

# Hannover Re

## Hannover Re Group 2024

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### Solvency and Financial Condition Report



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# Executive Summary

## Key Figures

in TEUR	2023	2024
<b>Solvency II Balance Sheet</b>		
Assets	81,962,813	90,917,514
Technical Provisions	50,360,460	53,220,374
Other Liabilities	14,149,611	18,004,078
Excess of Assets over Liabilities	17,452,742	19,693,062
<b>Eligible Own Funds</b>		
Tier 1 Basic Own Funds (unrestricted)	15,834,810	17,764,934
Tier 1 Basic Own Funds (restricted)	496,435	506,175
Tier 2 Basic Own Funds	2,550,139	2,589,192
Tier 3 Own Funds	70,518	171,455
Eligible Own Funds (SCR)	18,951,902	21,031,756
<b>Capital Requirements</b>		
Solvency Capital Requirement	7,032,514	8,050,977
Minimum Capital Requirement	4,841,186	5,523,060
<b>Coverage Ratio</b>		
Ratio of Eligible Own Funds to SCR (Solvency Ratio)	269%	261%
Ratio of Eligible Own Funds to MCR	357%	351%

Hannover Re Group (hereinafter referred to as “Hannover Re” or “the Group”) fulfils the minimum and solvency capital requirements (hereinafter referred to as MCR and SCR) stipulated by the supervisory authority as at the reporting date 31 December 2024 and during the financial year 2024. In addition, the solvency ratio ranges above the internal threshold of 200% during the entire financial year.

Please note that this report represents a voluntary publication of the Hannover Re Group.

Please note that rounding differences can occur in the presented tables. Values below TEUR 0.5 are displayed as “0”. Empty cells or cells with “-“ represent a value of EUR 0.00.

## A. Business and performance

With a gross reinsurance revenue in 2024 of TEUR 26,379,279, Hannover Re Group is one of the world’s leading reinsurers. Hannover Rück SE is a European Company, Societas Europaea (SE), based in Hannover, Germany. Our business model is aligned with our Group strategy. It is focused on the reinsurance business that we transact worldwide in the Property & Casualty and Life & Health reinsurance business groups.

We are thoroughly satisfied with the development of business in the 2024 financial year. Group net income was up by +27.6% at TEUR 2,328,689 (previous year: TEUR 1,824,775). We thus achieved our earnings guidance, which we had raised to around TEUR 2.300.000 in November.

Global reinsurance markets have been experiencing fierce competition and losses from natural catastrophes for some years now. At the same time, climate change, Russia’s war of aggression on Ukraine and global macroeconomic developments are presenting major challenges for the insurance industry.

Reinsurance revenue (gross) in Property & Casualty reinsurance grew by +10.9% to TEUR 18,664,744 (TEUR 16,823,937). Growth would have reached 11.1% at constant exchange rates. In the Life & Health reinsurance business group, the reinsurance revenue reached TEUR 7,714,535 (TEUR 7,632,528); the increase would have been 0.6% at constant exchange rates.

Our ordinary investment income clearly excelled previous year’s level. Losses from the disposal of investments came in significantly lower than last year’s and mainly resulted from the sale of fixed-interest securities in the course of portfolio management. There were as well less impairments on real estate to be recognised. Overall, we therefore achieved a significantly higher investment result than in the previous year.

The portfolio of our investments under own management increased in the reporting year, as did our portfolio of fixed-interest securities. The net unrealised losses contained therein remained at the previous year’s level as lower risk premiums on corporate bonds and interest rate declines in short maturities in the Euro segment as well as exchange rate effects largely compensated for higher interest rates in medium and long maturities. Overall, we kept our asset allocation largely stable in the

reporting year. Minimal adjustments to the asset allocation were prompted primarily by the constant goal of maintaining matching currencies and durations with our technical liabilities. We made the most of attractive opportunities in our real estate portfolio by acquiring two logistics properties in Germany and the United States and selling an office building in the United States. There were only minor changes in other asset classes as part of regular portfolio management.

## B. Governance system

Hannover Re has an effective system of governance, which provides for sound and prudent management. Written policies and guidelines are in place for all significant business events. The key functions pursuant to § 26 and §§ 29-31 of the Insurance Supervision Act (VAG) have been set up, entrusted with the tasks described in Section B and equipped with appropriate resources.

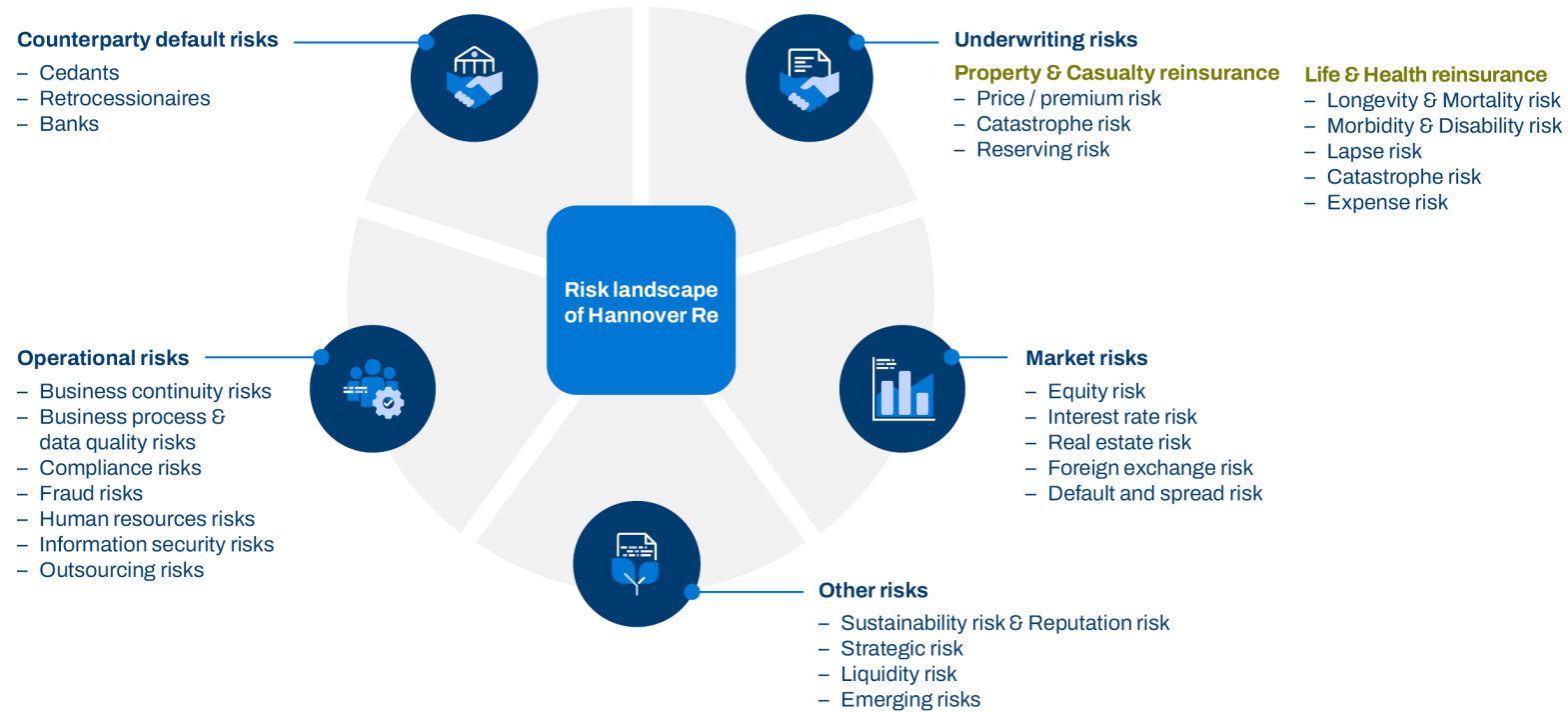
The Executive Board has established a committee, which supports the assessment of the system of governance. Based on the assessment conducted by the committee, the Executive Board has reached the conclusion that the system of governance of Hannover Re is appropriate considering the scope and complexity of its business activities and the inherent risks.

The individual elements of the system of governance of Hannover Re are explained in Section B.

## C. Risk profile

In the context of its business operations Hannover Re is confronted with a broad variety of risks. These risks are deliberately accepted, steered and monitored in order to be able to act on the associated opportunities. They specifically concern underwriting risks pertaining to Property & Casualty and Life & Health as well as capital market risks, liquidity risks and counterparty default risks. In addition, Hannover Re faces operational, strategic, sustainability and reputational risks. In Section C, we describe the sources and management of these risks. We also explain how we handle potential future risks (emerging risks).

### Risk landscape of Hannover Re



The solvency capital requirements (SCR) as of 31 December 2024 are shown in the following table. The SCR includes the impact from the dynamic volatility adjustment for both reference dates. The impact of the volatility adjustment is displayed separately in Section D.2 as well as in the annex QRT S.22.01.21.

#### Solvency Capital Requirement (SCR) - Risk categories

in TEUR	2023	2024
Underwriting risk - Property & Casualty	6,085,294	6,919,902
Underwriting risk - Life & Health	2,740,955	2,618,017
Market risk	5,244,241	6,082,634
Counterparty default risk	432,146	404,634
Operational risk	653,821	711,103
<b>Diversification</b>	<b>-5,520,217</b>	<b>-5,656,572</b>
<b>SCR (pre-tax)</b>	<b>9,636,040</b>	<b>11,079,718</b>
Deferred tax	2,603,526	3,028,741
<b>SCR (post-tax)</b>	<b>7,032,514</b>	<b>8,050,977</b>

The Solvency Capital Requirement is calculated based on the approved internal model. Currently, our most significant individual risks are the default and spread risks within the market risks, the reserving and catastrophe risks within the underwriting risks of Property & Casualty reinsurance and the biometric risks within the underwriting risks of Life & Health reinsurance.

Hannover Re applies the volatility adjustment. The volatility adjustment partially mitigates the effect of temporary value fluctuations due to credit spread movements on the bond market. This effect is also captured in the calculation of the Solvency Capital Requirement i.e. Hannover Re applies the dynamic volatility adjustment in its internal model.

The risk monitoring, control mechanisms and developments in 2024 are presented in Section C.

## D. Valuation for solvency purposes

For the purposes of calculating the eligible own funds, Hannover Re values the assets and liabilities pursuant to the provisions of §§ 74 et seq. of the Insurance Supervision Act (VAG), i.e. in accordance with Solvency II.

The valuation for Solvency purposes is based on fair value principles (market value). Insofar as IFRS values appropriately reflect the fair value of individual assets or liabilities, they are applied.

A comparison of IFRS 17 and Solvency II technical provisions is shown as well as a comparison of current technical provisions under Solvency II and those calculated last year.

Section D explains the details of the valuation for solvency purposes.

## E. Capital management

Hannover Re's solvency ratio amounted to 261% as of reporting date 31 December 2024. Hannover Re endeavours at all times to maintain a solvency ratio of at least 180%; whereas a reduction of the solvency ratio below the 200% threshold would already trigger countermeasures aimed at either strengthening the company's equity or reducing the risk, or both. This ensures compliance with the regulatory requirement of a minimum solvency ratio of 100%. However, a fall below threshold would most of the time be

avoided by proactive measures and thus has never occurred since introduction of the threshold.

The solvency ratio with and without application of the volatility adjustment is continuously monitored and also assessed as part of planning activities and in the event of large transactions. During the financial year 2024, the solvency ratio ranges above the threshold of 200%. Further information on the calculation of the solvency ratio can be found in Section E.

Own funds include subordinated (Tier 1 and 2) capital. Ancillary own funds were not in use by Hannover Re as at 31 December 2024.

Hannover Re uses an approved full internal model for the purposes of calculating the Solvency Capital Requirement (SCR). The individual risk categories are aligned with the risk modules of the standard formula. The internal model is applied in a broad range of management and decision-making processes. The future development of Solvency and Minimum Capital Requirements are estimated at regular intervals as part of the planning process.

In addition, the potential outcomes of the ongoing Solvency II review are monitored.

Section E explains the details of capital management.

# A. Business and Performance

## A.1 Business

### A.1.1 Business model

With a gross reinsurance revenue in 2024 of TEUR 26,379,279, Hannover Re Group is one of the world's leading reinsurers. Hannover Rück SE is a European Company, Societas Europaea (SE), based in Hannover, Germany. Our business model is aligned with our Group strategy. It is focused on the reinsurance business that we transact worldwide in the Property & Casualty and Life & Health reinsurance business groups.

The strategy cycle at Hannover Re spans three years. The Group strategy 2024–2026 “Staying Focused. Thinking Ahead.” is focused on industry-leading performance in terms of profitability and earnings growth, reliable economic value creation as well as attractive and increasing ordinary dividends. Another strategic objective is preserving Hannover Re's capital strength. Along with these financial targets, the ambition set out in the Group strategy also includes strategic targets in relation to employee engagement and environmental stewardship. The Group strategy is specified and supported by corresponding business group strategies.

We strive for the broadest possible diversification and thus an efficient risk balancing.

Data and information from primary insurance clients, brokers and other sources are the essential basis for our calculation models of the occurrence probabilities for potential loss scenarios. The basis for an adequate risk and premium calculation is an interdisciplinary workforce with a high level of expertise in risk assessment combined with the best available information and risk models.

Guided by a clearly defined risk appetite, the Executive Board steers the company with the support of risk management to capitalise on business opportunities while securing our long-term financial strength.

Primary insurers and their customers alike benefit from a robust and resilient insurance market. The extensive spreading of original risks across different risk carriers is a major aspect of the value chain in the insurance industry. In this way, not only do primary insurers get protection for their risks from reinsurers, but reinsurers are also able to partially pass on risks to so-called retrocessionaires. The resulting diversification has positive effects on the stability, capacity and innovative strength of primary insurers and thus on policyholders.

Our business operations are committed to being the preferred business partner for our clients. It is for this reason that our clients and their concerns are at the core of our activities.

By conducting our reinsurance business with lower administrative expenses than our peers, we generate competitive advantages to the benefit of our clients and shareholders. This enables us to deliver above-average profitability and at the same time offer our customers reinsurance protection on competitive terms.

In the Property & Casualty reinsurance business group we see ourselves as a reliable, flexible and innovative market player that ranks among the best in any given market. Cost leadership, effective cycle management and outstanding risk management are the key elements of our competitive positioning. We actively manage our portfolio to ensure long-term profitability in underwriting.

In the Life & Health reinsurance business group we are recognised – as customer surveys confirm – as one of the top players for traditional covers and a leading provider of structured solutions. We achieve this, among other things, by anticipating the future needs of our customers through the early identification of trends.

With a view to assuring Hannover Re's long-lasting stability, our strategy is grounded on a solid foundation: sustainability and integrated corporate governance. Sustainability reflects our aspiration to economic, social and environmental accountability. Through integrated corporate governance we foster the trust placed in Hannover Re, especially by regulators and investors but also by our clients and staff.

## A.1.2 Headquarters, supervisors and auditors

Hannover Rück SE – as the parent company of the Hannover Re Group – is a European stock corporation, Societas Europaea (SE), with its headquarters located in Karl-Wiechert-Allee 50, 30625 Hannover, Germany, and has been entered in the Commercial Register of the District Court of Hannover under the number HR Hannover B 6778. A rounded 50.2% of Hannover Rück SE shares are held by Talanx AG, Hannover, which in turn is majority-owned – with an interest of 76.7% – by HDI Haftpflichtverband der Deutschen Industrie V.a.G. (HDI), Hannover.

Hannover Re as well as Talanx and HDI are subject to the Federal Financial Supervisory Authority (BaFin).

### Address of Federal Financial Supervisory Authority (BaFin)

Graurheindorfer Straße 108, 53117 Bonn, Germany  
alternative: Postbox 1253, 53002 Bonn, Germany

### Contact details of Federal Financial Supervisory Authority (BaFin)

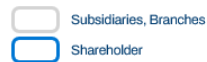
Phone: +49 22 8 / 41 08 – 0, Fax: +49 22 8 / 41 08 – 15 50  
E-mail: poststelle@bafin.de, De-mail: poststelle@bafin.de-mail.de

The Group auditor appointed for Hannover Re within the meaning of Section 318 of the German Commercial Code (hereafter referred to as HGB) is PricewaterhouseCoopers GmbH, Wirtschaftsprüfungsgesellschaft, Fuhrberger Straße 5, 30625 Hannover.

### Shareholders, subsidiaries and branches



1) Majority shareholder HDI V.a.G.

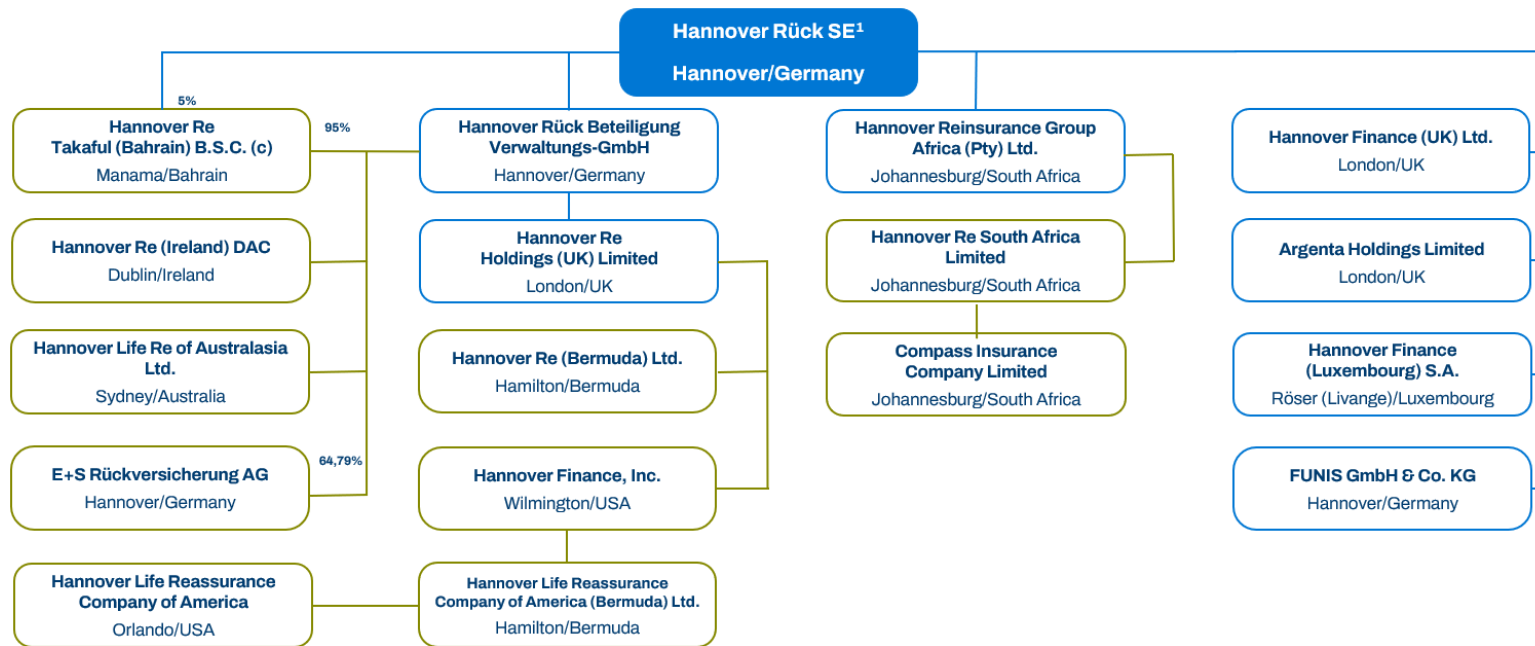


## A.1.3 Group structure

The company's network consists of more than 180 subsidiaries, affiliates, branches and representative offices worldwide with 3,895 employees.

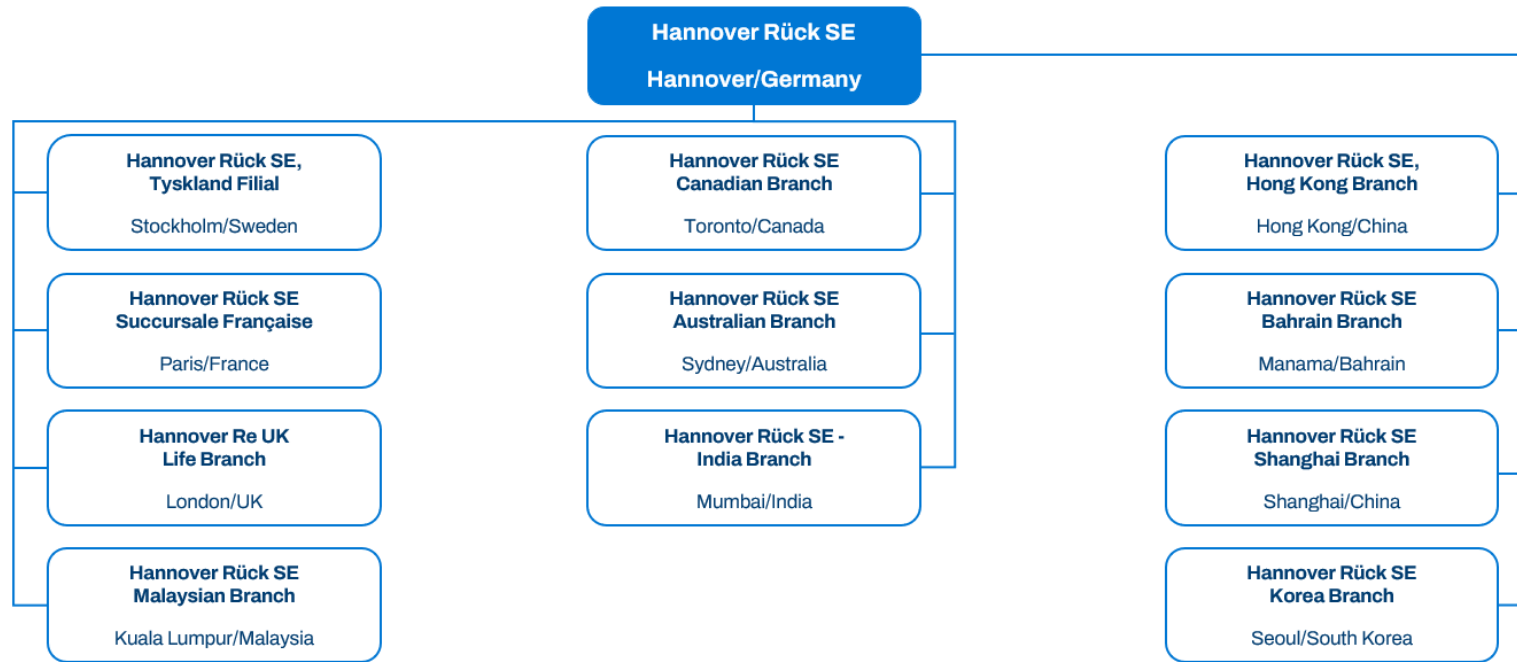
Subsidiaries and branches of Hannover Rück SE are shown in the following charts.

### Subsidiaries of Hannover Rück SE



<sup>1)</sup> Unless otherwise stated, the shareholding is 100%

Branches of Hannover Rück SE





## A.2 Performance

As one of the leading reinsurers in the world, Hannover Re has a far-reaching international network and extensive underwriting expertise. On this basis, we are able to offer our customers traditional, tailor-made and innovative reinsurance solutions and we work with them to open up new business opportunities.

Despite the challenges facing the reinsurance industry described in the section “Industry-specific environment”, Hannover Re once again demonstrated the resilience of its business model as a globally diversified and robustly capitalised reinsurer in the 2024 financial year. In view of the heightened risk situation worldwide, demand for high-quality reinsurance protection such as that offered by Hannover Re remains undiminished on a high level. Against this backdrop, our business continued to show profitable growth.

The operating profit (EBIT) rose sharply by +68.3% to EUR 3,317.6 million (EUR 1,971.2 million). Group net income came in at EUR 2,328.7 million (EUR 1,824.8 million). We thus achieved our earnings guidance, which we had raised to around EUR 2.3 billion in November. Earnings per share stood at EUR 19.31 (EUR 15.13).

Reinsurance revenue (gross) in our Property & Casualty reinsurance business group rose by 11.1% adjusted for exchange rate effects. Despite a large number of medium-severity catastrophe losses, the expenditures from large losses amounting to EUR 1,629.2 million remained within our budgeted expectation for the financial year of EUR 1,825 million. The combined ratio in property and casualty reinsurance, i.e. the ratio of the reinsurance service result (net) to the reinsurance revenue (net), improved year-on-year to 86.6% (94.0%). In view of the challenging market environment described at the outset, prices and conditions for reinsurance protection continued to show sustained improvement. As a further factor, the exceptional strengthening of the loss reserves in the previous year was followed by normalisation in the financial year, which contributed significantly to an improved combined ratio.

Reinsurance revenue (gross) booked in our Life & Health reinsurance business group grew by 0.6% adjusted for exchange-rate effects. The operating result (EBIT) in Life & Health reinsurance improved to

EUR 933.9 million (EUR 871.2 million) and thus played an important part overall in the total result for the year under review.

Our portfolio of investments amounted to EUR 65.9 billion at the end of the year (31 December 2023: EUR 60.1 billion). The investment result improved on the previous year by 26.2 % to reach EUR 2,005.1 million (EUR 1,588.2 million). This was attributable primarily to higher interest income and higher ordinary income from alternative investments. Lower expenses from realisations compensated for a lower result from market value changes of financial instruments recognised in profit and loss. The resulting return on our investments stood at 3.2% overall and thus comfortably beat our minimum full-year target of 2.8%.

