.6%	0.00%
NEW ZEALAND	2,784	-	-	-	-	2,784	45	-	-	45	557	0.1%	0.00%
NIGERIA	7,019	-	-	-	-	7,019	562	-	-	562	7,019	1.0%	0.00%
NORWAY	4,757	-	-	-	-	4,757	77	-	-	77	969	0.1%	2.00%
OMAN	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
PAKISTAN	25	-	-	-	-	25	1	-	-	1	13	0.0%	0.00%
PERU	1	-	-	-	-	1	0	-	-	0	1	0.0%	0.00%
PHILIPPINES	914	-	-	-	-	914	15	-	-	15	183	0.0%	0.00%
POLAND	90	-	-	-	-	90	4	-	-	4	45	0.0%	0.00%
QATAR	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
ROMANIA	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.50%
RUSSIAN FEDERATION	13,301	-	-	-	-	13,301	1,064	-	-	1,064	13,301	1.9%	0.00%
SAUDI ARABIA	164	-	-	-	-	164	7	-	-	7	82	0.0%	0.00%
SINGAPORE	2,941	-	-	-	-	2,941	47	-	-	47	588	0.1%	0.00%
SOUTH AFRICA	3,277	-	-	-	-	3,277	393	-	-	393	4,915	0.7%	0.00%
SPAIN	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
SRI LANKA	0	-	-	-	-	0	0	-	-	0	0	0.0%	0.00%

Template EU CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (€000) - continued

	General credit exposures		Relevant credit exposures – Market risk		Securitisation exposures	Total exposure value	Own fund requirements			Risk-weighted exposure amounts	Own fund requirements weights (%)	Countercyclical buffer rate (%)	
	Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for non-trading book		Relevant credit risk exposures – Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book				Total
Breakdown by country – continued:													
SWEDEN	13,354	-	-	-	-	13,354	214	-	-	214	2,673	0.4%	1.00%
SWITZERLAND	23,634	-	-	-	-	23,634	664	-	-	664	8,300	1.2%	0.00%
TAIWAN, PROVINCE OF CHINA	3,147	-	-	-	-	3,147	51	-	-	51	643	0.1%	0.00%
THAILAND	1,511	-	-	-	-	1,511	60	-	-	60	756	0.1%	0.00%
TUNISIA	0	-	-	-	-	0	0	-	-	0	0	0.0%	0.00%
TURKEY	565	-	-	-	-	565	23	-	-	23	282	0.0%	0.00%
UGANDA	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
UNITED ARAB EMIRATES	1,042	-	-	-	-	1,042	42	-	-	42	521	0.1%	0.00%
UNITED KINGDOM	592,964	-	-	-	-	592,964	23,859	-	-	23,859	298,232	41.6%	0.00%
UNITED STATES	179,742	-	-	-	-	179,742	12,615	-	-	12,615	157,688	22.0%	0.00%
URUGUAY	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.00%
VIETNAM	377	-	-	-	-	377	6	-	-	6	75	0.0%	0.00%
ZAMBIA	0	-	-	-	-	0	0	-	-	0	0	0.0%	0.00%
TOTAL	1,249,899	-	-	-	-	1,249,899	57,338	-	-	57,338	716,730	100%	-

Table 18 – Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (EU CCyB1)

8 Leverage ratio

8.1 Overview

The leverage ratio is an additional supervisory tool designed to serve as a transparent, non-risk-based ratio to complement existing risk-based capital requirements. The Basel III leverage ratio is calculated by dividing Tier 1 capital by the total of on-balance sheet and most off-balance sheet exposures prior to any application of risk weighting, netting or collateral.

NTGS's leverage ratio has remained at all times well in excess of the EBA regulatory minimum 3% implemented by CRR Article 92(1)d.

8.2 Leverage ratio breakdown

NTGS's leverage ratio as at 31 December 2022 stands at 10.62%, calculated in accordance with CRR Art. 429 and 499(2). All information is provided on a solo basis.

Referring to CRR 2 Art. 451(1)(b), Tables 19 and 20 below show the reconciliation of the leverage ratio exposures with the relevant information in the NTGS financial statements (regulatory scope: FINREP), and respectively a breakdown of leverage ratio exposures.

