

# 2018

# Solvency and Financial Condition Report

Nationale-Nederlanden Levensverzekering Maatschappij N.V.

# Content Solvency II

## Solvency and Financial

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# Summary

## Summary

### NN Leven's approach to the Solvency and Financial Condition Report

This Solvency and Financial Condition Report ('SFCR') provides public quantitative and qualitative disclosures for Nationale-Nederlanden Levensverzekering Maatschappij N.V. ('NN Leven') on Solvency II as required by the Solvency II legislation. NN Leven already discloses most of the information that is required to be included in the SFCR in its 2018 Annual Report ('Annual Report'). In order to ensure the most transparent and user-friendly approach, the information that is already included in the Annual Report is not duplicated in this SFCR. Therefore, this SFCR is prepared as a supplement to NN Leven's Annual Report. It includes all information required to be disclosed in the SFCR, either through a specific reference to the Annual Report or as supplemental information.

As required by the Delegated Regulation (EU) 2015/35/Annex XX "Structure of the Solvency and Financial Condition Report and Regular Supervisory Report", this SFCR follows the required standard chapter layout. The subjects addressed are based on Directive 2009/138/EC/ and (amended) Directive 2014/51/EU section 3 – Public Disclosures (articles 51-56), Delegated Regulation (EU) 2015/35 and (amended) Delegated Regulation (EU) 2016/467 chapter XII Public Disclosures (articles 292-298). Furthermore, the figures presented in this report are in line with the supervisor's reported Quantitative Reporting Templates ('QRTs').

NN Leven is required to submit the so-called Quantitative Reporting Templates to its supervisor Dutch Central Bank ('DNB'). A subset of these QRTs, which are required to be publicly disclosed and which provide quantitative information in accordance with Solvency II as at 31 December 2018, are included in the appendix to this SFCR.

The amounts disclosed in this SFCR are consistent with the amounts in the Annual Report, in thousands of euros unless stated otherwise. To comply with the Solvency II legislation, the amounts in the QRTs are in thousands of euros.

The Solvency ratio, as well as the amounts disclosed in this SFCR are not final until filed with the regulators.

Chapter A 'Business and performance' describes the overall business profile and structure of NN Leven. It also provides insight into the underwriting and investment performance of NN Leven. Chapter B 'Governance system' explains the organisational governance structure and looks into the role and execution of key Solvency II functions. Chapter C 'Risk profile' analyses NN Leven's exposure to financial and non-financial risks and explains the risk mitigation techniques in place. Chapter D 'Valuation for group solvency purposes' elaborates on the differences in presentation and measurement of balance sheet elements between Solvency II and International Financial Reporting Standards ('IFRS'). Chapter E 'Capital management' discusses the composition of Available and Eligible Own Funds and the calculation of the Solvency Capital Requirement ('SCR').

### Material changes in 2018

On 5 December 2018, NN Group announced that it received approval from DNB to apply the Partial Internal Model under Solvency II including the Major Model Change. The approved Partial Internal Model including the Major Model Change is used to calculate regulatory capital requirements effective 31 December 2018.

On 13 December 2018, NN Group announced that it has obtained approval from DNB to execute the legal merger of Delta Lloyd Levensverzekering N.V. (Delta Lloyd Levensverzekering) into Nationale-Nederlanden Levensverzekering Maatschappij N.V. (NN Leven). The legal merger became effective on 1 January 2019. As a result, NN Leven assumed all assets and liabilities of Delta Lloyd Levensverzekering, including its subordinated notes of EUR 500 million. This legal merger has no impact for 2018.

NN Leven, through a domestic branch, offers insurance products in the Czech Republic. The activities and the related financial risks of these activities are reinsured with NN Re (Netherlands) N.V. ('NN Re'). NN Re deposited collateral with NN Leven to cover the credit risk. On 16 August 2018 NN Group announced that it had reached an agreement to acquire Aegon's Life Insurance business in the Czech Republic and Aegon's Life Insurance and Pension businesses in Slovakia for a total consideration of EUR 155 million. The transaction was completed in January 2019.

### Eligible Own Funds

Solvency II requires to hold Eligible Own Funds for covering the Solvency Capital Requirement. The Eligible Own Funds are classified in three tiers depending on whether the own fund items are available to absorb losses on a going concern basis and/ or in the case of winding-up as prescribed in the Solvency II legislation. Tier 1 Own Fund items are the highest grade capital and Tier 3 Own Funds are the lowest grade capital.

### Eligible Own Funds

In EUR thousand	2018	2017
Tier 1 (restricted and unrestricted)	7,681,304	6,464,592
Tier 2	674,429	674,315
Tier 3	388,585	530,942
<b>Total Eligible Own Funds</b>	<b>8,744,318</b>	<b>7,669,849</b>

Eligible Own Funds increased by EUR 1,074 million, from EUR 7,670 million at 31 December 2017 to EUR 8,744 million at 31 December 2018. The change in eligible Own Funds is mainly due to expected business contribution, market variance and positive impact of assumption changes, partially offset by the impact of regulatory changes (the decrease in UFR level and change in corporate tax rate) and the dividend payment.

## Summary Continued

### Impact of long term guarantees and transitional measures

The quantification of the impact of a change to zero of the volatility adjustment on NN Leven's Solvency capital ratio – represented by an adjustment on the amount of technical provisions, the SCR, the Basic Own Funds and the Eligible Own Funds is included in the paragraph 'Matching and volatility adjustment, transitional measures and transitional risk-free interest rate term structure' in Section D.2 and QRT S.22.01.21 'Impact of long term guarantees and transitional measures' in the Appendix.

### Solvency Capital Requirement

NN Leven applies a Partial Internal Model ('PIM') approved by DNB to measure SCR.

#### Solvency Capital Requirement

In EUR thousand	2018	2017
Market Risk	2,215,339	2,662,504
Counterparty Default Risk	73,835	36,368
Non-market risk	3,000,349	3,097,455
Market / Non-market risk diversification	-1,298,776	-1,434,547
<b>Partial Internal Model BSCR</b>	<b>3,990,747</b>	<b>4,361,780</b>
Operational Risk	310,408	325,153
Capital add-on	898	-6,600
Loss-Absorbing Capacity of Technical Provisions	-54,087	-91,516
Loss-Absorbing Capacity of Deferred Taxes	-817,937	-1,049,207
<b>Total Solvency Capital Requirement</b>	<b>3,430,029</b>	<b>3,539,610</b>

The Solvency Capital Requirement decreased by EUR 110 million. The decrease is mainly driven by operating capital generation and market variances reflecting the favourable impact from credit spread movements partly offset by a decrease of interest rates.

### NN Leven's Solvency II Capital ratio

The following table presents the solvency ratio of NN Leven at year-end 2018 (and reported at year-end 2017).

#### Solvency ratio

In EUR thousand	2018	2017
Eligible Own Funds (EOF)	8,744,318	7,669,849
Minimum Capital Requirement (MCR)	1,543,515	1,592,825
Solvency Capital Requirement (SCR)	3,430,032	3,539,612
<b>Surplus</b>	<b>5,314,286</b>	<b>4,130,237</b>
<b>Ratio (%) (EOF/SCR)</b>	<b>255%</b>	<b>217%</b>

NN Leven was adequately capitalised at year-end 2018. The Solvency II ratio of NN Leven increased from 217% to 255%.

# Business and performance

## A. Business and performance

### Introduction

This chapter of the SFCR contains general information on NN Leven, a simplified group structure and NN Leven's financial performance over 2018.

### A.1 Business

#### General

Reference is made to the section 'NN Group and NN Leven at a Glance' in the 2018 Annual Report of NN Leven for the legal form of NN Leven and NN Leven's position within the legal structure of NN Group.

The supervisory authority responsible for financial supervision of NN Leven:

Dutch Central Bank  
Westeinde 1  
1017 ZN Amsterdam  
The Netherlands

The contact details of NN Leven's external auditor are:

Dhr. W. (Wim) Teeuwissen RA  
KPMG Accountants N.V.  
Papendorpseweg 83  
3528 BJ Utrecht  
The Netherlands

Information on the appointment of the external auditor is included in the section 'Corporate governance- External auditor' in the 2018 Annual Report of NN Leven.

#### Qualifying holdings

A 'qualifying' holding is a direct or indirect holding in NN Leven which represents 10 % or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that undertaking.

NN Leven is a fully owned subsidiary of Nationale-Nederlanden Nederland B.V. ('NN Nederland') which in turn is a fully owned subsidiary of NN Insurance Eurasia N.V. ('NN Eurasia'). NN Eurasia is fully owned by NN Group.

As at 31 December 2018, there were no holders of qualifying holdings in NN Leven.

#### Material lines of business and related undertakings

Reference is made to section 'NN Group and NN Leven at a Glance- NN Leven' and section 'Report of the Management Board' in the 2018 Annual report of NN Leven for more information on the material lines of business of NN Leven.

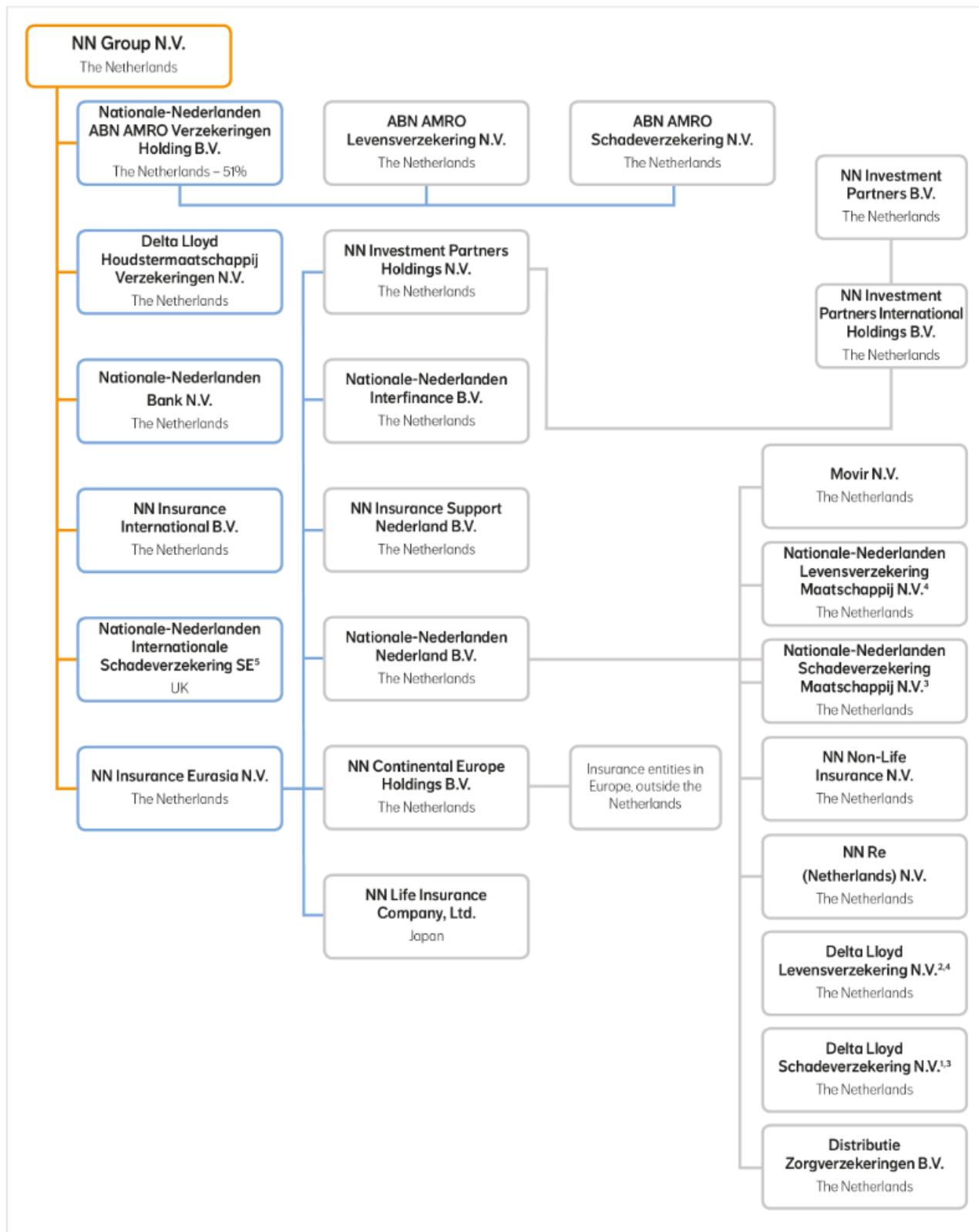
For information on any significant business events or other events that have occurred over the reporting period reference is made to section 'Report of the Management Board- Financial developments' in the 2018 Annual Report of NN Leven and note 40 'Other events' in the 2018 Consolidated annual accounts of NN Leven.

Reference is made to Note '36 Principal subsidiaries' in the 2018 Consolidated annual accounts of NN Leven for a list of material related undertakings and a description of the legal structure of NN Leven. Reference is made to the section 'Corporate governance' of the 2018 Annual Report of NN Leven for information on the governance and organisational structure of NN Leven.

Business and performance Continued

Simplified group structure

The simplified group structure as at 31 December 2018 is as follows:



1 As of 1 March 2018, Delta Lloyd Schadeverzekering N.V. was transferred to Nationale-Nederlanden Nederland B.V.

2 As of 1 April 2018, Delta Lloyd Levensverzekering N.V. was transferred to Nationale-Nederlanden Nederland B.V.

3 As of 1 January 2019, Delta Lloyd Schadeverzekering N.V. ceased to exist as a result of the legal merger with Nationale-Nederlanden Schadeverzekering Maatschappij N.V.

4 As of 1 January 2019, Delta Lloyd Levensverzekering N.V. ceased to exist as a result of the legal merger with Nationale-Nederlanden Levensverzekering Maatschappij N.V.

5 On 16 November 2018 NN Group agreed on the sale of Nationale-Nederlanden Internationale Schadeverzekering SE.

## Business and performance Continued

### A.2 Underwriting Performance (see A.3 below)

#### A.3 Investment Performance

NN Leven's operating result is analysed through a margin analysis, which includes the investment margin (investment performance), fees and premium-based revenues and the technical margin (underwriting performance). For information on underwriting and investment performance per material line of business, reference is made to the section 'Report of the Management Board- Financial development' in the 2018 Annual Report of NN Leven. For the underwriting performance, reference is made to QRT S.05.01.02 'Premiums, claims and expenses by line of business' in the Appendix.

Further reference is made to Note 18 'Investment income' in the 2018 Consolidated annual accounts of NN Leven for information on income and expenses arising from investments by asset class and the components of such income and expenses.