Other income and expenses amounted to EUR -482.9 million (EUR -481.7 million).

In addition, the following table shows the performance targets for the business year 2024 and the attained results.

### Business development and guidance in the year under review

	Guidance 2024	Target attainment 2024
Growth in reinsurance revenue (gross) for the group <sup>1</sup>	more than 5.0%	7.8 %
Combined ratio in P&C reinsurance	< 89%	86.6 %
Reinsurance service result (net) in Life & Health reinsurance	> EUR 850 million	EUR 883 million
Return on investment	at least 2.8%	3.2 %
Group net income	around EUR 2.3 billion <sup>2</sup>	EUR 2.3 billion

<sup>1</sup> At constant exchange rates

<sup>2</sup> The guidance was revised upwards during the year from “more than EUR 2.1 billion” to “around EUR 2.3 billion”. The guidance always assumes that there are no unforeseen distortions on capital markets and that large loss expenditure remains within the expected bounds.

For further information regarding our performance please refer to our Annual Report. You can receive the Annual Report via [download from our homepage](#).

# B. System of Governance

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

The Hannover Re has an effective system of governance in place which provides for sound and prudent management. The main elements of the System of Governance are described in the following sections.

### B.1.1 Governance structure

#### B.1.1.1 Our Administrative, Management or Supervisory body

Our administrative, management or supervisory body consists of the Executive Board and the Supervisory Board.

#### Executive Board

The Executive Board consists of no less than two persons. Furthermore, it is up to the Supervisory Board to determine the number of members of the Executive Board.

The following overview shows the allocation of the areas of responsibility to the members of the Executive Board as of 1 January 2025:

#### Members of the Executive Board

Chairman	Chief Financial Officer	Property & Casualty Reinsurance			
<b>Jean-Jacques Henchoz</b>	<b>Clemens Jungsthöfel</b>	<b>Thorsten Steinmann</b>	<b>Sven Althoff</b>	<b>Sharon Ooi</b>	<b>Silke Sehm</b>
Corporate Communications	Asset Management	Property & Casualty Reinsurance	Coordination of Property & Casualty Reinsurance business group with an associated service unit	Property & Casualty Reinsurance	Property & Casualty Reinsurance
Group Audit	Group Finance	Worldwide responsibility for Agricultural Risks	Worldwide responsibility for Aviation and Marine, Credit, Surety and Political Risks, Quotations	Worldwide responsibility for Facultative Reinsurance	Worldwide responsibility for Catastrophe XL (CAT XL), Structured Reinsurance, Insurance-Linked Securities, Retrocessions; Cyber & Digital
Group Operations & Strategy, Information Technology, Facility Management	Reinsurance Accounting & Valuation	Regional responsibility for Continental Europe, Latin America and North Africa	Regional responsibility for North America, United Kingdom, Ireland and London Market	Regional responsibility for Asia-Pacific and Sub-Saharan Africa	Regional responsibilities for Continental Europe and North Africa
Group Risk Management, Actuarial Function	Group Tax				
Group Human Resources	Coordination of International Operations				
Group Legal Services, Compliance	Investor & Rating Agency Relations				
		Life & Health Reinsurance			
		<b>Claude Chevre</b>	<b>Brona Magee</b>		
		Life & Health Reinsurance	Life & Health Reinsurance		
		Worldwide responsibility for Life & Health services	Worldwide responsibility for Longevity Solutions		
		Regional responsibility for Africa, Asia, Australia, Latin America, Middle East, Continental Europe	Regional responsibility for North America, Bermuda, United Kingdom and Ireland		

The four (Solvency II) key functions are allocated to the Chairman of the Executive Board. For further information on key functions (Solvency II) please refer to the following sections of chapter B.

Effective 1 September 2024, Mr. Thorsten Steinmann was appointed to the Executive Board. On 1 January 2025 he succeeds Dr. Michael Pickel, who left the Executive Board on 31 December 2024. In addition, Dr. Klaus Miller left Hannover Re's Executive Board on 31 December 2024. The Supervisory Board appointed Ms. Brona Magee as a new member of Hannover Re's Executive Board with effect from 1 January 2025.

#### Supervisory Board

The Supervisory Board consists of nine members appointed by the Annual General Meeting (AGM). Of these nine members, three shall be appointed on recommendation by the employees. The AGM is bound by these recommendations for the appointment of the employees' representatives. Apart from those, the AGM can freely propose candidates. Every member of the Supervisory Board can resign from his membership by adhering to a notice period of one month, without any obligation to specify an important

reason, by written notice to the Company, represented by the Management Board and the Chairman of the Supervisory Board (if notice is given by the Chairman himself, to his deputy). The Chairman of the Supervisory Board may choose to forgo adherence to this notice period.

The appointment for a successor of a member who has resigned prior to termination of his term is for the remaining term of the resigned member.

As of 31 December the Supervisory Board consists of the following members:

**Members of the Supervisory Board and membership in committees**

Members of the Supervisory Board	Standing Committee	Finance and audit Committee	Nomination Committee	Staff representative
Torsten Leue, Chairman	X	X	X	
Herbert K. Haas, Deputy Chairman	X	X	X	
Natalie Bani Ardalan/ from 6 May Sibylle Kempff				X
Frauke Heitmüller/ from 6 May Timo Kaufmann				X
Ilka Hundeshagen	X (from 6 May)			X
Dr. Ursula Lipowsky		X	X (from 6 May)	
Dr. Michael Ollmann	X (from 6 May)			
Dr. Andrea Pollak/ from 6 May Dr. Alena Kouba			X (until 6 May)	
Dr. Erhard Schipporeit/ from 6 May Harald Kayser	X (until 6 May)			

The Supervisory Board may form committees from among its members and authorise them to pass resolutions, to the extent permitted by law.

In the 2024 financial year the Supervisory Board again fulfilled its tasks and duties in accordance with the law, the Statute and its Rules of Procedure. The Supervisory Board monitored the management of business based on regular written and verbal reporting by the Executive Board. The Executive Board informed the Supervisory Board in a regular, timely and comprehensive manner about all matters relevant to the company, especially concerning the strategy, planning, business development, risk position, risk management and compliance. The Chairman of the Supervisory Board also stayed in touch with the Chief Executive Officer between meetings to discuss with him issues relating to the company's strategy, business development, risk position, risk management and compliance. The Chairwoman of the Finance and Audit Committee additionally engaged in a regular dialogue with the Chief Financial Officer and the independent auditor on matters of accounting, auditing and the internal control system. The full Supervisory Board was also informed in writing of important events outside the meetings.

It was concluded that there were no transactions in the reporting period that fall under the legal requirements governing mandatory approval (§ 111b Stock Corporation Act (AktG)) or compulsory disclosure (§ 111c Stock Corporation Act (AktG)).

Changes were made in the composition of the Supervisory Board and its committees as well as in the composition of the Executive Board in the year under review. At the Annual General Meeting on 6 May 2024 the following persons were elected as representatives of the company's shareholders:

- Herbert K. Haas
- Torsten Leue
- Dr. Ursula Lipowsky
- Dr. Michael Ollmann
- Dr. Alena Kouba
- Harald Kayser

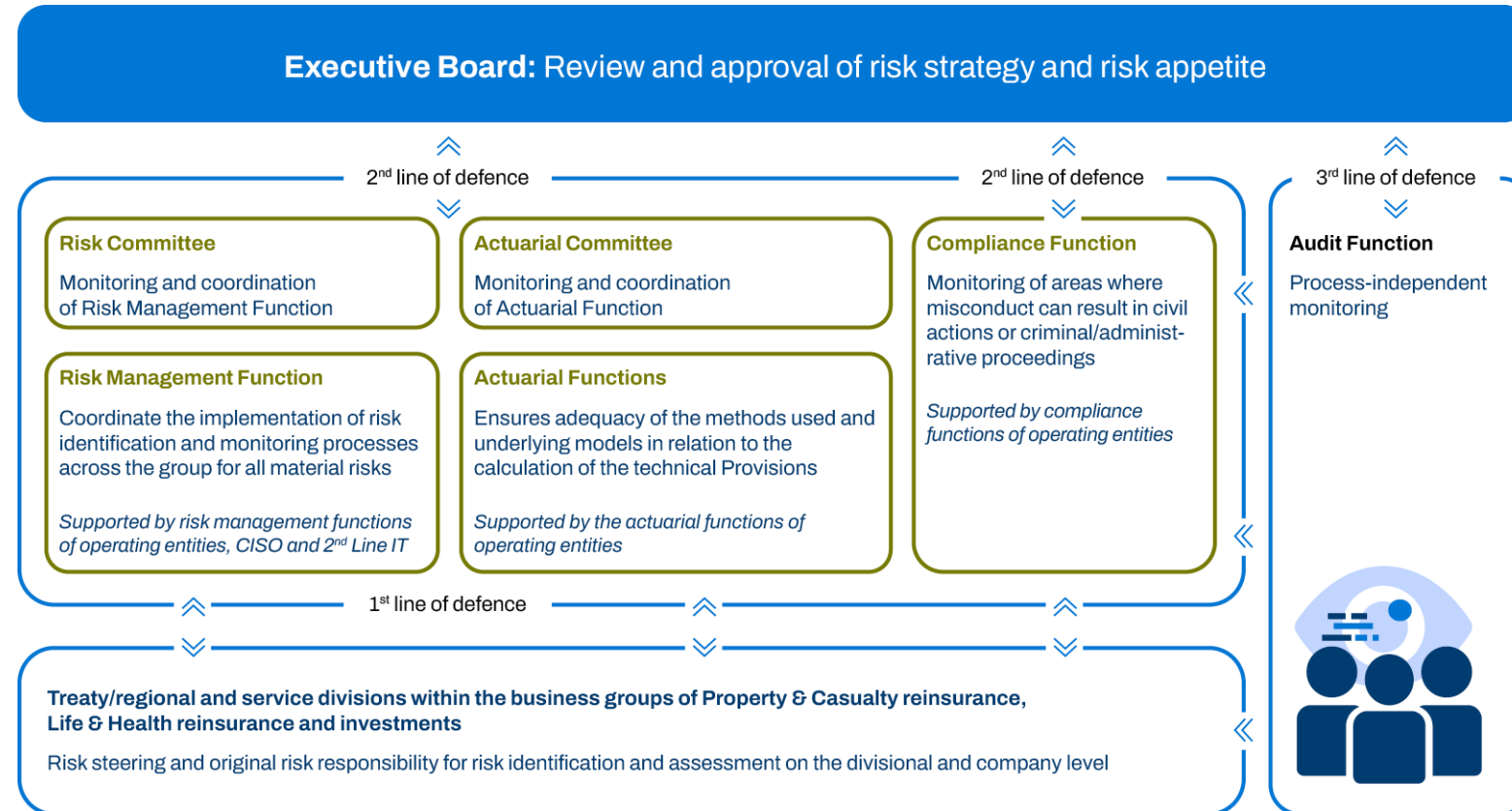
Dr. Pollak and Dr. Schipporeit left the Supervisory Board. Furthermore, in accordance with the provisions of the SE Participation Act (SEBG), the following employee representatives were elected to the Supervisory Board with effect from the conclusion of the Annual General Meeting on 6 May 2024:

- Sibylle Kempff
- Timo Kaufmann
- Ilka Hundeshagen

Ms. Natalie Ardalan and Ms. Frauke Heitmüller stepped down from the board.

### B.1.1.2 Key functions

The following chart provides an overview of the central functions and bodies within the overall system as well as of their major tasks and powers:



integrated monitoring and control. The third line of defence is the process-independent monitoring performed by the internal audit function.

the Group strategy and on the performance of the Hannover Rück SE share, including in a relative comparison with our peers.

The members of the Executive Board are remunerated in light of the company's position and according to their performance and their scope of activity and responsibility. In order to reinforce the concept of pay-for-performance, the target direct remuneration (sum of fixed remuneration and target amounts of the variable remuneration components in the event of 100% target attainment) is comprised of 40% fixed remuneration and 60% variable remuneration components. The variable remuneration consists of a short-term incentive (STI) and a long-term incentive (LTI) with a performance period of four years. The STI is geared to Hannover Re's commercial success in the relevant financial year. The LTI is structured in the form of a performance share plan and thereby incentivises increases in the value of the Hannover Re share in the interests of our investors.

The variable remuneration is defined at the Supervisory Board meeting that approves the consolidated financial statement for the financial year just ended.

The Executive Board remuneration is stated on the basis of the remuneration granted and owing. The total remuneration received by the Executive Board of Hannover Rück amounts to TEUR 14,222.

### B.1.2.2 Remuneration of the Supervisory Board

The remuneration of the Supervisory Board is determined by the Annual General Meeting of Hannover Rück and regulated by the Statute.

The total remuneration received by the Supervisory Board of Hannover Re Group amounts to TEUR 1,164.

## B.1.2 Remuneration policy

### B.1.2.1 Remuneration of the Executive Board

The remuneration ensures a transparent, performance-related incentive, strongly focused on the company's long-term success, which in particular depends on financial and non-financial performance criteria derived from

Hannover Re Group has set up Group-wide risk management functions to safeguard an efficient and effective risk management system. The individual elements of the risk management functions are closely interlinked and the roles, tasks and reporting channels are clearly defined and documented. We have implemented the three lines of defence model. The first line of defence consists of the risk steering and the original risk responsibility at divisional and company level. The second line of defence is made up of the core functions risk management, the actuarial function and the compliance function. These functions are responsible for process-

### B.1.2.3 Remuneration of staff and senior executives

The remuneration system for senior executives below the Executive Board (management levels 2 and 3) and for key function holders in Germany belonging as a matter of principle to the ranks of senior executives consists of a fixed annual salary and variable remuneration. This is comprised of short-term variable remuneration, the annual cash bonus and long-term share-based remuneration, the Share Award Plan.

Non-management employees can participate in a variable remuneration system through the Group Performance Bonus (GPB). The GPB is a remuneration model that is linked to the success of the company.

## B.1.3 Related party transactions

Talanx AG holds an unchanged majority interest of 50.2% in Hannover Rück. For its part, Haftpflichtverband der Deutschen Industrie Versicherungsverein auf Gegenseitigkeit (HDI), Hannover, holds a stake of 76.7% in Talanx AG.

The business relationship between Hannover Re and its subsidiary E+S Rück is based on a cooperation agreement. A retrocession by Hannover Rück to E+S Rück exists in property and casualty reinsurance. E+S Rück and Hannover Rück bear exclusive responsibility for German business and for international markets respectively.

The members of the governing bodies did not receive any advances or loans in the year under review. Nor were there any other material reportable circumstances or contractual relationships as defined by IAS 24 between companies of the Hannover Re Group and the members of the governing bodies or their related parties in the year under review.

## B.2 Fit and proper requirements

### B.2.1 Requirements

In 2024, Hannover Re's updated guideline on the professional suitability and reliability of board members and persons responsible for or acting in key functions was adopted by the Management Board and Supervisory Board. The key functions include the compliance, the risk management, the internal audit and the actuarial functions.

### B.2.2 Description of requirements

The guideline describes the requirements for Board members and key function holders and is based on the current regulatory requirements and the requirements of the company.

#### Professional suitability

Members of the Executive Board and Supervisory Board must at all times demonstrate the professional suitability that they require to fulfil their management and supervisory function. They must also always be able to actively monitor the company's developments at all times. This requires an understanding of the business transactions carried out by the company and the ability to assess the resulting risks for the company within the framework of the statutory provisions. The company draws up a specific requirements profile for Management Board members and sets out the extent to which a proposed member fulfils this profile. When assessing the following criteria in particular are to be taken into account: sufficient theoretical and practical knowledge of the business areas (expertise), relevant experience in the insurance sector, other financial financial sectors and other companies (market knowledge), knowledge of the internal model, language skills and analytical skills. Any lack of professional aptitude can be acquired through appropriate further training. The professional aptitude must be currently available.

The requirements for the professional qualifications of the holders of the other key functions are closely linked to the specifics of the respective governance tasks. When assessing the professional suitability, the following criteria in particular must be taken into account: Professional qualifications and knowledge (specialist knowledge), management expertise, relevant experience in the insurance sector, other financial sectors and other companies (market knowledge), language skills and analytical understanding. In the event that key functions are outsourced, the outsourcing company must ensure that the persons of the service provider who are responsible for the key task, are sufficiently professionally qualified and personally reliable. The outsourcing company must appoint an outsourcing officer for this purpose. The person is responsible for the respective key function in the company. The supervising outsourcing officer is responsible for the proper fulfilment of the tasks associated with the outsourcing of the key function. No key functions were outsourced in 2024.

### Personal reliability of Board members and key function holders

All members of the Supervisory Board, Executive Board and holders of key key functions must be responsible and act with integrity. They must fulfil their duties conscientiously and with due care. The assessment of whether a person is reliable includes an evaluation of their honesty and the soundness of their financial circumstances, personal behaviour and business conduct, including any criminal, financial and regulatory issues relevant to the purposes of the assessment. Reliability does not need to be positively proven. Reliability is assumed if no facts are recognisable that justify unreliability. Unlike in the context of professional aptitude, the principle of proportionality does not apply to the determination of personal reliability. The company promotes continuous professional development through a variety of training programmes tailored to actual needs in order to ensure professional suitability in consideration of changing requirements. In order to ensure ongoing compliance with the relevant requirements, an annual self-assessment is carried out by the members of the Supervisory Board and the Executive Board.

### B.2.3 Evaluation process

Professional suitability and personal reliability are checked in particular on the basis of the following documents:

1. Curriculum vitae
2. If applicable, the form "Personal declaration with information on reliability" from BaFin
3. Certificate of good conduct
4. Extract from the central trade register
5. Proof of further training(s)
6. Self-assessment, if applicable

The curriculum vitae in particular also serves to identify possible conflicts of interest and an assessment of time availability. The company reviews compliance with the catalogue of requirements in the event of changes in personal characteristics (e.g. new findings about the integrity of the person) or characteristics in the position (e.g. changes in the professional requirements for fulfilling the position).

The qualifications required for the holders of the key functions compliance, internal audit, risk management and actuarial mathematics are included in the relevant position descriptions. To ensure ongoing compliance with the



relevant requirements, the requirement profile is reviewed every five years by the responsible organisational unit.

The review and control processes on requirements and qualifications are summarized in an overview that lays out the frequency and means of review and control.

## B.3 Risk Management System including the Own Risk and Solvency Assessment

### B.3.1 Strategy implementation

Robust governance and strong risk management establish the foundation for our business operations. This is enshrined in our company strategy.

The risk strategy, the risk register and the system of limits and thresholds – as integral components of our Risk and Capital Management Policy – are reviewed at least once a year. In this way we ensure that our risk management system is kept up-to-date.

Our solvency ratio is subject to a limit of 180% and a threshold of 200%. Countermeasures would be triggered if the solvency ratio were to fall below this threshold. These indicators are monitored using our internal capital model and the Executive Board is informed quarterly about adherence to these key parameters as part of regular reporting. The necessary capital resources are determined according to the requirements of our economic capital model, solvency regulations, the expectations of rating agencies with respect to our target rating and the expectations of our clients. Above and beyond that, we maintain a capital cushion in order to be able to act on new business opportunities.

### B.3.2 Risk capital

In the interests of our shareholders, clients and employees, we strive to ensure that our risks remain commensurate with our capital resources. Our quantitative risk management provides a uniform framework for the evaluation and steering of the risks affecting the company as well as of our

capital position. The internal capital model—a stochastic enterprise model—is a central tool in this context. It covers all subsidiaries and business groups of the Hannover Re Group. The core variable in risk and enterprise management is the economic equity, which is calculated according to market-consistent valuation principles and also constitutes the basis for calculating the own funds under Solvency II.

Hannover Re calculates the required risk capital as the Value at Risk (VaR) of the economic change in value over a period of one year with a confidence level of 99.5%, in accordance with Solvency II using a full internal model.

We strive for a rating from the rating agencies most relevant to our industry that facilitates and secures our access to all reinsurance business worldwide. Hannover Re is analysed by the rating agencies Standard & Poor's (S & P) and A.M. Best as part of an interactive rating process. The current financial strength is assessed as "AA-" (Very Strong, stable outlook) by Standard & Poor's and "A+" (Superior, stable outlook) by A.M. Best. In this context both Standard & Poor's and A.M. Best consider Hannover Re's risk management to be a very important aspect in the evaluation of financial strength and rate it as very good.

Against the backdrop of the planned growth of our business in property and casualty reinsurance and selected areas of life and health reinsurance, we continuously track the impacts on our capitalisation and rating. In order to safeguard an adequate level of capitalisation and our rating, we initiate measures promptly based on forecasts. Possible measures include, among others, adjusting the structure and scope of our retrocessions, adjusting the amount of debt capital and managing business growth through risk budgets.

### B.3.3 Internal model governance

The governance of the internal model is defined in a number of documents and policies. In particular, governance rules include roles, responsibilities and standards for changes to the internal model and model validation as well as standards for internal and external data and expert settings used in the internal model. The rules have been set-up in compliance with the requirements of Solvency II.

The risk management function provides quarterly reports on internal model results and changes to the Executive Board and the Risk Committee. The

reporting supports the tracking of changes to the risk profile and the solvency ratio over time. Apart from this reporting, internal model results are embedded in essential internal steering processes such as capital cost allocation and new product evaluation.

The annual model validation ensures that the internal model meets all defined quality standards of the policies. The Solvency II directive requires that the validation is performed as an independent process. Therefore, Hannover Re has set-up a validation process which assigns validation to departments different from the departments responsible for model operation, calibration and maintenance. The validation report includes numerous stress tests and sensitivity analyses.

There have not been any significant changes in the model governance during the reporting period. The model change policy remained unchanged as well.

### B.3.4 Organisation of risk management and the tasks of the risk management function

An overview of risk management's organisational structure is provided in Section B.1.1.2 above.

The risk management function consists of three primary components: the Risk Committee, the Chief Risk Officer and the risk monitoring function.

#### Risk Committee

The tasks of the Risk Committee – the body charged with the monitoring and coordination of risk management – are mandated by the Executive Board. The scope of decision-making for the Risk Committee lies within the boundaries of risk appetite set by the Executive Board. Changes, and any instances of increase in risk appetite, require the approval of the Executive Board. The Risk Committee's tasks include quality assurance of the ORSA process (cf. section B.3.7) and monitoring of the implementation of risk-related measures. The Risk Committee also receives the model change reports according to the model change policy.

### Chief Risk Officer

The Chief Risk Officer is also the head of the risk monitoring function and member of the Risk Committee. The Chief Risk Officer coordinates the ORSA process and ensures the framework conditions of an effective risk management system.

### Risk monitoring function

The risk monitoring function coordinates and bears responsibility for comprehensive monitoring (systematic identification, evaluation, monitoring and reporting) of all significant asset- and liability-related risks and the regular execution of the ORSA process. Furthermore, the risk monitoring function develops methods, standards and processes for the assessment and monitoring of risk.

The risk monitoring function fulfils its tasks objectively and independently for Hannover Re.

During the reporting period, numerous systems and processes were improved. This enables a more detailed and faster analysis of risk exposure. Key controls were established in our Risk and Capital Management Policy to increase transparency of risk control measures. Furthermore, internal model changes and improvements were made. Assessments of the impact of new products and capital were also carried out.

## B.3.5 Key elements of our risk management system

Our Risk and Capital Management Policy including our risk strategy and the system of limits and thresholds for material risks of the Hannover Re Group describes the central elements of our risk management system. It is subject to a constant cycle of planning, action, control and improvement. Systematic risk identification, analysis, evaluation, steering and monitoring as well as risk reporting are especially crucial to the effectiveness of the system as a whole.

This Risk and Capital Management Policy describes roles and responsibilities in the risk management process, major elements of the limit- and threshold system and the risk control framework. Thereby, the policy implements regulatory requirements for risk management as well as international standards relating to enterprise risk management.

### Risk identification

A key source of information for monitoring risks is the risk identification carried out on a regular basis. All identified material risks are documented in the central register. Risk identification takes the form of, for example, structured assessments, interviews or scenario analyses. External insights such as industry know-how from relevant bodies or working groups are incorporated into the process. Risk identification is important for ensuring that our risk management consistently remains up-to-date.

### Risk analysis and evaluation

In principle, every risk that is identified and considered material is assessed quantitatively. Quantitative assessment of material risks and the overall risk position is performed by Group Risk Management using the internal capital model. The model makes allowance as far as possible for risk accumulations and concentrations.

Risk types for which quantitative risk measurement is currently impossible or unreliable are assessed qualitatively (e.g. strategic, reputational or emerging risks). Qualitative assessment takes the form of inter alia expert evaluations.

### Risk steering

The steering of all material risks is the task of the operational business units on the divisional and company level. In this context, the identified and analysed risks are either consciously accepted, avoided or minimised. The risk / reward ratio and the Solvency Capital Requirement are factored into the division's decision. Risk steering is assisted by, among other things, the parameters of the central and local underwriting guidelines and by defined limits and thresholds.

### Risk monitoring

The monitoring of all identified material risks is a core task of Group Risk Management. This includes, inter alia, monitoring execution of the risk strategy as well as adherence to the defined limits and thresholds and to risk-related methods and processes. A further major task of risk monitoring is the ascertainment of whether risk steering measures were carried out and whether the planned effect of the measures is sufficient.

### Risk communication and risk culture

Group-wide risk communication and an open risk culture are important to our risk management. Risk management is firmly integrated into our operational processes and requirements are stated in guidelines and

policies, which are communicated Group-wide. It is assisted by transparent risk communication and the open handling of risks as part of our risk culture. Risk communication takes the form, for example, of internal and external risk reports, in the context of committee and project work, through information on current risk complexities in the intranet and training opportunities for staff. The regular sharing of information between risk-steering and risk-monitoring units is also fundamental to the proper functioning of risk management. Regular global meetings attended by the actuarial units and risk management functions serve as a major anchor point for strategic considerations.