Template EU LR1 - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures (€000)

	Applicable amount
Total assets as per published financial statements (Lux GAAP)	6,108,919
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	
(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	
(Adjustment for temporary exemption of exposures to central banks (if applicable))	
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) CRR)	
Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	
Adjustment for eligible cash pooling transactions	
Adjustment for derivative financial instruments	169,250
Adjustment for securities financing transactions (SFTs)	
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	
(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	
(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) CRR)	
(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) CRR)	
Other adjustments (including Lux GAAP to IFRS adjustments)	(58,244)
Total exposure measure	6,219,925

Table 19 – Leverage ratio exposures reconciliation (EU LR1)

Refer to [section 4.2](#) of this document for more details on financial statements reconciliation.

Template EU LR3 - LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (€000)

	CRR leverage ratio exposures
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	6,198,550
Trading book exposures	-
Banking book exposures, of which:	6,198,550
Covered bonds	-
Exposures treated as sovereigns	5,108,538
Exposures to regional governments, MDB, international organisations and PSE, not treated as sovereigns	-
Institutions	336,510
Secured by mortgages of immovable properties	-
Retail exposures	-
Corporates	454,144
Exposures in default	-
Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	299,359

Table 20 – Leverage ratio exposures breakdown (EU LR3)

Referring to CRR 2 Art. 451(1)(a)(b) and Art. 451(3), Table 21 below presents the leverage ratio common disclosure for 2022 and 2021. The main component of the leverage exposure measure is represented by on-balance sheet items.

Template EU LR2 - LRCom: Leverage ratio common disclosure (€000)	2022	2021
	CRR leverage ratio exposures	
On-balance sheet exposures (excluding derivatives and SFTs)		
On-balance sheet items (excluding derivatives, SFTs, but including collateral)	6,198,550	7,584,370
Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-	-
(Adjustment for securities received under securities financing transactions that are recognised as an asset)	-	-
(General credit risk adjustments to on-balance sheet items)	-	-
(Asset amounts deducted in determining Tier 1 capital)	(147,876)	(160,183)
Total on-balance sheet exposures (excluding derivatives and SFTs)	6,050,675	7,424,188
Derivative exposures		
Replacement cost associated with SA-CCR derivatives transactions (i.e. net of eligible cash variation margin)	-	-
Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	-	-
Exposure determined under Original Exposure Method	169,250	150,046
(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	-	-
(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
(Exempted CCP leg of client-cleared trade exposures) (Original Exposure Method)	-	-
Total derivatives exposures	169,250	150,046
Securities financing transaction (SFT) exposures		
Total securities financing transaction exposures	-	-
Other off-balance sheet exposures		
Off-balance sheet exposures at gross notional amount	322,066	557,249
(Adjustments for conversion to credit equivalent amounts)	(322,066)	(536,941)
(General provisions deducted in determining Tier 1 capital and specific provisions associated with off-balance sheet exposures)	-	-
Off-balance sheet exposures	-	20,308
Excluded exposures		
(Total exempted exposures)	-	-
Capital and total exposure measure		
Tier 1 capital	660,731	648,473
Total exposure measure	6,219,925	7,594,542
Leverage ratio		
Leverage ratio (%)	10.62%	8.54%

Template EU LR2 - LRCom: Leverage ratio common disclosure (€000) - continued	2022	2021
Leverage ratio (excluding the impact of the exemption of public sector investments and promotional loans) (%)	-	-
Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) (%)	-	-
Regulatory minimum leverage ratio requirement (%)	3.00%	3.00%
Additional own funds requirements to address the risk of excessive leverage (%)	-	-
of which: to be made up of CET1 capital	-	-
Leverage ratio buffer requirement (%)	-	-
Overall leverage ratio requirement (%)	3.00%	3.00%
Disclosure of mean values		
Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	-	-
Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	-	-
Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	6,219,925	7,594,542
Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	6,219,925	7,594,542
Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	10.62%	8.54%
Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	10.62%	8.54%

Table 21 – Leverage ratio common disclosure (EU LR2)

The leverage exposures and leverage ratio for NTGS are mainly influenced by its liquidity and investment policy. To manage the risk of excessive leverage, NTGS ensures appropriate management of assets and liabilities. This manifests itself through the majority of proceeds from client deposits being placed with central banks. Furthermore, NTGS monitors the leverage ratio on an ongoing basis as part of its wider risk management framework.

The leverage ratio over the reference period was impacted mainly by the growth in the balance sheet.