Gains and losses on investments recognised directly in equity are disclosed in Note 11 'Equity'- revaluation reserve and in the Consolidated statement of comprehensive income in the 2018 Consolidated annual accounts of NN Leven.

Information on investment in securitisations is included in Note 37 'Structured entities' in the 2018 Consolidated annual accounts of NN Leven. Most of the investments in securitisations issued by third parties relate to debt instruments of structured entities regarding asset-backed securities, classified as loans. Further reference is made to Note 4 'Available-for-sale investments' in the 2018 Consolidated annual accounts of NN Leven for more information on these investments in structured entities.

#### A.4 Performance of other activities

Other material income and expenses incurred over 2018 are disclosed in notes 17-24 in the section 'Report of the Management Board- Financial development' in the 2018 Annual Report of NN Leven. Leasing arrangements are included in Note 24 'Other operating expenses' and future rental commitments are disclosed in Note 34 'Contingent liabilities and commitments' in the 2018 Consolidated annual accounts of NN Leven.

#### A.5 Any other information

Reference is made to section 'Report of the Management Board- Financial development' in the 2018 Annual Report of NN Leven.

# System of governance

## B. System of governance

### Introduction

This chapter of the SFCR contains information on the system of the governance of NN Leven in addition to governance information included in the 2018 Annual Report of NN Leven. The additional information includes relevant committees of the Management Board (hereafter 'MB'), a description of the main roles and responsibilities of the key functions and NN Leven's approach to the 'fit and proper' requirements and Own Risk and Solvency Assessment.

### B.1 General information on the system of governance

This chapter describes the structure of the committees, and explains the responsibilities, members and interdependencies of each committee. This chapter also sets out the governance and control framework effective in 2018.

#### Structure of governance and changes in system of governance

For a description of the structure of NN Group's administrative, management and supervisory body, reference is made to the Corporate Governance section and the Report of the Supervisory Board, both included in the NN Group 2018 Financial Report and to the NN Group website: <https://www.nn-group.com/Who-we-are/Corporate-governance/Corporate-governance.htm>. These sources also describe the main roles and responsibilities of these bodies, provide a brief description of the segregation of responsibilities within these bodies and describe their relevant committees.

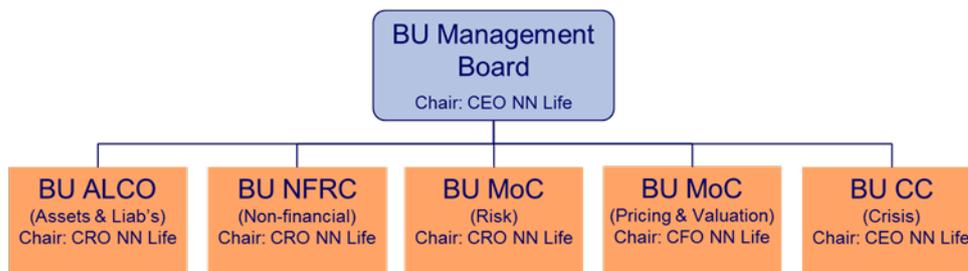
No material changes in the system of governance were made.

#### Management Board committees

The Management Board of NN Leven is responsible for defining, installing, and monitoring the risk management organisation in order to ensure its control systems are effective.

The MB, or its (sub) committees, approves all risk management policies as well as the quantitative and qualitative elements of NN Leven's risk appetite. The Board reports and discusses these topics with the Supervisory Board, on a regular basis.

While the Board retains responsibility for risk management, it has delegated certain responsibilities to committees which are responsible for day-to-day risk and finance related management decision-making, processes and controls. The following committees are in place: the Asset & Liability Committee, the Non-Financial Risk Committees, the Model Committees and the Crisis Committee. Representation in the various committees is provided from the relevant risk departments.



#### Crisis Committee

The main scope and responsibility of the Crisis Committee ('CC') is handling financial and non-financial crisis situations as defined by the MB of NN Leven. The Crisis Committee meets on an ad-hoc basis, but at least twice per year, face-to-face. The Crisis Committee is chaired by the Chief Executive Officer ('CEO') of NN Leven.

#### Asset and Liability Committee

The NN Leven Asset and Liability Committee ('ALCO') oversees the activities and market risks related to investments and the matching of assets and liabilities at NN Leven level. The NN Leven ALCO has decision making authorities that are delegated from the NN Leven MB. Further, the NN Leven ALCO is responsible for approving decisions taken by the MB. The ALCO and/or -management board remain responsible for these decisions. For this reason the ALCO can only approve or decline proposals and request amendments. The ALCO and MB are required to inform the NN Group ALCO about any deviations from the requested amendments including a justification of their decision. The Asset and Liability Committee is chaired by the Chief Risk Officer ('CRO') of NN Leven.

Reference is also made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### Authority, resources and operational independence of key functions

The key functions are positioned independently from the business (2nd line). These functions have, including but not limited to, strong hiring, career development and succession planning, appraisal as well as termination of employment rights to ensure adequate resources, and to allow them to act independently and with authority.

The sections below further describe how the key functions have the necessary authority, resources and operational independence to carry out their tasks and how they report to and advise the MB of NN Leven.

## System of governance Continued

### Roles and responsibilities of key functions

NN Leven has organised its Solvency II key functions (Risk Management, Internal Audit, Compliance and Actuarial Function) in accordance with the applicable Solvency II regulations. All Solvency key function holders within NN Leven have passed the DNB's fit and proper test. All the Solvency II key functions are able to carry out their duties objectively and free from undue influence, and do not simultaneously perform conflicting activities. They all have been given an appropriate standing in the organisation and can report relevant findings directly to the Board.

### Risk function

The risk function is a Solvency II key function within NN Leven.

#### Role

The Chief Risk Officer of NN Leven is the Head of the Risk function and is entrusted with the day-to-day responsibility for NN Leven's risk management function. The CRO steers an independent risk organisation which supports the first line in their decision making, but which also has sufficient countervailing power to prevent excessive risks. The CRO must ensure that both the Management Board and the Supervisory Board are at all times informed of, and understand the material risks to which NN Group is exposed. To ensure that the risk responsibilities of the CRO can be executed in an independent manner, the direct reports of the CRO are split into dedicated first line and second line teams.

The NN Leven CRO also has a functional reporting line to the NN Group CRO.

#### Responsibilities

Within the MB, the risk management responsibilities of the CRO are:

- Setting and monitoring compliance with NN Group's overall risk policies
- Formulating and communicating NN Leven's risk management strategy and ensuring that it is implemented throughout the organisation
- Supervising the operation of NN Leven's risk management and business control systems
- Reporting NN Leven's risks, as well as the processes and internal business controls
- Making risk management decisions with regard to matters which may have an impact on the financial results of NN Leven or its reputation, without limiting the responsibility of each individual Management Board and Executive Board member in relation to risk management.

### Compliance function

The compliance function is a Solvency II key function within NN Leven.

#### Role

To effectively manage Business conduct risk, NN Leven has put in place a Compliance function which is headed by a Chief Compliance officer ('CCO') with delegated responsibility for day-to-day management of the Compliance function. The Compliance function is positioned independently from the business it supervises. This independent position is -amongst others- warranted by independent reporting, unrestricted access to senior management as well as structural, periodic meetings of the CCO with the CEO and the Chairman of the Risk Committee of the Supervisory Board.

#### Responsibilities

Within NN Leven's broader risk framework, the purpose of the Compliance function is to:

- Understand and advocate the rules, regulations and laws and the effective management of Compliance risk; proactively work with and advise the business to manage Business Conduct risk throughout our products' life cycle and our business' activities to meet stakeholder expectations
- Develop and enhance the Compliance Framework to strengthen the three lines of defence to detect, communicate, manage and to report and manage Compliance Risks in order to limit surprises
- Support NN Leven's strategy by establishing clear roles and responsibilities to help embed good compliance risk management practice throughout the business by using a risk-based approach to align business outcomes with NN Leven's risk appetite
- Deepen the culture of compliance by partnering with the business to increase the culture of trust, accountability, transparency and integrity in evaluating, and managing Compliance Risk.

The Local Compliance Officer ('LCO') hierarchically reports to the CEO, to the Head of Legal or to the CRO. If local level management has legitimate and specific reasons to deviate from this governance model and would like to change the hierarchical reporting line of the LCO to another member of the board, prior approval must be obtained from the General Counsel.

### Internal audit function

The Corporate Audit Services NN Group ('CAS') is also a Solvency II key function within NN Leven. For a description of this function, role and responsibilities and implementation in the NN Leven structure, reference is made to section B.5.

## System of governance Continued

### Actuarial function

The Actuarial function is a Solvency II key function within NN Leven. For a description of this function, role and responsibilities and implementation in the NN Leven structure, reference is made to section B.6.

### Remuneration

Reference is made to Note 22 'Staff expenses' and Note 39 'Key management personnel compensation' as disclosed in the 2018 Consolidated Annual accounts of NN Leven for information on the remuneration policy and practices regarding administrative, management and supervisory bodies and employees. Other information on remuneration is disclosed on NN Group's website: <https://www.nn-group.com/Who-we-are/Corporate-governance/Remuneration.htm>.

### Transactions with related parties

Reference is made to Note 38 'Related parties' and Note 39 'Key management personnel compensation' in the 2018 Consolidated annual accounts of NN Leven for information about material transactions during the reporting period. Section B.7 in this SFCR contains more information on intra-group outsourcing arrangements. Transactions with people who exercise a significant influence on NN Leven and with members of the Management Board and Supervisory Board are disclosed in Note 39 'Key management personnel compensation' in the 2018 Consolidated annual accounts of NN Leven.

### Adequacy of system of governance

The assessment of the adequacy of the system of governance of NN Leven to the nature, scale and complexity of the risks inherent to its business is disclosed in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

### Consistent use of risk management, internal control systems and reporting procedures

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for a description of how the risk management and internal control systems and reporting procedures are implemented consistently throughout NN Leven.

## B.2 Fit and proper requirements

For a description of NN Leven's specific requirements concerning skills, knowledge and expertise applicable to the persons who manage NN Leven, reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven. Requirements concerning skills, knowledge and expertise applicable to people who have other key functions, are included in the respective job profiles.

In accordance with the NN Group Governance Manual and applicable HR policies, the persons who effectively run NN Leven and the persons fulfilling key functions should be fit and proper. During recruitment all candidates must have the professional qualifications, knowledge and experience that are required for sound and prudent management ('fit') and be of good reputation and have integrity ('proper'). Where applicable the candidates must pass the DNB or AFM fit and proper test.

All people holding key functions are assessed against their performance objectives, leadership behaviours and any other requirements from their job profiles during the annual performance cycle and specifically during the year-end appraisal.

## B.3 Risk management system including the own risk and solvency assessment

### Description of NN Leven 's risk management system

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for a description of the risk management system which comprises strategies, processes and reporting procedures, and how NN Leven is able to effectively identify, assess, monitor, manage, and report, on a continuous basis, the risks to which NN Leven is or could be exposed on an individual and aggregated level. In the same note, a description is included on how the risk management system including the risk management function are implemented and integrated into the organisational structure and decision-making process of NN Leven.

### Own Risk and Solvency Assessment

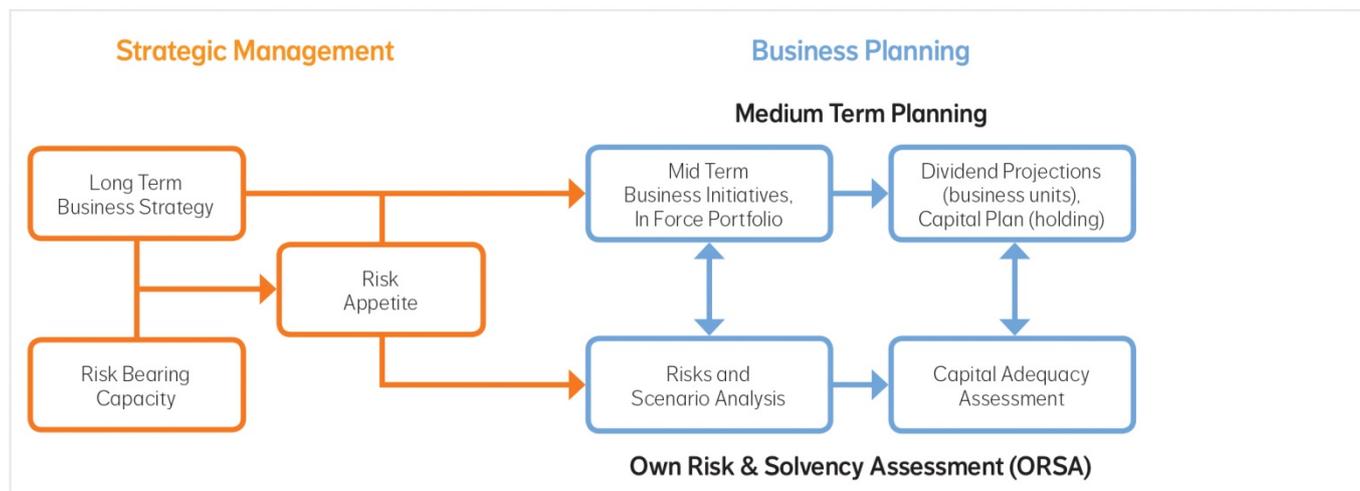
Business strategy and objectives, key risk appetite statements, risk and capital management are aligned in the Own risk and Solvency Assessment ('ORSA') in synchronisation with the yearly medium-term business plan. The ORSA report supports the MB in assessing the overall risk and capital profile of the business under a wide range of scenarios.

The ORSA is defined as the entirety of the processes and procedures employed to identify, assess, monitor, manage and report the short and long term risks an insurance legal entity as NN Leven faces or may face and to determine the own funds necessary to ensure that the entity's overall solvency needs are met at all times. In particular, the ORSA:

- Is a specific instrument within NN Leven's risk management system: it is a high level forward looking analysis on capital adequacy under a wide range of scenarios based on the current and emerging risk profile of an entity, given its strategy and risk appetite
- Does not serve to calculate the capital requirement, although capital add-ons can be considered as a result of the ORSA
- Is an integral part of business planning.

## System of governance Continued

As such, the ORSA is linked to the strategic management process and related decision-making framework as illustrated below:



### Regular frequency

NN Leven prepares an ORSA at least once a year. In the ORSA, NN Leven articulates its strategy and risk appetite; describes its key risks and how they are managed; analyses whether or not its risks and capital are appropriately modelled; and evaluates how susceptible the capital position is to shocks through stress testing and scenario testing. Stress testing examines the effect of exceptional but plausible scenarios on the capital position of NN Leven. Stress testing can also be initiated outside ORSA, either internally or by external parties such as DNB and the European Insurance and Occupational Pensions Authority ('EIOPA').