### Risk reporting

Our risk reporting provides systematic and timely information about all material risks and their potential implications. The central risk reporting system consists primarily of regular risk reports, e.g. on the overall risk situation, adherence to the parameters defined in the risk strategy or on the capacity utilisation within specific catastrophe scenarios. Complementary to the regular risk reporting, immediate internal reporting on material risks that emerge at short notice takes place as necessary.

### Process-integrated / -independent monitoring and quality assurance

Irrespective of internally assigned competencies, the Executive Board is responsible for the orderly organisation of the company's business. This also encompasses monitoring of the internal risk steering and control system. Furthermore, the Executive Board is the owner of the internal capital model and is responsible for the approval of major model changes. Process-independent monitoring and quality assurance of risk management is carried out by the internal audit function and external instances (regulators, independent auditors and rating agencies). Most notably, the independent auditors review the internal risk monitoring and control systems. The entire system is rounded off with process-integrated procedures as well as (key) controls and rules, such as those of the internal control system.

## B.3.6 Own Risk and Solvency Assessment (ORSA)

The ORSA cycle mirrors our process of planning, action, monitoring and finally enhancement, and comprises the elements listed in Section B.3.5.

The ORSA report is prepared on an annual basis and summarises the results of the last ORSA cycle. Here, the internal model is used—especially for the calculation of solvency requirements in comparison to the allocated risk capital. The interplay between risk and capital management is also highlighted. Additionally, it explains the inclusion of the Executive Board into the ORSA process and its use as one of the controlling instruments at the company's disposal.

The ORSA report is coordinated by the risk management division and is subject to both assessment and approval by the Executive Board. In addition, the report is submitted to the Supervisory Board and to BaFin.

The risk monitoring function regularly prepares reports, which show the company's risk position. This includes internal and external risk reports, results reports on the internal model runs including solvency calculations and risk limits for natural disasters.

These reports form the basis for the solvency and risk assessments described in the ORSA report. Therein, all employees contributing to the above procedures are involved as data and information suppliers, and are consulted for quality assurance purposes.

The Executive Board takes the results of the ORSA cycle into account when assessing the degree of accomplishment of defined business targets; if needed, changes in the business process take place. This establishes a surveillance process for business enhancements and risk mitigation.

In the event that—because of a material change in risk profile—an ad-hoc ORSA report becomes necessary, we defined specific procedural plans and responsibilities.

In addition to the regular supervisory reporting (e.g. internal risk report, ORSA report), this annual Solvency and Financial Condition Report (SFCR) and an annual Regular Supervisory Report (RSR) are generated.

## B.4 Internal control system

### B.4.1 Elements of the Internal Control System

The internal control system (ICS) is an integral part of the risk management system and compiles the entirety of controls within the organisation. Particularly important controls are labelled as key controls and listed in guidelines. The ICS safeguards:

- the adherence to laws and regulations and contractual agreements as well as internal stipulations,
- the accuracy of relevant records and
- the operation within defined risk tolerance.

The core elements of Hannover Re's ICS are summarised in a guideline that sets out the framework at Group level and establishes the common understanding of (key) controls and their execution, roles and responsibilities for the stipulation of controls as well as standards for control documentation, testing and reporting. The system includes structured organisational measures, such as the principle of dual control, separation of functions and documentation, and technical measures, such as plausibility checks and access privileges in the IT systems. The proper functioning of the ICS necessitates the involvement of management, policy-, process- and control owners and employees on all levels.

In particular, financial reporting must satisfy international and national financial reporting standards as well as regulatory requirements. Completeness and accuracy of the annual and consolidated financial statements (incl. Hannover Rück SE) are to be ensured. This is safeguarded by identifying and minimising the risk of errors in the annual and consolidated financial statements at an early stage, with differentiated criteria, control points and materiality thresholds.

In order to safeguard and continuously improve the adequacy of the control system it is subject to regular review and evaluation. In this regard, the internal audit function ensures that the quality of the control system is constantly monitored.

## B.4.2 Compliance function

### Implementation of the compliance function

Hannover Re has opted for a decentralised approach towards the implementation of the compliance function: responsibility for Compliance lies with GLS but the tasks of the compliance function are fulfilled by various specialised departments as well.

The head of the Hannover Re department Group Legal Services (GLS) is the holder of the key compliance function as well as the Chief Compliance Officer (CCO) of the Hannover Re Group.

The Executive Board of Hannover Re has established the compliance division within GLS responsible for the oversight of the fulfilment of the tasks of the compliance function. As mentioned above, the compliance function is supported by different specialised departments, e.g. employment law remains the responsibility of the Human Resources department, tax law falls under the jurisdiction of the Tax department of Hannover Re.

### Tasks

The handling of subjects of particular compliance relevance by the departments, who collectively form the compliance function, comprises at least the following activities:

- Identification and evaluation of risks, which are associated with the non-compliance of statutory requirements (risk control)
- Evaluation of the possible consequences for the company's activity as a result of changes in legal operating conditions (risk relating to changes in the law/early warning)
- Consultation with regard to compliance with the legal provisions which apply to company activity
- Assessment of the appropriateness of implemented measures in relation to compliance with statutory requirements (monitoring function)

Every year, the CCO prepares a compliance plan for the following year. This plan determines where the key areas of compliance activity should be in the subsequent year. The plan takes into account all relevant areas of activity of the company and the compliance risk situation.



The Hannover Re Executive and Supervisory Boards last updated the Code of Conduct (CoC) of the Hannover Re Group in 2022. The CoC is published on the Hannover Re homepage.

Hannover Re has specified its compliance management system (CMS) in the “Compliance Group Policy”. This policy is regularly assessed by the members of staff from the compliance division for its pertinence and, if necessary, updated at least once a year or on an event-driven basis when new developments occur.

In addition to Talanx Group’s whistleblower system, Hannover Re has set up a separate Speak-up system through which incidents concerning the Hannover Re Group can be reported directly to the compliance division, also anonymously.

### Reporting

As the holder of the key function compliance, the CCO reports directly to the Chief Executive Officer (CEO).

The annual compliance report of Hannover Re which is presented to the Supervisory Board in its Finance & Audit Committee meeting by the CCO is based inter alia on the results of the monitoring activities of both the Hannover and Local Offices as well as the compliance reports by the Local Offices. The report contains information on all compliance-relevant topics.

## B.5 Internal audit function

### Implementation of the internal audit function

The Company's internal audit function is performed by the department Group Audit (GA). GA provide independent objective audit services, including evaluations and recommendations, which help in particular to ensure external and internal compliance of processes, the internal control system (ICS) and other areas of the Company, identify potential scope for improvements and hence generate added value. Along with the auditing activity, GA provides value-adding in-puts as an internal consultant in its interconnected cooperation with other units and functions of the Company.

The Executive Board guarantees that GA is not bound by any instructions in the planning of audits, conduct of audits, reporting and evaluation of audit results. In order to safeguard this independence the Head of GA, who is at

the same time the key function holder for the internal auditing of the Company pursuant to § 30 as well as § 47 No. 1 VAG, reports directly to the Executive Board. GA team members are not employed in other areas of the Company and only perform tasks that are in conformity with the GA "Internal Audit Charter". This charter, which has been approved by the Executive Board, also sets out the powers of the internal audit function. Additionally, GHR is responsible for an adequate Fit & Proper assessment process for Key Function Holders and ensures adherence to the process.

The GA team encompasses staff with various areas of expertise, university degrees and supplementary vocational examinations in order to cover the wide specialist spectrum of (audit) tasks. The members of staff in GA have a broad mix of professional experience both internally (in specialist terms especially from the underwriting side) and externally (especially from external auditing and consulting). If a need for special capacity or expertise arises, GA can additionally involve internal peers and/or appropriate external resources.

### Tasks

GA supports the Executive Board in the achievement of objectives by evaluating all business centres, processes and systems of the Company on a targeted, independent and objective basis through a systematic, risk-oriented approach in the planning and conduct of audits and by contributing to further development. Audit results are reported directly to the full Executive Board. The evaluation of individual observations and the overall evaluation of the audit result are the exclusive responsibility of GA. The classification scheme defined by GA for this purpose ensures an objective basis for the evaluations made.

### Reporting lines

The internal audit function reports its audit results and recommendations directly to the Executive Board on an ongoing basis through written audit reports, or immediately in the case of serious observations, as well as annually in the form of the GA Annual Report. Implementation of the recommendations/measures agreed upon in the audits is monitored by GA at the specified due dates.

## B.6 Actuarial function

### Implementation of the actuarial function

Tasks and responsibilities of the Actuarial Function (AF) are defined in the AF policy which has been approved by the Executive Board. The owner of the AF coordinates the tasks of the AF.

The tasks are conducted by the division Group Risk Management and its departments. This reflects the common understanding of AF and Risk Management Function (RMF) that a broad exchange of information and a competent support of each other's function is useful to fulfil their individual tasks in an effective and efficient way.

### Tasks

The tasks of the AF are inter alia:

- Coordination and validation of the calculation of the Solvency II Technical Provisions (TP)
- Ensure the appropriateness of the applied methods, the underlying models and assumptions
  - used for the calculation of the TP for solvency as well as for accounting purposes
  - used as a basis for the appropriate recognition of the inherent risks of these methods, models and assumptions in the internal model
- Evaluation of the uncertainty associated with the estimations made in the calculation of the TP
- Regular review and assessment of the underlying data in terms of sufficiency and quality
- Regular comparison of best estimates against experience
- Reconciliation of TP between financial accounting and Solvency II basis
- Recommendations on improving processes and models used for the calculation of the TP, including data collection, if deficiencies have been observed, and monitoring of their implementation
- In the context of the contribution to the RMF inter alia
  - Support of the internal model, especially with respect to underwriting risks including the delivery and validation of models, data, parameters
  - Monitoring of the resilience level within the scope of the system of limits and thresholds
  - Analysis of large transactions and new types of business
- Preparation of the AF report containing inter alia the following topics
  - Tasks of the AF
  - Activities of the AF in the reporting period

- Methods, results and sensitivity analyses in respect of TP
- Opinion on the underwriting policy and the retrocession policy

### Reporting lines

In addition to the annual AF report, the responsible owner of the AF reports regularly directly to the Executive Board and to the Actuarial Committee, which is the responsible committee for the information exchange with the AF. If necessary, the AF reports to the Board or the Actuarial Committee on an ad hoc basis or upon requests and vice versa. Any requests of these two bodies were directed to the responsible owner of the AF. These direct reporting lines ensure the independence of the AF from the other key functions and the operational management.

The Actuarial Committee consists of the CEO, CFO, a member of the Executive Board responsible for Property & Casualty reinsurance, a member of the Executive Board responsible for Life & Health reinsurance, the head of the AF, the head of the department responsible for the valuation of technical provisions for Property & Casualty reinsurance, the head of the department in risk management dealing with Life & Health reinsurance, and the head of the department in risk management dealing with Property & Casualty reinsurance business.

## B.7 Outsourcing management

Hannover Re has a guideline in place approved by the Executive Board, which governs external and intra-group third party provisions including outsourcing. The management process for third-party provisions includes:

- Initial analysis, including materiality assessment as well as due diligence and risk assessment
- Legal check
- Approval and notification
- Continuous steering and monitoring, including review of due diligence and risk assessment as well as incident management
- Change and termination/exit
- Reporting

All relevant stakeholder groups are involved in the risk governance process. Additionally, a central organisation has been built up to coordinate the overarching core procurement process.

Hannover Rück has currently outsourced essential parts of the investment management to Ampega Asset Management GmbH, located in Cologne (Germany), as well as cloud-based IT services to Microsoft Ireland Operations Limited, located in Dublin (Ireland). These services are the only outsourcings classified as important.

## B.8 Any other information

### Evaluating the appropriateness of the system of governance

On an annual basis, the Executive Board receives an opinion on the adequacy of Hannover Re's System of Governance (SoG) from the System of Governance Assessment Committee (SoGAC) regarding the past financial year. This opinion presented by the committee dated 24 February 2025 was assessed and approved by the Executive Board.

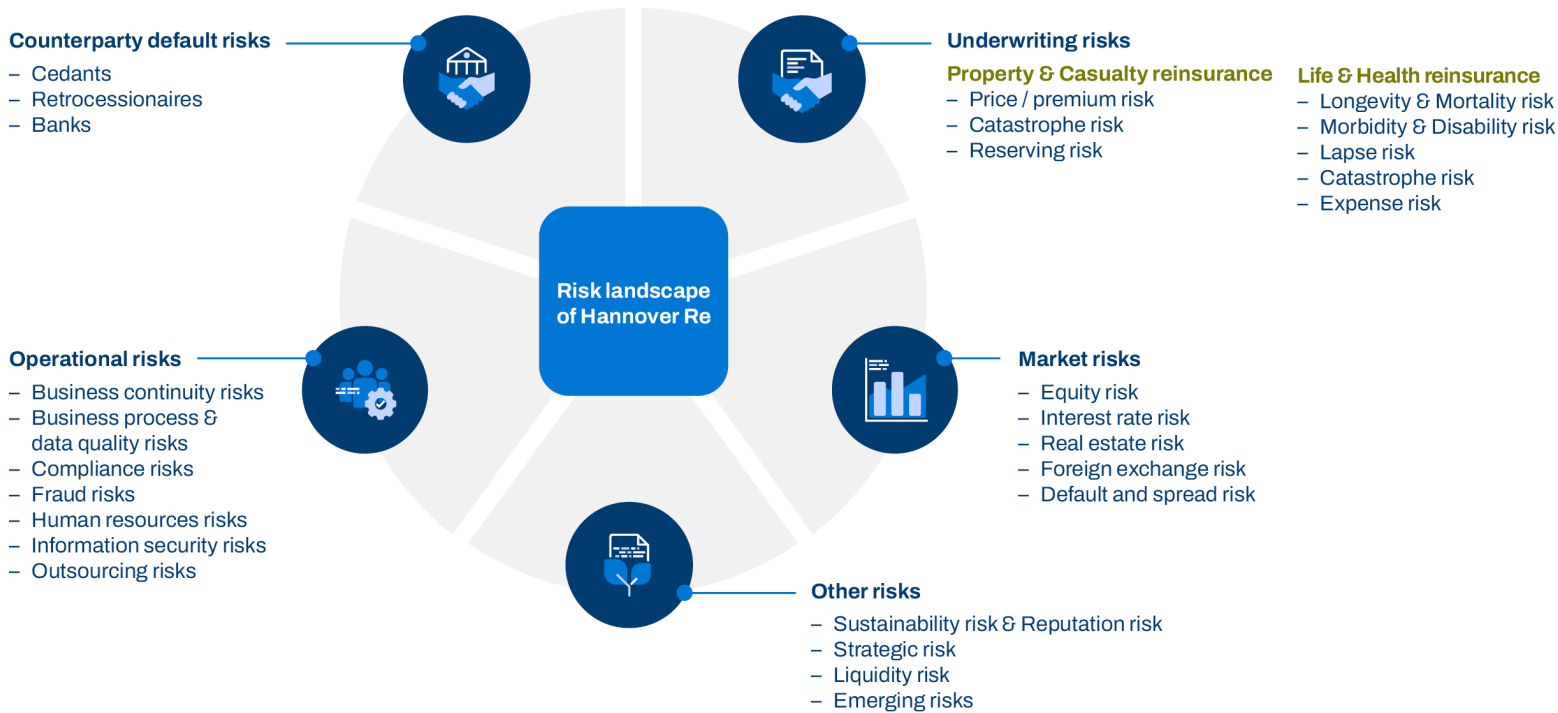
Members of the committee are the Heads of Hannover Re's key functions (Actuarial Function, Internal Audit, Risk Management, and Compliance), the Head of Global Human Resources and the Head of Group Operations & Strategy – Costs, Organisation, Processes & Procurement. It usually convenes twice a year. Guests are invited on an event-driven basis. The basis for the assessment of the SoG includes, among other things, the annual reports submitted by the key functions.

Based on the assessment conducted by the committee, the Executive Board has reached the conclusion that the SoG of Hannover Re is appropriate considering the scope and complexity of its business activities and the inherent risks.

# C. Risk Profile

The risk landscape is displayed in the following graph.

## Risk landscape of Hannover Re



In the context of its business operations the Hannover Re Group is confronted with a broad variety of risks. These risks are deliberately accepted, steered, and monitored as appropriate to the actions taken on the associated opportunities. The parameters and decisions of the Executive Board with respect to the risk appetite of the Hannover Re Group, which are based on the calculations of risk-bearing capacity, are fundamental to the acceptance of risks.

Currently, our most significant individual risks are the default and spread risks within the market risks, the reserving and catastrophe risks within the underwriting risks of property and casualty reinsurance and the mortality, longevity and morbidity risks within the underwriting risks of life and health reinsurance.

Retrocession has a particular significance within risk appetite and risk reduction. It is used to protect the capital of the Hannover Re Group. The process of strategic retrocession placement for the Group, subsidiaries or branches is determined by the responsible Board member and overseen by the Board as a whole.

In the course of the mid-term planning, we monitor the business development over a time horizon of five years. Besides the basic scenario, we also behold alternative scenarios in respect of the evolution of (re)insurance markets including different impacts related to business growth and performance. Under the assumptions within the mid-term business plan, the risk profile and the capitalisation of the Hannover Re Group remain comfortable. It is worthwhile to notice that the forecast of the capital requirements is based on various assumptions for the future economic and business environment and is therefore to be handled carefully.

Large transactions are assessed with regards to their influence on the risk profile, capitalisation, and the defined thresholds for different risk categories. This ensures that the risks develop in line with our risk appetite.

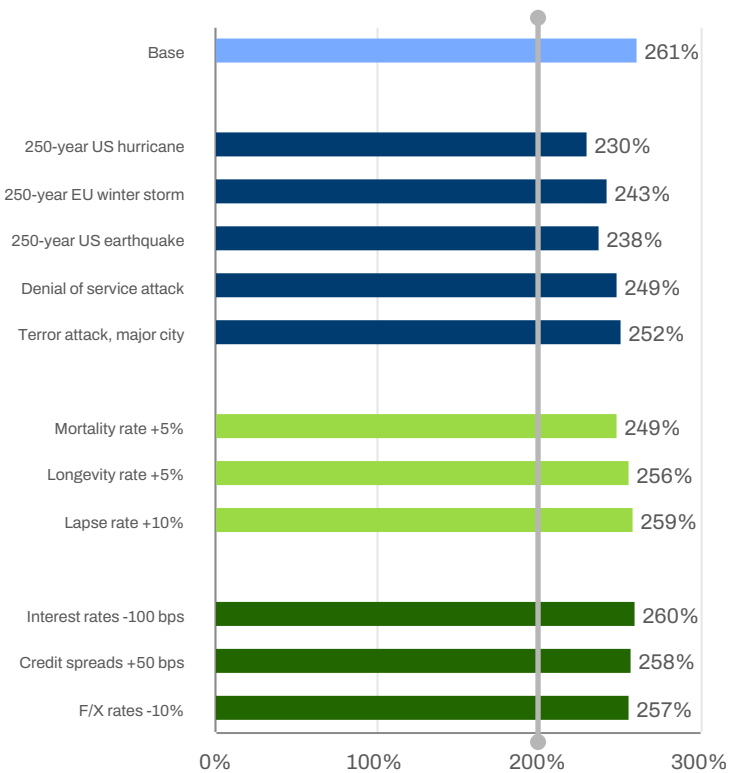
New reinsurance and investment products are analysed under a dedicated process, namely the New Products Process (NPP). In addition to analysing the risk profile, integration into all internal processes, such as accounting and risk monitoring, is defined.

In addition to stochastic modelling, we perform stress tests, scenario and sensitivity analyses on a regular basis. This represents a central element of

our risk management. The main stress tests and analyses have to be performed at least annually. They include analyses regarding natural catastrophes, terror and financial market event. Selected scenarios and stress tests of the Solvency II ratio for year-end 2024 are presented below.

Note that the sensitivities for mortality, longevity, interest rates, credit spreads and fx rates are stylized and applied for all markets and currency areas. More realistic sensitivities may provide for different results.

**Sensitivities of the Solvency II ratio YE 2024**  
Values in percent



Additional information on individual risk categories can be found in the following sections.

## C.1 Underwriting risk

### C.1.1 Underwriting risk Property & Casualty

Risk management in property and casualty reinsurance has defined various overall guidelines for efficient risk steering. These include, among other things, the use of retrocessions to reduce volatility and conserve capital. Furthermore, it is important to utilize the available risk budgets based on the risk management parameters of the Hannover Re Group and to steer the acceptance of risks systematically through the existing central and local underwriting guidelines. Our conservative reserving level is a key factor in our risk management, too.

For risk steering purposes we make a fundamental distinction between risks that result from business operations of past years (reserve risk) and those stemming from activities in the current or future years (price / premium risk). Particularly in the latter case, special importance attaches to the catastrophe risk.

Diversification within the Property & Casualty reinsurance business group is actively managed through allocation of the cost of capital according to the contribution made to diversification. A high diversification effect arises out of the underwriting of business in different lines and different regions with different business partners. In addition, the active limitation of individual risks—such as natural catastrophes—enhances the diversification effect. The risk capital with a confidence level of 99.5% for underwriting risks in property and casualty reinsurance breaks down as follows:

**Solvency Capital Requirement for underwriting risks in property and casualty reinsurance**

in TEUR	2023	2024
Premium risk (incl. catastrophe risk)	4,405,318	5,090,505
Reserve risk	3,527,533	4,101,237
Diversification	-1,847,557	-2,271,840
<b>Underwriting risk property and casualty</b>	<b>6,085,294</b>	<b>6,919,902</b>

The underwriting risks in property and casualty reinsurance have increased mainly as a result of higher premiums and reserves. The higher volumes result from business growth including higher capacities for natural

catastrophe risks as well as claims development and the associated higher reserves.

#### C.1.1.1 Risks arising from natural disasters

A large share of the Solvency Capital Requirement for the premium risk (including catastrophe risk) is attributable to risks from natural disasters. They constitute the main concentration risk in property and casualty reinsurance. The following table shows the Solvency Capital Requirements for five of our largest natural hazards scenarios. The natural catastrophe risk was increased over the course of the year, partly due to the achievable market rates, but also due to increases in the value of the insured properties as a result of general inflation.

**Solvency Capital Requirements for five of our largest natural hazards scenarios**

in TEUR	2023	2024
Hurricane US	2,414,748	3,162,065
Earthquake US West Coast	1,720,804	2,255,705
Winter storm Europe	1,435,425	1,797,950
Earthquake Japan	1,205,567	1,283,708
Earthquake Chile	1,503,476	1,771,898

For the purpose of assessing our material catastrophe risks from natural hazards (especially earthquake, windstorm and flood) we use licensed scientific simulation models, supplemented by the experience of our own specialist departments. The monitoring of the risks resulting from natural hazards is rounded out by scenario analyses. Major scenarios and stress tests are shown in the following table:

**Stress tests for natural catastrophes after retrocessions**  
Effect on net income

in TEUR	2023	2024
<b>Hurricane US</b>		
100-year loss	-1,426,351	-1,854,217
250-year loss	-1,946,295	-2,510,309
<b>Earthquake US West Coast</b>		
100-year loss	-781,818	-1,029,954
250-year loss	-1,424,861	-1,899,618
<b>Winter storm Europe</b>		
100-year loss	-822,649	-987,577
250-year loss	-1,184,805	-1,466,776
<b>Earthquake Japan</b>		
100-year loss	-608,906	-620,144
250-year loss	-977,751	-1,052,841
<b>Earthquake Chile</b>		
100-year loss	-505,344	-587,008
250-year loss	-1,345,197	-1,521,546

As part of this process for steering risks connected with natural catastrophes, the Executive Board defines the risk appetite and the limit for natural perils once a year on the basis of the risk strategy.

Risk management considers numerous scenarios and extreme scenarios, determines their effect on portfolio and performance data, evaluates them in relation to the planned figures and identifies alternative courses of action.

For the purposes of risk limitation, maximum amounts are also stipulated for various extreme loss scenarios and return periods; the limits set take into account the profitability of the respective business. Risk management ensures adherence to these maximum amounts. The Executive Board, the Risk Committee and the P & C Executive Committee are kept regularly updated on the degree of capacity utilisation.

## C.1.2 Reserve risk

The reserve risk, i.e. the risk of under-reserving of incurred or foreseeable losses and the resulting burden on the underwriting result, is a high priority in our risk management. We attach importance to maintaining a conservative reserving level. In order to counter the risk of under-reserving we calculate our loss reserves based on our own actuarial estimations and establish, where necessary, additional reserves supplementary to those

posted by our cedants for reported claims. Liability claims have a major influence on the latter reserve. Reserves are calculated on a differentiated basis according to line of business and regions.

In calculating the reserves, we use actuarial methods based on run-off triangles. Run-off triangles show the changes in the reserve over time due to paid claims and the recalculation of the reserves to be established as at the respective balance sheet date. Their adequacy is monitored by the actuarial departments.

Our own actuarial calculations regarding the adequacy of the reserves are also subject to annual quality assurance reviews in the form of an external analysis.

The price / premium risk lies in the possibility of a random claims realisation that diverges from the claims expectancy on which the premium calculation was based. Regular and independent reviews of the models used for treaty quotation as well as central and local underwriting guidelines are vital management components. We have put in place a quotation process to ensure the quality of our portfolios that considers the claims expectancy including anticipated rate of inflation, anticipated costs and cost of capital (volatility).