9 Minimum Requirement for own funds and Eligible Liabilities (MREL)

Where the bail-in tool is envisaged as part of the resolution plan under the Bank Recovery and Resolution Directive (BRRD), the resolution authorities will require banks to raise and hold the capital resources (Eligible Liabilities) that will be either written-down or converted into equity (bailed-in) as part of the resolution. MREL is the amount of the 'bail-inable' liabilities that banks have to maintain as per their resolution plan. For 2022, the CSSF has requested that NTGS fulfil two MREL ratios. They are calculated (i) as the amount of own funds and eligible liabilities expressed as a percentage of the total risk exposure amount (MREL TREA) and, (ii) as the amount of own funds and eligible liabilities expressed as a percentage of the total exposures of the leverage ratio (MREL TEM). At the end of 2022, the respective values of these two ratios versus their requirements are:

- MREL TREA: 74.1% versus a requirement of 17.7%
- MREL TEM: 10.6% versus a requirement of 6.0%

10 Asset encumbrance

10.1 Overview

Consistent with the EBA guidelines NTGS considers an asset to be encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralize or credit-enhance any on-balance-sheet or off-balance-sheet transaction from which it cannot be freely withdrawn. This includes assets which are subject to any restrictions on withdrawal, including a requirement for prior approval or replacement with other assets.

10.2 Asset encumbrance disclosures

Asset encumbrance is not a key feature of NTGS's funding model which is primarily driven by unsecured client deposits. Asset encumbrance may be considered in a stressed liquidity environment where NTGS's stock of eligible debt securities could be used to borrow funds on a secured basis from third parties.

For the year to 31 December 2022 the only source of asset encumbrance was a €500,000 government bond pledged in support of NTGS's client custody activities. This pledge is designed to protect against potential shortfalls in client custody assets as required under UK client asset rules.

NTGS's median quarterly balance of encumbered assets for the year to 31 December 2022 was €0.5 million.

Referring to CRR 2 Art. 443 disclosure requirements, tables 22 and 23 below present information on encumbered assets for NTGS.

Template EU AE1 - Encumbered and unencumbered assets (€000)

	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
Assets of the disclosing institution	500	500			6,209,626	14,604		
Equity instruments	-	-	-	-	289	-	-	-
Debt securities	500	500	500	500	14,604	14,604	14,604	14,604
of which: covered bonds	-	-	-	-	-	-	-	-
of which: issued by financial corporations	500	500	500	500	14,604	14,604	14,604	14,604
Other assets	-	-			6,194,732	-		

Table 22 – Encumbered and unencumbered assets (EU AE1)

NTGS does not consider that any of the balance reported as “other assets” above to be available for encumbrance in the normal course of its business.

Template EU AE3 - Encumbered and unencumbered assets (€000)

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
Carrying amount of selected financial liabilities	-	-

Table 23 – Encumbered and unencumbered assets (EU AE3)

11 Remuneration and Board of Directors

11.1 Board of Directors

All directors of the NTGS SE Board are required to obtain approval for any directorships held in organisations external to Northern Trust. Directors are also required to avoid taking up any appointments during their tenure which would give rise to a conflict of interest. During the 2022 performance year, four directors of the NTGS SE Board held a total of 34 directorships for organisations outside of Northern Trust.

The NTGS SE Risk Committee discusses and recommends risk related matters to the NTGS SE Board.

NTGS has established a suitability assessment committee as a specialised committee of the board of directors, a diversity policy, a suitability assessment policy and a Fitness & Proprietary (F&P) policy. These apply to individuals identified as being members of the NTGS SE Board of Directors (BoD) and Authorised Management (AM), together the 'Management Body' or other regulated roles. The purpose of the diversity policy is to ensure that appropriate measures are taken in relation to diversity requirements in accordance with the values of Northern Trust and the regulatory requirements, the EBA Guidelines and the Law.

The suitability assessment committee assesses the suitability requirements under the EBA guidelines using the NTGS suitability assessment policy and associated suitability assessment methodology. The key areas reviewed under the NTGS suitability assessment policy are:

- Reputation, honesty and integrity,
- Knowledge, skills and experience,
- Independence of mind, and
- The level of time available to commit to the duties.

While performing its assessment of suitability of members of the NTGS Management Body, the suitability assessment committee is taking into account the diversity requirements.

11.2 Qualitative disclosures

Governance and compensation policies

The Northern Trust (NTC) Human Capital and Compensation Committee (HCCC), formerly known as the Compensation and Benefits Committee (CBC), is a committee of the board of directors of the parent company headquartered in Chicago IL, USA. The HCCC has primary responsibility for ensuring that compensation programs align with our philosophy and objectives, including oversight of the processes through which the company reviews its incentive plans within the context of business risk mitigation.

The HCCC consists of independent NTC non-executive directors and has Meridian Compensation Partners as its independent consultant. The HCCC confers with its independent compensation consultant to ensure that decisions and actions are consistent with stockholders' long-term interests and compensation-related best practices within the financial services industry, including effective risk management within our compensation framework.