### Monitoring between regular ORSAs: possible ad-hoc ORSA

To the extent necessary, outcomes of the ORSA are translated in ad-hoc ORSA triggers (i.e. events that lead to a significant shock in the risk profile and/or capital position), risk metrics and management actions for identified material risks. Monitoring of ad-hoc ORSA triggers and risk metrics is performed as part of the regular Finance & Risk control cycle. Developments are documented in internal Finance & Risk reports and discussed during board and/or delegated committee meetings. The CRO within NN Leven is responsible for identifying the need of a (partial) ad-hoc ORSA. Head Office will be informed as soon as possible when the decision for a(n) (partial) ad-hoc ORSA is made. In such cases, DNB is also informed.

### The regular ORSA process as undertaken within NN Leven

#### Strategy and risk appetite

A thorough assessment of strategy is done once a year or when material developments in the (external or internal) environment give rise to an earlier re-assessment. Yearly assessments are made in the first half of the year whether to adjust the strategy for developments in the past year and/or revised assumptions on the future. Setting (and adjusting) the risk appetite is inextricably part of strategy setting (and adjusting).

#### Risk Assessment

Key to the ORSA is the identification of potentially solvency threatening risks, given the strategy and risk appetite. Basis for this risk assessment is NN Leven's risk taxonomy. Modelled risks are subject to an appropriateness test (see below) and additional statistical stress testing (see below), both contributing to adequate capitalisation of these risks. Focus is therefore on non-modelled risks.

#### Appropriateness test of regulatory capital calculation

The assumptions and models for calculating regulatory solvency requirements are assessed against the actual risk profile. Differences are analysed in terms of future model improvements and/or non-modelled risks. The outcome of the analysis may lead to mitigating actions to overcome model shortcomings. If the deviations or uncertainties are considered material, quantification of the deviation is necessary in order to consider a (temporary) self-imposed capital add-on.

#### Capital projections

The projection basis is consistent with the best-estimate assumptions and parameters used for the Business Plan best estimate financial forecasts, among others the yearly updated Macro Economic Scenario. Expected regulatory developments (like a decrease in Ultimate Forward Rate level) are included in the Capital projections.

The Actuarial Function Holder is to confirm that the base-case and projected technical provisions represent a true and fair view of future liabilities. The Actuarial Function Holder also provides input concerning the risks arising from the calculation of technical provisions.

## System of governance Continued

Regulatory solvency is at the heart of the ORSA: NN Leven must ensure that it is able to meet the regulatory required solvency ratio at all times. In addition, NN Leven assesses:

- The quantity and quality of Own Funds over the Business Plan period;
- The composition of Own Funds across tiers and how this composition may change as a result of redemption, repayment and maturity dates during the Business Plan period.

### Stress testing and overall assessment of capital adequacy

Based on the Business Plan and the outcomes of the ORSA risk assessment, (reverse) stress scenarios and their parameters are developed and documented. The MB is responsible for identifying the key uncertainties and the related scenarios.

Scenario testing, as well as (reverse) stress testing is required for each ORSA. When the outcomes of performed stress tests show solvency ratios dropping below 100%, realistic strategies for recovering the solvency ratio will be considered and documented in the ORSA report. A capital downstream can only be considered if there is no other feasible management option left.

Ultimately, after the assessments and considerations (including formulated management actions) the ORSA is to conclude whether, going forward, NN Leven is adequately capitalised under a wide range of scenarios over the planning horizon.

### Governance of NN Leven's Partial Internal Model

For the model governance and validation process, reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### Model Validation

The model governance and model validation department seek to ensure that NN Leven's models are fit for their intended purpose. Models and their disclosed metrics are approved by the Model Committee. The findings of the model validation department are also reported to the Model Committee via regular validations. This committee is responsible for modelling policies, processes, methodologies and parameters which are applied within NN Leven. Furthermore, the model validation department carries out validations of risk and valuation models particularly those related to Solvency II. Any changes to models that affect NN Leven risk figures above a certain materiality threshold are presented to one of the Model Committees.

Model validation is not a one-off assessment of a model, but an ongoing process whereby the reliability of the model is verified at different stages during its lifecycle: at initiation, before approval, when the model has been redeveloped or modified and on a regular basis discussed and agreed with Model Development. It is not a mere verification of the mathematics or statistics of the model, but encompasses both a quantitative and qualitative assessment of the model. Accordingly, the validation process covers a mix of developmental evidence assessment, process verification and outcome analysis.

The validation cycle is based on a five-year period. This means that at least once every five years a model in scope will be independently validated. In general, the validation frequency relates to the relative materiality of the models in scope.

### Changes in the governance of NN Leven's Partial Internal Model

On 5 December 2018, NN Group announced that it received approval from DNB to expand its Partial Internal Model under Solvency II to include the Delta Lloyd Levensverzekering entity. The expanded approved Partial Internal Model is used to calculate regulatory capital requirements effective as at 31 December 2018.

## B.4 The Internal control system and compliance function

Reference is made to Note 41 'Risk management' of the 2018 Consolidated annual accounts of NN Leven for a description of the implementation of the internal control system and compliance function.

## B.5 Internal audit function

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for a description of the implementation of the Internal control system, compliance, internal audit and actuarial function.

## B.6 Actuarial function

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for a description of the implementation of the Internal control system, compliance, internal audit and actuarial function.

## B.7 Outsourcing

### External Outsourcing arrangements

NN Leven has outsourced part of its operational and IT processes to external service providers. In the normal course of business, NN Leven enters into various transactions with related parties. Parties are considered to be related if one party has the ability to control or exercise significant influence over the other party in making financial or operating decisions. Related parties of NN Leven include, amongst others, its associates, share service centres, joint ventures, key management personnel and the defined benefit and contribution plans.

## System of governance Continued

NN Leven has internal policies ensuring that a formal written agreement is in place with the service provider, covering the relevant business and financial risks. NN Leven has an identified number of improvement actions which are closely monitored by the management of NN Leven to ensure maintaining adequate control over outsourcing activities. Next to that no possible significant provisions for doubtful debts or individually significant bad debt expenses may be missing on outstanding balances with related parties during the integration with Delta Lloyd Leven.

There are no significant provisions recognised for doubtful debts or individually significant bad debt expenses on outstanding balances with these providers.

For these external outsourcing arrangements written service level agreements are in place, setting out:

- The mutual rights and obligations of the parties
- The duties and responsibilities of all parties involved
- The Service Provider's commitment to comply with applicable local laws and regulatory requirements, applicable to the outsourced function or activity and to cooperate with the Outsourcing Entity's relevant supervisory authority with regard to the outsourced function or activity
- The Service Provider's obligation to disclose any development which may have a material impact on its ability to carry out the outsourced functions and activities effectively and in compliance with applicable laws and regulatory requirements
- That the Service Provider and the Outsourcing Entity can only terminate the contract with a notice period
- That the Outsourcing Entity is able to terminate the arrangement for outsourcing where necessary without detriment to the continuity and quality of its provision of services to the policyholder and other clients
- That the Outsourcing Entity reserves the right to be informed about the outsourced functions and activities and their performance by the Service Provider as well as a right to issue general guidelines and individual instructions at the address of the Service Provider, as to what has to be taken into account when performing the outsourced functions or activities

### Intra-group Outsourcing arrangements

In the normal course of business, NN Leven enters into various transactions with entities within the consolidated Group. Transactions with entities within the consolidated Group take place on an arm's length basis and include distribution agreements, human resources-related arrangements and rendering and receiving of services. There are no significant provisions recognised for doubtful debts or individually significant bad debt expenses on outstanding balances within the Group.

All intra-group transactions are conducted under market-consistent conditions. Intra-group transactions included:

- Facility services carried out by NN Leven
- Various other shared services, including finance and information technology, carried out by group companies for insurance and other entities
- Staff of NN Leven is employed by NN Insurance Personeel B.V.. NN Leven is charged for its staff expenses by NN Insurance Personeel B.V., under a service level agreement. Although these costs are not paid out in the form of salaries, they do have the character of staff expenses and they are therefore recognised as such. A staff provision for holiday entitlement and bonuses is recognised at NN Insurance Personeel. Actual spending is charged as per the contract with NN Insurance Personeel B.V.
- The transactions in financial instruments, such as shares, bonds, loans (excluding mortgage loans) and derivatives, are conducted via a management agreement with NN Investment Partners Holding B.V.. NN Investment Partners B.V. makes use of Nationale-Nederlanden Interfinance B.V. for the execution of the transactions involving certain derivatives
- NN Bank is the servicing and originating partner for mortgage loans held by NN Leven

For material intra-group outsourcing arrangements, a written service level agreement is in place, similar to the one used for external service providers.

### B.8 Any other information

Reference is made to the section 'Corporate Governance' in the 2018 Annual report of NN Leven and the NN Group website:

<https://www.nn-group.com/Who-we-are/Corporate-governance/Corporate-governance> for other information regarding the system of governance of NN Leven and NN Group.

# Risk profile

## C. Risk Profile

### Introduction

This chapter of the SFCR contains information on the risk profile of NN Leven and information on the 'prudent person principle' used when investing.

### Risk profile per risk category

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for quantitative and qualitative information on the risk profile per risk category. The following risk categories have been disclosed:

#### C.1 Non-market risk (Underwriting risk)

Non-market risk is disclosed as insurance risk and business risk in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### C.2 Market risk

Market risk is disclosed in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### C.3 Counterparty Default risk (Credit risk)

Counterparty Default risk is disclosed in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### C.4 Liquidity risk

Liquidity risk is disclosed in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### C.5 Operational risk

Operational risk is disclosed in Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

#### C.6 Other material risks

##### Business conduct risk

Business conduct risk is the risk related to unethical or irresponsible corporate behaviour, inappropriate employee behaviour and customer suitability of products. For more details reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven.

##### Concentration risks

NN Leven does not have an appetite for risk concentration and manages concentration risk with a limit structure. During the year a few limit breaches lower than 1% occurred. More information on the mitigation of several types of concentration risk is included in Note 41 'Risk Management' in the 2018 Consolidated annual accounts of NN Leven.

##### Investing assets in accordance with the 'Prudent person principle'

##### Acceptable investments

NN Leven complies with the prudent person principles as set out in Directive 2009/138/EC/article 132: Prudent person principle. NN Group maintains a Global Asset List, which contains all asset classes in which NN Group and its subsidiaries are allowed to invest. Before an asset class is approved for this list, a specific procedure, called 'New Asset Class Assessment' ('NACA') must be followed.

The NACA should describe all relevant considerations on return, risk and operational consequences that are relevant to the decision whether a Business Unit of NN Group should invest in the proposed investment class.

The NACA request does not describe a specific transaction, but is a proposal for the potential investment in an investment class.

The NACA should nevertheless address the quantitative impact of potential future investments and include proposed portfolio limits for the product. This should always be in line with NN Group internal policies as well as external constraints (such as regulatory limits).

##### Governance of investments

Within the Three Lines-of-Defence model, investments are managed in the first line through a dedicated Central Investment Office, reporting directly to the CEO of NN Group. Within NN Leven the second line function Financial Risk Management reports to the Head of Risk management who then reports to the CRO of NN Leven. Investment office and the CRO meet regularly in the NN Leven Asset & Liability Management Committee (ALCO), and in the Group ALCO for the most material issues. Operational activities regarding investments are performed by NN Investment Partners or third parties, which also provide advice on proposed or current investments.

## Risk profile Continued

**All investment related activities are performed within the boundaries as set by NN Group Policies. These include among others the following:**

- Asset-Liability Management Policy
- Asset Class Standard (NACA)
- Investment Management Policy
- Concentration Risk Standard
- Interest Rate Risk Management Standard
- Liquidity Risk Reporting Standard
- Financial Regulations Standard
- Responsible Investment framework policy
- Investment Mandate Standard

### Chief Investment Officer

Based on market views, NN Leven requirements and input from its assets managers, the Chief Investment Officer, will:

- Propose Investment Strategies for NN Leven
- Prepare proposals for mandates and for delegated approval levels for the Asset Managers
- Prepare Performance Measurement Guidelines of all investment decisions taken under the delegated approval authorities

NN Investment Partners will prepare a market view, propose investment ideas based on market developments and NN Leven requirements and decides on investment decisions within allocated limits/thresholds. NN Investment Partners executes the Performance Measurement mandates as prepared by the Chief Investment Officer.

### Asset & Liability Management Committee

The main responsibility of the ALCO is the oversight of risks related to the matching of assets and liabilities (Asset & Liability Management) and the consequences for the balance sheets and P&L of NN Leven. It includes risks related to the prevailing market circumstances and the possible adverse consequences for NN Leven. The ALCO also monitors and advises on insurance and business risks that can impact the balance sheet or P&L. The ALCO operates within the delegated authority of the NN Leven Board.

NN Leven ALCO monitors investment performance and decides on investment strategy, investment mandates as well as investment proposals within risk limits as set by the ALCO at NN Group:

- Investment strategy: the NN Leven ALCO decides on its investment strategy by taking the approved NN Group investment strategy into consideration.
- Investment mandates: the NN Leven ALCO decides on the investment mandates with its selected Asset Managers, taking the GIC recommendations into consideration. This includes deciding on the approval authority delegated by the NN Leven ALCO to the GIC regarding allocation of asset classes within bandwidths as determined by NN Leven SAA, and to the Asset Managers.
- Investment proposals: the NN Leven ALCO will decide on investment proposals where there is no approval authority delegated by the NN Leven ALCO.

### Sensitivity analysis

Reference is made Note 41 'Risk Management' in the 2018 Consolidated annual accounts of NN Leven for a description of the methods used, the assumptions made and the outcome of stress testing and sensitivity analysis for material risks and events.

### Risk exposure from off-balance sheet positions and transfer of risk to special purpose vehicles

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven regarding the risk exposure of NN Leven, including the exposure arising from off-balance sheet positions and describing the measures used to assess these risks. As at 31 December 2018, no material risks were transferred to special purpose vehicles outside NN Group.

## C.7 Any other information relevant to the risk profile of NN Leven

### Techniques used for mitigation of risk

Reference is made to Note 41 'Risk management' in the 2018 Consolidated annual accounts of NN Leven for a description of the techniques used for mitigating risks and the processes for monitoring the continued effectiveness of these risk mitigation techniques.

Per 1 January 2019, NN Leven merged with Delta Lloyd Levensverzekering. For more information, reference is made to Note 42 'Capital management' in the 2018 Consolidated annual accounts of NN Leven regarding subsequent events.

# Valuation for Solvency purposes

## D. Valuation for Solvency purposes

### Introduction

This chapter contains information on the valuation for solvency purposes of consolidated assets, insurance liabilities and other liabilities of NN Leven and explains the differences with the valuations in the 2018 Consolidated annual accounts of NN Leven.