## C.1.3 Risk mitigation techniques Property & Casualty

### C.1.3.1 Strategic aims and key figures

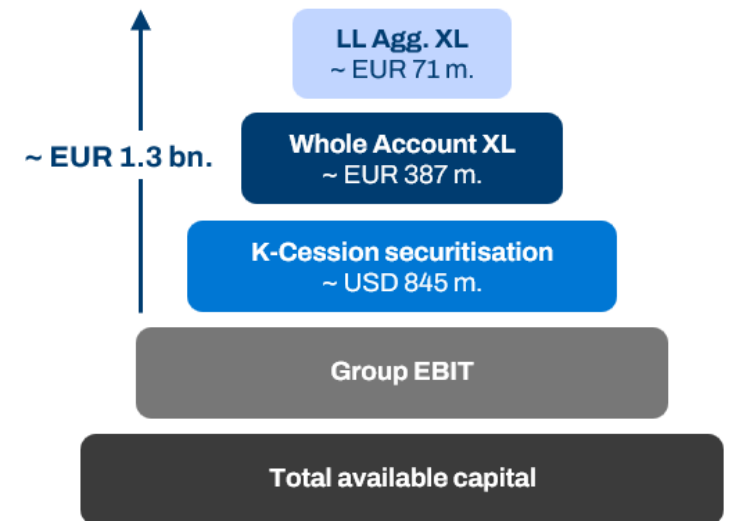
The strategic aims in relation to the placement of retrocessions are determined by the responsible member of the Executive Board. The Executive Board oversees the placement of the retrocessions as a whole, in particular the limits, premiums and contractual terms.

The Executive Board derives the risk budget for natural perils from the global risk budget. Many risk tolerances are based on net metrics, i.e. the placement of retrocessions plays a key role in adhering to the limits.

During the planning phase in September and October every year, the Executive Board decides on the capacities for the following year. The planning process includes an assessment of the utilisation of all risk tolerances. An overutilisation would be inconsistent with the risk appetite

and an underutilisation would result in under-deployment of allocated capital.

The resulting multilevel protection increases the reinsurance capacity for natural catastrophes and thus provides additional revenues with a defined risk appetite.



Additional retrocessions for Marine, Aviation, Cyber and facultative reinsurance are in place.

### C.1.3.2 Description of main types of cover against natural perils

Details on the individual forms of reinsurance covers are described below.

#### Whole Account Protection 2024

The Whole Account Protections cover all property, motor hull and engineering business of the Hannover Re Group, i.e. business recorded in Hannover and through subsidiaries or branch offices. The protections are placed on a gross claim basis.



### Large Loss Aggregate XL 2024

The Large Loss Aggregate XL is an aggregate protection and covers all natural catastrophe perils for the Hannover Re Group on a gross basis.

### K-Quota share 2024

The portfolio covered under the K-quota share consists of catastrophe excess of loss treaties exposed to natural catastrophe perils in those regions of the world which are most material for the Hannover Re Group.

By way of its “K-transactions”, Hannover Re has raised underwriting capacity for catastrophe risks in the capital market. The “K-Cession”, which was placed with investors on all continents, involves a quota share cession on worldwide natural catastrophe business as well as aviation and marine risks. A large part of the total volume of the K-Cession was securitised via structured entities. The transaction has an indefinite term. It can be cancelled annually by investors. Segregated accounts of Kaith Re Ltd. and other structured entities outside the Group are used for transformer purposes for part of this transaction. The structured entities are fully funded by contractually defined investments in the form of cash and equivalent liquid assets and therefore there exists no default risk for Hannover Re.

## C.1.4 Underwriting risk Life & Health

All risks directly connected with the Life & Health of an insured person are referred to as biometric risks. They include in particular the miscalculation of mortality, life expectancy, morbidity and occupational disability.

Biometric risks are the material risks for our company in the area of life and health reinsurance. Our goal is to strike a balance between biometric risks.

Furthermore, we are exposed to lapse risks because the cash flows resulting from our reinsurance treaties are in part dependent on lapse rates among policyholders. Counterparty default risks are also material since we partly prefinance our cedants’ new business acquisition costs.

Furthermore, we are exposed to catastrophe risks, especially events involving a high number of fatalities in our insured portfolio such as those recorded in connection with the Covid-19 pandemic.

The reserves are determined on the basis of secure biometric actuarial bases in light of the information provided by our clients. The biometric actuarial bases used and the lapse assumptions are continuously reviewed with an eye to their adequacy and if necessary adjusted. This is done using the company’s own empirical data as well as market-specific insights. Our

current risk profile in Life & Health reinsurance is dominated by mortality and longevity risks. This is due to the fact that under some of our contracts we pay death benefits, while under others we pay survival benefits. The volume of our annuity portfolio contributes to diversification within Life & Health reinsurance. We calculate the diversification effect between mortality and longevity risks prudently because the contracts are normally taken out for different regions, age groups and individuals. Morbidity risks are also playing a central role. These result from a variety of products including Critical Illness and disability business. The Solvency Capital Requirements with a confidence level of 99.5% for underwriting risks in Life & Health reinsurance breaks down as follows:

#### Solvency Capital Requirement for underwriting risks in Life & Health reinsurance

Solvency Capital Requirement at a confidence level of 99.5%

in TEUR	2023	2024
Mortality risk (incl. catastrophe risk)	1,782,201	1,778,427
Longevity risk	1,823,941	1,582,416
Morbidity and disability risk	1,337,535	1,563,576
Lapse risk	394,408	400,059
Expense risk	420,425	169,499
Diversification	-3,017,555	-2,875,960
<b>Underwriting risk life and health</b>	<b>2,740,955</b>	<b>2,618,017</b>

Diversification is a central management tool for our company. We seek to spread risks as far as possible across different risk classes and different regions. In our pricing of reinsurance treaties we provide incentives to further increase diversification.

The underwriting risks in Life & Health reinsurance are decreasing mainly due to the higher interest rate level for USD, GBP and AUD. The decline particularly affects longevity risk.

A risk concentration in life and health reinsurance business arises from mortality and longevity risks, followed by morbidity risks. Concerning mortality risks, the risk of a pandemic event represents a main driver for our Solvency Capital Requirement for Life & Health business with regard to concentration risks. To govern our risks we regularly monitor our exposure regarding potential pandemic events in the context of internal model runs. More information is available in Section D.2.2.

Through our quality assurance measures we ensure that the reserves established by ceding companies in accordance with local accounting principles satisfy all requirements with respect to the calculation methods used and assumptions made (e. g. use of mortality and morbidity tables, assumptions regarding the lapse rate). In addition, the assumptions are continuously reviewed on the basis of empirical data and modified if necessary. New business is written in all regions in compliance with underwriting guidelines applicable worldwide, which set out detailed rules governing the type, quality, level and origin of risks and how these considerations are factored into the pricing. These global guidelines are revised annually and approved by the Executive Board. Special underwriting guidelines give due consideration to the particular features of individual markets. By monitoring compliance with these underwriting guidelines we minimise the potential implications of an inability to pay or of deterioration in the financial status of cedants. Regular reviews and holistic analyses (e. g. with an eye to lapse risks) are carried out with respect to new business activities and the assumption of international portfolios. Large transactions are also examined by our risk management department.

Individual actuarial reports and documentation ensure that regular scrutiny also takes place at the subsidiary level. The interest rate risk, which in the primary sector is important in life business owing to the guarantees that are given, is of only minimal relevance to our company thanks to the design of our reinsurance treaties. We have confidence in the entrepreneurial abilities of our underwriters and grant them the most extensive possible powers. In our decentralised organisation we manage risks where they arise using a consistent Group-wide approach in order to obtain an overall view of the risks in life and health reinsurance. Our global underwriting guidelines provide underwriters with an appropriate framework for this purpose.

### C.1.4.1 Risk mitigation techniques Life & Health Reinsurance

In the Life & Health business group, retrocessions for the purpose of risk reduction are only used on a limited basis.

An index-based pandemic cover was structured in 2013 as a swap and, since then, has been placed with different investors in various tranches. The overall capacity placed is flexibly collateralised, such that the level of collateralisation can be increased depending on the current WHO pandemic alert phases.

Some large longevity deals are retroceded proportionally and on a regular premium basis in order to reduce the volatility of the longevity portfolio with regards to particular large contracts. Two sided collateral provisions ensure that future liabilities will be collateralised if receivables from or to the retrocessionaires resulting from expected business development are projected to exceed an agreed threshold.

The existing pool retrocessions for high sum assured individual policies mainly originate from times when a lower per life retention applied for the Hannover Re. For risk reduction reasons, they are no longer necessary and have been placed in run-off.

All other existing retrocessions are not placed for reasons of active risk reduction, but rather to maintain existing customer relationships and gain access to attractive inward business or are placed with affiliates and non-affiliates in order to reduce the HGB strains from large financing transactions.

The effectiveness of the retrocessions is closely linked to the default risk of the retrocessionaires. The monitoring of the default risk of retrocessionaires is performed across all business segments of Hannover Re in a standardised way, using standard systems and methods which are described in Section C.3.

## C.2 Market risk

Faced with a challenging capital market climate, particularly high importance attaches to preserving the value of assets under own management and the stability of the return. Hannover Re's portfolio is therefore guided by the principles of a balanced risk / return profile and broad diversification. Based on a risk-averse asset mix, the investments reflect both the currencies and durations of our liabilities. Market price risks include equity risks, interest rate risks, foreign exchange risks, real estate risks, spread and default risks. Our portfolio currently consists in large part of fixed-income securities, and hence default and spread risks account for the bulk of the market risk. We minimise interest rate and foreign exchange risks through the greatest possible matching of payments from fixed-income securities with the projected future payment obligations from our insurance contracts. Market risks derive from the investments managed by Hannover Re itself and from investment risks of ceding companies that we

assume in connection with insurance contracts. The following table shows the risk capital with a confidence level of 99.5% for the market risks from investments under own and third-party management.

### Solvency Capital Requirement for market risks Including private equity

in TEUR	2023	2024
Default and spread risk	3,348,111	3,573,462
Interest rate risk	1,178,219	1,346,290
Foreign exchange risk	1,983,415	2,494,107
Equity risk	1,700,522	2,062,712
Real estate risk	1,031,160	1,083,657
Diversification	-3,997,186	-4,477,594
<b>Market risk</b>	<b>5,244,241</b>	<b>6,082,634</b>

The market risk increased primarily as a result of: an increase in credit and spread risk due to higher market values of fixed-income securities, an adjustment to the calibration of the model, an increase in exchange rate risk and new investments in private equity and real estate. The interest rate risk also increased, but it contributes only marginally to the increase in market risk

With a view to preserving the value of our assets under own management, we constantly monitor adherence to a trigger mechanism based on a clearly defined traffic light system that is applied across all portfolios. This system defines clear thresholds and escalation channels for the cumulative fluctuations in fair value and realised gains / losses on investments since the beginning of the year. They are unambiguously defined in conformity with our risk appetite and trigger specified information and escalation channels if a corresponding fair value development is exceeded.

To ensure that our self-managed investments retain their value, we continuously monitor compliance with a cross-portfolio early warning system based on a clearly defined traffic light system. This system defines clear threshold values and escalation paths for the market value fluctuations and realisation results from the investments that have accumulated since the beginning of the year. They are clearly defined in line with our risk appetite and lead to defined information and escalation channels if a corresponding market value development is exceeded. The discussion and analysis mechanisms predefined when the early warning system was triggered came into play during the reporting year due to interest rate and spread volatility as well as central bank activities in

response to inflationary trends. In accordance with our guidelines, the potential effects on our invested asset classes and the current portfolio composition were therefore regularly discussed in the Investment Committee and brought to the attention of the Executive Board. Thanks to the broad diversification and rather conservative orientation of our investments, there was no need to change the strategic orientation of our portfolios in favour of a more defensive investment strategy during the reporting period. In addition, we had already positioned ourselves accordingly in view of expected central bank activities and inflation developments in recent years.

Another important instrument for the operational monitoring and management of the market price risks of our securities positions is the short-term probability of loss measured as value at risk (VaR). VaR is calculated on the basis of historical data, e.g. the volatility of the self-managed securities positions and the correlation of these risks. As part of these calculations, the decline in the market value of our securities portfolio is simulated with a certain probability and within a certain period of time. The VaR of the Hannover Re Group calculated according to these principles indicates the loss in market value of our self-managed securities portfolio that will not be exceeded within ten trading days with a probability of 95%. A standard market model is used to calculate the VaR figures for the Hannover Re Group. It is based on historical time series of selected relevant market parameters (share prices, yield curves, spread curves and exchange rates). In the reporting year, the volatilities of fixed-interest investments in particular were again at a high level at times in a very volatile capital market and interest rate environment. Thanks to continued broad risk diversification and the orientation of our investment portfolio, our VaR nevertheless remained well below the VaR limit set out in our investment guidelines. At the end of the reporting period, it totalled 0.8% (1.2%).

Stress tests are conducted in order to be able to map extreme scenarios as well as normal market scenarios for the purpose of calculating the Value at Risk. In this context, the loss potentials for fair values and shareholders' equity (before tax) are simulated on the basis of already occurred or notional extreme events.

Scenarios for changes in the fair value of material asset classes

		Portfolio change on a fair value basis	
in TEUR	Scenario	2023	2024
Equity securities and equity funds	Share prices -10%	-202,865	-225,620
	Share prices -20%	-405,730	-451,240
	Share prices +10%	+202,865	+225,620
	Share prices +20%	+405,730	+451,240
Fixed-income securities	Yield increase +50 basis points	-1,261,841	-1,313,964
	Yield increase +100 basis points	-2,455,628	-2,562,764
	Yield decrease -50 basis points	+1,333,468	+1,384,598
	Yield decrease -100 basis points	+2,747,878	+2,847,016
Real Estate	Real estate market values -10%	-407,233	-436,437
	Real estate market values +10%	+407,233	+436,437

In addition to the various stress tests, which estimate the loss potential under extreme market conditions, other key risk management measures include sensitivity and duration analyses and our asset liability management (ALM). The internal capital model provides us with the quantitative underpinning of the capital investment strategy as well as various VaR calculations. Tactical duration bands are also installed, within which the portfolio is opportunistically positioned in line with market expectations. The specifications for these bands and our calculated risk-bearing capacity are interlinked. It should be noted that the subordinated bonds issued and the resulting interest rate risk are also actively taken into account in ALM.

Share price risks result from the possibility of unfavourable changes in the value of shares, equity derivatives or equity index derivatives in our portfolio. However, their relevance for our investments was very low, as we currently only have marginal holdings of equities in our portfolio. We continue to be exposed to the market for private equity. Here, changes in market value are based less on general market conditions and more on company-specific assessments. The risks primarily relate to the business model and profitability and, to a lesser extent, to the interest rate component of the cash flow forecasts.

The portfolio of fixed-income securities is exposed to an interest rate risk. Declining market yields lead to increases and rising market yields to decreases in the fair value of the fixed-income securities portfolio. The

credit spread risk should also be mentioned. The credit spread refers to the interest rate differential between a risk-entailing bond and risk-free bond with the same maturity. Changes in these risk premiums, which are observable on the market, result—analogously to changes in pure market yields—in changes in the fair values of the corresponding securities. We minimise interest rate risks by matching the durations of payments from fixed-income securities as closely as possible with the projected future payment obligations under our insurance contracts.

Currency risks exist in particular when there is a currency imbalance between the technical liabilities and the assets. We reduce this risk on the basis of the Group's individual balance sheets by largely matching the currency distribution between assets and liabilities on the Solvency II balance sheet. The quantification of currency risk is therefore not included in the short-term VaR. We regularly compare the liabilities and the associated capital per currency with the assets covering them and optimise currency coverage by reallocating investments. Remaining currency surpluses are systematically quantified and monitored as part of solvency and economic modelling.

Property risks arise from the possibility of negative changes in the value of properties held directly or via fund units. They can be caused by a deterioration in specific property characteristics or a general decline in market value. The significance of property risks has gradually increased for us in recent years due to our ongoing involvement in this area. We spread these risks through broadly diversified investments in high-quality markets worldwide, each of which is preceded by detailed property, manager and market analyses. We monitor developments in the markets relevant to our property portfolio very closely. Uncertainties regarding the future development of individual properties have been taken into account in the valuation as at the reporting date.

We only utilise derivative financial instruments to the extent necessary to hedge risks. The main purpose of such financial instruments is to hedge against possible negative capital market developments. Some of our cash flows from the insurance business and currency risks due to inefficient currency matching are partially hedged using forward exchange transactions. Hannover Re holds further derivative financial instruments to hedge interest rate risks from loans to finance real estate and to hedge inflation risks from the life reinsurance business of our Australian branch. Hannover Re also holds hedging instruments in the form of equity swaps to hedge price risks in connection with the equity participation rights granted

under the Share Award Plan. These are intended to neutralise the changes in market value of the share options granted. In order to avoid credit risks from the use of derivative transactions, the contracts are concluded with reliable counterparties and largely collateralised on a daily basis. The remaining exposures are controlled in accordance with the restrictive requirements of our investment guidelines.

As a supplementary instrument for liquidity management, we have been entering into repurchase agreements (repo transactions) for a limited period of time for several years. The portfolios exchanged are fully collateralised.

Our investments entail credit risks that arise out of the default risk (interest and/or capital repayment) or a change in the credit status (rating downgrade) of issuers of securities. We attach equally vital importance to exceptionally broad diversification as we do to credit assessment conducted on the basis of the quality criteria set out in the investment guidelines. We measure credit risks in the first place using the standard market credit risk components, especially the probability of default and the potential amount of loss – making allowance for any collateral and the ranking of the individual instruments depending on their effect in each case.

We then assess the credit risk first on the level of individual securities (issues) and in subsequent steps on a combined basis on the issuer level. In order to limit the risk of counterparty default we set various limits on the issuer and issue level as well as in the form of dedicated rating quotas. A comprehensive system of risk reporting ensures timely reporting to the functions entrusted with risk management.

In general terms, Hannover Re gears its investment portfolio to the principles of a balanced risk / return ratio coupled with broad diversification. Accordingly, we counter the risk concentrations that nevertheless arise in individual asset classes with the broadest possible spread of different issuers per asset class. This is just as much a key component of our investment policy as credit rating assessment and management based on the quality criteria defined in the investment guidelines.

### C.3 Counterparty default risk

The counterparty default risk consists primarily of the risk of complete or partial unwillingness or inability to pay of counterparties and the associated default on payment. Counterparty default risks exist with respect to



cedants, retrocessionaires and in connection with short-term deposits at banks. We address credit risks from fixed-income investments in the preceding section under market risks.

**Solvency Capital Requirement for counterparty risk**

in TEUR	2023	2024
Counterparty default risk	432,146	404,634

The slight decrease in counterparty default risk can be attributed principally to an adjustment to the calibration of the model and an improved rating structure that counteracts the increase in the default volume.

Since the business that we accept is not always fully retained, but instead portions are retroceded as necessary, the counterparty default risk is also material for our company in reinsurance transactions. Our retrocession partners are carefully selected and monitored in light of credit considerations in order to keep the risk as small as possible. This is also true of our broker relationships, which entail a risk inter alia through the potential loss of the premium paid by the cedant to the broker. We minimise these risks, among other measures, by reviewing broker relationships with an eye to criteria such as the existence of professional indemnity insurance, payment performance and proper contract implementation. The Security Committee decides on measures where necessary to secure receivables that appear to be at risk of default. This process is supported by a risk management application, which specifies cession limits for the individual retrocessionaires participating in protection cover programmes and determines the capacities still available for short-, medium- and long-term business. Depending on the type and expected run-off duration of the reinsured business, the selection of reinsurers takes into account not only the minimum ratings of the rating agencies Standard & Poor's, A.M. Best, Fitch and Moody's but also internal and external expert assessments. Overall, retrocessions conserve our capital, stabilise and optimise our results and enable us to act on market opportunities across a broader front, e. g. following a major loss event. A close and regular dialogue with our retrocessionaires gives us a reliable overview of the market and puts us in a position to respond quickly to capacity changes.

The following table shows how the proportion of assumed risks that we do not retrocede (i.e. that we run in our retention) has changed in recent years:

**Reinsurance Revenue Retained**

in %	2023	2024
Group cumulated	86.2%	87.3%
Property and casualty cumulated	84.4%	85.1%
Life and health cumulated	90.3%	92.7%

Alongside traditional retrocessions in property and casualty reinsurance we also transfer risks to the capital market. Please refer also to Section C.1.3.

Counterparty default risks, among other risks, are also relevant to our investments and in life and health reinsurance because we prefinance acquisition costs for our ceding companies. Our cedants, retrocessionaires and broker relationships as well as our investments are therefore carefully evaluated and limited in light of credit considerations and are constantly monitored and controlled within the scope of our system of limits and thresholds.

Lastly, short-term deposits at banks are also at risk of counterparty default.

Retrocession gives rise to claims that we hold against our retrocessionaires. These reinsurance recoverables—i.e. the reinsurance recoverables on unpaid claims—amounted to EUR 2,566.1 million (EUR 2,231.4 million) as at the balance sheet date. For the majority of our retrocessionaires we also function as reinsurer, meaning that in most cases recoverables can potentially be set off against our own liabilities. In addition a portion of our recoverables are secured by deposits or letter of credits.

In terms of the Hannover Re Group's major companies, EUR 669.7 million of our accounts receivable from reinsurance business were older than 90 days as at the balance sheet date. In the previous year, the amount was EUR 860.2 million.

The following table shows the accounts receivables, broken down by rating class.

**Accounts receivables as of balance sheet date**

in TEUR	2023	2024
AAA		
AA	204.3	158.9
A	516.4	575.7
≤ BBB, NR	596.4	74.0

**C.4 Liquidity risk**

We define liquidity risk as the risk of not being able to fulfil our financial obligations when they fall due. Liquidity risk consists of refinancing risk (required funds cannot be obtained or can only be obtained at higher costs) and market liquidity risk (financial market transactions can only be concluded at a worse price than expected due to a lack of market liquidity). Key elements of the liquidity management of our investments are, on the one hand, the management of the maturity structure of our investments on the basis of the planned payout profiles from the technical obligations and, on the other hand, regular liquidity planning and the investment structure of the investments. Beyond the foreseeable payouts, unexpected, extraordinarily high payouts could pose a liquidity risk. However, in the reinsurance business, significant events (major claims) are generally paid out with a predictable lead time. Nevertheless, as part of our liquidity management, we have defined portfolios that have proven to be highly liquid even in situations of financial stress such as the 2008 financial crisis. During the year under review, our holdings of free German, British and US government bonds and financial resources were larger than possible payouts for assumed extreme events, so that our liquidity is guaranteed even in the unlikely event of a combination of financial crises and the need for an extreme event to be paid out quickly. The liquidity reserve totalled EUR 9.9 billion (EUR 8.6 billion) as at the reporting date. In addition, we manage the liquidity of the portfolio by monitoring the liquidity of the portfolio securities on each trading day. When reinvesting fixed-income securities in the reporting period, we increased our investments in securities and funds with short-term maturities, slightly shortening the average residual term. We have further strengthened our liquidity base by expanding our portfolio of short-term securities of appropriate quality. As an additional liquidity management tool, we have been entering into repurchase agreements (repo transactions) for a limited period of time for several years. We use these measures to reduce our liquidity risk.

Regarding the “total amount of the expected profit included in future premiums” required by Art. 295 (5) of the Delegated Regulation 2015/35 please refer to the Quantitative Reporting Template S.23.01.22, item R0790. We do not use this quantity for our liquidity management.

## C.5 Operational risk

Operational risk means the risk related to business operations and due to inadequate processes, human errors, system failures or external events. Within the overall framework of operational risks, we pay particularly close attention to business continuity risks, business process and data quality risks, compliance risks, fraud risks, human resources risks, information security risks and outsourcing risks.

Operational risks are an indivisible part of our business activities. With the aid of half-yearly Group-wide self-assessments, in which all relevant corporate operations are actively involved, we determine the maturity level of our risk management system for operational risks and define action fields for improvements. In order to calculate the capital commitment in our internal capital model we perform extensive scenario analyses. In joint workshops, experts across all disciplines establish assumptions for the loss frequency and impact, and take the results as a basis for specifying the parameters for the stochastic model. In addition, internal (near) loss events are systematically recorded and examined with an eye to possible measures for improving the control system. The internal data are enhanced with insights gained from external events, which either become known through public channels or were reported through a loss data consortium of which we are a member.

Regular quarterly risk reporting incl. risk indicators to the Risk Committee and the Executive Board takes place with regard to all operational risks.

The following table shows the Solvency Capital Requirements for operational risk as at 31 December.

### Solvency Capital Requirements for operational risk

in TEUR	2023	2024
Operational risk	653,621	711,103

The changes in the operational risk result above all from updated expert assessments regarding the impact of individual scenarios.

Unlike market, counterparty default and underwriting risks, operational risks are categorised as non-financial risks. We discuss below the subcategories of operational risks.

Business continuity risks arise from natural or man-made hazards that threaten or disrupt business operations. The risk also includes the continuity of IT infrastructure and services. Our Business Continuity Management (BCM) system reduces the risk through preventive resilience measures that are regularly tested. A special organisational and operational structure has been set up to respond reactively to a crisis event and to recover business operation.

Business process risks are associated with the risk of inadequate or failed internal processes, which can arise inter alia as a consequence of an inadequate process organisation. We have defined criteria for managing the risk that result in a high process quality. Data quality is similarly a very critical success factor, especially in risk management, because for example the validity of the internal model is largely based on the data provided. As part of our data quality management, we have defined extensive automatic routines that continuously determine data quality in central systems.