A Compensation Committee (NTGS SE CC) has also been established by the NTGS SE Board at a local level, with the membership consisting of three independent non-executive directors of the NTGS SE Board (including the chair), the Head of Compensation and Regulatory Reward, EMEA (standing attendee) and Head of HR, Continental Europe (standing attendee). The role of the NTGS SE CC is to provide support and advice to the NTGS SE Board on the design and review of the NTGS SE compensation policies, practices and processes, and to monitor and implement the NTGS SE regulatory compensation requirements. The purpose of NTGS SE CC is to ensure remuneration policies

and processes are in line with the requirements of the Luxembourg law implementing the European Directive (CRD V Luxembourg Law) and provisions in relation to remuneration policies into the Luxembourg law on the financial sector (the LFS). The terms of reference for the NTGS SE CC sets out the details on roles and responsibilities.

NTC's Total Compensation Policy applies to all employees globally and contains addendums specifically related to EU remuneration requirements for employees operating in EU regulated countries. The HCCC reviews the Total Compensation Policy on an annual basis.

Furthermore, NTGS SE has established a Total Compensation Policy in line with the requirements of the LFS, CRD V Luxembourg Law and the EBA Guidelines. NTGS SE Total Compensation Policy applies to all employees in NTGS SE. The NTGS SE Board approves and regularly reviews the general principles of this Total Compensation Policy following a recommendation by NTGS SE CC. Information on guaranteed variable remuneration and severance payments are set out in a separate guideline and policy respectively.

Material Risk Takers

Employees whose professional activities have a material impact on NTGS SE risk profile are classified as performing Material Risk Taker (MRT) roles in accordance with the criteria set out in the European Regulation, (EU) No 2021/923, and have been categorised as:

- "Senior Manager MRT" – those identified as members of the management body and senior management per paragraph 3(1)(a) of Article 92 of the CRD V Directive.
- "Standard MRT" – those that could have the ability to impact the risk profile of NTGS SE; however these all operate within appropriate governance structures and under delegated authorised limits from Senior Managers.

Employees identified as MRTs for performing an executive function role in more than one regulated entity (**Group MRTs**) will be subject to the Remuneration Rules aligned to their primary regulator. This is based on the regulated entity to which they provide the majority of their services (i.e. on the basis of role pre-dominance in an entity).

Compensation design

Remuneration design and structure at NTC focuses on all elements of total compensation and differentiation to avoid entitlement and to develop a high performance culture. In addition to fixed remuneration, NTC offers variable remuneration which includes short-term and long-term incentives where appropriate. Risk and Compliance employees have incentive awards funded from the Corporate Risk & Compliance pool and are not impacted by the business funding.

At the start of the performance year, the NTC board of directors approves a profit plan (the Profit Plan) which includes detail on projected performance outlook and competitive requirements for incentive compensation. The Profit Plan determination includes risk considerations including reserves for credit and operational losses and other risk assessments. The HCCC then reviews the initial cash incentive pool accrual at the corporate level based on a competitive target percentage range of the pre-tax income projections included in the Profit Plan.

The initial accrual level takes into consideration financial performance factors including affordability and risk considerations. The corporate cash incentive pool is funded based on the actual performance of the Corporation as measured by pre-tax income in early December, with the ability to add or claw funding back post-performance period when the actuals have been determined.

NTC's CRO participates in funding and allocation discussions that inform the recommendation to the HCCC of corporate pool funding level as well as Business Unit allocation. Corporate Risk Management has developed a process to track and consolidate risk events and key metrics for the plan year and this

information is provided to Business Unit leaders and managers for incorporation in performance review and throughout the plan year. The CRO uses the Enterprise and Business Unit Risk Performance Scorecards and any known Significant Risk Outcomes to inform recommendations to the HCCC regarding any risk adjustments to the overall funding or business unit allocations. The CRO participates in quarterly discussions with the NTC Chief Financial Officer and Chief Human Resources Officer regarding the financial performance as well as consideration of risk factors such as credit loss reserves and operational losses. Once the cash incentive allocation to Business Units has been determined, the Business Unit President reviews financial performance and any risk factors to determine allocation of the cash incentive pool. The Business Unit Chief Financial Officer and Business Unit CRO (with input from the CRO, International and the NTGS SE CRO) participate in this review.

The NTGS SE Board and NTGS SE Authorized Management are also provided with the Finance and Risk Scorecard for NTGS SE as part of the global incentive risk management processes to ensure that they can feed back into the corporate process. Performance against these criteria is measured using both quantitative and qualitative criteria.