### Reconciliation IFRS Balance sheet to Solvency II Balance sheet

As at 31 December 2018. In EUR thousand	IFRS	Consolidation Scope	Presentation differences	Valuation differences	Solvency II
<b>Assets</b>					
Cash and cash equivalents	243,410	-216,694	-4,568	0	22,148
Financial assets at fair value through profit or loss and Available-for-sale investments	61,051,675	766,192	742,692	0	62,560,560
Loans	22,575,199	-1,768,563	85,841	1,023,934	21,916,412
Reinsurance contracts	1,073,213	-0	0	6,885	1,080,097
Associates and joint ventures	3,696,932	2,538,673	0	-62,985	6,172,620
Real estate investments	2,281,404	-2,281,404	0	0	0
Property and equipment	48	-35	-1	0	12
Intangible assets	3,275	0	0	-3,275	0
Deferred acquisition costs	228,408	-0	0	-228,408	0
Deferred tax assets	4,483	-4,483	-19,949	408,534	388,585
Other assets	2,514,700	-350,540	-855,359	0	1,308,801
<b>Total assets</b>	<b>93,672,746</b>	<b>-1,316,852</b>	<b>-51,344</b>	<b>1,144,685</b>	<b>93,449,234</b>
<b>Equity</b>					
Shareholders' equity (parent)	15,570,946	0	-0	-7,924,637	7,646,307
Minority interests	982,798	-982,798	0	0	0
Undated subordinated notes	450,000	0	-450,000	0	0
<b>Total equity / Excess of assets over liabilities</b>	<b>17,003,744</b>	<b>-982,798</b>	<b>-450,000</b>	<b>-7,924,637</b>	<b>7,646,307</b>
<b>Liabilities</b>					
Subordinated debt	600,000	0	481,553	48,011	1,129,565
Other borrowed funds	716,533	335,647	-982	41	1,051,239
Insurance and investment contracts	69,932,720	0	0	10,627,685	80,560,405
Financial liabilities at fair value through profit or loss	1,143,696	-0	36,068	0	1,179,764
Deferred tax liabilities	1,880,977	-254,612	-19,949	-1,606,416	0
Other liabilities	2,395,078	-415,090	-98,034	0	1,881,953
<b>Total liabilities</b>	<b>76,669,002</b>	<b>-334,055</b>	<b>398,656</b>	<b>9,069,322</b>	<b>85,802,926</b>
<b>Total equity and liabilities</b>	<b>93,672,746</b>	<b>-1,316,853</b>	<b>-51,344</b>	<b>1,144,685</b>	<b>93,449,234</b>

Reference is made to the 2018 Consolidated annual accounts of NN Leven for more detailed information on the IFRS Balance sheet. Reference is made to QRT S.02.01.02 'Balance sheet' in the Appendix for the full Solvency II Balance sheet. The values in these tables may differ from those included in Note 41 'Risk Management' in the 2018 Consolidated annual accounts of NN Leven due to classification and valuation differences to reflect a risk management view.

For Solvency II reporting, Principal subsidiaries are not consolidated line-by-line while they are for IFRS reporting. The impact from this difference is reflected above in the column 'Consolidation scope'.

The valuation and presentation differences between IFRS and Solvency II resulting from differences in accounting principles and methods are explained in the sections below. For items where no valuation difference occurred, reference is made to Note 1 'Accounting policies', Note 26 'Fair value of financial assets and liabilities' and Note 27 'Fair value of non-financial assets' in the 2018 Consolidated annual accounts of NN Leven for a description of the bases, methods and main assumptions used for their valuation.

Details of valuation, presentation and consolidation differences are included in Section D.1- D.3 below.

### D.1 Assets

#### Accounting principles, methods and main assumptions used

In general, Solvency II valuation requires a market consistent approach to the valuation of assets and liabilities. The default reference framework for valuing assets and liabilities, other than technical provisions, is IFRS as endorsed by the European Union ('IFRS-EU'). The exception is if the IFRS valuation principle does not reflect a market consistent valuation (e.g. amortised cost). For main assumptions used in fair valuing assets, reference is made to Note 26 'Fair value of financial assets and liabilities' and to Note 27 'Fair value of non-financial assets' in the 2018 Consolidated annual accounts of NN Leven.

## Valuation for Solvency purposes Continued

### Cash and cash equivalents

In the IFRS balance sheet, cash and cash equivalents are reported at the notional amount. In the Solvency II balance sheet, cash and cash equivalents are reported at market value. There are no significant valuation differences between IFRS and Solvency II for cash and cash equivalents as the market value is not significantly different from the notional value. Total presentation differences of EUR -5 million as at 31 December 2018 are caused by the presentation of short term deposits and money market funds as loans in the Solvency II balance sheet. Differences due to a different scope of consolidation amounted to EUR -217 million as at 31 December 2018.

### Investments (excluding loans)

In the IFRS balance sheet, investments are reported at fair value. In the Solvency II balance sheet, investments are reported at market value. There are no significant valuation differences between IFRS and Solvency II for investments as fair value generally equals market value. Presentation differences of EUR 743 million as at 31 December 2018 are caused by the presentation of accrued interest as part of the investments, instead of a separate presentation as accrual under IFRS. Solvency II requires accrued interest to be presented as part of the investments ('dirty market value') and not separately as other assets as in the 2018 Consolidated annual accounts of NN Leven ('clean market value').

Differences due to a different scope of consolidation amounted to EUR 766 million as at 31 December 2018.

### Loans

In the IFRS balance sheet, loans are reported at amortised cost. In the Solvency II balance sheet, loans are reported at market value. For loans that are repriced frequently and have had no significant changes in credit risk, the carrying values in the 2018 Consolidated annual accounts of NN Leven represent a reasonable estimate of the market value for Solvency II. For other loans the market value is estimated by discounting expected future cash flows using a discount rate that reflects credit risk, liquidity and other current market conditions. The market value of mortgage loans is estimated by taking into account prepayment behaviour. Loans with similar characteristics are aggregated for calculation purposes.

Valuation differences between IFRS and Solvency II for loans represents the difference between amortised cost and market value of EUR 1,024 million as at 31 December 2018.

Presentation differences of EUR 86 million as at 31 December 2018 are caused by:

- The different presentation of accrued interest. Solvency II requires accrued interest to be presented as part of the loans ('dirty market value') and not separately as other assets as in the 2018 Consolidated annual accounts of NN Leven ('clean market value').
- Presentation of short term deposits as investments under Solvency II, instead of their inclusion in cash and cash equivalents under IFRS.
- Presentation of short term deposits and money market funds as loans under Solvency II, instead of their inclusion in cash and cash equivalents under IFRS.

Differences due to a different scope of consolidation amounted to EUR -1,769 million as at 31 December 2018.

### Reinsurance contracts

Reference is made to section D2 'Technical provisions' of this SFCR.

### Associates and joint ventures (Holdings in related undertakings)

In the IFRS balance sheet, associates and joint ventures are reported at net asset value (equity accounting).

In the Solvency II balance sheet, non-Solvency II entities are recognised as associates and measured at the local regulatory capital in accordance with the local (sectoral) rules. Valuation differences of EUR -63 million as at 31 December 2018 represents the difference between the value of the associates under IFRS and the local regulatory capital of these entities.

All holdings in related undertakings were either valued using quoted market prices in active markets or by using the adjusted equity method (when a stock listing was not available).

Differences due to a different scope of consolidation amounted to EUR 2,539 million as at 31 December 2018.

### Real estate investments

In the IFRS balance sheet, real estate investments are reported at fair value. In the Solvency II balance sheet, real estate investments are reported at market value. There are no significant valuation differences between IFRS and Solvency II for real estate investments as fair value generally equals market value. Differences in real estate investments recognised in the IFRS and the Solvency II Balance sheets due to a different scope of consolidation amounted to EUR -2,281 million as at 31 December 2018.

### Property and equipment

In the IFRS balance sheet, property in own use is reported at fair value. In the Solvency II balance sheet, property in own use is reported at market value. There are no significant valuation differences between IFRS and Solvency II for property in own use as fair value generally equals market value. In the IFRS balance sheet, equipment is reported at cost less depreciation. In the Solvency II balance sheet, equipment is reported at market value. There are no significant valuation differences between IFRS and Solvency II for equipment, as market value is generally not significantly different from depreciated cost.

Differences due to a different scope of consolidation amounted to EUR -35 million as at 31 December 2018.

## Valuation for Solvency purposes Continued

### Intangible assets

Intangibles such as software can be recognised and measured at a value other than nil if they can be sold separately and if there is a quoted market price in an active market for the same or similar intangible assets. As there is no quoted market price for NN Leven's intangible assets, it is valued at nil for Solvency II purposes.

### Deferred acquisition costs

Deferred acquisition costs are not recognised for Solvency II purposes.

### Deferred taxes

Under IFRS, deferred tax assets are part of the other assets. In the IFRS balance sheet, deferred taxes, other than deferred tax assets arising from the carry forward of unused tax credits and the carry forward of unused tax losses, are valued on the basis of the difference between the tax bases of assets and liabilities and their carrying values. A positive value to deferred taxes is only attributed where it is probable that future taxable profit will be available against which the deferred tax asset can be used, taking into account any legal or regulatory requirements on the time limits relating to the carry forward of unused tax losses or credits.

Reference is made to Note 25 'Taxation' of the 2018 Consolidated annual accounts of NN Leven for more information on the origin of the recognition of deferred tax assets and the amount and expiry date of deductible temporary differences, unused tax losses and unused tax credits for which no deferred tax asset is recognised in the IFRS balance sheet.

In the Solvency II balance sheet, deferred tax assets and liabilities are recognised and valued in conformity with IFRS. Differences in valuation of assets and liabilities as set out in sections D.1 'Assets', D.2 'Technical provisions' and D.3 'Other liabilities' result in an additional EUR 2,015 million of deferred tax assets (deferred taxes assets EUR 409 million, deferred taxes liabilities EUR -1,606 million) recognised in the Solvency II balance sheet as at 31 December 2018.

### Other assets

In the IFRS balance sheet, other assets are reported at their notional amounts. In the Solvency II balance sheet, other assets (with the exclusion of deferred taxes) are reported at market value.

Presentation differences of EUR -855 million as at 31 December 2018 consist of the different presentation of accrued interest. Solvency II requires accrued interest to be presented as part of the interest bearing investments ('dirty market value') and not separately as other assets as in the 2018 Consolidated annual accounts of NN Leven ('clean market value').

Differences in other assets recognised in the IFRS and the Solvency II Balance sheets due to a different scope of consolidation amounted to EUR -351 million as at 31 December 2018.

### Changes in valuation bases

During 2018, no material changes were made to the recognition and valuation bases, or estimations used, in the measurement of assets on the Solvency II balance sheet.

## Valuation for Solvency purposes Continued

### D.2 Technical provisions

#### Value of the technical provisions

The value of technical provisions, including the amount of the Best Estimate of Liabilities ('BEL') and the Risk Margin ('RM') is disclosed below separately for each material line of business as at 31 December 2018:

#### Value of technical provisions by Solvency II Business Line

As at 31 December 2018. In EUR thousand	BEL	Risk margin	Technical provisions
Technical provision by Solvency II Business line:			
1. Life	63,982	3,084	67,066
2. Life similar to health	8		8
3. Index-linked and Unit-linked	13,083	403	13,486
<b>Total</b>	<b>77,073</b>	<b>3,487</b>	<b>80,560</b>

#### Bases, methods and main assumptions used for solvency valuation

Technical Provisions are measured for Solvency II purposes as the sum of the BEL and a RM. The BEL are equal to the probability-weighted average of the present value of the future liability cash flows, based on the relevant risk-free interest rate term structure. The RM is defined as the amount that an empty (re)insurance entity is expected to require in excess of the BEL in order to take over and meet the (re)insurance obligations.

#### Best estimate of liabilities

NN Leven uses cash flow models and best estimate assumptions to determine the BEL under Solvency II. Premiums, benefits, expenses and other relevant cash flows are projected for the policy term – subject to contract boundaries – and discounted at the currency specific risk-free interest rate term structure, including the Ultimate Forward Rate ('UFR'), to allow for financial risk with the currency specific Credit Risk Adjustments ('CRA') and a Volatility Adjustment ('VOLA'). This is the full-cash flow approach and is typical for traditional business. For unit-linked business, NN Leven mainly uses a method where margins are projected (expenses and charges) as investment risks are borne by the policyholder. Cash flows are either projected on a per policy basis or individual policies are grouped into representative model points.

In 2018, the UFR for EUR under Solvency II was reduced to 4.05%. In April 2017, EIOPA published an updated methodology to derive the UFR and in line with this updated methodology, the calculated value of the UFR for EUR is 3.60%, but annual changes to the UFR will not be higher than 15 basis points. Therefore the UFR for EUR is expected to decrease from 4.05% to 3.90% from 1 January 2019.

Cash flows are projected along a sufficiently large number of future risk-free interest rate scenarios to allow for one-sided financial options and guarantees. This is typical for business with profit sharing on top of a fixed interest rate guarantee and unit-linked products with a return guarantee. The best estimate risk-free interest rate term structure is used in those instances where there are no embedded options or guarantees.

The cash flow projections consider management actions that can be taken to mitigate the loss to NN Leven, management policy covering the distribution of future discretionary benefits and the predictability and profit sharing of liability cash flows. The cash flow projections used in the calculation of the BEL are based on the best estimate assumptions. The cash flow projection reflects the expected realistic future demographic, legal, medical, technological, social, environmental and economic developments that have a material impact on the BEL.

Assumptions underlying the BEL are portfolio-specific rather than entity-specific. Entity-specific assumptions are used only insofar as those assumptions enable the entity to better reflect the characteristics of the portfolio or where the calculation of the BEL in a realistic, reliable and objective manner without those assumptions is not possible.

NN Leven reports a relatively small portion of un-modelled Technical Provisions. For un-modelled business, in general Technical Provisions are estimated either by scaling of modelled business or by setting Solvency II Technical Provisions equal to IFRS provisions. Where these approaches are taken, the Actuarial Function Holder has provided an opinion that the approaches are acceptable given the materiality of the Technical Provisions.

#### Reinsurance and other recoverables

The BEL are estimated gross, without deduction of the amounts recoverable from reinsurance contracts. The amounts recoverable from reinsurance contracts and expected losses due to counterparty default are calculated separately. The principles used to calculate the amounts recoverable are consistent with those underlying the calculation of the gross BEL.