We define compliance risks as the risks of violating legal regulations and/or internal company guidelines. Compliance risk includes legal and tax risk.

Responsibilities within the compliance organisation are regulated and documented throughout the Group. Interfaces to risk management have been established. Regular compliance training programmes and awareness-raising measures complement the range of tools. In conformity with a risk-based approach, a sanctions screening software is used on our business partners, the relevant parts of the Hannover Re Group’s portfolio as well as on loss advices to filter out individuals, goods and services that are subject to sanctions. In case of a hit, suitable steps are taken. Russia and Belarus are categorised for sanction screening (severe risk) due to the current situation. Countries that pose a high risk due to sanctions evasion measures, such as the UAE or Kazakhstan, are also subject to stricter rules. According to the Sanctions Guideline, for every transaction relating to "severe risk" countries a submission requirement and an in-depth review are mandatory in order to take into account the increased scope of sanctions. New business with Russian or Belarusian cedents is currently excluded.

Fraud risks refer to the risk that results from intentional violations of laws or rules from own employees and/or from third parties in order to gain an advantage. This risk is reduced by the internal control system as well as by the audits conducted by Group Auditing on a Group-wide and line-independent basis. Should an instance of fraud nevertheless occur, established escalation processes to involve all relevant functions are in place and a risk-specific analysis (e.g. forensic investigation) is conducted including determination of appropriate measures.

Personnel risks arise from the inadequate use or availability of personnel resources or inappropriate behaviour. The labour markets around the world remain tense. Hannover Re Group counters the risk of a generally increasing shortage of skilled labour by paying particular attention to the qualifications, experience and motivation of our employees.

Information security risks arise, inter alia, out of an inadequate protection of confidentiality, integrity or availability of information, which is stored/processed in information technology or handled by human beings.

With a view to protecting against, among other threats, cyber attacks and the loss of sensitive information, Hannover Re has implemented an Information Security Management System (ISMS) that is closely aligned with international standards and harmonised with other management systems. Specific policies and control standards regulate all technical and organisational measures. Consideration is given to all types of digital and physical information assets.

The Executive Board bears overall responsibility for information security and is supported by the Risk Committee. The Information Risk & Security Committee (IRSC) is a sub-committee of the Risk Committee and is comprised of the Head of Risk Management, the Chief Information Security Officer (CISO) and the Head of IT. The IRSC evaluates and monitors the corresponding information risks and steers any conflicts of interest on a quarterly basis. The full Executive Board is provided with information at least annually by way of an information security report and also within the year if necessary.

The CISO, as the main process owner, is responsible for the planning, implementation and ongoing development of the ISMS as well as for coordinating the corresponding tasks with local contacts within the Hannover Re Group. The CISO cooperates closely with Information Risk Management (IRM), the central Compliance function and the Data

Protection Officer. Both, the CISO and the other specified functions, form part of the second line of defence. Furthermore, every single member of staff is responsible for adhering to the relevant security standards. To this end, all employees undergo regular training in information security topics as well as awareness-raising, e.g. through phishing simulations.

Outsourcing risks can result from the outsourcing of functions or services to third parties. They also include intra-group outsourcings. Mandatory rules and processes have been put in place to limit this risk. Among other things, a risk analysis and partner assessment is to be performed prior to outsourcing to identify specific risks associated with the outsourcing and to take adequate risk steering measures. The analysis is subject to regular review.

In selected market niches we transact primary insurance business that complements our reinsurance activities. In so doing, just as on the reinsurance side, we always work together with partners from the primary sector—such as insurance brokers and underwriting agencies. The associated distribution channel risks are minimised through the careful selection of agencies, mandatory underwriting guidelines and regular checks. The distribution channel risk forms an integral part of management of the outsourcing risk and of business partners.

## C.6 Other material risks

Of material importance to our company in the category of other risks are primarily emerging risks, strategic risks, sustainability risks, reputation risks as well as liquidity risks.

Furthermore, we monitor the contagion risk between single entities of the Hannover Re Group and in respect of the relation to the Talanx Group.

### C.6.1 Emerging risks

Early detection and subsequent evaluation of risks are crucially important when it comes to emerging risks. For this reason, we deploy Hannover Re's internal, interdepartmental and multi-line expert working group on "Emerging Risks & Scientific Affairs" and we ensure its linkage to risk management. The analyses performed by this working group are used Group-wide in order to initiate any necessary measures. The working group

is currently exploring around 20 risk complexes, some of them megatrends, to facilitate the identification and adequate evaluation of not only existing but also emerging risks. Megatrends are defined as developments with a trend cycle of at least 30 years. They are not presently associated with direct impacts on operations, but may potentially evolve in this direction. Examples are:

- Biodiversity: A decline in biodiversity can be viewed in conjunction with emerging risks associated with scarcity of resources, air pollution, genetically modified organisms or food security and availability—but also goes hand-in-hand with a need for innovative (insurance) solutions and services.
- Climate Change: The current action on climate change means new or refined technologies, such as renewable energies, energy storage innovations or hydrogen concepts and their various possible applications, for which insurance coverages are needed.
- Urbanisation: The steady increase in urbanisation means the growth and change of cities. Those leaving the countryside and moving to the city are mostly young, hence altering both rural and urban age distributions. Correlated trends such as the ageing society and new types of mobility, increasingly against a backdrop of sustainability, are throwing up major questions. The significance of these trends and the speed of change are compelling the insurance industry to plan which role it wants to play in helping to shape the future. In this context it is important to consider both business opportunities and risks. Given that all this is affected by climate change, people's property—especially when value concentrations form in future megacities—will have to be insured against natural perils. In a worst-case scenario, this could mean that certain regions and risks become uninsurable if adequate urban planning—taking account of natural hazards—is neglected in the spread of large cities around the world. Urbanisation not only means new buildings, technologies and lifestyles that have to be insured; rather, living close together also has implications for people's physical and mental well-being, which is relevant to our portfolio of life and health insurance.

Hannover Re publishes summary position papers on various emerging risks which can be accessed on our website. In 2024, papers on mental health, political violence and terrorism, fracking, personal damage compensation and factors influencing future life expectancy, among others, were created.

Hannover Re is a member of the Chief Risk Officer (CRO) Forum and a constant participant in the CRO Forum's Emerging Risk Initiative, which

continuously tracks and analyses various emerging risks, publishes information on those risks considering possible trends thereof and conducts corresponding impact analyses. The trends considered include "Ageing and health", "Economic instability", "Environment and climate", "ESG issues", "Changes in the geopolitical landscape", "Technological developments" as well as "Demographic and social change". New topics added in the year under review were "Social Fragmentation" and "Economic Trade Conflicts and Sanctions". The publications are publicly accessible on the CRO Forum website.

### C.6.2 Strategic risks

Strategic risks derive from a possible imbalance between the corporate strategy of the Hannover Re Group and the constantly changing general business environment, for example with respect to evolving regulatory requirements. Such an imbalance might be caused, for example, by incorrect strategic policy decisions, a failure to consistently implement the defined strategies and business plans or an incorrect allocation of resources. We therefore regularly review our corporate strategy in a multi-step procedure and adjust our processes and the resulting guidelines as and when required. We have defined performance criteria and indicators for operational implementation of the strategic principles and objectives; these are authoritative when it comes to determining fulfilment of the various targets. The process for the management of strategic risks continues to be assessed annually as part of the monitoring of business process risks.

### C.6.3 Sustainability and reputation risks

The handling of sustainability risks has come into increasing focus in recent years, above all against the backdrop of climate change. Instead of sustainability risks, reference is often made to risks associated with environmental, social and governance (ESG) issues.

We make a fundamental distinction here between risks and impacts to which a company is exposed (outside-in perspective) as well as risks and impacts that a company causes through its business operations (inside-out perspective). Sustainability risks corresponding to the outside-in perspective are financial risks due to the potential financial repercussions of environmental, social and governance (ESG) issues on Hannover Re.

These financial risks encompass market, underwriting, counterparty default and operational risks and are integrated into the risk management processes for such risks. The inside-out perspective refers to situations in which the activities of Hannover Re would be harmful to the environment or social norms or would reflect a failure of governance.

Reputation risks refer to the risk that the trust put in our company by clients, shareholders, employees or the public at large may be damaged. This risk has the potential to significantly jeopardise the business foundation of the Hannover Re Group. A good corporate reputation is therefore an indispensable prerequisite for our core business as a reinsurer. Reputation risks may arise out of all business activities conducted by the Hannover Re Group. Reputational damage may be caused, inter alia, by a data leakage that becomes public knowledge or financial difficulties on account of an underwriting risk. We use a number of different techniques for risk mitigation, such as our defined communication channels (e. g. Crisis Communication Guideline), a professional approach to corporate communications, tested processes for specific crisis scenarios as well as our established Code of Conduct. A reputation risk can occur isolated or as a result of a materialisation of any other risk category.

Reputation and sustainability risks are closely linked, as e.g. failure to fulfil societal expectations of sustainability can result in a reputation risk. Risk Management and the departments Group Sustainability & Strategy and Corporate Communications work together closely to identify ESG and reputation risks. This applies both to the assessment of ESG risks and to the monitoring of media reports, the analysis of NGO activities and the dialogue cultivated with relevant stakeholder groups.

## C.6.4 Contagion risks

Contagion risk refers to the risks originated by interactions between individual entities of Hannover Re Group. More precisely, contagion risk is the propagation of the effect of a failure or financial distress of an organisation in a sequential manner to other organisations, markets or systems, or to other parts of a financial group or financial conglomerate.

Hannover Re manages this risk by a strict look-through approach in its management systems.

## C.7 Other information

In this section, we describe external developments in 2024 with particular relevance for risk management.

### C.7.1 Geopolitical developments

Global geopolitical tensions intensified further in the financial year 2024 and were therefore of particular importance for our risk management.

Russia's war against Ukraine continued. The far-reaching consequences and ramifications for Europe and the world have been mitigated to some extent but are still felt. Inflation, energy prices and problems in international supply chains should be mentioned here in particular. An escalation of the conflict beyond the territory of Ukraine can still not be ruled out. This could have potentially far-reaching consequences for the geopolitical order on a global scale. As reactions on the Russian invasion, Western countries have enacted numerous sanctions against Russia. Hannover Re ensures that sanctions are not violated. The business relationship with Russian cedants therefore remains suspended.

The consequences of Donald Trump's victory in the US Presidential Elections remain difficult to assess, as the full extent of his policies and their implementation is still uncertain. In the worst-case scenario, his proposed protectionist tariff policies could set off a chain reaction of global trade conflicts, potentially disrupting international supply chains, and slowing economic growth on a global scale. The long-term impact will largely depend on how other nations respond to these measures and whether negotiations can mitigate potential tensions.

The situation in the Middle East remains volatile and carries a significant risk of escalation. The military clashes between Israel and various terrorist groups in the Gaza Strip and Lebanon are continuing and pose a risk of the conflicts escalating into a regional war. Potential consequences of such an escalation could include rising oil prices, restrictions on regional sea and air traffic, and an increased threat of terrorism in Western countries. Overall, the global risk of terrorism is considered to be elevated. Possible opportunities and risks arising from the end of the civil war in Syria following the fall of the Assad regime cannot yet be foreseen.

China's conflicts with its neighbouring states increase the risk of escalation in East and Southeast Asia. In the South China Sea and East China Sea, diverging views on maritime borders are leading to tensions. The status of Taiwan represents another point of conflict. Taiwan plays a central role in the global economy, particularly in semiconductor manufacturing. China's measures to enforce its territorial claims could have significant impacts on global supply chains.

Generally spoken, risks from armed conflicts are excluded in reinsurance treaties but may be covered under special arrangements such as for marine risks. Political risk and political violence covers, among others, are available for other risks from violent conflicts and their consequences. The risk situation for these policies is therefore elevated. Risks stemming from economic tensions can have disruptive effects on supply chains.

### C.7.2 Capital market environment

Our investments performed very satisfactorily in the 2024 reporting year, although numerous geopolitical and macroeconomic challenges continued to cause unrest. This was once again reflected in volatile interest rate markets in particular. Nevertheless, the global economy provided positive surprises across the board, driven primarily by the US and - to a lesser extent in Germany - Europe. This was reflected above all in the clear performance of asset classes with a steeper risk profile.

An important external factor influencing the achievable return on our investments is the general interest rate level. The market expectations of interest rate cuts by the central banks, which were priced in at the end of 2023, have now largely disappeared from valuations, while both the ECB and other central banks actually cut interest rates in several steps during the reporting year after many years of constant interest rate hikes. Overall, there were increases in interest rates in our main currency areas, except for very short maturities, meaning that a certain normalisation away from the strongly inverted curves at the end of the previous year can be observed. This resulted in a decline in the market value of our fixed-interest securities. On the other hand, the increases in market value observed as a result of the narrowing of risk premiums on corporate bonds partially offset this, as did our high proportion of US dollars and their appreciation against the euro. Even though the higher interest rates compared to the past initially reduced the market value of our fixed-interest securities, we are benefiting from the overall increase in the level of new investments and reinvestments. In



addition, as part of our asset liability management, we always endeavour to achieve the most balanced interest rate positions possible for our investments in relation to the technical provisions in order to take advantage of the opposing effects of changes in market interest rates on the performance of investments and provisions.

In contrast to the interest rate markets, the equity markets were characterised by high valuation levels and low volatility. Due to the liquidation of our positions in 2022, the equity markets currently have no direct impact on our investments.

Inflation remains a key issue, although the measured inflation indices in both the euro and the US dollar have noticeably reduced their momentum, even though inflation levels have not yet returned to the levels targeted by the central banks across the board and it will be necessary to keep a close eye on how the central banks will counter the inflationary potential that still exists.

We continue to be exposed to the market for private equity. Here, changes in market value are based less on general market conditions and more on company-specific assessments. The risks are primarily in the business model and profitability and less in the interest component as part of the cash flow forecasts. We therefore also see the declines in the market value of individual investments in the reporting period as part of the risk profile specific to this asset class and these company characteristics.

The importance of property risks remains significant for us due to our ongoing involvement in this area. We spread these risks through broadly diversified investments in high-quality markets worldwide, each of which is preceded by detailed property, manager and market analyses. Uncertainties regarding the future development of individual properties have been taken into account in the valuation as at the reporting date.

Geopolitical tensions and armed conflicts, such as those currently taking place in Ukraine and the Middle East, are associated with corresponding risks for the current balance of political power worldwide. Negative effects on the financial markets are possible. The resulting increases in energy prices and logistics costs could also drive up inflation again.

We continue to expect increased volatility on the global capital markets in the near future, but also see this as an opportunity and believe that we are adequately prepared with our current investment strategy.

## C.7.3 Regulatory developments

In the year 2024, there were numerous regulatory developments at the international, European and national levels.

In November 2024, the European Council gave final approval in the legislative process for the Solvency II review and the Insurance Recovery and Resolution Directive (IRRDR). Important changes of relevance to the Hannover Re Group under the Solvency II review include, among others, the lowering of the cost-of-capital rate in the risk margin from 6% to 4.75%. The IRRDR introduces a set of rules for managing financial distress, requiring national resolution authorities to prepare resolution plans for insurers with significant market shares and compelling affected undertakings, including the Hannover Re Group, to create their own pre-emptive recovery plans. These reforms must be transposed into national law and applied by 30 January 2027.

On a global scale, the Insurance Capital Standard (ICS) marked major milestones as the International Association of Insurance Supervisors (IAIS) finalised its development and adoption in 2024. In November 2024, the IAIS Executive Committee recognised the US aggregation method (AM) as producing comparable outcomes, with ongoing convergence efforts planned. At its Annual General Meeting in December 2024, the IAIS formally adopted the ICS as the first comprehensive global capital standard for insurance supervision. Given that Solvency II is to be considered a direct implementation of the ICS in the EU, no further supervisory implications are likely for the Hannover Re Group.

The EU Corporate Sustainability Due Diligence Directive (CSDDD), which came into force in July 2024 and must be implemented in national law within two years, aims to harmonise minimum due diligence standards across the EU. In order to avoid duplicate reporting, the CSDDD envisages that undertakings compiling a report in accordance with the requirements of the Corporate Sustainability Reporting Directive (CSRD) will thereby also fulfil their future reporting obligations under the CSDDD. Hannover Re already falls under the German Act on Corporate Due Diligence Obligations in Supply Chains and will adjust its internal processes, where necessary, to the new European standards. Of particular significance here is the question of whether customer relationships of financial services providers will continue to be exempted from the scope of application of the CSDDD. The

European Commission plans to review their potential inclusion by the summer of 2026.

In April 2024, the European Insurance and Occupational Pensions Authority (EIOPA) issued a supervisory statement addressing reinsurance arrangements with third-country (non-EU) insurers. The statement emphasises the importance of reinsurance as a global, cross-border business that contributes to risk diversification and financial stability. However, EIOPA also highlights certain potential risks and points to possible actions.

Digital technologies play a crucial role in the processes of the financial services industry overall, and especially for (re)insurers. The EU has developed a new framework, the Digital Operational Resilience Act (DORA), to ensure the performance of digital services in critical scenarios. To fulfil the requirements, the Hannover Re Group must adjust numerous internal processes related to information security management, business continuity management and outsourcing management before DORA becomes effective in 2025.

In 2024, the EU signed the EU AI Act, which came into effect on 1 August 2024. The new EU AI Act sets out classifications for AI systems with different requirements and obligations tailored to a risk-based approach. The European Commission is currently developing guidelines, standards, and codes of practice for the implementation of the AI Act. The Act includes a specific provision for insurers, especially in the high-risk classification related to AI systems used for risk assessment and pricing in the life and health insurance. The Hannover Re Group is preparing for potential requirements regarding AI governance and AI risk management and is planning to adapt existing practices in response to legal requirements. The EU AI Act is applicable two years after its enactment, with some exceptions for specific provisions.

Growing protectionism in many parts of the world again led to additional market access restrictions in 2024, creating hurdles for the cross-border business of reinsurance.

## D. Valuation for Solvency Purposes

A valuation principle assigns monetary values to sets of rights and obligations in a structured way. The decision on what rights and obligations need to be considered is one of the distinguishing features of the valuation principles.

Hannover Re's internal valuation approaches are based on economic valuation principles. In principle, economic valuation assigns to each right or obligation the price at which this right or obligation would be traded in an arm's-length transaction between willing and knowledgeable parties. This principle has the advantages of being:

- Objective, since transaction prices can (in theory) be simply observed and do not require any further input,
- Comprehensive, since a transaction would incorporate all potential cash flows arising from those rights or obligations. In particular, there can be no off-balance sheet items within an economic valuation framework,
- Risk-adjusted, since trades between risk-adverse parties will always incorporate the price of risk.

Depending on the specific position being valued and the state of the market at the time of valuation, two different and mutually exclusive levels of valuation can be distinguished:

**Mark-to-market:** This is the prototypical and simplest level of economic valuation. It is applicable if the positions to be valued are quoted in an active market. In that case, the value of the position is just the market price. Examples for positions, which can be valued on a mark-to-market basis are US treasuries, blue chips or futures with standard maturities on broad indices, such as the S&P 500. In general, everything traded in a deep and liquid market can be valued on a mark-to-market basis.

**Market-consistent valuation (mark-to-model):** This principle applies if neither prices themselves nor all inputs required for generally accepted pricing models can be observed in active markets. Accordingly, at least some parameters and inputs will be based on judgmental, and thus subjective, decisions. The valuation of many investments and most

insurance contracts falls within this category, which is why this level of valuation is the most important one within the internal model. For consistency of the valuation with mark-to-market principles, it is required that

- Observable prices and model parameters derived from them are used wherever available,
- Parameter estimates are unbiased and derived according to sound techniques based on statistics or expert judgment,
- Unavoidable risk must be allowed for in the valuation, consistent with the prevailing market price of risk. For this, it does not matter whether the risk is caused by the cash flows themselves or due to uncertainties in models or parameter estimates. This allowance for risk is called the risk margin.

Unavoidable risk is defined as the risk, which cannot be replicated completely by financial instruments. If it can be replicated by such instruments, the risk can be avoided by investing in the replicating portfolio and the price of the position will be identical to the price of the replicating portfolio.

Many risks are hedgeable in principle but some positions in the resulting hedge portfolios might not be quoted in active markets. One example is credit risk of smaller or non-listed obligors, where in theory OTC CDS are available from certain counterparties, but observable market prices are not. In addition, if the position cannot be replicated perfectly, i.e. if basis risk remains, this residual risk is still considered unavoidable and requires a risk margin.

The terms unavoidable and non-hedgeable will be used synonymously below.

Non-hedgeable risk is allowed for in Hannover Re's economic valuation framework by decreasing assets and / or increasing liabilities with a risk margin. Hannover Re defines the risk margin for non-hedgeable risk as the market cost of capital required for the orderly run-off of all its rights and obligations.

### Fair value hierarchy according to IFRS

The fair value hierarchy according to IFRS, which reflects characteristics of the price data and inputs used for measurement purposes, is similar to Solvency II valuation methods and structured as follows:

- Level 1: Assets or liabilities measured at (unadjusted) prices quoted directly in active and liquid markets.
- Level 2: Assets or liabilities which are measured using observable market data and are not allocable to level 1. Measurement is based, in particular, on prices for comparable assets and liabilities that are traded on active markets, prices on markets that are not considered active as well as inputs derived from such prices or market data.
- Level 3: Assets or liabilities that cannot be measured or can only be partially measured using observable market inputs. The measurement of such instruments draws principally on valuation models and methods.

If input factors from different levels are used to measure a financial instrument, the level of the lowest input factor material to measurement is determinative. The operational units responsible for coordinating and documenting measurement are organisationally separate from the operational units that enter into investment risks. All relevant valuation processes and valuation methods are documented. Decisions on fundamental valuation issues are taken by a valuation committee that meets monthly.

### General valuation principles

The primary objective is an economic, market-consistent approach to the valuation of assets and liabilities. According to the risk-based approach in the internal steering processes as well as under Solvency II, when valuing balance sheet items on an economic basis, the risks that arise from a particular balance sheet item need to be considered, using assumptions that market participants would use in valuing the asset or the liability. According to this approach, assets and liabilities should be valued as follows:

- Assets should be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction.
- Liabilities should be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction.
- The time value of money should be reflected, i.e. all cash flows are discounted. The discount rate should take the long-term asset management strategy into account, i.e. whether the company acts as held-to-maturity investor or not.
- When valuing liabilities no adjustment to take account of the own credit standing of the insurance or reinsurance undertaking shall be made.



- Assets and liabilities shall be valued based on the assumption that the undertaking will pursue its business as a going concern.
- Individual assets and liabilities are valued separately.
- The application of materiality, whereby the omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions that users make on the basis of the Solvency II balance sheet. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor.
- The application of simplifications is feasible when the method is proportionate to the nature, scale and complexity of the risks inherent.
- Unless otherwise stated, assets and liabilities other than technical provisions shall be recognised in conformity with the international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002.
- Valuation of assets and liabilities other than technical provisions shall be carried out, unless otherwise stated, in conformity with international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002 provided that those standards include valuation methods that are consistent with the valuation approach set out in Article 75 of Directive 2009/138/EC. If those standards allow for more than one valuation method, only valuation methods that are consistent with Article 75 of Directive 2009/138/EC can be used.
- Where the valuation methods included in international accounting standards, as endorsed by the Commission in accordance with Regulation (EC) No 1606/2002 are either temporarily or permanently not consistent with the valuation approach set out in Article 75 of Directive 2009/138/EC, insurance and reinsurance undertakings shall use the other valuation methods that have been deemed to be consistent with Article 75 of Directive 2009/138/EC.
- When valuing liabilities using fair value, the adjustment to take account of the own credit standing as required by IFRS 13 Fair Value Measurement has to be eliminated. When valuing financial liabilities this only applies to the subsequent adjustment after initial recognition.
- As a Guidance for marking-to-market and marking-to-model the guidance on fair value measurement within IFRS 13 may be used, for example the characteristics of inactive markets described in IFRS 13.

IFRS do not always require an economic valuation as envisaged by Article 75 of Directive 2009/138/EC.

Hannover Re makes use of the volatility adjustment.