Annual review processes for all employees include performance expectations related to the monitoring and mitigation of risk. In completing the annual performance evaluation and compensation planning, managers receive information on how to incorporate appropriate performance expectations relative to the management of risk into the review process. As part of the annual salary review and incentive process, managers recommend total compensation reflecting their discretionary assessment of specific objective and subjective factors including performance against risk expectations.

When choosing appropriate measures for team and individual goals, these goals are aligned with those of the business. As these business and financial goals are achieved, employees are rewarded accordingly to reinforce the value of their contribution. In order to determine an individual's pay and incentive allocation, managers will take into consideration discretionary assessment of specific objective and subjective factors such as:

- corporate and business unit performance;
- performance within a standard risk expectation for all employees;
- prior and expected individual performance and long term impact; and
- teamwork and individual contributions.

Employees engaged in the internal control functions are independent from the business units they oversee and have appropriate authority. They are remunerated in accordance with the achievement of the objectives linked to their functions, and the amount of their variable compensation is not linked to the performance of the business units they control.

All employees within NTC are eligible for an incentive payment subject to performance. Performance factors can result in no increase to base pay and/or a zero cash incentive award for a specific performance period.

The short-term incentive (STI) and long-term incentive (LTI) mix was determined for employees according to a fixed structure based on the total incentive award amount. The purpose of the LTI cash and equity awards is to link current and future business leaders to overall long term performance of the organisation. For performance year 2022, the minimum total incentive award for receiving a LTI award was US\$75,000. Incentive splits for MRTs and other regulated roles were administered according to regulatory requirements and the deferral and vesting of variable remuneration was in accordance with the CRD V remuneration rules.

Total variable remuneration consists of a combination of three components for Material Risk Takers:

- **STI Cash**

- **STI Equity**¹ typically granted in the form of Restricted Stock Units (RSU), which vest immediately
- **LTI Deferred Equity**^{1,2} typically granted in the form of RSUs

¹At the time of vest, delay in distribution/hold period is applicable on STI and LTI awards delivered in equity. The equity award is distributed 12 months after it vests.

²In accordance with CRD V remuneration requirements, deferred awards are subject to performance adjustment consideration at time of vesting.

The deferral period for MRTs identified for NTGS SE is:

- 5 years for Senior Manager MRTs, vesting on a pro-rata basis of 20% per year, beginning on the first anniversary of the first day of the month after the month of grant;
- 4 years for Standard MRTs, vesting on a pro-rata basis of 25% per year, beginning on the first anniversary of the first day of the month after the month of grant.

The MRT remuneration structure does not apply where total incentive is no more than €50,000 and total incentive is no more than one third of total remuneration.

There is a set limit on the amount of incentive compensation that can be paid in relation to fixed compensation. This is referred to as the bonus cap. The maximum incentive compensation that an MRT can receive is 100% of their fixed compensation. Under exceptional and limited circumstances, the bonus cap may be extended to a higher ratio which may reach up to 200% of the fixed component of the total remuneration for the MRT. This would be subject to shareholder approvals on an annual basis and compliance with both the procedure set out in article 38-6 of the LFS and the notification requirements of the Circular CSSF 15/622.

11.3 Quantitative disclosures

The NTGS SE CC met five times during the 2022 performance year. The independent non-executive directors who are members of this committee are also members of other committees and as such, the fixed remuneration they receive relates to their full duties and not just the NTGS SE CC duties. All NTGS SE CC members are MRTs; the 2022 total fixed remuneration for these members was €0.4m, with no variable remuneration awarded.

The HCCC met five times during the 2022 performance year. The directors who act as members of the HCCC are also members of other committees of the NTC Board and as such the remuneration they receive relates to their full duties and not just the HCCC duties. Total remuneration paid to the HCCC members for 2022 was US\$1.4m and this was awarded in a combination of stock and cash. Full details of these awards are available in the 2022 NTC Proxy Statement.

Referring to CRR 2 Art. 450(1)(h)(i)-(ii) NTGS discloses the information in Table 24 below regarding remuneration awarded for the financial year 2022.