#### Risk margin

In addition to the BEL a RM is held to allow for non-hedgeable market and non-market risks. The calculation of the RM is performed by either explicitly calculating the SCR for each future year or by using a driver approach. Long-Term Guarantee ('LTG') measures are excluded from the calculation of the SCRs and in the discounting, when calculating the RM.

With the driver approach, the relevant sub-risk SCRs - either Internal Model or Standard Formula - are projected using appropriate risk drivers, multiplied by the cost of capital of 6% (net of tax), then discounted at the relevant risk free rate term structure. The sub-risk market value margins are aggregated using the relevant diversification factors. Note that this is a simplification as Solvency II requires the individual SCRs to be diversified at each future point in time. NN Leven's simplification does not lead to a material misestimation of the RM.

## Valuation for Solvency purposes Continued

### Assumptions

#### Non-financial assumptions

Assumptions are set for expenses, mortality, morbidity and other relevant insurance risks using historical experience of the insurance portfolio. Assumptions are reviewed by NN Leven at least annually and submitted to the Model Committee (MoC) for approval or for information, depending on materiality, following NN Leven's model governance. Note that Best estimate assumptions are approved by the Pricing and Valuation MoC whereas Risk assumptions are approved by the Risk MoC.

Policyholder behaviour regarding lapses, partial and full surrenders and paid-ups are taken into account subject to the boundaries of the contracts. Management actions are reflected in the cash flow projections. These are mostly current management actions related to dynamic decision rules in the asset liability models of NN Leven. Future management actions are assumed for portfolios including discretionary benefits.

Boundaries of insurance contracts are based on a detailed investigation of terms and conditions.

#### Financial assumptions

NN Leven follows EIOPA requirements in determining the basic risk-free rates and the VOLA to determine the relevant currency specific risk free rate term structure for valuation of Technical Provisions. Because EIOPA curves are not available in time for NN Leven to start their valuations, NN Leven follows the EIOPA methodology to independently produce the curves. These are then compared to the published EIOPA curves when these are made available to ensure consistency between the EIOPA and the NN Leven manufactured curves. At year-end 2018, the EIOPA and NN Leven curves were identical.

#### Changes in assumptions

During 2018, NN Leven reviewed the best estimate assumptions as part of the regular process and updated them where necessary to reflect new insights.

#### Options and guarantees

When establishing technical provisions at NN Leven, all material financial guarantees and contractual options included within the boundary of insurance and reinsurance policies are taken into account. In doing so, factors which may affect the likelihood that policyholders will exercise contractual options or realise the value of financial guarantees are analysed.

The intrinsic value of financial options and guarantees is reflected in the single (deterministic) cash flow projection of technical provisions. These include the interest rate guarantees implicit in traditional products as well as policyholder options such as paid-up, surrender etc. where material.

A stochastic model is required to determine the time value of options and guarantees (TVoG) where cash flows vary asymmetrically with market returns. The stochastic model uses a number of Monte Carlo simulations (typically, 1,000 to 3,500) to project future cash flows under various economic scenarios. The number of scenarios is set in order to reduce the simulation error to within the tolerance level. Currently, such error should be less than 1% of the best estimate liabilities, as determined by taking 80% confidence interval of the mean standard error of the simulations. NN Leven performs a test to ensure the simulation error is within the established limits and increase number of scenarios used if the test does not satisfy the requirements. Nearly the entire TVoG for NN Leven is from NN Leven's group pension business.

Dynamic policyholder behaviour has been reflected where it is deemed material to the valuation under the different economic environments reflected in the stochastic scenarios. Where future profit sharing is dependent on economic conditions, the variability is taken into account in the TVoG. Where management actions have been taken into account, these are consistent with policies signed-off by the respective boards.

The Actuarial Function Holder has assessed the allowances made in respect of options and guarantees in the technical provisions and the underlying assumptions, and came to the conclusion that such allowances are appropriate.

#### Level of Uncertainty

For the level of uncertainty associated with the value of the technical provision, reference is made to Note 41 'Risk Management' in the 2018 Consolidated annual accounts of NN Leven.

### Main differences between IFRS and Solvency II valuation of technical provisions

As at 31 December 2018. In EUR thousand	IFRS	Valuation differences	Solvency II
<b>Technical provision by Solvency II Business line:</b>			
1. Life	57,682	9,384	67,066
2. Life similar to health	29	-21	8
3. Index-linked and Unit-linked	12,222	1,265	13,486
<b>Total</b>	<b>69,933</b>	<b>10,628</b>	<b>80,560</b>

#### Summary of main differences between IFRS and Solvency II as at 31 December 2018

At 31 December 2018, the valuation and presentation differences between the insurance and investment contracts recognised in the IFRS balance sheet and the technical provisions recognised in the Solvency II balance sheet of NN Leven amounted to EUR 10,628 million.

## Valuation for Solvency purposes Continued

Methods and models used in calculating the Solvency II technical provisions and IFRS insurance liabilities differ substantially. The main valuation differences between IFRS and Solvency II are outlined below:

- Insurance liabilities in the IFRS Balance sheet are established in accordance with IFRS 4 'Insurance Contracts'. Under IFRS 4, an insurer may continue its existing pre-IFRS accounting policies for insurance contracts, provided that certain minimum requirements are met. Upon adoption of IFRS-EU in 2005, NN Leven decided to continue the then existing accounting principles for insurance contracts under IFRS-EU
- The BEL in Solvency II is calculated as the probability-weighted average of the present value of future liability cash flows using best estimate assumptions
- A RM for non-hedgeable risks is added to the BEL to establish the Solvency II technical provisions
- Different interest rates are used for calculation of insurance and investment contracts under IFRS and Solvency II. For Solvency II a risk-free interest rate curve with credit risk, VOLA and UFR where applicable is used. NN Leven does not apply a matching adjustment. For IFRS a fixed interest rate/guaranteed technical interest rate is used
- The present value of future profits is recognised in Solvency II technical provisions but not in IFRS technical provisions
- The difference between IFRS and Solvency II technical provisions is primarily reflected in the Life Business line, where IFRS technical provisions largely reflect assumptions - interest, mortality, morbidity, expense, etc. - locked-in at policy issue, which can depart significantly from the best estimate assumptions reflected in the Solvency II provisioning.
- For index-linked and unit-linked insurance the IFRS technical provisions are equal to the fund value of these contracts. For Solvency II technical provisions, the present value of the margins is deducted from the fund value.

### Matching and volatility adjustment, transitional measures, and transitional risk-free interest rate-term structure

QRT S.22.01.21 'Impact of long term guarantees and transitional measures' in the Appendix provides the quantitative impact of excluding the so-called Long-Term Guarantee ('LTG') measures and Transitional measures from Own Funds and the SCR. QRT S.22.01.21 mandates disclosure of the quantitative impact of excluding:

- Transitional measures on technical provisions
- Transitional measures on interest rates
- Volatility adjustment
- Matching Adjustment

on:

- Technical provisions
- Basic Own funds
- Eligible Own Funds to meet Solvency Capital Requirement
- Solvency Capital Requirement

All the elements of which the impact is excluded in this QRT are an integral part of the Solvency II framework. The resulting Own Funds and SCR should therefore not be seen as a replacement of, or alternative for, the Own Funds and SCR as determined in accordance with Solvency II. For NN Leven, the VOLA is of relevance given its liability profile and its approach to match cash-flows of these liabilities with corresponding fixed income instruments. Transitional measures in respect of technical provisions and interest rates and Matching Adjustment are not applied by NN Leven.

### Volatility adjustment

NN Leven applies the yield curve as published by EIOPA for the calculation of the technical provisions under Solvency II. In line with Solvency II regulations, this yield curve includes a Volatility adjustment component. As at 31 December 2018, the level of the VOLA for the Euro currency was 24 bps (31 December 2017: 4 bps). The application of the VOLA resulted in a reduction of EUR 2,068 million in technical provisions, contributing EUR 1,644 million (after tax) to Basic own funds and Eligible Own Funds as at 31 December 2018.

In the calculation of the SCR, NN Leven assumes no change to the VOLA after a shock-event, but reflects the illiquidity of liabilities in the asset shocks to ensure appropriate solvency capital requirements. This VOLA approach is approved by DNB, in particular to ensure appropriate risk incentives on asset allocation decisions. NN Leven also shocks all government bonds and its mortgage portfolio in the calculation of spread risk capital requirements. Under the Standard Formula no capital is required to be held against spread risk arising from these assets, whereas under the Partial Internal Model substantial capital is held against these risks.

If the VOLA would be excluded from the SCR calculation, the spread risk on government bonds and mortgages would need to be adjusted accordingly. However, for the completion of QRT S.22.01.21 'Impact of long term guarantees and transitional measures' in the Appendix, NN Leven is required to reflect only the impact of excluding the VOLA from Eligible Own Funds and the SCR, without adjusting for the spread risk on government bonds and mortgages.

The impact of removing the VOLA from Own Funds increased in 2018 versus 2017 as the level of the VOLA in the yield curve as published by EIOPA increased.

## Valuation for Solvency purposes Continued

### D.3 Other liabilities

#### Subordinated debt and Other borrowed funds

In the IFRS balance sheet, subordinated debt, debt securities issued and other borrowed funds are reported at amortised cost. In the Solvency II balance sheet, these borrowings are reported at market value, excluding an adjustment for the change in NN Leven's own credit risk after initial recognition. In Solvency II value, the change in the own credit risk after initiation is not taken into account. The Solvency II value of subordinated debt is calculated using discounted cash flows based on current interest rates and credit spreads at issued date. The Solvency II value of other borrowed funds, is calculated by discounting expected future cash flows using a current market interest rate and at issued date.

Valuation differences between IFRS and Solvency II for Subordinated debt of EUR 48 million and other borrowed funds of EUR 0,1 million represent the difference between amortised cost and the valuation as described before.

Presentation differences include the different presentation of accrued interest. Solvency II requires accrued interest to be presented as part of the interest bearing liabilities ('dirty market value') and not separately as other liabilities as in the 2018 Consolidated annual accounts of NN Leven ('clean market value'). In addition to this presentation difference, subordinated debt presented as equity under IFRS is presented as liability under Solvency II. Total presentation differences for subordinated debt amounted to EUR 482 million as at 31 December 2018.

Debt securities issued in IFRS is presented as other borrowed funds in Solvency II, causing a presentation difference of EUR -0,1 million.

Differences due to a different scope of consolidation amounted to EUR 336 million for the other borrowed funds as at 31 December 2018.

#### Deferred tax liabilities

Reference is made to section D1 'Deferred tax assets'

#### Other liabilities

In the IFRS balance sheet, other liabilities are reported at the notional amount. In the Solvency II balance sheet, other liabilities are reported at market value.

Presentation differences amounted to EUR -98 million as at 31 December 2018 of which the main part (the cash collateral received) is transferred to Other borrowed funds. Presentation differences also include the different presentation of accrued interest. Solvency II requires accrued interest to be presented as part of the interest bearing liability ('dirty market value') and not separately as other liabilities as in the 2018 Consolidated annual accounts of NN Leven ('clean market value').

Differences due to a different scope of consolidation amounted to EUR -415 million as at 31 December 2018.

#### Contingent liabilities and provisions

Part of the other liabilities are the contingent liabilities and provisions. In the IFRS balance sheet, provisions are recognised when:

- An entity has a present obligation (legal or constructive) as a result of a past event
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation
- A reliable estimate can be made of the amount of the obligation

In the IFRS balance sheet, provisions are recognised for the amount representing the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. Contingent liabilities are not recognised in the IFRS balance sheet. These are disclosed, unless the possibility of an outflow of resources embodying economic benefits is remote.

In the Solvency II balance sheet, all material contingent liabilities are recognised as liabilities for the expected present value of future cash flows required to settle the contingent liability over the lifetime of that contingent liability, using the basic risk-free interest rate term structure.

Valuation differences between IFRS and Solvency II for contingent liabilities and provisions represent:

- A recognition difference: contingent liabilities are not recognised in the IFRS balance sheet, but are recognised in the Solvency II balance sheet if the exposure can be reliably estimated
- A measurement difference: provisions are measured in the IFRS balance sheet using the best estimate outcome (i.e. the full amount that may be incurred), while Solvency II requires a provision for the probability weighted outcome (i.e. the probability multiplied by the impact of the differences as at 31 December 2018)

For more details on other provisions and contingent liabilities, reference is made to Note 34 'Contingent liabilities and commitments' and Note 35 'Legal proceedings' in the 2018 Consolidated annual accounts of NN Leven.

The valuation difference between IFRS and Solvency II for provisions and contingent liabilities had no material impact at 31 December 2018.

#### Leasing

Information on operating lease arrangements are recognised in Note 24 'Other operating expenses' and Note 34 'Contingent liabilities and commitments' in the 2018 Consolidated annual accounts of NN Leven. There are no significant financial lease arrangements within NN Leven.

## Valuation for Solvency purposes Continued

### Expected profits in future premiums

For existing business, expected profits included in future premiums are reflected in the technical provisions and therefore contribute to the Own Funds. For more information on the expected profits in future premiums, reference is made to QRT S.23.01.01 'Own funds' as included in the Appendix.

### Outflow of economic benefits

For the expected timing of the outflows of economic benefits reference is made to Note 30 'Liabilities by maturity' in the 2018 Consolidated annual accounts of NN Leven. Uncertainties surrounding the amount or timing of the outflows of economic benefits is described in the Liquidity Risk paragraph in Note 41 'Risk management' in the 2018 Annual Report NN Leven. The uncertainties in amount or timing of other liability cash flows are low. Deviation risk was not taken into account in the valuation of the other liabilities.

### Changes during 2018

No significant changes were made to the recognition and valuation bases nor on estimations of the other liabilities during the reporting period.

## D.4 Alternative methods for valuation

### Alternative valuation methods used

Alternative valuation methods are used by NN Leven to determine the fair value of assets and liabilities if quoted market prices in active markets are unavailable. Reference is made to Note 26 'Fair value of financial assets and liabilities' and Note 27 'Fair value of non-financial assets' in the 2018 Consolidated annual accounts of NN Leven for more information on the valuation approaches used.

## D.5 Any other information

### Active markets

Information on the criteria used to assess whether markets are active is included in Note 1 'Accounting policies' in the 2018 Consolidated annual accounts of NN Leven. The valuation methods used if the markets are inactive are described in Note 26 'Fair value of financial assets and liabilities' in the 2018 Consolidated annual accounts of NN Leven.

### Estimation uncertainties

For the major sources of estimation uncertainty, reference is made to Note 41 'Risk Management' in the 2018 Consolidated annual accounts of NN Leven.

# Capital management

## E. Capital Management

### Introduction

This chapter of the SFCR contains information on the capital management of NN Leven, including the reconciliation of IFRS equity to Solvency II Own Funds, NN Leven's Minimum Capital Requirement ('MCR') and detailed information on NN Leven's Partial Internal Model.