## D.1 Solvency II balance sheet

### Difference in valuation

in TEUR	Item	Solvency II	IFRS
<b>Assets</b>			
Goodwill	R0010		79,939
Deferred acquisition costs	R0020		-52
Intangible assets	R0030		131,746
Deferred tax assets	R0040	171,455	501,452
Pension benefit surplus	R0050	2,115	2,115
Property, plant & equipment held for own use	R0060	164,853	152,463
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	65,260,048	65,591,259
Property (other than for own use)	R0080	3,196,779	2,605,186
Holdings in related undertakings, including participations	R0090	814,771	837,371
Equities	R0100	657	657
Equities - listed	R0110		
Equities - unlisted	R0120	657	657
Bonds	R0130	53,388,903	56,187,866
Government Bonds	R0140	29,161,012	31,803,327
Corporate Bonds	R0150	22,225,015	22,496,826
Structured notes	R0160	115,164	
Collateralised securities	R0170	1,887,713	1,887,713
Collective Investments Undertakings	R0180	6,614,954	5,136,644
Derivatives	R0190	83,823	230,384
Deposits other than cash equivalents	R0200	1,145,375	531,773
Other investments	R0210	14,785	61,377
Loans and mortgages	R0230	826,149	286,373
Loans and mortgages to individuals	R0250	978	
Other loans and mortgages	R0260	825,172	286,373
Reinsurance recoverables from:	R0270	1,792,175	2,894,407
Non-life and health similar to non-life	R0280	1,827,053	2,720,533
Non-life excluding health	R0290	1,815,106	2,709,747
Health similar to non-life	R0300	11,947	10,786
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	-34,650	173,874
Health similar to life	R0320	198,460	1,930
Life excluding health and index-linked and unit-linked	R0330	-233,110	171,944
Life index-linked and unit-linked	R0340	-227	
Deposits to cedants	R0350	11,795,145	11,528,110
Insurance and intermediaries receivables	R0360	8,522,609	19,063,299
Reinsurance receivables	R0370	318,890	808,634
Receivables (trade, not insurance)	R0380	557,039	1,547,518
Cash and cash equivalents	R0410	1,252,680	1,253,147
Any other assets, not elsewhere shown	R0420	254,354	295,884
<b>Total assets</b>	<b>R0500</b>	<b>90,917,514</b>	<b>104,136,292</b>

in TEUR	Item	Solvency II	IFRS
<b>Liabilities</b>			
Technical provisions – non-life	R0510	47,950,643	51,466,926
Technical provisions – non-life (excluding health)	R0520	45,194,679	47,966,224
TP calculated as a whole	R0530		
Best Estimate	R0540	44,357,222	
Risk margin	R0550	837,457	
Technical provisions - health (similar to non-life)	R0560	2,755,964	3,500,703
TP calculated as a whole	R0570		
Best Estimate	R0580	2,653,456	
Risk margin	R0590	102,508	
Technical provisions - life (excluding index-linked and unit-linked)	R0600	6,628,210	14,901,937
Technical provisions - health (similar to life)	R0610	3,641,072	4,421,226
TP calculated as a whole	R0620		
Best Estimate	R0630	3,033,151	
Risk margin	R0640	607,921	
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	2,987,139	10,480,711
TP calculated as a whole	R0660		
Best Estimate	R0670	1,242,742	
Risk margin	R0680	1,744,397	
Technical provisions – index-linked and unit-linked	R0690	1,628,659	
TP calculated as a whole	R0700		
Best Estimate	R0710	1,504,570	
Risk margin	R0720	124,089	
Contingent liabilities	R0740		
Provisions other than technical provisions	R0750	266,612	266,612
Pension benefit obligations	R0760	155,373	155,373
Deposits from reinsurers	R0770	190,691	184,287
Deferred tax liabilities	R0780	4,071,514	1,797,420
Derivatives	R0790	91,988	97,641
Debts owed to credit institutions	R0800	583,910	583,910
Financial liabilities other than debts owed to credit institutions	R0810	941,443	957,969
Insurance & intermediaries payables	R0820	1,750,942	11,527,191
Reinsurance payables	R0830	2,299,389	2,780,684
Payables (trade, not insurance)	R0840	765,788	765,788
Subordinated liabilities	R0850	3,095,367	3,233,056
Subordinated liabilities not in BOF	R0860		
Subordinated liabilities in BOF	R0870	3,095,367	3,233,056
Any other liabilities, not elsewhere shown	R0880	803,923	2,729,219
<b>Total liabilities</b>	<b>R0900</b>	<b>71,224,452</b>	<b>91,448,014</b>
<b>Excess of assets over liabilities</b>	<b>R1000</b>	<b>19,693,062</b>	<b>12,688,278</b>



For general differences in valuation between Solvency II and IFRS please refer to Section D.

### Comparison to prior year

in TEUR	Item	Solvency II 2023	Solvency II 2024
<b>Assets</b>			
Intangible assets	R0030		
Deferred tax assets	R0040	70,518	171,455
Pension benefit surplus	R0050	1,946	2,115
Property, plant & equipment held for own use	R0060	162,198	164,853
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	59,211,532	65,260,048
Property (other than for own use)	R0080	3,033,259	3,196,779
Holdings in related undertakings, including participations	R0090	3,021,142	814,771
Equities	R0100	0	657
Equities - listed	R0110		
Equities - unlisted	R0120	0	657
Bonds	R0130	48,147,898	53,388,903
Government Bonds	R0140	27,300,529	29,161,012
Corporate Bonds	R0150	19,044,143	22,225,015
Structured notes	R0160	151,475	115,164
Collateralised securities	R0170	1,651,750	1,887,713
Collective Investments Undertakings	R0180	3,677,928	6,614,954
Derivatives	R0190	102,857	83,823
Deposits other than cash equivalents	R0200	1,176,809	1,145,375
Other investments	R0210	51,638	14,785
Assets held for index-linked and unit-linked contracts	R0220		
Loans and mortgages	R0230	1,009,530	826,149
Loans and mortgages to individuals	R0250	1,346	978
Other loans and mortgages	R0260	1,008,184	825,172
Reinsurance recoverables from:	R0270	1,556,090	1,792,175
Non-life and health similar to non-life	R0280	1,523,564	1,827,053
Non-life excluding health	R0290	1,513,861	1,815,106
Health similar to non-life	R0300	9,702	11,947
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	-33,662	-34,650
Health similar to life	R0320	207,977	198,460
Life excluding health and index-linked and unit-linked	R0330	-241,639	-233,110
Life index-linked and unit-linked	R0340	66,188	-227
Deposits to cedants	R0350	10,357,234	11,795,145
Insurance and intermediaries receivables	R0360	7,479,226	8,522,609
Reinsurance receivables	R0370	410,773	318,890
Receivables (trade, not insurance)	R0380	444,185	557,039
Cash and cash equivalents	R0410	1,054,517	1,252,680
Any other assets, not elsewhere shown	R0420	205,064	254,354
<b>Total assets</b>	<b>R0500</b>	<b>81,962,813</b>	<b>90,917,514</b>

in TEUR	Item	Solvency II 2023	Solvency II 2024
<b>Liabilities</b>			
Technical provisions – non-life	R0510	42,299,221	47,950,643
Technical provisions – non-life (excluding health)	R0520	39,593,487	45,194,679
TP calculated as a whole	R0530		
Best Estimate	R0540	38,862,911	44,357,222
Risk margin	R0550	730,576	837,457
Technical provisions - health (similar to non-life)	R0560	2,705,734	2,755,964
TP calculated as a whole	R0570		
Best Estimate	R0580	2,621,256	2,653,456
Risk margin	R0590	84,478	102,508
Technical provisions - life (excluding index-linked and unit-linked)	R0600	5,424,621	6,628,210
Technical provisions - health (similar to life)	R0610	3,485,272	3,641,072
TP calculated as a whole	R0620		
Best Estimate	R0630	3,048,140	3,033,151
Risk margin	R0640	437,133	607,921
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	1,939,348	2,987,139
TP calculated as a whole	R0660		
Best Estimate	R0670	302,448	1,242,742
Risk margin	R0680	1,636,900	1,744,397
Technical provisions – index-linked and unit-linked	R0690	2,636,618	1,628,659
TP calculated as a whole	R0700		
Best Estimate	R0710	2,481,435	1,504,570
Risk margin	R0720	155,183	124,089
Contingent liabilities	R0740		
Provisions other than technical provisions	R0750	219,906	266,612
Pension benefit obligations	R0760	164,342	155,373
Deposits from reinsurers	R0770	302,028	190,691
Deferred tax liabilities	R0780	4,005,290	4,071,514
Derivatives	R0790	66,117	91,988
Debts owed to credit institutions	R0800	632,411	583,910
Financial liabilities other than debts owed to credit institutions	R0810	1,111,720	941,443
Insurance & intermediaries payables	R0820	2,018,582	1,750,942
Reinsurance payables	R0830	1,533,357	2,299,389
Payables (trade, not insurance)	R0840	624,179	765,788
Subordinated liabilities	R0850	3,046,574	3,095,367
Subordinated liabilities in BOF	R0870	3,046,574	3,095,367
Any other liabilities, not elsewhere shown	R0880	425,105	803,923
<b>Total liabilities</b>	<b>R0900</b>	<b>64,510,071</b>	<b>71,224,452</b>
<b>Excess of assets over liabilities</b>	<b>R1000</b>	<b>17,452,742</b>	<b>19,693,062</b>

Solvency II recognition, valuation and presentation of balance sheet items follows regulatory requirements. The IFRS balance sheet is taken from Hannover Re Group’s annual financial statements and shown in the column “IFRS” on the right hand side. We note that IFRS Contractual Service Margin and Risk Adjustment have been allocated to the line “Technical Provisions”.

Note that for allocation of investments under own management to Solvency II balance sheet items, detailed EIOPA regulations on classification as well as BaFin regulations (e.g. regarding collective investment undertakings) have to be followed and are not utilised for the IFRS balance sheet items.

Comparing Solvency II and IFRS balance sheets, Hannover Re Group classifies differences in recognition, valuation and presentation into the following categories:

- Adjustments of self-managed investments, which comprise market valuation vs. valuation at amortised cost for several, but not all self-managed investments under IFRS,
- Adjustments of technical items (incl. risk margin), where technical items are revaluated for Solvency II purposes as described in Section D.2,
- Adjustments of other balance sheet items (without deferred taxes), which mostly consist of differences in recognition of balance sheet items for Solvency II vs. IFRS (e.g. intangible assets) as well as reclassifications, together with market valuation (e.g. of subordinated liabilities),
- Deferred tax, which comprises the effects on deferred tax assets and deferred tax liabilities when moving from IFRS to Solvency II valuation.

Those adjustments amounted to a difference in excess of assets over liabilities (including minorities) for Solvency II compared to IFRS of TEUR 7,004,784 as at the balance sheet date.

With the publication of the Implementing Regulation (EU) 2023/894 by the European Commission on April 4, 2023, the application of Directive 2009/138/EC of the European Parliament and the Council was adapted.

In accordance with the aforementioned legal bases, reinsurance receivables and payables have to be split according to their certainty and existence of a settled agreement. Future payments whose absolute amount and due date are known after settlement with the cedant are reported within the respective balance sheet items. Estimated balances, on the other hand, are included into the reinsurance recoverables.

Apart from the mentioned adjustments in the Solvency II balance sheet, the principles of recognition, valuation and presentation remained unchanged compared to the previous year.

## D.2 Technical provisions

The technical provisions (TP) under Solvency II are determined as the sum of the best estimate liability (BEL) and the risk margin (RM).

Cash flows are discounted with risk-free rates in line with EIOPA requirements. A matching adjustment is not applied. Furthermore, the risk-free yield curves are not adjusted as set out in Art. 308c of the directives 2009/138/EC.

A temporary deduction according to Art. 308d of the directives 2009/138/EC is not applied. Furthermore, the concept of calculating the “TP as a whole” is currently not applied.

Hannover Re applies the static volatility adjustment according to Article 77d of the Directive 2009/138/EC. This is intended to mitigate the effect of temporary value fluctuations due to credit spread movements on the bond market. In order to capture this effect adequately for the calculation of the Solvency Capital Requirement Hannover Re uses the dynamic volatility in its internal model. The following table shows the impact of a non-application of a volatility adjustment on the TP, the Solvency Capital Requirement (SCR) and the basic own funds and the amounts of own funds eligible to meet the SCR.

Even under a non-application of a volatility adjustment, the solvency ratio is still comfortable.

### Impact of non-application of a volatility adjustment

in TEUR	Amount with Long Term Guarantee measures and transitionals	Impact of volatility adjustment set to zero
Technical provisions	56,207,513	524,530
Basic own funds	21,031,756	-291,493
Eligible own funds to meet Solvency Capital Requirement	21,031,756	-291,493
Solvency Capital Requirement	8,050,977	405,590

Transitionals are not applied at Hannover Re.

For Solvency II purposes, all contracts have to be evaluated over the whole lifetime within the individual contract boundaries (ultimate view). The contract boundary is defined as the future date on which at least one of the following criteria is met:

- The (re)insurance undertaking has a unilateral right to terminate the contract.
- The (re)insurance undertaking has a unilateral right to reject premiums payable under the contract.
- The (re)insurance undertaking has a unilateral right to amend the premiums or benefits payable under the contract in such a way that the premiums fully reflect the risks.

In case no such condition is met, the policies are projected until their natural expiry.

The BEL is shown on a gross basis in the following, i.e. before the deduction of reinsurance recoverables, if not stated otherwise. The RM is shown on a net basis, i.e. reflecting the risk mitigating effect of retrocessions. This is consistent with the methodology used in the Solvency II balance sheet.

### Best Estimate Liability (BEL)

The calculation of the BEL is based on the projection of future cash in- and outflows including premiums, claims, and expenses. Best estimate assumptions are used in the calculation of the BEL. The expenses consist of direct administration expenses and costs of on-going operations.

Cash flows in connection with funds withheld (FWH) – increase, decrease or interest on FWH – of the underlying business are usually not netted against the liability cash flows. For very risk remote transactions a netted presentation is proceeded. For all other transactions the FWH are grossed up.

Balances of accounts payables and receivables not yet agreed with retrocession partners with a certain amount are netted against the reinsurance recoverables.

According to Solvency II, there is a differentiation between business accepted – shown on the liability side – and business ceded – shown on the asset side. According to IFRS, the assignment to the asset and liability side, respectively, partially depends on the sign of the accounting figures.

For the Property & Casualty business, the TP does not include any financial options and guarantees (FOGs). For the Life & Health business, there is an immaterial amount of FOGs for US business. The latter is included in the BEL.

The projections are done separately for assumed and retroceded business using the same bases, methods and assumptions.

### Risk Margin (RM)

According to Art. 37 (1) of the delegated acts (EU) 2015/35, a uniform Cost of Capital (CoC) approach is used for calculating the risk margin.

The CoC factor is 6%. The required capital is the SCR under Solvency II according to Hannover Re's internal model. The allocation of the SCR to the lines of business reflects the contribution to the SCR (Art. 37). The allocated SCR contributions are projected to future periods using appropriate risk drivers for each line of business.

According to Solvency II principles, the risk margin of all legal entities is calculated on a standalone basis, thus there is no allowance for diversification effects between legal entities. Diversification is taken into account within a legal entity including diversification effects between Property & Casualty and Life & Health.

## D.2.1 Technical provisions of Property and Casualty reinsurance

This section provides information on the technical provisions held for property and casualty reinsurance and insurance. The next section shows BEL and RM per line of business and the following section provides further detail on the valuation methods.

### D.2.1.1 Value of technical provisions

#### Gross technical provisions property & casualty by lines of business in TEUR

Line of business	BEL	RM	TP	TP IFRS 17	Difference SII and IFRS
General liability insurance	5,416,667	99,861	5,516,527	6,051,483	-534,955
Workers' compensation insurance	192,743	11,630	204,372	73,648	130,725
Income protection insurance	578,953	32,481	611,434	679,084	-67,650
Fire and other damage to property insurance	10,226,692	191,200	10,417,892	8,553,057	1,864,835
Motor vehicle liability insurance	3,581,109	46,992	3,628,101	1,963,181	1,664,920
Credit and suretyship insurance	1,940,999	43,731	1,984,730	2,194,212	-209,481
Marine, aviation, transport	1,559,116	25,972	1,585,087	1,677,333	-92,246
Other motor insurance	1,649,603	43,966	1,693,569	707,072	986,496
Other insurance	727,942	10,049	737,991	741,753	-3,763
Non-proportional health reinsurance	1,614,851	55,345	1,670,196	2,572,437	-902,241
Non-proportional property reinsurance	7,798,399	140,001	7,938,400	7,588,404	349,996
Non-proportional marine, aviation and transport	1,330,760	14,200	1,344,959	1,459,688	-114,729
Non-proportional casualty reinsurance	10,392,844	224,538	10,617,383	11,809,881	-1,192,498
<b>Total Non-Life Obligation</b>	<b>47,010,678</b>	<b>939,965</b>	<b>47,950,643</b>	<b>46,071,233</b>	<b>1,879,410</b>

The line of business "Other insurance" comprises assistance, legal expenses insurance, medical expense insurance and miscellaneous financial loss.

Within the TP IFRS 17 figures shown above the funds and deposits are netted. Furthermore, the TP IFRS 17 is shown before netting accounts payables and accounts receivables.

### D.2.1.2 Valuation of technical provisions

#### Valuation basis

For the calculation of the BEL under Solvency II the business of the company is split into homogeneous risk groups such that the nature, scale and complexity of the business is adequately taken into account.

In general, there are no deviations regarding the valuation methods between the different lines of business, therefore the valuation methods described in the following paragraphs are valid for all segments of Property and Casualty reinsurance.

#### Valuation methods

The evaluation of the BEL is based on the estimation of future cash flows, including all expected (future) cash in- and outflows related to existing obligations taking into account the time value of money. The BEL is calculated separately with respect to the best estimate premium provisions and the best estimate claims provisions.

The Solvency II calculations to determine all relevant cash flows for premium and claims provision reflect a best estimate projection. The calculation of the BEL is based on gross data. Cash flows for premiums, claims and costs are modelled separately.

For the calculation, a whole-contract-view (with respect to the contractual agreements) is taken into account, i.e. all cash in- and outflows are projected to the economic ultimate within the contract boundaries.

The BEL comprises the sum of the discounted cash flows and is aggregated to the minimum lines of business according to Solvency II requirements.

#### Assumptions

For the calculation of the BEL, development pattern and estimated ultimates are applied on the homogeneous risk groups. The pattern and the

ultimates are determined on run-off triangles using state-of-the-art methods. The triangles are generated using up-to-date and trustworthy data. First, average inflation rates of the past are taken into account. With the help of scenario-based analyses for expected future inflation rates, the necessity of surcharges is examined.

The cash flows are discounted using the risk-free interest rates provided by EIOPA and converted to the reporting currency EUR using the exchange rate on the valuation date.

Overall, the described valuation bases, methods and assumptions ensure that the calculation of the BEL is proportionate to the nature, scale and complexity of the underlying risks.

### Reinsurance Recoverables

In general, the projection of the reinsurance recoverables is undertaken analogously to the principles applied for the calculation of technical (gross) provisions of property and casualty reinsurance.

Reinsurance recoverables are adjusted with regard to the expected loss upon default of the counterparty. This adjustment is determined separately and is based on the valuation of the probability of a default per counterparty over the whole lifetime – whether be it through insolvency or legal dispute – as well as the resulting change in cash flows due to loss per default at the respective time under consideration.

### D.2.1.3 Comparison with other provisions

#### Comparison to IFRS provisions

This section outlines the reconciliation of the net technical provisions from IFRS to the Solvency II.

#### Reconciliation Solvency II vs. IFRS in TEUR

Description	2024
<b>IFRS 17 liability net of reinsurance</b>	<b>43,268,911</b>
Elimination of Contractual Service Margin	-1,645,629
Elimination of deposits netted under IFRS 17	5,459,293
Difference between IFRS 17 Risk Adjustment and SII Risk Margin	-46,829
Further differences in methods / assumptions	-1,087,046
<b>Total revaluation effect from IFRS 17 to Solvency II</b>	<b>2,679,789</b>
<b>Solvency II TP net of reinsurance</b>	<b>45,948,700</b>

The IFRS 17 TP net of reinsurance is shown before netting accounts payables and accounts receivables.

The main sources of the differences in methods and assumptions are:

- Under IFRS 17, only directly attributable costs are taken into account whereas under Solvency II, all expenses are considered.
- Under both regimes, current risk-free interest rates (including a volatility adjustment (VA) under Solvency II and illiquidity premium (ILP) under IFRS 17, respectively) are used. However, the VA / ILP are determined based on different concepts.

For some treaties the Solvency II contract boundaries may differ from the contract boundaries under IFRS 17 as well as the initial recognition date.

### Comparison to BEL of last year Comparison to prior year

in TEUR	2023	2024
BEL gross	41,484,167	47,010,678
BEL net	39,960,604	45,183,625
RM	815,054	939,965

The increase in BEL is mainly based on economic effects and an increased business volume.

## D.2.2 Technical provisions Life & Health

In the section, we provide quantitative information with respect to the Life°&°Health BEL, RM and TP as well as a comparison to the IFRS 17 liability.

Details with respect to the basis of valuation, the valuation methods, and the main assumptions underlying the calculation of the TP are given in Section „D.2.2.2 Valuation of technical provisions“. Details regarding the treatment of funds withheld (FWH) as well as payables and receivables are provided in Section D.2.

Material differences between the TP and the IFRS 17 liability are explained in Section D.2.2.4.

### D.2.2.1 Quantitative Information on technical provisions Life & Health

The following table provides an overview of the liabilities of the segments. The index-linked and unit-linked business is contained in the life segment.

#### Technical provisions Life & Health per line of business in TEUR

Line of Business	BEL	RM	TP	IFRS 17 liability	Comparison IFRS 17/ Solvency II
Life	2,747,312	1,868,486	4,615,798	10,480,711	-5,864,913
Health	3,033,151	607,921	3,641,072	4,421,226	-780,155
<b>Total</b>	<b>5,780,463</b>	<b>2,476,407</b>	<b>8,256,870</b>	<b>14,901,937</b>	<b>-6,645,067</b>

A reconciliation from the IFRS 17 liability net of reinsurance to the Solvency II TP net of reinsurance is provided in Section D.2.2.3.

### D.2.2.2 Valuation of the technical provisions Life & Health

#### Valuation basis

All business is valued employing current best estimate assumptions. The general methodology used for calculating the BEL, RM and TP is described in Section D.2.

With only a few exceptions, the BEL is calculated individually per treaty. The calculation is based on weighted model points or – if available and material – based on individual policy data. The portfolio development is modelled using appropriate mortality and morbidity tables, respectively, as well as lapse rates. A certain part of the risk premium basis business is modelled based on a loss-ratio based approach.

#### Valuation methods

Based on weighted model points (e.g. tariff, gender mix, entry age, policy term, reinsurance conditions) and policy data, respectively, as well as assumptions for mortality, morbidity, lapse and relevant interest rate curves, the portfolio development and all resulting reinsurance profit items (i.e. premium, commission, benefits, reserve changes, and interest) are projected into the future.

Assumed and retroceded business is projected separately. Management expenses are allocated and projected into the future. Usually, thereby the reporting currency of the respective entity is applied.

The BEL is calculated in the respective treaty main currency and using currency specific interest rate curves.

Simplified methods are not used for calculating the BEL and RM, respectively.

### **Material assumptions for the Life & Health business (excluding longevity business)**

Business is written all over the world with a wide range of different policy types, tariffs and mortality / morbidity tables.

For treaties projected individually, the calculation of the BEL is initially based on weighted model points (or detailed policy data). The assumptions are regularly reviewed and - if necessary - adjusted on the basis of the accounts from the cedents or detailed experience analyses. The reinsurance conditions of the treaty are reflected in the calculation of the BEL.

For the majority of the business in the US and UK market, specific mortality and morbidity assumptions are derived from Hannover Re's base standard tables and updated regularly. For financial solution and morbidity risk solution business in the US market, mortality / morbidity assumptions are set using best estimate pricing assumptions. Also they are validated regularly. The projection of structured financial transactions in the US market allows for counterparty recapture assumptions. Rates can be increased for certain health business in the US market. This circumstance is reflected in the projections since this is market practice of managing the business.

Lapse rates are set from the original pricing basis of the treaty and adjusted for actual experience where credible data exists and for changes of the internal view of long-term lapse rates.

With exception of mortality or morbidity business in the North American, UK and Irish market, no allowance for future trends is made.

A few smaller treaties modelled are in an aggregate manner using more general assumptions. Base mortality / morbidity tables are chosen in order

to be appropriate for the market of the respective treaties. The assumptions are monitored based on the booked results from the past and adjusted if necessary.

For a portion of the business expected claims are based on claims ratios. I.e. instead of using explicit mortality / morbidity and lapse rates, the claims are estimated via a certain proportion of the premium.

Future Management Actions (FMA) are reflected for certain American, Australian and Asian business. Except for some Asian and some US business, the management actions have generally no impact on the Best Estimate Projections, but only on the stress scenarios used for the internal model. Therefore, they affect the SCR and the risk margin. For Asian business, FMA is only considered in the BEL.

### **Material assumptions for the longevity business**

The calculation of the BEL is based on policy data. Best estimate base mortality assumptions are set on a treaty level. Best estimate mortality improvement assumptions are set either by treaty or by country. The assumptions are monitored when the accounts from the cedants are booked and are in turn adjusted, if necessary, or if other relevant insight emerges. Furthermore, detailed mortality studies are carried out to allow for a comparison between expectation and experience and to adjust if necessary.

### **Assumptions changes in comparison to the previous reporting period**

The morbidity assumptions for a material portion of the Chinese critical illness business of the Shanghai Branch were strengthened. For two material long-term mortality treaties of the UK branch, the lapse and mortality improvement assumptions were strengthened (partially buffered by changes of base mortality assumption changes). The morbidity and mortality assumptions for some material treaties of the Hong Kong Branch were adjusted following the completion of an experience analysis. The mortality and lapse assumptions were adjusted for a contract in the Australian market. Furthermore, the expense assumptions were updated for several markets. All effects mentioned in this paragraph resulted in an increase in BEL.

For the longevity business in the UK market, there was a material BEL reducing effect from the adjustment of the mortality improvement and mortality assumptions for large parts of the portfolio. In the previous year,

around 50 per cent of the portfolio were reviewed and adjusted and the remaining portion was adjusted in the reporting year.

### **Reinsurance recoverables**

For all retrocessions to third party reinsurers where the recoverable represents an asset to Hannover Re, a default adjustment according to their rating was included.

In total the reinsurance recoverables under Solvency II are positive (TEUR -34,878), i.e. this position is to be seen as an asset for Hannover Re and reduces the net Solvency II reserves.

The respective IFRS 17 reinsurance recoverables amount to TEUR 176,013. Some revaluation steps between IFRS 17 and Solvency II are provided in Section D.2.2.4.

### **Risk assessment**

The main area of uncertainty around the level of the TP relates to a potential deviation of actual experience from the underlying assumptions and the sensitivity of cash flows to changes in those assumptions. The Risk Margin can serve as an indicator of such uncertainty.