Template EU REM1 - Remuneration awarded for the financial year (€000)

	MB Supervisory function	MB Management function	Other senior management	Other identified staff
Number of identified staff	6	4	11	14
Total fixed remuneration	2,261	1,067	2,959	3,175
Of which: cash-based	2,261	1,067	2,959	3,175
Fixed remuneration				
Of which: shares or equivalent ownership interests	-	-	-	-
Of which: share-linked instruments or equivalent non-cash instruments	-	-	-	-
Of which: other instruments	-	-	-	-
Of which: other forms	-	-	-	-

	Number of identified staff	6	4	11	14
Variable remuneration	Total variable remuneration	-	639	1,758	1,753
	Of which: cash-based	-	192	575	686
	<i>Of which: deferred</i>	-	-	-	-
	Of which: shares or equivalent ownership interests	-	447	1,113	1,067
	<i>Of which: deferred</i>	-	255	636	618
	Of which: share-linked instruments or equivalent non-cash instruments	-	-	69	-
	<i>Of which: deferred</i>	-	-	40	-
	Of which: other instruments	-	-	-	-
	<i>Of which: deferred</i>	-	-	-	-
	Of which: other forms	-	-	-	-
	<i>Of which: deferred</i>	-	-	-	-
Total remuneration		2,261	1,706	4,717	4,928

Note: the information in the table above excludes identified staff that terminated during 2022.

Table 24 – Remuneration awarded for the financial year (EU REM1)

Referring to CRR 2 Art. 450(1)(h)(v)-(vii) NTGS discloses the information in Table 25 below regarding special payments to staff whose professional activities have a material impact on the Bank's risk profile.

Template EU REM2 - Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff) (€000)

	MB Supervisory function	MB Management function	Other senior management	Other identified staff
Guaranteed variable remuneration awards				
Guaranteed variable remuneration awards - Number of identified staff	-	-	-	-
Guaranteed variable remuneration awards - Total amount	-	-	-	-
Of which guaranteed variable remuneration awards paid during the financial year, that are not taken into account in the bonus cap	-	-	-	-
Severance payments awarded in previous periods, that have been paid out during the financial year				
Severance payments awarded in previous periods, that have been paid out during the financial year - Number of identified staff	-	-	-	-
Severance payments awarded in previous periods, that have been paid out during the financial year - Total amount	-	-	-	-
Severance payments awarded during the financial year				
Severance payments awarded during the financial year - Number of identified staff	-	-	-	-
Severance payments awarded during the financial year - Total amount	-	-	-	-
Of which paid during the financial year	-	-	-	-
<i>Of which deferred</i>	-	-	-	-
Of which severance payments paid during the financial year, that are not taken into account in the bonus cap	-	-	-	-
Of which highest payment that has been awarded to a single person	-	-	-	-

Table 25 – Special payments to staff whose professional activities have a material impact on NTGS risk profile (EU REM2)

Referring to CRR 2 Art. 450(1)(h)(iii)-(iv) NTGS discloses the information in Table 26 below regarding deferred remuneration.

Template EU REM3 - Deferred remuneration (€000)								
	Total amount of deferred remuneration awarded for previous performance periods	Of which due to vest in the financial year	Of which vesting in subsequent financial years	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years	Total amount of adjustment during the financial year due to ex post implicit adjustments (i.e. changes of value of deferred remuneration due to the changes of prices of instruments)	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year	Total amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods
MB Supervisory function								
Total MB Supervisory function	-	-	-	-	-	-	-	-
Cash-based	-	-	-	-	-	-	-	-
Other forms	-	-	-	-	-	-	-	-
MB Management function								
Total MB Management function	661	103	558	-	-	-	115	53
Cash-based	89	19	71	-	-	-	19	-
Shares or equivalent ownership interests	572	84	488	-	-	-	96	53
Other forms	-	-	-	-	-	-	-	-
Other senior management								
Total Other senior management	2,219	377	1,841	-	-	-	432	153
Cash-based	337	63	274	-	-	-	65	-
Shares or equivalent ownership interests	1,788	294	1,495	-	-	-	344	153
Share-linked instruments or equivalent non-cash instruments	93	21	72	-	-	-	23	-
Other forms	-	-	-	-	-	-	-	-
Other identified staff								
Total Other identified staff	1,666	211	1,455	-	-	-	236	74
Cash-based	120	25	95	-	-	-	26	-
Shares or equivalent ownership interests	1,547	186	1,360	-	-	-	210	74
Other forms	-	-	-	-	-	-	-	-
Total amount	4,546	691	3,855	-	-	-	782	280

Table 26 – Deferred remuneration (EU REM3)

Referring to CRR 2 Art. 450(1)(i) regarding remuneration of 1 million EUR or more per year, there have been no NTGS high earners qualifying for this disclosure as of 31 December 2022.

Referring to CRR 2 Art. 450(1)(g) NTGS discloses the information in Table 27 below regarding remuneration of staff whose professional activities have a material impact on the Bank's risk profile.