### E.1 Own funds

Reference is made to Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven for:

- The objectives, policies and processes employed by NN Leven for managing its own funds, including information on the time horizon used for business planning and on any material changes over the reporting period
- The structure, amount and quality of own funds, including the extent to which each material own fund item is available and subordinated, as well as its duration and any other features that are relevant for assessing its quality
- The amount of Eligible Own Funds to cover the SCR, classified by tiers

NN Leven did not have ancillary own funds during 2018 or as at 31 December 2018.

Solvency II Basic Own Funds represent the excess of assets over liabilities in the Solvency II balance sheet and subordinated liabilities. It comprises the following items:

- Paid-in ordinary share capital and the related share premium account
- Paid-in subordinated liabilities
- Not distributed profits from previous years and the profit accrued during the reporting year
- The amount equal to the value of net deferred tax assets
- A reconciliation reserve reflecting the accumulated unrealized revaluations on balance sheet items that are not yet recycled through the Profit and Loss. These items include technical reserves for own account policies, bonds and loans, derivatives under hedge accounting programs and similar assets.

### Impact of long term guarantees and transitional measures

The quantification of the impact of a change to zero of the VOLA on NN Leven's financial position, represented by an adjustment on the amount of technical provisions, the SCR, the basic own funds and the Eligible Own Funds is included in Section D.2 and QRT S.22.01.21 'Impact of long term guarantees and transitional measures' in the Appendix. No transitional measures are applicable for NN Leven.

### Items deducted from own funds

Under Solvency II, Own funds are reduced by 'foreseeable dividends, distributions and charges'. This requirement is different from reporting under IFRS where dividends are deducted from equity (and a corresponding liability is recognised) when they are declared.

Recognition of 'foreseeable dividends and distributions' under Solvency II is relevant for NN Leven in two circumstances:

#### 1) Dividends

No foreseeable dividends are subtracted from the 31 December 2018 available equity.

#### 2) Coupons on subordinated liabilities

From the equity per 31 December 2018 an amount of EUR 32 million is subtracted as accrued coupon in relation to the subordinated liabilities.

### Additional ratios

No additional ratios are disclosed in the Solvency and Financial Condition Report other than the ratios included in QRT S.23.01.01 'Own funds' as included in the Appendix; plus those that are included by reference into this report.

### Analysis of significant changes in own funds

Reference is made to Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven for an analysis of significant changes in own funds.

### The principal loss-absorbency mechanism

During 2018, NN Leven had no principal loss-absorbency mechanism in place.

## Capital management Continued

### Reconciliation reserve

The reconciliation reserve equals the total excess of assets over liabilities reduced by the following key elements:

- Paid-in ordinary share capital and related share premium account
- Paid-in preference shares and related share premium account
- The amount equal to the value of net deferred tax assets
- Foreseeable dividends and distributions

The reconciliation reserve is included in QRT S.23.01.01 'Own funds' in the Appendix to this report.

### Reconciliation IFRS equity to Own Funds

#### Reconciliation IFRS equity to Solvency II Basic Own Funds

In EUR thousand	2018	2017
IFRS Shareholders' Equity	15,570,946	15,894,518
Elimination of deferred acquisition costs and other intangible assets	-231,682	-252,559
Valuation differences on assets	967,831	1,555,362
Valuation differences on liabilities, including insurance and investment contracts	-10,675,738	-13,490,334
Deferred tax effects on valuation differences	2,014,950	3,030,386
<b>Excess assets/ liabilities</b>	<b>7,646,307</b>	<b>6,737,373</b>
Qualifying subordinated debt	1,129,565	1,154,807
Foreseeable dividends and distributions	-31,553	-20,228
<b>Basic Own Funds</b>	<b>8,744,318</b>	<b>7,871,952</b>

The differences between IFRS Shareholders' Equity in the 2018 Consolidated annual accounts of NN Leven and Solvency II Basic Own Funds of NN Leven as at 31 December 2018 are mainly caused by:

- Valuation differences:
  - Deferred acquisition costs are not recognised for Solvency II purposes
  - Intangible assets are not recognised or recognised at nil under Solvency II
  - Different measurement of:
    - o Loans and advances
    - o Reinsurance contracts
    - o Subordinated loans
    - o Insurance and investment contract liabilities
  - The other valuation differences mainly consist of the change in net Deferred Tax Assets or Deferred Tax Liabilities caused by using different valuations for some Solvency II balance sheet items whilst the tax base of these items remained the same.
- Other differences:
  - Foreseeable dividends and distributions are recognised for Solvency II purposes when determining the basic own funds

Reference is made to section D 'Valuation for Solvency Purposes' for more information on the valuation and consolidation differences between IFRS and Solvency II.

### Intra-group transactions

There are four kinds of significant transactions with other companies within NN Group worth mentioning.

- All liabilities stemming from commercial contracts from the Czech branch are reinsured at NN Re;
- All derivative transactions, except interest rate swaps initiated after 21 May 2016, are traded with Nationale-Nederlanden Interfinance B.V.(NN Interfinance);
- NN Leven and NN Interfinance have entered a EUR 1.000 million loan agreement for the purpose of liquidity risk management. As per year-end 2018 NN Leven has borrowed EUR 500 million using this loan agreement;
- For more information on the subordinated loans please refer to Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven

### Eligibility of Own Funds

Reference is made to Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven for the eligibility of Own Funds of NN Leven.

## E.2 Solvency Capital Requirement and Minimum Capital Requirement

### SCR

Reference is made to QRT S.25.02.21 in the Appendix and Note 41 'Risk management' of the 2018 Consolidated annual accounts of NN Leven for the amount of the SCR split by risk categories.

## Capital management Continued

NN Leven determined the SCR including:

- Loss-absorbing capacity of technical provisions ('LAC TP'). LAC TP is the part of the technical provisions that can be used to absorb some of the SCR shock losses, as the expected future profit sharing to policyholders will be reduced if actual losses would arise. LAC TP is applicable to insurance policies with discretionary profit sharing
- Loss-absorbing capacity of deferred taxes ('LAC DT'). NN Leven's total loss in a 1-in-200 adverse event would be offset by tax recoveries and these are recognised to the extent to be expected to be recoverable. The determination of LAC DT is significantly dependent on various assumptions, such as capitalisation assumptions, the assumed investment returns and the projection period.

Reference is made to QRT S.25.02.21 'Solvency Capital Requirement' in the Appendix.

### Deferred tax under Solvency II

The total deferred tax amount in Solvency II arises from:

- Taxable or deductible temporary differences because the carrying amount of assets or liabilities in the balance sheet differs from the tax base of those assets or liabilities. These differences multiplied by the tax rate are recognised as a net deferred tax liability or a net deferred tax asset in the balance sheet. Reference is made to section D.1 'Assets' for the deferred tax asset recognised in the Solvency II balance sheet.
- The LAC DT on the SCR.
- Unused tax losses that are available for carry forward for tax purposes.

Not all valuation differences between the tax basis and Solvency II and SCR shocks will lead to deferred tax as certain elements are exempt for tax. For example: valuation differences on certain equity securities and the equity shock in the SCR on these securities do not result in a deferred tax effect when equity returns are exempt from tax. Therefore, these are excluded from the valuation differences and SCR amounts in order to arrive at the deferred tax balances for Solvency II.

The total deferred tax amount for Solvency II is therefore built up in a number of steps:

- deferred tax assets on unused tax losses
- +/- deferred tax assets/liabilities from valuation differences between IFRS and tax basis (except for non-taxable items)
- = deferred tax asset/liability in the IFRS balance sheet (deferred tax for IFRS)
- +/- deferred tax assets/liabilities from valuation differences between Solvency II and IFRS (except for non-taxable items)
- = deferred tax asset/liability in the Solvency II balance sheet (deferred tax for Own Funds)
- + deferred tax on SCR (LAC DT on the SCR) (except for non-taxable items)
- = total deferred tax amount for Solvency II

The 'total deferred tax amount for Solvency II' represents the deferred tax position that would be reflected in a Solvency II balance sheet that is fully shocked in line with the SCR shock. Any net deferred tax asset/benefit - whether for IFRS, Own Funds or SCR - must be tested for recoverability. The general guidance on assessing recoverability is summarised as follows:

Tax assets can only be recognised when it is concluded that their recoverability is probable. This applies to both deferred tax assets from timing differences, deferred tax assets from unused tax losses carried forward and the LAC DT on the SCR.

Deferred tax assets are recoverable when:

- There are sufficient deferred tax liabilities relating to the same taxation authority and the same taxable entity. These deferred tax liabilities must be expected to reverse either in the same period as the tax asset or in periods into which a tax loss can be carried back or forward
- It is probable that the entity will have sufficient taxable profit relating to the same taxation authority and the same taxable entity in the same period as the reversal of the deductible temporary difference (or in the periods into which a tax loss arising from the deferred tax asset can be carried back or forward)
- Tax planning opportunities are available

Deferred taxes in the IFRS and Solvency II balance sheet are nominal, undiscounted, amounts. Therefore, recoverability testing also only considers nominal, undiscounted, amounts.

Specific guidance applies under Solvency II in respect of item b. 'Sufficient taxable profit' as, different from IFRS, this refers to Solvency II based profits (before and after a shock event) and not to regular (IFRS-based) profits.

In order to assess the recoverability of deferred tax, the total deferred tax amount for Solvency II (i.e. deferred tax in the Solvency II balance sheet plus the LAC DT on the SCR) must be equal to or lower than the total recoverable deferred tax amount in a Solvency II environment.

The recoverable amount must be assessed at the legal entity level and may not - except for the Solvency II balance sheet deferred tax asset only - include amounts from other entities in the Group, independent of existing fiscal unities or tax groups. While from a legal, tax and economic perspective the recoverability would benefit from the existence of a fiscal unity, and therefore the benefit from a fiscal unity is 'real', the Q&A as published by DNB prohibits reflecting the benefit of a fiscal unity in supporting the LAC DT on the SCR. The fiscal unity may be reflected in supporting the deferred tax asset in the Solvency II balance sheet.

## Capital management Continued

As the total deferred tax amount for Solvency II (i.e. the deferred tax asset that exists in a fully shocked SCR balance sheet) is the highest amount, it acts as starting point for the recoverability test. This total amount reflects the differences between the tax values and the Solvency II values for all assets and liabilities and the tax benefit on the SCR. Only if the total deferred tax is non-recoverable, the recoverability of the deferred tax in Own Funds becomes separately relevant.

It is reasonable to assume that NN Leven can continue as a going concern after the shock. The tax recoverability test of NN Leven is performed on this basis.

The total recoverable deferred tax amount in a Solvency II environment may come from various sources and includes both recoverability from items that never impact taxable profits and reverse over time as well as sources of profits and losses that would emerge in a Solvency II environment or a Solvency II environment after a SCR-type shock would have occurred. The recoverability is therefore based on an estimation of the total taxable results (including both income and expenses) that is expected to arise in a Solvency II environment after the shock. The sources of recoverability include all components of the estimated future taxable results, irrespective whether these are income ('profit') or expense ('loss'). In this calculation the reduction of the ultimate corporate income tax rate from 25% to 20.5% is included, that was approved in December 2018.

The following items may be included in determining the total recoverable deferred tax amount:

- The amount of the risk margin in the technical provision
- Taxable return on capital after the shock, after recapitalisation to 100% SCR if applicable, net of expected dividends
- Reversal of the net effects of the credit-spread shock
- Taxable part of investment spread in excess of interest accretion on liabilities and funding costs over their (expected average) remaining duration.
- Profits from estimated new business
- Other taxable items

NN Leven has sufficient recoverable amounts to support the total deferred tax position recognised.

The net deferred tax asset is classified as Tier 3 capital. Tier 3 capital cannot exceed 15% of the SCR. Further information on Tiering is included in Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven.

### Minimum Capital Requirement

In EUR thousand	2018	2017
<b>Eligible Own Funds to cover Minimum Capital Requirements</b>	7,990,007	6,732,587
of which Tier 1 unrestricted	7,226,169	5,924,223
of which Tier 1 restricted	455,136	468,974
of which Tier 2	308,703	339,390
<b>Minimum Capital Requirements</b>	<b>1,543,515</b>	<b>1,696,950</b>

For the MCR (and its inputs) as calculated in accordance with the formulas in the Solvency II regulations, reference is made to QRT S.28.01.01 as included in the Appendix.

### E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement

NN Leven does not use the duration-based equity risk sub module.

### E.4 Differences between the Standard Formula and any Internal Model used

#### Internal Model vs Standard Formula

NN Leven applies a Partial Internal Model as it better reflects the risk profile and contains additional benefits for risk management purposes. In particular:

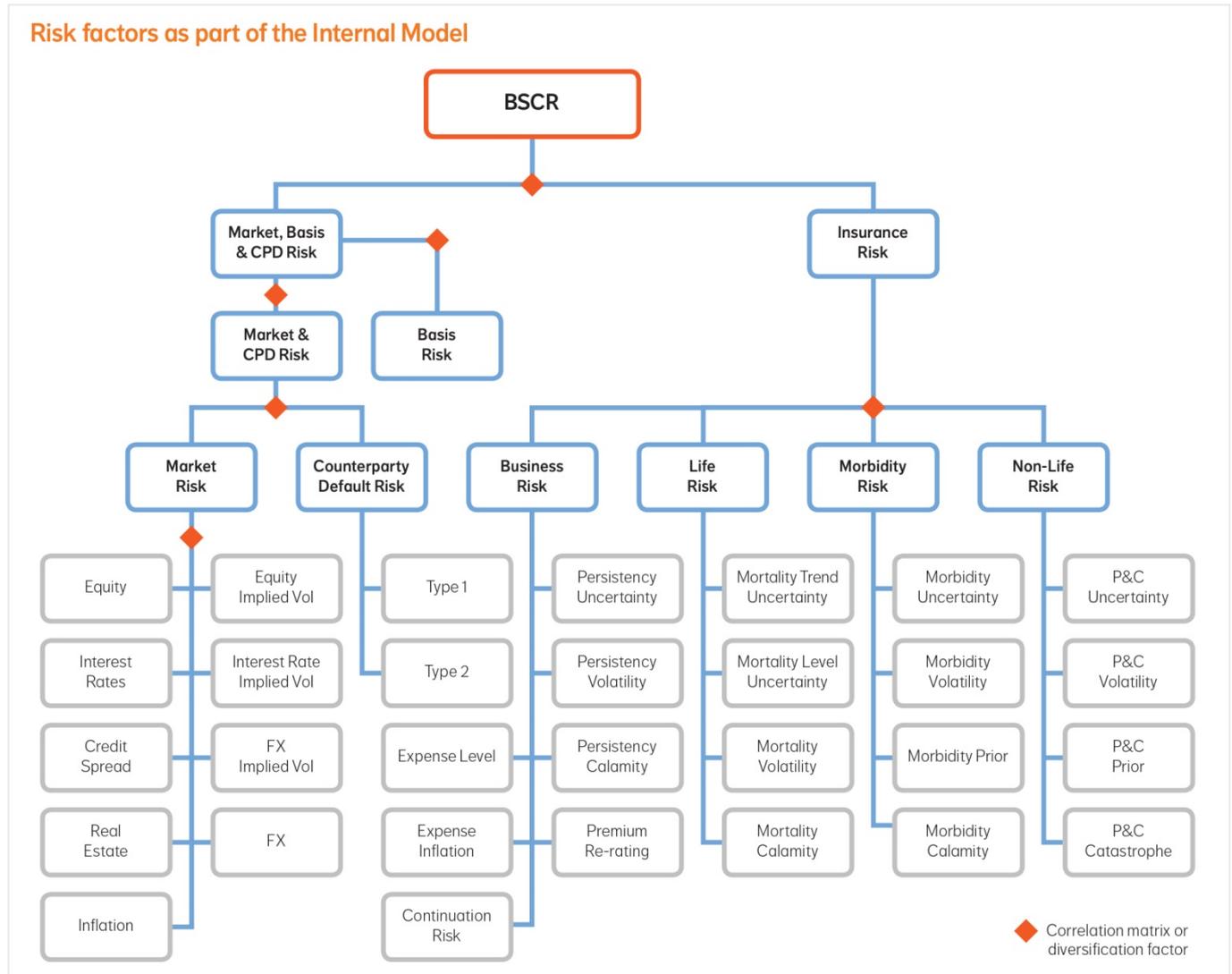
- An Internal Model approach better reflects the specific assets and therefore the market risk in the portfolio of NN Leven e.g. property risk, sovereign and other credit spread risks. In addition, the approach to the most significant non-market risks within NN Leven such as longevity (trend uncertainty) and expense risk (closed block treatment) is better tailored to the specific portfolio characteristics and statutory reserves set up according to local company law
- In the case of Disability/Morbidity Risks, the product features and experience in the Dutch market are different from those in the wider European market, e.g. greater emphasis is placed on claimants returning to work in the Netherlands
- The Standard Formula diversification assumptions do not recognise all the diversification of risks that exist in the NN Leven portfolios
- The Internal Model accounts for the volatility adjustment by means of an approach recognizing the illiquidity of liabilities in the asset shocks. Reference is made to section D.2 (in paragraph 'Matching and volatility adjustment, transitional measures and transitional risk-free interest rate term structure') for further information on NN Leven's VOLA

There are no differences between the Internal Models used at NN Leven and the Internal Model used to calculate the Group SCR.

In 2018, NN Leven submitted a Major Model Change request to the Dutch regulator (DNB) to expand its Partial Internal Model under Solvency II to include the Delta Lloyd Levensverzekering entity. The regulatory approval of the Partial Internal Major Model Change (PIM MMC) was received from the DNB on 5 December 2018. The expanded approved Partial Internal Model is used to calculate regulatory capital requirements effective 31 December 2018. The updated Partial Internal Model is the basis for this report.

Capital management Continued

Risks covered by the Internal Model which are not –or differently- covered in the Standard Formula



1 This scheme reflects the NN Group Internal Model, some risks are not applicable for NN Leven

Risk arises from the possibility that actual experience will negatively deviate from expectations, which results in economic losses for NN Leven. In this respect, NN Leven identified the following risk factors, and developed probability distributions for these various risk factors, as part of its Internal Model, which leads to the Basic Solvency Capital requirement ('BSCR'):

In addition to the risks covered in the Standard Formula, the Internal Model includes the following risks:

- Inflation risk is defined as the risk associated with adverse changes in both realised and future expected inflation rates
- Equity implied volatility refers to the possibility of adverse changes in Solvency II own funds due to adverse changes in the level of equity implied volatilities
- Interest rate implied volatility refers to the possibility of adverse changes in Solvency II own funds due to adverse changes in the level of interest rate implied volatilities
- Foreign Exchange implied volatility refers to the possibility of adverse changes in Solvency II own funds due to adverse changes in the level of FX implied volatilities
- Basis risk is the risk that occurs if the underlying asset or liability behaves differently than the underlying hedge instrument
- Continuation risk refers to political, country or legal risk

## Capital management Continued

The most important differences between the Internal Model and the Standard Formula in covered risk factors are:

- Interest Rate Risk:
  - The Internal Model incorporates several shocks, including non-parallel ones, to the curve instead of only two parallel shocks used in the Standard Formula
  - The Internal Model uses absolute shocks, while the Standard Formula applies relative shocks to the base curves
  - The Internal Model allows for shocking negative interest rates, whereas the Standard Formula does not
  - In the Internal Model, first, the shock is applied to the interest rates and then the resulting rates are extrapolated to the Ultimate Forward rate. In the Standard Model the interest rates are first extrapolated to the Ultimate Forward rate and afterwards the shock is applied
  - In the Internal Model interest rates converge to the UFR after shock and thereby follow the dynamics of the balance sheet, whereas in the Standard Formula there is no convergence to the UFR after shock
- Equity Risk:
  - Level of shocks differs mainly because it is calibrated to the equity portfolio of NN Leven
- Credit Spread Risk:
  - Shocks in the Internal Model apply to all fixed income assets, whereas the Standard Formula does not apply shocks to the bonds issued by countries which are EU members
- Real Estate Risk:
  - Shock applied in the Standard Formula is calibrated to historical prices observed in the UK property market which is less representative for NN Leven's portfolio, while the shock in the Internal Model is calibrated to actual exposures of NN Leven
- Counterparty Default Risk:
  - Counterparty Default Risk module in the Standard Formula includes shocks applied to mortgage exposure, which are included under the Credit Spread module in the Internal Model
- Diversification within the Market Risk module:
  - The Internal Model assumes significant diversification between interest rate risk on the one hand, and Credit Spread and Equity risks on the other. Under the Standard Formula, diversification between these risks is different
- Life Risk:
  - Under the Internal Model, longevity risk (i.e. longevity trend uncertainty) is based on a multiyear model, whereas under the Standard Formula the longevity risk is estimated by permanently decreasing all mortality rates by the same fixed percentage.

Capital requirements for operational risk are calculated in NN Leven based on the Standard Formula, and added to the combined BSCR. Next, loss absorption effects from technical provisions and taxes are included.

The table below shows the results for the steps described above.

### Solvency Capital Requirement

In EUR thousand	2018	2017
Market Risk	2,215,339	2,662,504
Non-market risk	3,000,349	3,097,455
Diversification	-1,298,773	-1,453,698
<b>Partial Internal Model BSCR</b>	<b>3,916,915</b>	<b>4,306,261</b>
Operational Risk	310,408	325,154
Capital add-on	898	-6,600
Loss-Absorbing Capacity of Technical Provisions	-54,087	-91,516
Loss-Absorbing Capacity of Deferred Taxes	-817,937	-1,049,207
<b>Total SCR</b>	<b>3,430,032</b>	<b>3,539,612</b>

In 2018, the total decrease of the market risk was EUR 448 million. The main driver was the increased diversification benefit as a result of the updated market risk correlation based on PIM MMC update. Furthermore, the increase of interest rate risk contributed to more diversification benefit. The EUR interest rate curve is lower at the end of 2018 compared to the end of 2017 and volatility adjustment increased from 4 bps to 24 bps in 2018. Much higher volatility adjustments resulted in the higher interest rate curve with volatility adjustment at the end of 2018 compared to 2017. A regular assumption update of the CBS-2017 mortality table, experience rates and an update of the expense risk model leads to a decrease of the non-market risk. The loss-absorbing capacity of deferred taxes (LACDT) benefit decreased by EUR 232 million primarily due to the lower corporate tax rates, reference is made to Note 25 in the Annual Report.

Further reference is made to the QRT 25.02.21 in the Appendix.

## Capital management Continued

### The nature and appropriateness of the data used in the Internal Model

Market data is collected from pre-defined external data sources. The market data methodologies are based on the following key principles:

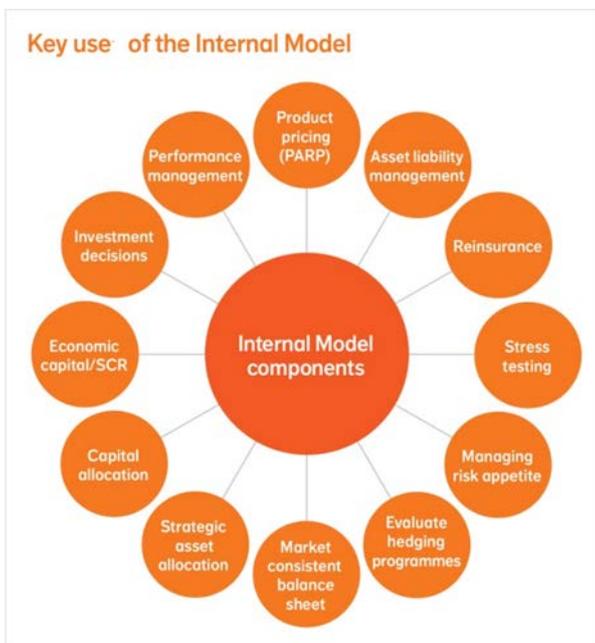
- All relevant market data must be used when it is available and is of sufficient quality, i.e. data derived from deep, liquid and transparent ('DLT') markets; for most of the market risk models NN Leven uses standard well established market data sources
- The market data used should be of sufficient quality; e.g. for most of the market risk models standard well established market data sources are used. The data is analysed for correctness as part of the calibration process;
- From the last observable liquid market data point, extrapolation methods must be used to complete the data set
- Extrapolated market data should:
  - Be free of arbitrage
  - Be based on sound theoretical assumptions and/or expert judgment
  - Follow a smooth path from the entry point to the unconditional long-term level
- Estimates of ultimate long-term rates or levels should be stable over time, and only change because of changes in long-term expectations

### The use of the Internal Model

The Internal Model allows NN Leven to treat different risk management activities in a consistent way:

- The model provides a framework which is consistent across risk types, businesses and the key uses such as market valuation, capitalisation, product pricing, investments, monitoring of risk appetite and risk mitigation/transfer
- The model facilitates adequate risk management at all levels of the organisation and provides a framework to measure, monitor and manage risks versus NN Leven's risk appetite
- The model allows NN Leven to manage risk in many different ways, e.g.:
  - Manage individual risk types at a much more granular approach, i.e. a stochastic (loss distribution) approach
  - Manage volatility in a stochastic rather than deterministic approach
  - Supports valuation, scenario- and stress analysis by running scenarios in a simple way using replicating portfolios
- The model allows NN Leven to proactively define its risk measurement and management approach rather than awaiting (generic) industry changes to the Standard Formula

The Internal Model is used for different purposes. It is used to measure and manage the risks at all levels within the company, thus covering the entire loss distribution. This information is not only used to determine the SCR to cover tail risks. It is also used for, amongst others, wider risk management, capital management and business decisions such as product pricing and asset allocation. The following diagram provides an overview of the key uses of the Internal Model.



### The methods used in the Internal Model for the calculation of the probability distribution forecast and the Solvency Capital Requirement

For the market risk models the Normal Inverse Gaussian ('NIG') distribution is mostly used. The class of the NIG distributions is a flexible set of distributions that includes fat-tailed and skewed distributions. For some market risk models e.g. for the real estate risk model where fewer data points are available, the Normal or t-distribution are used.

## Capital management Continued

Where there is lack of annual data, higher frequency data is used for the calibration of the distribution parameters. The distribution is then annualised for the calculation of the SCR.

To assess the quality of the calibration, the goodness-of-fit tests and back testing are applied.

### **E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement**

NN Leven complied with the MCR and the SCR during the reporting period.

### **E.6 Any other information**

Reference is made to Note 42 'Capital and liquidity management' in the 2018 Consolidated annual accounts of NN Leven for any other material information regarding the capital management of NN Leven and financial leverage of NN Leven.

#### **Subsequent events**

Reference is made to Note 40 'Other events' in the 2018 Consolidated annual accounts of NN Leven for the nature and the effect of material events arising after the balance sheet date which are not reflected in the balance sheet, if any.

## Appendix 1

### Appendix 1: Quantitative Reporting Templates that form part of the Solvency and Financial Condition Report

This appendix includes certain Quantitative Reporting Templates ('QRTs') of NN Group, required to be reported to DNB and to be publicly disclosed:

Reference number	Title	Description
S.02.01.02	Balance sheet	Balance sheet information using Solvency II valuation methodology
S.05.01.02	Premiums, claims and expenses by line of business	Information on premiums, claims and expenses using the valuation and recognition principles used in NN Leven's Consolidated Annual Report
S.12.01.02	Life and health similar to life provisions	Information on life and health similar to life provisions split by line of business
S.22.01.21	Impact of long term guarantees and transitional measures	Information on the impact of the long term guarantee and transitional measures
S.23.01.01	Own Funds	Information on Own Funds, including Basic Own Funds
S.25.02.21	Solvency Capital Requirement	Information on the Solvency Capital Requirement calculated using the Standard formula and a partial Internal model
S.28.01.01	Minimum Capital Requirement	Information on the Minimum Capital Requirement

All amounts in this appendix are recorded in EUR 1,000.