The key driver to the overall level of uncertainty comes in the form of the mortality, longevity and morbidity business. This also becomes evident from the capital requirements under Solvency II presented in Section E.

For the mortality business, small changes in the mortality rates can have significant effects on the claims payments. However, for a significant share of the portfolio, this risk is largely mitigated by profit commission arrangements or by limits regarding the retention of the cedant such that changes in mortality rates would change the underlying cash flow pattern but would have a limited impact on the associated BEL. The mortality rates are well grounded in available data. For longer tailed products, in particular in the North American and UK market, mortality improvement and expert settings can also play an important role. Significant mortality risk is stemming from US mortality business.

The longevity business is very dependent on the appropriateness of the underlying mortality tables and mortality improvement assumptions, in particular due to its long-term nature. While the premiums are known, the expected claim payments are sensitive to the underlying mortality table, and more importantly in the later years, the mortality improvement that is



applied to the underlying table. The underlying mortality assumptions are based on copious amounts of data and experience studies, both internally held and industry accepted. However, a certain level of judgment is involved in assessing the applicability of historical mortality improvement observations for forward-looking purposes. In general, changes in the interest rates have little impact as to the cash flows; however, they can have a material impact on the discounting of the cash flows.

Morbidity risks are a material driver of uncertainty in the modelling of business. Relevant morbidity risks are stemming from potential changes of incidence rates for Chinese and Hong Kong critical illness business as well as from Australian and Taiwanese disability business and UK critical illness business.

Changes in lapse rates are material for certain products as well, with a varying level of confidence based on product design and the experience available. The direction of the lapse effect is dependent on the treaty and type of reinsurance used. In aggregate, an increase in lapse rates would be more adverse in that Hannover Re Group would forgo positive expected future cash flows.

Pandemic risk is a tail risk, i.e. a risk with a low probability of occurrence but a potential high impact. It is one of the key drivers of capital requirements and is therefore allowed for in the Risk Margin.

Financing business is generally not or only moderately exposed to mortality or morbidity risks and thus experiences a low level of uncertainty. Repayment of the outstanding financing amount can diminish on a combination of adverse biometric experience and lapses, but this is accounted for in the Risk Margin. Cedant default risk is also accounted for in the Risk Margin.

### D.2.2.3 Comparison of the technical provision with the IFRS 17 liability

In the following, a reconciliation between IFRS 17 and Solvency II liabilities is provided. The reconciliation steps are explained below. The figures are net of reinsurance recoverables.

#### Reconciliation from IFRS 17 to Solvency II in TEUR

Reconciliation Step	Explanation	2024
(1)	<b>IFRS 17 liability net of reinsurance</b>	<b>8,412,889</b>
(2)	Elimination of Contractual Service Margin	-6,516,799
(3)	Elimination of IFRS 17 deposits	5,884,530
(4)	Elimination of IFRS 17 accounts payables and receivables	448,886
(5)	Difference between IFRS 17 Risk Adjustment and SII Risk Margin	-540,871
(6)	Further differences in methods / assumptions	603,113
<b>(7)=(1)+...+(6)</b>	<b>Solvency II TP net of reinsurance</b>	<b>8,291,747</b>

The main sources of the differences in methods and assumptions are:

(6a) The Solvency II BEL includes certain IFRS 9 and IFRS 15 transactions which are accounted as (re-)insurance business under Solvency II, but not under IFRS 17.

(6b) Under IFRS 17, only directly attributable costs are taken into account whereas under Solvency II, all expenses are considered.

(6c) Under both regimes, current risk-free interest rates (including a volatility adjustment (VA) under Solvency II and illiquidity premium (ILP) under IFRS 17, respectively) are used. However, the VA / ILP are determined based on different concepts.

(6d) For some treaties the Solvency II contract boundaries differ from the contract boundaries under IFRS 17.

## E. Capital Management

This section presents the main elements of Hannover Re's capital management.

### E.1 Own funds

#### E.1.1 Management of own funds

Hannover Re aims to maintain a capitalisation of at least 180% under Solvency II. In addition, a threshold of 200% is defined. Own funds are managed in such a way that the minimum capitalisation is not undercut in the planning. This is achieved through coordinated planning and management of all own funds components, dividend payments and the risk profile.

The capital management process comprises a classification of all own funds components with regard to the Solvency II tiering specifications, with regard to basic and ancillary own funds and an assessment of the availability of the different own funds components.

In general, it is our objective for our hybrid capital instruments to correspond with the tier 2 category requirements. The timing of each issue takes into account the current market conditions and our medium-term growth objectives. In case of a required replacement of a subordinated bond, the detailed replacement planning process normally begins a year before the regular call date.

Hannover Re Group's economic capital model is used for the evaluation of both the quantitatively measurable individual risks and also the overall risk position. The assumptions and calculation methods for the determination of the risk-bearing capacity of the company are recorded in the documentation of the risk model and in regular reports.

#### E.1.2 Tiering

The classification of own funds with regard to their ability to cover losses represents a central component of regulatory capital requirements pursuant

to Solvency II. The individual components of the own funds will be classified into one of three quality classes ("tiers").

Own fund items classified under tier 1 possess the highest degree of quality, due to the fact that they are permanently available. They equalise verifiably unexpected losses, both during ongoing business operations and in the event of a company liquidation. Tier 2 refers to basic own funds and ancillary own funds which possess the ability to equalise losses incurred in the event of a company liquidation. Own fund items, which are not categorised under tier 1 or tier 2, are categorised under tier 3.

### E.1.3 Basic own funds

The following table displays the composition of basic own funds held by Hannover Re Group as of 31 December 2024.

#### Basic own funds

in TEUR	2023	2024
Tier 1 unrestricted	15,834,810	17,764,934
Ordinary Share capital	120,597	120,597
Share premium account related to ordinary share capital	880,608	880,608
Reconciliation reserve	15,468,710	17,399,820
Non available minority interests at Group level	-635,105	-636,090
Tier 1 restricted	496,435	506,175
Subordinated liabilities	496,435	506,175
Tier 2	2,550,139	2,589,192
Subordinated liabilities	2,550,139	2,589,192
Tier 3	70,518	171,455
Net deferred tax assets	70,518	171,455
<b>Total</b>	<b>18,951,902</b>	<b>21,031,756</b>

The change in basic own funds is a result of an increasing reconciliation reserve, a change in value of subordinated bonds and rising net deferred tax assets.

The reconciliation reserve change results from a change in excess of assets over liabilities and – compared to the previous year – rising foreseeable dividends.

Solvency II imposes restrictions on the availability of own funds to cover SCR. For Hannover Re restrictions arise from non-available minority

interests at Group level which relate primarily to the minority interests in E+S Rück.

Tier 3 capital arises as a consequence of net deferred tax assets in branches and subsidiaries of the Hannover Re Group.

Restrictions may arise from limitations to use tier 2 and tier 3 capital to meet SCR and MCR. Such restrictions do not arise for Hannover Re with respect to SCR coverage but with respect to the availability of tier 2 and tier 3 capital to cover MCR.

Funds are denoted as eligible if they can effectively be used to cover the SCR or MCR.

#### Available and eligible own funds

in TEUR	2023	2024
Available own funds	18,951,902	21,031,756
Eligible own funds to meet SCR	18,951,902	21,031,756
Eligible own funds to meet MCR	17,299,483	19,375,721

#### E.1.3.1 Movement analysis of eligible own funds and solvency capital requirements

The movement analysis of Solvency II eligible own funds and SCR in the year under consideration is presented in the table below.

#### Eligible own funds and SCR movement analysis

in TEUR	Eligible own funds	SCR
<b>Year end 2023</b>	<b>18,951,902</b>	<b>7,032,514</b>
Operating Impact	3,000,522	1,254,731
Model changes	148,284	-16,581
Market variances	617,067	205,529
Taxes	-493,311	-425,215
Capital management	-1,192,708	
<b>Year end 2024</b>	<b>21,031,756</b>	<b>8,050,977</b>

Operating impacts mainly comprise the investment result above risk-free, unwind, new business value and the property and casualty run-off result as well as assumption changes. The operating impact was clearly positive during the reporting period, mainly due to the positive contribution from new business for both life and health and property and casualty business. For

the SCR the effect from operating experiences mainly stems from an increased business volume. This relates to P&C business but also to new investment.

Model changes include internal model changes approved by the regulator in the course of the model governance process. In addition, it includes model updates for the calculation of technical provisions or other items. The main impact for eligible own funds during the reporting period relates to the calculation of technical provisions for life and health business. A number of minor model changes affected the SCR and lead in total to a small impact.

Market variances comprise changes in eligible own funds and SCR due to changes of foreign exchange rates, interest rates, credit spreads and other financial market indicators. All in all, the changes in the financial market environment had a slightly positive impact on Hannover Re's economic capital. The main positive effect, caused by appreciated foreign exchange rates in most of the relevant currencies, was nearly offset by smaller negative effects from rising interest rates. Appreciated exchange rates in most of out material currencies compared to EUR contribute mainly to the increase in SCR. We observe an offsetting effect from the higher interest rate level, in particular in USD, GBP and AUD.

All items are shown on a pre-tax basis, tax effects including tax payments and changes in deferred taxes are shown separately.

Capital management comprises dividend payments and changes in foreseeable dividends.

#### E.1.3.2 Reconciliation IFRS shareholders' equity to Solvency II basic own funds

Finally, we present the transition from IFRS shareholders' equity to Solvency II basic own funds.

### Reconciliation of IFRS shareholders' equity to Solvency II own funds

in TEUR	2023	2024
Shareholders' equity including minorities	11,019,512	12,688,278
Contractual Service Margin	7,810,801	8,162,428
Other differences	-1,377,571	-1,157,644
<b>Excess of assets over liabilities</b>	<b>17,452,742</b>	<b>19,693,062</b>
Foreseeable dividends and distributions*	-912,310	-1,120,583
Hybrid capital	3,046,574	3,095,367
Non-available minority interests at group level**	-635,105	-636,090
<b>Regulatory equity</b>	<b>18,951,902</b>	<b>21,031,756</b>

\*Foreseeable dividends and distributions refer to Hannover Re SE dividend as well as dividends to minorities within Hannover Re group.

\*\*Non-available minority interests mostly consist of non-controlling interests in E+S Rückversicherung AG.

#### E.1.3.3 Ordinary share capital

The ordinary share capital (capital stock of Hannover Rück SE) stands at TEUR 120,597 as of the balance sheet date. The shares have been paid up in full. The capital stock is divided into 120,597,134 no-par value registered shares which carry both voting and dividend rights. Every share grants the same right to vote and same dividend entitlement. As at the balance sheet date no treasury shares were held by the company.

No new shares were issued in the reporting period.

The capital stock paid in and the corresponding issue premium in the capital reserve form the own funds bearing the highest degree of quality, which can be relied upon to equalise losses in the course of business operations.

#### E.1.3.4 Share premium account related to ordinary share capital

The issue premium in relation to the capital stock of Hannover Re Group stands at TEUR 880,608 as of the balance sheet date.

The share premium account is a separate item to which premiums, the amount between the value attained at the point in time of issuance and the value recorded in the capital stock, are transferred in accordance with national statutory provisions.

#### E.1.3.5 Reconciliation reserve

The reconciliation reserve pursuant to Solvency II represents an item of basic own funds attributable (in unlimited capacity) to category tier 1. It

primarily comprises the excess of assets over liabilities, adjusted by the subscribed capital, the capital reserve and shareholder dividend payouts.

At the balance sheet date, the reconciliation reserve was TEUR 17,399,820.

The reconciliation reserve represents reserves (in particular retained earnings) less value adjustments; it does, moreover, contain the differences between the accounting valuation pursuant to IFRS and the valuation pursuant to the Directive 2009/138/EC.

#### E.1.3.6 Subordinated own funds

Hannover Re Group holds five subordinated bonds in its portfolio at the balance sheet date, which fulfil the criteria stipulated under Solvency II pertaining to subordinated liabilities, and which thus can be categorised under basic own funds.

##### Subordinated own funds

in TEUR	2023	2024
Subordinated debts (Tier 1 – restricted)	496,435	506,175
Subordinated debts (Tier 2)	2,550,139	2,589,192
<b>Total</b>	<b>3,046,574</b>	<b>3,095,367</b>

Following subordinated liabilities of an equity nature exist as at reporting date:

On 14 November 2022 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 22 March 2021 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 8 July 2020 Hannover Rück raised a subordinated bond with a nominal value of TEUR 500,000 from capital markets. The bond issued is classified as tier 2.

On 9 October 2019 Hannover Rück raised a subordinated bond with a nominal value of TEUR 750,000 from capital markets. The bond issued is classified as tier 2.

On 15 September 2014 Hannover Rück raised a subordinated bond with a nominal value of TEUR 500,000 from capital markets. This debt is classified under Solvency II as “Grandfathered restricted tier 1” own funds for a transitional period of a maximum of 10 years.

On the basis of their tiering classes, the value of the subordinated debt can be fully used to cover the Solvency Capital Requirement when applying the limit on eligible own funds in accordance with Article 82 Delegated Regulation 2015/35.

#### E.1.4 Transferability

Hannover Re Group actively manages its capital resources. Restraints in transferability arise due to minority interests in E+S Rück of TEUR 636,090. In the period under consideration, no further issues were identified that restrict the transferability of the capital for the covering of the solvency capital requirements.

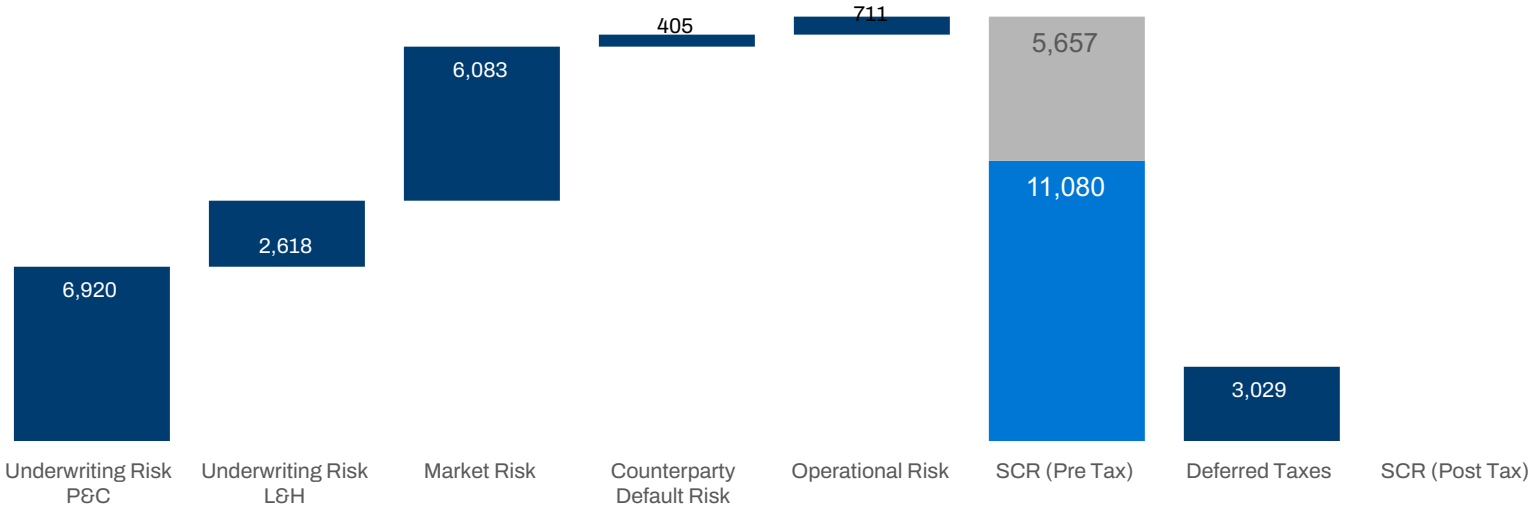
## E.2 Solvency Capital Requirement and Minimum Capital Requirement

### E.2.1 Solvency capital requirement

This section deals with the Solvency Capital Requirement and its sources. The risk categories of the internal model of Hannover Re are defined in Section E.4.1.4. Capital requirements per risk category are shown in the following.



**Solvency Capital Requirement - per risk category**  
in EUR million



**Solvency Capital Requirement (SCR)**

Solvency Capital Requirement	2023	2024
Underwriting risk - Property & Casualty	6,085,294	6,919,902
Underwriting risk - Life & Health	2,740,955	2,618,017
Market risk	5,244,241	6,082,634
Counterparty default risk	432,146	404,634
Operational risk	653,621	711,103
Diversification	-5,520,217	-5,656,572
<b>SCR (pre-tax)</b>	<b>9,636,040</b>	<b>11,079,718</b>
Deferred tax	2,603,526	3,028,741
<b>SCR (post-tax)</b>	<b>7,032,514</b>	<b>8,050,977</b>

The Solvency Capital Requirement has been calculated based on the approved internal model. The model is subject to strict internal quality checks and extensive validation. There is continuous model supervision by the regulators. There are no capital add-ons imposed by the regulator.

Hannover Re applies the static volatility adjustment according to §82 of the Insurance Supervision Law VAG. This is intended to mitigate the effect of temporary value fluctuations due to credit spread movements on the bond market. In order to capture this effect adequately for the calculation of the

Solvency Capital Requirement Hannover Re uses the dynamic volatility in its internal model. The impact of the volatility adjustment is displayed in section D.2.

The Solvency Capital Requirements of the Hannover Re Group have increased over the course of the year. This is primarily a consequence of business growth, which has led to an increase in the underwriting risk property and casualty reinsurance and market risk. The exchange rate effects and a lower diversification also contribute to the increase in risk. On the other hand, the higher interest rates for USD, GBP and AUD lead to a decline in the SCR.

Underwriting risks in property and casualty reinsurance have increased due to growing business volumes and new business. This includes higher capacities for natural catastrophe risks, claims development and the associated higher reserves.

Mainly due to the higher interest rate level for USD, GBP and AUD, the underwriting risks in life and health reinsurance are decreasing. The decline particularly affects longevity risk.

The increase in market risk reflects the increase in credit and spread risk due to higher market values of fixed-income securities, an adjustment to the calibration of the model, an increase in exchange rate risk and new investments in private equity and real estate. The interest rate risk is also increasing, but contributes only marginally to the increase in market risk

The slight decrease in counterparty default risk can be attributed principally to an adjustment to the calibration of the model and an improved rating structure that counteracts the increase in the default volume.

The changes in the operational risk result above all from updated expert assessments regarding the impact of individual scenarios.

The decrease in the diversification effect can be attributed to changes in the composition of the risks. The loss-mitigating effect from taxes increases in absolute terms, but remains stable in relative terms.

The build-up of deferred tax assets is restricted to the amount of initial net deferred tax liabilities. The net deferred tax liabilities basically stem from temporary valuation differences compared to the tax balance sheet.

The following table displays the Solvency Capital Requirement and the ratio of eligible own funds to SCR taking into account tiering restrictions.

**Ratio of eligible own funds to Solvency Capital Requirement**

in TEUR	2023	2024
Eligible own funds	18,951,902	21,031,756
SCR	7,032,514	8,050,977
<b>Ratio of eligible own funds to SCR</b>	<b>269 %</b>	<b>261 %</b>

**E.2.2 Minimum capital requirement**

The following table displays the Minimum Capital Requirement and the ratio of eligible own funds to MCR taking into account tiering restrictions.

The group MCR is the result of the sum of the MCRs of the different legal entities.

#### Ratio of eligible own funds to Minimum Capital Requirement

in TEUR	2023	2024
Eligible own funds to meet MCR	17,299,483	19,375,721
MCR	4,841,186	5,523,060
<b>Ratio of eligible own funds to MCR</b>	<b>357 %</b>	<b>351 %</b>

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

Germany did not make use of the option to allow the use of a duration-based equity risk sub-module.

Consequently, Hannover Re does not use a duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement.

## E.4 Differences between the standard formula and internal model used

### E.4.1 The internal model

Hannover Re received approval from the regulatory authorities to calculate its solvency requirements using a full internal capital model. This section provides information regarding the internal capital model.

#### E.4.1.1 Introduction

The quantitative risk management of Hannover Re provides a standardised framework for the assessment and management of all risks the undertaking is exposed to and of our capital position. In this context, the internal model is our key instrument. It is a stochastic enterprise model, covering all subsidiaries and business areas of Hannover Re.

The central key figure in risk and company management is the economic equity, which is evaluated according to market-consistent valuation principles and forms the basis for the calculation of the Solvency II capital.

The internal model of Hannover Re reflects all risks influencing the development of the economic capital. These risks are classified into underwriting, market, counterparty default and operational risks. For each of these risk categories, we have determined a series of risk factors for which we define a probability distribution. Risk factors are, as for instance, economic indicators, like interest rates, exchange rates and inflation rates, as well as insurance-specific indicators such as the mortality rates in a specific age group of our insurance portfolio in a certain country, or the number of natural disasters in a certain region and the insured loss per disaster.

We use publicly accessible and historical data to specify the probability distributions of risk factors. In addition, we use industry specific and internal (re-)insurance data of Hannover Re. The judgement of internal and external experts supplements this process. The suitability of probability distributions is subject to regular review by our specialist departments and verified in conjunction with the regular, company-wide application of the capital model and allocation of costs of capital. Hannover Re calculates the Solvency Capital Requirement using the Value at Risk (VaR) reflecting the changes in economic value over a period of one year with a confidence level of 99.5%. For its capitalisation under Solvency II Hannover Re has set a limit of 180% and a threshold of 200% for the capital adequacy ratio (Solvency ratio). Both, limit and threshold are exceeded.

The internal capital model uses state-of-the-art techniques of insurance and financial mathematics. In case of underwriting risks, we draw on a comprehensive history of internal data to estimate probability distributions, e.g., for reserving risk. In the context of natural catastrophe risks, we use external models that we adjusted in the course of detailed internal reviews to represent our risk profile adequately. For Life and Health reinsurance we determine long-term cash flows for different scenarios. The determination of scenarios and probability distributions is based on internal data for all mentioned risks. The internal data base is enriched with parameters set by experts. These parameters are of importance in particular in the area of extreme events that have not been observed by now.

The aggregation of single risks takes into account dependencies between risk factors. Dependencies arise, e.g., during financial crises, which affect

several market segments at the same time. Furthermore, market phenomena such as pricing cycles can cause dependencies over time. We generally assume that extreme events do not all occur simultaneously. The absence of complete dependency is denoted as diversification. Hannover Re's business model is based i.a. on establishing a preferably well-balanced portfolio such that a significant diversification effect is achieved and the capital can be used efficiently. Diversification effects exist between reinsurance contracts, divisions, business segments and risks. Given the costs of capital of our business segments and divisions, and on the basis of their contribution to the diversification effect, we determine the costs of capital that have to be achieved per single business unit.

#### E.4.1.2 Basic principles

A key purpose of the capital model of Hannover Re relates to the calculation of the required and available capital for Hannover Re. The principles outlined below are the manifestation of Hannover Re's risk capacity and how it is consistently measured within a quantitative framework.

- Target variable: Our main target variable for the calculation of risk based capital is the deviation of the net asset value (or own funds) from its expected value.
- Time horizon: For calculating the Solvency Capital Requirement, a one-year time horizon is used.
- Risk measure: We use two statistics to measure and allocate risk capital, namely the Value-at-Risk (VaR) and the Expected Shortfall (ES).
- Ongoing business operations: We operate on the premise of existing business and on a going-concern assumption.
- New business assumptions: We consider one year of new business. This assumption holds for all lines of business.
- Stochastic simulation: The capital model of Hannover Re is based on stochastic simulations, i.e. we generate discrete approximations for the probability distribution of our target variables.
- Capital fungibility: Hannover Re's capital model covers the risks stemming from several (legally independent) business units within the Group. We assume full capital fungibility. This is based on the assessment of stress tests for capital fungibility and transferability.
- Consolidation method: The capital model of Hannover Re comprises all business units by using the consolidation method. Deduction and aggregation as defined under Solvency II as an alternative method is not applied.

The capital model uses a stochastic simulation model, which combines random variables using the company-specific dependency structure, for the purposes of implementing these principles.

### **E.4.1.3 Main applications**

Hannover Re's internal capital model is a key component of the risk management system. It serves to analyse its overall risk position, to quantify risks and to determine the economic capital required to assume those risks.

The results of Hannover Re's internal model provide support to senior management in their decision-making. Main applications are:

- Analysis of the financial position
- Assessment of the overall Solvency Capital Requirement and monitoring of key risk metrics
- Capital consumption by each risk category
- Capital allocation for pricing and performance measurement
- Risk budgeting, limit allocation and monitoring
- Strategic asset allocation
- Assessment of risk mitigation strategies
- Assessment of new business

### **E.4.1.4 Scope of the model**

Hannover Re's complete risk landscape comprises the main risk categories underwriting risks (life and health as well as property and casualty), market risks, counterparty default risks, operational risks and other risks (see Section "C. Risk Profile").

The risk categories addressed by the internal model of Hannover Re using a quantitative model are: underwriting risk life and health, underwriting risk property and casualty, market risk, counterparty default risk and operational risk. These risks and their interactions are accounted for in the presentation of target variables through the application of stochastic simulation models. Concentration risk is taken into account in the calculations of the Solvency Capital Requirement for each risk category.

### **E.4.1.5 Type and suitability of data**

Hannover Re has a comprehensive internal control system in place to ensure quality and timeliness of data. The specific data used in the internal model is documented in the data requirements for the different modules and interfaces. All data used in the internal model is subject to the data

standards for the internal model. This set-up is appropriate to provide for timely data that is free of material errors.