Template EU REM5 - Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff) (€000)										
	Management body remuneration			Business areas						Total
	MB Supervisory function	MB Management function	Total MB	Investment banking	Retail banking	Asset management	Corporate functions	Independent internal control functions	All other	
Total number of identified staff										33
Of which: members of the MB	6	4	10							
Of which: other senior management				-	-	-	1	2	8	
Of which: other identified staff				-	-	-	5	7	2	
Total remuneration of identified staff	2,261	1,706	3,967	-	-	-	2,482	2,542	4,621	
Of which: variable remuneration	-	639	639	-	-	-	969	740	1,801	
Of which: fixed remuneration	2,261	1,067	3,328	-	-	-	1,512	1,801	2,820	

Table 27 – Remuneration of staff whose professional activities have a material impact on NTGS risk profile (EU REM5)

ANNEX A – Pillar 3 attestation letter (CRR art. 431)

To whom it may concern

ATTESTATION

On behalf of the NTGS Authorised Management, we hereby attest that the disclosures in this report have been prepared in accordance with the formal policies and internal processes, systems and controls the entity has established in order to ensure compliance with all applicable rules and guidelines.

DocuSigned by:
Rachel Hamen
EE3C8ADF493044E

Rachel Hamen
Authorised Manager and Chief Financial Officer
Northern Trust Global Services SE

DocuSigned by:
Thierry Lopez
EDF2F29FF4524FD

Thierry Lopez
Authorised Manager and Chief Risk Officer
Northern Trust Global Services SE

ANNEX B – Disclosure of liquidity requirements

Template EU LIQ1 - Quantitative information of LCR (€000)								
Scope of consolidation: Solo								
Quarter ending	Total unweighted value (average)				Total weighted value (average)			
	Dec-22	Sep-22	Jun-22	Mar-22	Dec-22	Sep-22	Jun-22	Mar-22
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS								
Total high-quality liquid assets (HQLA)					5,519,858	5,578,347	5,600,650	5,671,277
CASH - OUTFLOWS								
Retail deposits and deposits from small business customers, of which:	-	-	-	-	-	-	-	-
<i>Stable deposits</i>	-	-	-	-	-	-	-	-
<i>Less stable deposits</i>	-	-	-	-	-	-	-	-
Unsecured wholesale funding	5,878,368	6,004,578	5,948,454	6,034,691	2,316,680	2,393,748	2,413,079	2,671,970
<i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	4,748,917	4,814,440	4,713,833	4,483,628	1,187,229	1,203,610	1,178,458	1,120,907
<i>Non-operational deposits (all counterparties)</i>	1,129,450	1,190,138	1,234,621	1,551,063	1,129,450	1,190,138	1,234,621	1,551,063
<i>Unsecured debt</i>	-	-	-	-	-	-	-	-
<i>Secured wholesale funding</i>					-	-	-	-
Additional requirements	3,509,678	3,213,580	2,859,519	2,817,639	248,000	248,725	240,528	217,379
<i>Outflows related to derivative exposures and other collateral requirements</i>	17,953	18,349	1,968	2,024	17,953	18,349	1,968	2,024
<i>Outflows related to loss of funding on debt products</i>	-	-	-	-	-	-	-	-
<i>Credit and liquidity facilities</i>	-	-	-	-	-	-	-	-
<i>Other contractual funding obligations</i>	24,879	25,061	25,447	19,462	6,250	6,250	6,250	-
<i>Other contingent funding obligations</i>	3,466,846	3,170,170	2,832,104	2,796,153	223,797	224,127	232,310	215,354
TOTAL CASH OUTFLOWS					2,564,680	2,642,473	2,653,607	2,889,349

Template EU LIQ1 - Quantitative information of LCR (€000) - continued								
Scope of consolidation: Solo								
Quarter ending	Total unweighted value (average)				Total weighted value (average)			
	Dec-22	Sep-22	Jun-22	Mar-22	Dec-22	Sep-22	Jun-22	Mar-22
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
CASH - INFLOWS								
Secured lending (e.g. reverse repos)	-	-	-	-	-	-	-	-
Inflows from fully performing exposures	1,026,472	1,081,237	1,004,616	997,527	1,026,472	1,081,237	1,004,616	997,527
Other cash inflows	2,423	2,320	2,960	4,001	2,423	2,320	2,960	4,001
TOTAL CASH INFLOWS	1,028,895	1,083,557	1,007,576	1,001,528	1,028,895	1,083,557	1,007,576	1,001,528
<i>Inflows subject to 75% cap</i>	<i>1,028,895</i>	<i>1,083,557</i>	<i>1,007,576</i>	<i>1,001,528</i>	<i>1,028,895</i>	<i>1,083,557</i>	<i>1,007,576</i>	<i>1,001,528</i>
TOTAL ADJUSTED VALUE								
LIQUIDITY BUFFER					5,519,858	5,578,347	5,600,650	5,671,277
TOTAL NET CASH OUTFLOWS					1,535,785	1,558,916	1,646,031	1,887,821
LIQUIDITY COVERAGE RATIO					362%	361%	343%	313%