## Appendix 1 Continued

## S.02.01.02 Balance sheet

		Solvency II value C0010
<b>Assets</b>		
Goodwill	R0010	
Deferred acquisition costs	R0020	
Intangible assets	R0030	0
Deferred tax assets	R0040	388,585
Pension benefit surplus	R0050	
Property, plant & equipment held for own use	R0060	12
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	56,748,023
Property (other than for own use)	R0080	760
Holdings in related undertakings, including participations	R0090	6,172,620
Equities	R0100	2,597,048
Equities - listed	R0110	2,402,293
Equities - unlisted	R0120	194,755
Bonds	R0130	43,285,167
Government Bonds	R0140	31,490,265
Corporate Bonds	R0150	9,725,397
Structured notes	R0160	520,159
Collateralised securities	R0170	1,549,347
Collective Investments Undertakings	R0180	1,510,111
Derivatives	R0190	2,914,744
Deposits other than cash equivalents	R0200	267,573
Other investments	R0210	
Assets held for index-linked and unit-linked contracts	R0220	12,152,194
Loans and mortgages	R0230	21,749,366
Loans on policies	R0240	9,360
Loans and mortgages to individuals	R0250	15,741,133
Other loans and mortgages	R0260	5,998,873
Reinsurance recoverables from:	R0270	1,080,097
Non-life and health similar to non-life	R0280	
Non-life excluding health	R0290	
Health similar to non-life	R0300	
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	536,152
Health similar to life	R0320	8,112
Life excluding health and index-linked and unit-linked	R0330	528,040
Life index-linked and unit-linked	R0340	543,945
Deposits to cedants	R0350	141
Insurance and intermediaries receivables	R0360	310,015
Reinsurance receivables	R0370	7,760
Receivables (trade, not insurance)	R0380	955,018
Own shares (held directly)	R0390	
Amounts due in respect of own fund items or initial fund called up but not yet paid in	R0400	
Cash and cash equivalents	R0410	22,148
Any other assets, not elsewhere shown	R0420	35,867
<b>Total assets</b>	<b>R0500</b>	<b>93,449,226</b>

## Appendix 1 Continued

		Solvency II value C0010
<b>Liabilities</b>		
Technical provisions – non-life	R0510	
Technical provisions – non-life (excluding health)	R0520	
Technical provisions calculated as a whole	R0530	
Best Estimate	R0540	
Risk margin	R0550	
Technical provisions - health (similar to non-life)	R0560	
Technical provisions calculated as a whole	R0570	
Best Estimate	R0580	
Risk margin	R0590	
Technical provisions - life (excluding index-linked and unit-linked)	R0600	67,074,028
Technical provisions - health (similar to life)	R0610	8,115
Technical provisions calculated as a whole	R0620	
Best Estimate	R0630	7,918
Risk margin	R0640	197
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	67,065,913
Technical provisions calculated as a whole	R0660	
Best Estimate	R0670	63,981,852
Risk margin	R0680	3,084,060
Technical provisions – index-linked and unit-linked	R0690	13,486,377
Technical provisions calculated as a whole	R0700	
Best Estimate	R0710	13,083,148
Risk margin	R0720	403,229
Other technical provisions	R0730	
Contingent liabilities	R0740	
Provisions other than technical provisions	R0750	16,537
Pension benefit obligations	R0760	
Deposits from reinsurers	R0770	994,282
Deferred tax liabilities	R0780	-0
Derivatives	R0790	1,179,764
Debts owed to credit institutions	R0800	1,051,233
Financial liabilities other than debts owed to credit institutions	R0810	
Insurance & intermediaries payables	R0820	769,248
Reinsurance payables	R0830	3,325
Payables (trade, not insurance)	R0840	67,460
Subordinated liabilities	R0850	1,129,565
Subordinated liabilities not in Basic Own Funds	R0860	
Subordinated liabilities in Basic Own Funds	R0870	1,129,565
Any other liabilities, not elsewhere shown	R0880	31,101
<b>Total liabilities</b>	<b>R0900</b>	<b>85,802,919</b>
<b>Excess of assets over liabilities</b>	<b>R1000</b>	<b>7,646,307</b>

## Appendix 1 Continued

## S.05.01.02 Premiums, claims and expenses by line of business

		Line of Business for: life insurance obligations				Total C0300
		Health insurance C0210	Insurance with profit participation C0220	Index-linked and unit-linked insurance C0230	Other life insurance C0240	
<b>Premiums written</b>						
Gross	R1410	34,201	378,570	651,803	1,214,700	2,279,274
Reinsurers' share	R1420	34,201	41,780	70,906	12,204	159,091
Net	R1500	0	336,790	580,897	1,202,496	2,120,183
<b>Premiums earned</b>						
Gross	R1510	34,258	379,422	651,803	1,214,698	2,280,181
Reinsurers' share	R1520	34,258	42,632	70,906	12,202	159,998
Net	R1600	0	336,790	580,897	1,202,496	2,120,183
<b>Claims incurred</b>						
Gross	R1610	7,720	1,112,758	723,363	2,368,573	4,212,413
Reinsurers' share	R1620	7,720	72,213	59,931	4,350	144,214
Net	R1700	-0	1,040,544	663,432	2,364,222	4,068,199
<b>Changes in other technical provisions</b>						
Gross	R1710	-1,201	769,802	486,744	-106,449	1,148,897
Reinsurers' share	R1720	-1,201	22,678	24,217	-735	44,960
Net	R1800		747,124	462,526	-105,714	1,103,936
<b>Expenses incurred</b>	<b>R1900</b>	<b>10,190</b>	<b>74,690</b>	<b>130,609</b>	<b>285,474</b>	<b>500,963</b>
Other expenses	R2500					
<b>Total expenses</b>	<b>R2600</b>					<b>500,963</b>

## Appendix 1 Continued

## S.12.01.02 Life and Health SLT Technical Provisions

		Index-linked and unit-linked insurance				Other life insurance			Health insurance (direct business)			
		Insurance with profit participation	Contracts without options and guarantees	Contract s with options or guarantees		Contract s without options and guarantees	Contract s with options or guarantees	Total (Life other than health insurance, incl. Unit-Linked)	Contract s without options and guarantees	Total (Health similar to life insurance)		
												C0020
Technical provisions calculated as a whole	R0010											
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default associated to TP as a whole	R0020											
Technical provisions calculated as a sum of BE and RM												
Best Estimate												
Gross Best Estimate	R0030	13,766,507		8,249,361	4,833,787		31,479,005	18,736,341	77,065,001		7,918	7,918
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080	525,606		477,402	66,543		-11,171	13,606	1,071,985		8,112	8,112
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090	13,240,901		7,771,959	4,767,244		31,490,176	18,722,736	75,993,016		-194	-194
Risk Margin	R0100	229,674	403,229			2,854,386			3,487,289	197		197
Amount of the transitional on Technical Provisions												
Technical Provisions calculated as a whole	R0110											
Best estimate	R0120											
Risk margin	R0130											
Technical provisions - total	R0200	13,996,181	13,486,377			53,069,732			80,552,290	8,115		8,115

Appendix 1 Continued

S.22.01.21 Impact of long term guarantees and transitional measures

		Amount with LTG measures and transitionals	Impact of transitional on technical provisions	Impact of transitional on interest rate	Impact of volatility adjustment set to zero 1)	Impact of matching adjustment set to zero
		C0010	C0030	C0050	C0070	C0090
Technical provisions	R0010	80,560,405			2,068,248	
Basic own funds	R0020	8,744,318			-1,644,337	
Eligible own funds to meet SCR	R0050	8,744,318			-1,644,337	
SCR	R0090	3,430,032			4,271,326	
Eligible own funds to meet MCR	R0100	7,990,007			-1,991,883	
Minimum Capital Requirement	R0110	1,543,515			381,825	

1 This reflects the impact to set the volatility adjustment to zero; it does not reflect second order impacts, such as changes to LAC DT (which is kept constant).

Reference is made to page 27 to 29 in Section D.2. (paragraph 'Matching and volatility adjustment, transitional measures and transitional risk free interest rate term structure') for more information on the impact of long term guarantees and transitional measures.

## Appendix 1 Continued

## S.23.01.01 Own funds

		Total C0010	Tier 1 - unrestricted C0020	Tier 1 - restricted C0030	Tier 2 C0040	Tier 3 C0050
Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation 2015/35						
Ordinary share capital (gross of own shares)	R0010	22,689	22,689			
Share premium account related to ordinary share capital	R0030	3,228,029	3,228,029			
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040					
Subordinated mutual member accounts	R0050					
Surplus funds	R0070					
Preference shares	R0090					
Share premium account related to preference shares	R0110					
Reconciliation reserve	R0130	3,975,450	3,975,450			
Subordinated liabilities	R0140	1,129,565		455,136	674,429	
An amount equal to the value of net deferred tax assets	R0160	388,585				388,585
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180					
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220					
Deductions						
Deductions for participations in financial and credit institutions	R0230					
Total basic own funds after deductions	R0290	8,744,318	7,226,169	455,136	674,429	388,585
Ancillary own funds						
Unpaid and uncalled ordinary share capital callable on demand	R0300					
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual - type undertakings, callable on demand	R0310					
Unpaid and uncalled preference shares callable on demand	R0320					
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330					
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340					
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350					
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0360					
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370					
Other ancillary own funds	R0390					
Total ancillary own funds	R0400					
Available and eligible own funds						
Total available own funds to meet the SCR	R0500	8,744,318	7,226,169	455,136	674,429	388,585
Total available own funds to meet the MCR	R0510	8,355,733	7,226,169	455,136	674,429	
Total eligible own funds to meet the SCR	R0540	8,744,318	7,226,169	455,136	674,429	388,585
Total eligible own funds to meet the MCR	R0550	7,990,007	7,226,169	455,136	308,703	

## Appendix 1 Continued

SCR	R0580	3,430,032
MCR	R0600	1,543,515
Ratio of Eligible own funds to SCR	R0620	2.55
Ratio of Eligible own funds to MCR	R0640	5.18

		<b>C0060</b>
<b>Reconciliation reserve</b>		
Excess of assets over liabilities	R0700	7,646,307
Own shares (held directly and indirectly)	R0710	
Foreseeable dividends, distributions and charges	R0720	31,553
Other basic own fund items	R0730	3,639,303
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	R0740	
Reconciliation reserve	R0760	3,975,450
Expected profits		
Expected profits included in future premiums (EPIFP) - Life business	R0770	366,600
Expected profits included in future premiums (EPIFP) - Non- life business	R0780	
<b>Total Expected profits included in future premiums (EPIFP)</b>	<b>R0790</b>	<b>366,600</b>

## Appendix 1 Continued

## S.25.02.21 Solvency Capital Requirement - for undertakings using the Standard Formula and partial Internal Model

Unique number of component C0010	Components description C0020	Calculation of the Solvency Capital Requirement C0030	Amount modelled C0070	USP C0090	Simplifications C0120
1001	Total capital requirement for market risk	2,185,903	2,185,903		
1002	Total capital requirement for market risk Seperate account business	205,333	205,333		
1003	Total capital requirement for counterparty default risk	73,835	73,835		
1004	Overall Insurance Risk	2,686,282	2,686,282		
1005	Overall Business Risk	976,180	976,180		
1006	Operational risk	310,408	310,408		
8	Loss-absorbing capacity of tech. provisions if not modelled within components	-54,087	-54,087		
9	Loss absorbing capacity for deferred taxes if not modelled within components	-817,937	-817,937		

## Calculation of Solvency Capital Requirement

		C0100
Total undiversified components	R0110	5,565,917
Diversification	R0060	-2,136,783
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	3,429,134
Solvency capital requirement excluding capital add-on	R0200	3,429,134
Capital add-ons already set	R0210	898
Solvency capital requirement	R0220	3,430,032
Other information on SCR		
Amount/estimate of the overall loss-absorbing capacity of technical provisions	R0300	-54,087
Amount/estimate of the overall loss-absorbing capacity of deferred taxes	R0310	-817,937
Capital requirement for duration-based equity risk sub-module	R0400	
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	
Total amount of Notional Solvency Capital Requirements for ring fenced funds	R0420	
Total amount of Notional Solvency Capital Requirement for matching adjustment portfolios	R0430	
Diversification effects due to RFF nSCR aggregation for article 304	R0440	

## Appendix 1 Continued

## S.28.01.01 Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

		<b>C0010</b>	
MCR <sub>NL</sub> Result	R0010		
		<b>Net (of reinsurance/SP V) best estimate and TP calculated as a whole</b>	<b>Net (of reinsurance) written premiums in the last 12 months</b>
		<b>C0020</b>	<b>C0030</b>
Medical expense insurance and proportional reinsurance	R0020		
Income protection insurance and proportional reinsurance	R0030		
Workers' compensation insurance and proportional reinsurance	R0040		
Motor vehicle liability insurance and proportional reinsurance	R0050		
Other motor insurance and proportional reinsurance	R0060		
Marine, aviation and transport insurance and proportional reinsurance	R0070		
Fire and other damage to property insurance and proportional reinsurance	R0080		
General liability insurance and proportional reinsurance	R0090		
Credit and suretyship insurance and proportional reinsurance	R0100		
Legal expenses insurance and proportional reinsurance	R0110		
Assistance and proportional reinsurance	R0120		
Miscellaneous financial loss insurance and proportional reinsurance	R0130		
Non-proportional health reinsurance	R0140		
Non-proportional casualty reinsurance	R0150		
Non-proportional marine, aviation and transport reinsurance	R0160		
Non-proportional property reinsurance	R0170		
			<b>C0040</b>
MCR <sub>L</sub> Result	R0200		1,672,415
		<b>Net (of reinsurance/SP V) best estimate and TP calculated as a whole</b>	<b>Net (of reinsurance/SP V) total capital at risk</b>
		<b>C0050</b>	<b>C0060</b>
Obligations with profit participation - guaranteed benefits	R0210	13,186,814	
Obligations with profit participation - future discretionary benefits	R0220	54,087	
Index-linked and unit-linked insurance obligations	R0230	12,539,203	
Other life (re)insurance and health (re)insurance obligations	R0240	50,212,717	
<b>Total capital at risk for all life (re)insurance obligations</b>	<b>R0250</b>		<b>64,391,106</b>
			<b>C0070</b>
Linear MCR	R0300		1,672,415
SCR	R0310		3,430,032
MCR cap	R0320		1,543,515
MCR floor	R0330		857,508
Combined MCR	R0340		1,543,515
Absolute floor of the MCR	R0350		3,700
Minimum Capital Requirement	R0400		1,543,515

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Small differences are possible in the tables due to rounding.

Certain of the statements in this 2018 Solvency and Financial Condition Report are not historical facts, including, without limitation, certain statements made of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Actual results, performance or events may differ materially from those in such statements due to, without limitation: (1) changes in general economic conditions, in particular economic conditions in NN Leven's core markets, (2) changes in performance of financial markets, including developing markets, (3) consequences of a potential (partial) breakup of the euro or European Union countries leaving the European Union, (4) changes in the availability of, and costs associated with, sources of liquidity as well as conditions in the credit markets generally, (5) the frequency and severity of insured loss events, (6) changes affecting mortality and morbidity levels and trends, (7) changes affecting persistency levels, (8) changes affecting interest rate levels, (9) changes affecting currency exchange rates, (10) changes in investor, customer and policyholder behaviour, (11) changes in general competitive factors, (12) changes in laws and regulations and the interpretation and application thereof, (13) changes in the policies and actions of governments and/or regulatory authorities, (14) conclusions with regard to accounting assumptions and methodologies, (15) changes in ownership that could affect the future availability to NN Leven of net operating loss, net capital and built-in loss carry forwards, (16) changes in credit and financial strength ratings, (17) NN Leven's ability to achieve projected operational synergies, (18) catastrophes and terrorist-related events, (19) adverse developments in legal and other proceedings and (20) the other risks and uncertainties detailed in the Risk management section and/or contained in recent public disclosures made by NN Group and/or related to NN Group.

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