Hannover Re utilises the relevant historical company data, in order to calibrate the model – in particular for the underwriting risk. Generally speaking, company data relating to insurance performance within property and casualty is available for more than 30 years. This is deemed sufficiently historical information. However, due to the particular characteristics of early underwriting years, e.g. low premium volume, changing business segmentation or non-representative market segments, only portions of this data are used as part of the internal model calibration.

Internal company data, above all for the model validation, is used for underwriting risk pertaining to life and health insurance. This is due to the fact that only a limited number of significant (and thus rare) deviations are available that are suitable for the calibration of extreme events.

Long-term market data is used for the calibration of the market and counterparty risk model.

The operational risk model is based on information retrieved from a self-assessment process with experts from all relevant units and departments. Wherever possible, available data and additional information are used. Given the limited history of operational risk events as well as the low frequency and high severity character of some operational risks, Hannover Re is convinced that input parameters for the SCR calculation cannot be solely derived by quantitative methods.

In general, Hannover Re relies on data that is used in other business applications, too, as often as appropriate to ensure consistent use of information within the company. Examples are the technical provisions which are calculated as part of the Solvency II balance sheet process and data items used in the accounting process under IFRS, thereby providing an anchor to other established reporting processes. Thus, many data items are subject to multiple quality checks and internal as well as external review.

## **E.4.2 Calculation techniques for the purposes of integrating results into the standard formula**

Hannover Re uses a full internal model. As a consequence, there are no results of standard formula modules which have to be integrated in the internal model.

## **E.4.3 Comparison between the internal model and the standard formula**

The standard formula is designed to fit a typical European (or EEA) primary insurer. As a consequence, mainly European data has been used to calibrate the standard formula.

There are many aspects which make Hannover Re quite different from a typical European primary insurer, in particular, its access to global diversification across regions, markets, cedants and all lines of business. The difference in diversification is the driving force of differences between the standard formula and the internal model for life, health, property and casualty underwriting risk. It also has some influence on counterparty and market risk.

A further difference is caused by the fact that Hannover Re has received approval for a dynamic modelling of the volatility adjustment from BaFin. By this, the effect of the volatility adjustment is captured in the calculation of the Solvency Capital Requirement more adequately compared to the standard formula.

The standard formula offers a detailed module for the quantification of EU natural catastrophe risk. Due to its focus it does offer a very broad, premium-based approximation for non-EU and non-proportional natural catastrophe risk, only. Hannover Re assumes more than 70% of its natural catastrophe risk outside the EU and thus has a detailed internal model for such risks.

The standard formula is designed for a single primary insurer and thus has no module to recognise diversification between different primary insurers. The latter is an important feature of Hannover Re's internal model and founded on Hannover Re's internal data analysis.

The standard formula allows for appropriate recognition of some but not all reinsurance structures. For example multi-line covers are not fully effective. The internal model is able to recognise all retrocession structures currently implemented by Hannover Re.

In contrast to the standard formula, Hannover Re's internal model has capital requirements for all government bonds.

Technically, the internal model is a stochastic approach while the standard formula is a factor-based (deterministic) approach. The concept for underlying risk factors is in many areas similar, e.g. for market and counterparty risk but in general more detailed in Hannover Re's internal model. Hannover Re's internal model allows for bottom-up, non-linear dependency structures within and between market, underwriting, operational and counterparty risk.

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

Both solvency and minimum capital requirements – with and without application of the volatility adjustment - were complied with at all times during the period under consideration.

# Abbreviations and glossary

**AF:** Actuarial Function

**AGM:** Annual General Meeting

**BaFin:** Bundesanstalt für Finanzdienstleistungsaufsicht, Federal Financial Supervisory Authority

**BEL:** Best Estimate Liability

**BOF:** Basic Own Funds

**CCO:** Chief Compliance Officer

**CDS:** Credit Default Swap

**CEO:** Chief Executive Officer

**CFO:** Chief Financial Officer

**CMS:** Compliance Management System

**EBIT:** Earnings before interest and taxes

**EEA:** European Economic Area

**EIOPA:** European Insurance and Occupational Pensions Authority

**ESG:** Environment Social Governance

**E+S Rück:** E+S Rückversicherung AG

**GA:** Group Audit, internal audit of Hannover Re Group

**GLS:** Group Legal Services, legal division of the Hannover Re Group

**Hannover Re:** Hannover Re Group

**Hannover Rück:** Hannover Rück SE

**HDI:** HDI Haftpflichtverband der Deutschen Industrie V.a.G.

**HGB:** Handelsgesetzbuch, German Commercial Code

**IAS:** International Accounting Standards

**ICS:** Internal Control System

**IFRS:** International Financial Reporting Standards

**L&H:** Life and Health

**MCR:** Minimum Capital Requirement

**NGO:** Non-Governmental Organisation

**ORSA:** Own Risk and Solvency Assessment

**OTC:** Over the Counter

**P&C:** Property and Casualty

**QRT:** Quantitative Reporting Template

**RM:** Risk Margin

**RMF:** Risk Management Function

**SCR:** Solvency Capital Requirement

**SII:** Solvency II

**TP:** Technical Provisions

**VAG:** Gesetz über die Beaufsichtigung der Versicherungsunternehmen (Versicherungsaufsichtsgesetz), Insurance Supervision Act

**VaR:** Value-at-Risk

**WHO:** World Health Organisation



# Quantitative Reporting Templates

All values are shown in TEUR if not otherwise stated.

Values below TEUR 0.5 are displayed as “0”. Empty cells represent the fact that Hannover Re has no value to state.

Please note that this report represents a voluntary publication of the Hannover Re Group. Hence, we provide information we think are most informative for our stakeholders.

## **Additional disclosure according to Art. 192 (2) of the Delegated Regulation 2015/35**

The Hannover Re Group has collateral arrangements with a total value well below 60% of total assets. The threshold of 60% is defined in Art. 192 (2) of the Delegated Regulation 2015/35. This information is relevant to calculate the counterparty default risk with respect to the Hannover Re Group in the Solvency II standard formula.



## S.02.01.02: Balance sheet

### S.02.01.02: Balance sheet, page 1

		Solvency II
		C0010
<b>Assets</b>		
Intangible assets	R0030	
Deferred tax assets	R0040	171,455
Pension benefit surplus	R0050	2,115
Property, plant & equipment held for own use	R0060	164,853
Investments (other than assets held for index-linked and unit-linked contracts)	R0070	65,260,048
Property (other than for own use)	R0080	3,196,779
Holdings in related undertakings, including participations	R0090	814,771
Equities	R0100	657
Equities - listed	R0110	
Equities - unlisted	R0120	657
Bonds	R0130	53,388,903
Government Bonds	R0140	29,161,012
Corporate Bonds	R0150	22,225,015
Structured notes	R0160	115,164
Collateralised securities	R0170	1,887,713
Collective Investments Undertakings	R0180	6,614,954
Derivatives	R0190	83,823
Deposits other than cash equivalents	R0200	1,145,375
Other investments	R0210	14,785
Assets held for index-linked and unit-linked contracts	R0220	
Loans and mortgages	R0230	826,149
Loans on policies	R0240	
Loans and mortgages to individuals	R0250	978
Other loans and mortgages	R0260	825,172
Reinsurance recoverables from:	R0270	1,792,175
Non-life and health similar to non-life	R0280	1,827,053
Non-life excluding health	R0290	1,815,106
Health similar to non-life	R0300	11,947
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	-34,650
Health similar to life	R0320	198,460
Life excluding health and index-linked and unit-linked	R0330	-233,110
Life index-linked and unit-linked	R0340	-227
Deposits to cedants	R0350	11,795,145
Insurance and intermediaries receivables	R0360	8,522,609
Reinsurance receivables	R0370	318,890
Receivables (trade, not insurance)	R0380	557,039
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	1,252,680
Any other assets, not elsewhere shown	R0420	254,354
<b>Total assets</b>	<b>R0500</b>	<b>90,917,514</b>

### S.02.01.02: Balance sheet, page 2

		Solvency II
		C0010
<b>Liabilities</b>		
Technical provisions – non-life	R0510	47,950,643
Technical provisions – non-life (excluding health)	R0520	45,194,679
Technical provisions calculated as a whole	R0530	
Best Estimate	R0540	44,357,222
Risk margin	R0550	837,457
Technical provisions - health (similar to non-life)	R0560	2,755,964
Technical provisions calculated as a whole	R0570	
Best Estimate	R0580	2,653,456
Risk margin	R0590	102,508
Technical provisions - life (excluding index-linked and unit-linked)	R0600	6,628,210
Technical provisions - health (similar to life)	R0610	3,641,072
Technical provisions calculated as a whole	R0620	
Best Estimate	R0630	3,033,151
Risk margin	R0640	607,921
Technical provisions – life (excluding health and index-linked and unit-linked)	R0650	2,987,139
Technical provisions calculated as a whole	R0660	
Best Estimate	R0670	1,242,742
Risk margin	R0680	1,744,397
Technical provisions – index-linked and unit-linked	R0690	1,628,659
Technical provisions calculated as a whole	R0700	
Best Estimate	R0710	1,504,570
Risk margin	R0720	124,089
Contingent liabilities	R0740	
Provisions other than technical provisions	R0750	266,612
Pension benefit obligations	R0760	155,373
Deposits from reinsurers	R0770	190,691
Deferred tax liabilities	R0780	4,071,514
Derivatives	R0790	91,988
Debts owed to credit institutions	R0800	583,910
Financial liabilities other than debts owed to credit institutions	R0810	941,443
Insurance & intermediaries payables	R0820	1,750,942
Reinsurance payables	R0830	2,299,389
Payables (trade, not insurance)	R0840	765,788
Subordinated liabilities	R0850	3,095,367
Subordinated liabilities not in Basic Own Funds	R0860	0
Subordinated liabilities in Basic Own Funds	R0870	3,095,367
Any other liabilities, not elsewhere shown	R0880	803,923
<b>Total liabilities</b>	<b>R0900</b>	<b>71,224,452</b>
<b>Excess of assets over liabilities</b>	<b>R1000</b>	<b>19,693,062</b>

## S.12.01.02: Life and Health SLT Technical Provisions

S.12.01.02: TP Life, Page 1

		Index-linked and unit-linked insurance				Other life insurance		
		Insurance with profit participation		Contracts without options and guarantees	Contracts with options or guarantees		Contracts without options and guarantees	Contracts with options or guarantees
		C0020	C0030	C0040	C0050	C0060	C0070	C0080
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 calculated as a whole	R0020							
Technical provisions calculated as a sum of BE and RM								
Best Estimate								
Gross Best Estimate	R0030							
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080							
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090							
Risk Margin	R0100							
Technical provisions - total	R0200							

S.12.01.02: TP Life, Page 2

		Health insurance (direct business)								
		Annuities stemming from non-life insurance contracts and relating to insurance obligation other than health insurance obligations C0090	Accepted reinsurance C0100	Total (Life other than health insurance, incl. Unit-Linked) C0150	C0160	Contracts without options and guarantees C0170	Contracts with options or guarantees C0180	Annuities stemming from non-life insurance contracts and relating to health insurance obligations C0190	Health reinsurance (reinsurance accepted) C0200	Total (Health similar to life insurance) C0210
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 calculated as a whole	R0020									
Technical provisions calculated as a sum of BE and RM										
Best Estimate										
Gross Best Estimate	R0030		2,747,312	2,747,312					3,033,151	3,033,151
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080		-233,338	-233,338					198,460	198,460
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090		2,980,650	2,980,650					2,834,690	2,834,690
Risk Margin	R0100		1,868,486	1,868,486					607,921	607,921
<b>Technical provisions - total</b>	<b>R0200</b>		<b>4,615,798</b>	<b>4,615,798</b>					<b>3,641,072</b>	<b>3,641,072</b>

## S.17.01.02: Non-life Technical Provisions

S.17.01.02: TP Non-Life, Page 1

		Direct business and accepted proportional reinsurance								
		Medical expense insurance	Income protection insurance	Workers' compensation insurance	Motor vehicle liability insurance	Other motor insurance	Marine, aviation and transport insurance	Fire and other damage to property insurance	General liability insurance	Credit and suretyship insurance
		C0020	C0030	C0040	C0050	C0060	C0070	C0080	C0090	C0100
<b>Technical provisions calculated as a whole</b>	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	R0050									
<b>Technical provisions calculated as a sum of BE and RM</b>										
<b>Best estimate</b>										
<b>Premium provisions</b>										
Gross	R0060	19,953	87,346	34,947	655,964	302,796	152,076	1,576,415	598,191	240,443
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0140		3,417		-350	-8,459	4,091	-436,971	27,562	-15,525
Net Best Estimate of Premium Provisions	R0150	19,953	83,928	34,947	656,314	311,255	147,985	2,013,386	570,628	255,968
<b>Claims provisions</b>										
Gross	R0160	246,956	491,608	157,796	2,925,145	1,346,806	1,407,040	8,650,277	4,818,476	1,700,556
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240		-3,096	8,489	8,387	20,673	301,312	1,564,655	103,352	33,333
Net Best Estimate of Claims Provisions	R0250	246,956	494,704	149,307	2,916,759	1,326,134	1,105,728	7,085,622	4,715,124	1,667,223
<b>Total Best estimate - gross</b>	<b>R0260</b>	<b>266,909</b>	<b>578,953</b>	<b>192,743</b>	<b>3,581,109</b>	<b>1,649,603</b>	<b>1,559,116</b>	<b>10,226,692</b>	<b>5,416,667</b>	<b>1,940,999</b>
<b>Total Best estimate - net</b>	<b>R0270</b>	<b>266,909</b>	<b>578,632</b>	<b>184,254</b>	<b>3,573,072</b>	<b>1,637,389</b>	<b>1,253,713</b>	<b>9,099,008</b>	<b>5,285,752</b>	<b>1,923,192</b>
<b>Risk margin</b>	<b>R0280</b>	<b>3,052</b>	<b>32,481</b>	<b>11,630</b>	<b>46,992</b>	<b>43,966</b>	<b>25,972</b>	<b>191,200</b>	<b>99,861</b>	<b>43,731</b>
<b>Technical provisions - total</b>										
Technical provisions - total	R0320	269,961	611,434	204,372	3,628,101	1,693,569	1,585,087	10,417,892	5,516,527	1,984,730
Recoverable from reinsurance contract / SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	R0330		321	8,489	8,037	12,214	305,403	1,127,684	130,914	17,808
Technical provisions minus recoverables from reinsurance / SPV and Finite Re - total	R0340	269,961	611,113	195,884	3,620,065	1,681,355	1,279,684	9,290,208	5,385,613	1,966,923



S.17.01.02: TP-Non-Life, Page 2

		Direct business and accepted proportional reinsurance			Accepted non-proportional reinsurance				Total Non-Life obligation
		Legal expenses insurance	Assistance	Miscellaneous financial loss	Non-proportional health reinsurance	Non-proportional casualty reinsurance	Non-proportional marine, aviation and transport reinsurance	Non-proportional property reinsurance	
		C0110	C0120	C0130	C0140	C0150	C0160	C0170	
<b>Technical provisions calculated as a whole</b>	R0010								
Total Recoverables from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty	R0050								
<b>Technical provisions calculated as a sum of BE and RM</b>									
<b>Best estimate</b>									
<b>Premium provisions</b>									
Gross	R0060	13,540	17,114	32,132	56,094	672,639	164,763	542,089	5,166,501
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0140		0	76	-39	-34,024	-37,047	-114,525	-611,793
Net Best Estimate of Premium Provisions	R0150	13,540	17,114	32,057	56,133	706,663	201,809	656,614	5,778,294
<b>Claims provisions</b>									
Gross	R0160	91,574	29,535	277,138	1,558,756	9,720,206	1,165,997	7,256,311	41,844,177
Total recoverable from reinsurance / SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0240			8,099	3,175	5,406	216,345	168,718	2,438,846
Net Best Estimate of Claims Provisions	R0250	91,574	29,535	269,039	1,555,581	9,714,800	949,652	7,087,593	39,405,331
<b>Total Best Estimate - gross</b>	R0260	105,114	46,649	309,270	1,614,851	10,392,844	1,330,760	7,798,399	47,010,678
<b>Total Best Estimate - net</b>	R0270	105,114	46,649	301,096	1,611,714	10,421,463	1,151,461	7,744,207	45,183,625
<b>Risk margin</b>	R0280	1,708	387	4,902	55,345	224,538	14,200	140,001	939,965
<b>Technical provisions - total</b>									
Technical provisions - total	R0320	106,822	47,035	314,172	1,670,196	10,617,383	1,344,959	7,938,400	47,950,643
Recoverable from reinsurance contract / SPV and Finite Re after the adjustment for expected losses due to counterparty default - total	R0330			8,175	3,137	-28,619	179,298	54,192	1,827,053
Technical provisions minus recoverables from reinsurance / SPV and Finite Re - total	R0340	106,822	47,035	305,998	1,667,059	10,646,002	1,165,661	7,884,208	46,123,590

## S.22.01.21: Impact of long term guarantees measures and transitionals

S.22.01.22: Impact of long term guarantees measures and transitionals		Amount with Long Term Guarantee measures and transitionals	Impact of transitional on technical provisions	Impact of transitional on interest rate	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
		C0010	C0030	C0050	C0070	C0090
Technical provisions	R0010	56,207,513			524,530	
Basic own funds	R0020	21,031,756			-291,493	
Eligible own funds to meet Solvency Capital Requirement	R0050	21,031,756			-291,493	
<b>Solvency Capital Requirement</b>	<b>R0090</b>	<b>8,050,977</b>			<b>405,590</b>	



## S.23.01.22: Own Funds

### S.23.01.22: Own funds, page 1

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
<b>Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation (EU) 2015/35</b>						
Ordinary share capital (gross of own shares)	R0010	120,597	120,597			
Non-available called but not paid in ordinary share capital to be deducted at group level	R0020					
Share premium account related to ordinary share capital	R0030	880,608	880,608			
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040					
Subordinated mutual member accounts	R0050					
Non-available subordinated mutual member accounts to be deducted at group level	R0060					
Surplus funds	R0070					
Non-available surplus funds to be deducted at group level	R0080					
Preference shares	R0090					
Non-available preference shares to be deducted at group level	R0100					
Share premium account related to preference shares	R0110					
Non-available share premium account related to preference shares at group level	R0120					
Reconciliation reserve	R0130	17,399,820	17,399,820			
Subordinated liabilities	R0140	3,095,367		506,175	2,589,192	
Non-available subordinated liabilities to be deducted at group level	R0150					
An amount equal to the value of net deferred tax assets	R0160	171,455				171,455
The amount equal to the value of net deferred tax assets not available to be deducted at the group level	R0170					
Other items approved by supervisory authority as basic own funds not specified above	R0180					
Non available own funds related to other own funds items approved by supervisory authority	R0190					
Minority interests	R0200					
Non-available minority interests to be deducted at group level	R0210	636,090	636,090			



S.23.01.22: Own funds, page 2		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
<b>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</b>						
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					
<b>Deductions</b>						
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	R0230					
whereof deducted according to art 228 of the Directive 2009/138/EC	R0240					
Deductions for participations where there is non-availability of information (Article 229)	R0250					
Deduction for participations included via Deduction and Aggregation method (D&A) when a combination of methods are used	R0260					
Total of non-available own fund items to be deducted	R0270	636,090	636,090			
<b>Total deductions</b>	<b>R0280</b>	<b>636,090</b>	<b>636,090</b>			
<b>Total basic own funds after deductions</b>	<b>R0290</b>	<b>21,031,756</b>	<b>17,764,934</b>	<b>506,175</b>	<b>2,589,192</b>	<b>171,455</b>
<b>Ancillary own funds</b>						
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					
Non available ancillary own funds to be deducted at group level	R0380					
Other ancillary own funds	R0390					
<b>Total ancillary own funds</b>	<b>R0400</b>					

S.23.01.22: Own funds, page 3		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
<b>Own funds of other financial sectors</b>						
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies - total	R0410					
Institutions for occupational retirement provision	R0420					
Non regulated undertakings carrying out financial activities	R0430					
Total own funds of other financial sectors	R0440					
<b>Own funds when using the D&amp;A, exclusively or in combination with method 1</b>						
Own funds aggregated when using the D&A and combination of method	R0450					
Own funds aggregated when using the D&A and combination of method net of IGT	R0460					
Total available own funds to meet the consolidated part of the group SCR (excluding own funds from other financial sector and from the undertakings included via D&A )	R0520	21,031,756	17,764,934	506,175	2,589,192	171,455
Total available own funds to meet the minimum consolidated group SCR	R0530	20,860,302	17,764,934	506,175	2,589,192	
Total eligible own funds to meet the consolidated part of the group SCR (excluding own funds from other financial sector and from the undertakings included via D&A )	R0560	21,031,756	17,764,934	506,175	2,589,192	171,455
Total eligible own funds to meet the minimum consolidated group SCR	R0570	19,375,721	17,764,934	506,175	1,104,612	
<b>Minimum consolidated Group SCR [entspricht HRG Gruppen-MCR]</b>	<b>R0610</b>	<b>5,523,060</b>				
<b>Ratio of Eligible own funds to Minimum Consolidated Group SCR</b>	<b>R0650</b>	<b>3.5081</b>				
<b>Total eligible own funds to meet the total group SCR (including own funds from other financial sector and from the undertakings included via D&amp;A)</b>	<b>R0660</b>	<b>21,031,756</b>	<b>17,764,934</b>	<b>506,175</b>	<b>2,589,192</b>	<b>171,455</b>
<b>Total Group SCR</b>	<b>R0680</b>	<b>8,050,977</b>				
<b>Ratio of Total Eligible own funds to Total group SCR - ratio including other financial sectors and the undertakings included via D&amp;A</b>	<b>R0690</b>	<b>2.6123</b>				





**S.23.01.22: Own funds, page 4 / Reconciliation reserve**

		<b>C0060</b>
<b>Reconciliation reserve</b>		
Excess of assets over liabilities	R0700	19,693,062
Own shares (held directly and indirectly)	R0710	0
Foreseeable dividends, distributions and charges	R0720	1,120,583
Other basic own fund items	R0730	1,172,660
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	R0740	
Other non available own funds	R0750	
<b>Reconciliation reserve</b>	<b>R0760</b>	<b>17,399,820</b>
<b>Expected profits</b>		
Expected profits included in future premiums (EPIFP) - Life business	R0770	7,191,384
Expected profits included in future premiums (EPIFP) - Non- life business	R0780	
<b>Total EPIFP</b>	<b>R0790</b>	<b>7,191,384</b>

## S.25.05.22: Solvency Capital Requirement – for undertakings using an internal model (partial or full)

Component - specific information		Solvency Capital Requirement		Amount modelled		USP		Simplifications	
		C0010	C0070	C0090	C0120				
<b>Risk Type</b>									
Total diversification	R0020	-9,113,915	-9,113,915						
Total diversified risk before tax	R0030	11,079,718	11,079,718						
Total diversified risk after tax	R0040	8,050,977	8,050,977						
Total market & credit risk	R0070	12,334,647	12,334,647						
Market & Credit risk - diversified	R0080	6,082,634	6,082,634						
Credit event risk not covered in market & credit risk	R0190	508,276	508,276						
Credit event risk not covered in market & credit risk - diversified	R0200	404,634	404,634						
Total Business risk	R0270								
Total Business risk - diversified	R0280								
Total Net Non-life underwriting risk	R0310	12,570,704	12,570,704						
Total Net Non-life underwriting risk - diversified	R0320	6,919,902	6,919,902						
Total Life & Health underwriting risk	R0400	6,886,956	6,886,956						
Total Life & Health underwriting risk - diversified	R0410	2,618,017	2,618,017						
Total Operational risk	R0480	711,103	711,103						
Total Operational risk - diversified	R0490	711,103	711,103						
Other risk	R0500	0	0						



Calculation of Solvency Capital Requirement		C0100
Total undiversified components	R0110	16,736,289
Diversification	R0060	-5,656,571
Adjustment due to RFF/MAP nSCR aggregation	R0120	
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	
<b>Solvency Capital Requirement calculated on the basis of Art. 336 (a) of Delegated Regulation (EU) 2015/35, excluding capital add-on</b>	<b>R0200</b>	<b>8,050,977</b>
Capital add-ons already set	R0210	
of which, Capital add-ons already set - Article 37 (1) Type a	R0211	
of which, Capital add-ons already set - Article 37 (1) Type b	R0212	
of which, Capital add-ons already set - Article 37 (1) Type c	R0213	
of which, Capital add-ons already set - Article 37 (1) Type d	R0214	
<b>Consolidated Group SCR</b>	<b>R0220</b>	<b>8,050,977</b>
<b>Other information on SCR</b>		
Amount/estimate of the overall loss-absorbing capacity of technical provisions	R0300	-308,502
Amount/estimate of the loss absorbing capacity for deferred taxes	R0310	-3,028,741
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 Requirements for matching adjustment portfolios	R0430	
Diversification effects due to RFF nSCR aggregation for article 304	R0440	
Minimum consolidated group solvency capital requirement	R0470	5,361,251
<b>Information on other entities</b>		
Capital requirement for other financial sectors (Non-insurance capital requirements)	R0500	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Credit institutions, investment firms and financial institutions,	R0510	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Institutions for occupational retirement provisions	R0520	
Capital requirement for other financial sectors (Non-insurance capital requirements) - Capital requirement for non-regulated undertakings carrying out	R0530	
Capital requirement for non-controlled participation	R0540	
Capital requirement for residual undertakings	R0550	
Capital requirement for collective investment undertakings or investments packaged as funds	R0555	
<b>Overall SCR</b>		
SCR for undertakings included via D&A method	R0560	
Total group solvency capital requirement	R0570	8,050,977

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