Table 28 – Quantitative information of LCR (EU LIQ1)

Explanations on the main drivers of LCR results and the evolution of the contribution of inputs to the LCR's calculation over time

The LCR of NTGS is driven by a combination of changes to the amount of HQLA and net cash outflows. The majority of funding is categorised as operational which attracts a reduced outflow factor to that related to non-operational deposits. LCR outflows (post-outflow factor) are driven by the level of operational and non-operational deposits held at any one time.

Explanations on the changes in the LCR over time

Over the year under review, NTGS has seen a reduction in total non-operational balances which has driven the increase in the LCR seen in Table EU LIQ1 above.

Explanations on the actual concentration of funding sources

NTGS' principal source of funding is client cash balances arising from the settlement of their transactions. Its global custody customers are spread across pension funds, investment funds, corporate customers and financial institutions, as well as an increasing geographic spread across Europe.

High-level description of the composition of the institution`s liquidity buffer

NTGS`s stock of HQLAs is almost exclusively comprised of Central Bank deposits and level 1 securities issued by Sovereign.

As at 31 December 2022, NTGS`s stock of HQLAs was made up mainly of EUR Central Bank cash [99.7%] and EU Sovereign securities [0.3%].

Currency mismatch in the LCR

NTGS prepares its LCR on an all currency basis denominated in EUR as the entity`s reporting currency. On any particular month, where non-EUR liabilities exceed the regulatory mandated 5% threshold, additional reporting in that significant currency takes place. NTGS manages its balance sheet in a way which minimises the risk of currency mismatch within the LCR through matching assets and liabilities in each currency.

Other items in the LCR calculation that are not captured in the LCR disclosure template but that the institution considers relevant for its liquidity profile

Potential outflows in relation to overdrafts are also considered within the LCR calculation. Impacts from overdraft lines are considered as part of the entity`s overall liquidity stress testing program.

Template EU LIQ2: Net Stable Funding Ratio (€000)

	Unweighted value by residual maturity				Weighted value
	No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
Available stable funding (ASF) Items					
Capital items and instruments	808,607	-	-	-	808,607
<i>Own funds</i>	808,607	-	-	-	808,607
<i>Other capital instruments</i>	-	-	-	-	-
Retail deposits	-	-	-	-	-
<i>Stable deposits</i>	-	-	-	-	-
<i>Less stable deposits</i>	-	-	-	-	-
Wholesale funding:	-	5,131,914	-	-	1,994,914
<i>Operational deposits</i>	-	3,989,829	-	-	1,994,914
<i>Other wholesale funding</i>	-	1,142,085	-	-	-
Interdependent liabilities	-	-	-	-	-
Other liabilities:	5,578	199,587	-	-	-
<i>NSFR derivative liabilities</i>	5,578	-	-	-	-
<i>All other liabilities and capital instruments not included in the above categories</i>	-	199,587	-	-	-
Total available stable funding (ASF)					2,803,521
Required stable funding (RSF) Items					
Total high-quality liquid assets (HQLA)	-	-	-	-	-
Assets encumbered for a residual maturity of one year or more in a cover pool	-	-	-	500	250
Deposits held at other financial institutions for operational purposes	-	-	-	-	-
Performing loans and securities:	-	790,166	-	488	79,505
<i>Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions</i>	-	790,166	-	488	79,505
Interdependent assets	-	-	-	-	-
Other assets:	-	7,455	-	303,479	305,635
<i>Physical traded commodities</i>	-	-	-	-	-
<i>Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs</i>	-	-	-	-	-
<i>NSFR derivative assets</i>	-	1,877	-	-	1,877
<i>NSFR derivative liabilities before deduction of variation margin posted</i>	-	5,578	-	-	279
<i>All other assets not included in the above categories</i>	-	-	-	303,479	303,479
Off-balance sheet items	-	-	-	-	-
Total RSF					385,390
Net Stable Funding Ratio (%)					727%

Table 29 – Net Stable Funding Ratio (EU LIQ2)

ANNEX C – Contact

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