SFCR 2018
Solvency and Financial Condition Report
Munich Re (Group)

2018

WE DRIVE BUSINESS AS ONE

Munich RE

This document is a translation of the original German version and is intended to be used for informational purposes only. While every effort has been made to ensure the accuracy and completeness of the translation, please note that the German original is binding.

Executive summary

Part		Page
A – Business and performance	Munich Re's business activities in the reinsurance and ERGO fields of business are broken down into material lines of business and regions. In both fields of business, our underwriting performance was up on the previous year, which had been severely impacted by extremely high property losses from Hurricanes Harvey, Irma and Maria. Investment income was down on the previous year, mainly as a result of higher net write-downs on our equity investments following a substantial decline in share prices in the fourth quarter. We also posted lower net gains on the disposal of fixed-interest securities. Other activities include our leasing arrangements, but these are not material for Munich Re.	5–18
B – System of governance	Munich Re has an effective system of governance that is adequate for the nature, scale and complexity of the risks inherent in its business. The new remuneration system introduced in 2018 puts a greater focus on the overall responsibility of the Board of Management for business activities, the Company's results, and performance benchmarked against peers. Persons who run the undertaking or perform other key tasks, including the holders of key functions under Solvency II, have the professional qualifications, knowledge and experience to perform the relevant tasks and have the requisite fitness for office. The risk management system, including the own risk and solvency assessment (ORSA), is closely integrated into Group-wide planning, risk strategy and decision-making processes. Processes that are subject to material risks are reviewed on a regular basis as part of the internal control system implemented throughout the Group. The outsourcing of operational activities and functions is monitored.	19–40
C – Risk profile	We quantify the solvency capital requirements (SCR) of the risk categories using an internal model. At Group level, the SCR slightly increased to €14.7bn compared with last year's €14.4bn. In the property-casualty reinsurance segment, the higher capital requirement was mainly attributable to business growth in areas exposed to natural hazards. In the reinsurance field of business, the solvency capital requirement increased due to new business written in Life and Health, while in the ERGO field of business, the higher capital requirement was attributable to lower interest rates in the eurozone and a methodological adjustment. We use appropriate limit and early-warning systems to manage risks and limit risk concentrations. Risk is mitigated by means of reinsurance and retrocession and through the transfer of risk to the capital markets, for instance using derivative financial instruments.	41–56
D – Valuation for solvency purposes	The differences in measurement between the solvency balance sheet and IFRS financial reporting are outlined for individual balance sheet items. These differences in measurement are mainly attributable to the fact that the solvency balance sheet is a purely economic balance sheet, whilst IFRS uses a mixed measurement model. For further ease of comparison between the figures, differences between our IFRS accounts and the solvency balance sheet are explained for individual balance sheet items. One life primary insurance company uses the volatility adjustment pursuant to Article 77d of Directive 2009/138/EC. Three life primary insurance companies apply a transitional deduction on technical provisions.	57–84

E – Capital management	We pursue active capital management, which ensures that our capitalisation is needs-based and risk-commensurate. Our eligible own funds (EOF) total €43.2bn. EOF increased by €0.7bn in the reporting period. Munich Re's solvency capital requirement totalling €14.7bn as at 31 December 2018 is equivalent to a very comfortable solvency ratio of 295%. The solvency ratio shown includes transitional measures under Solvency II and the dividend for the 2018 financial year, as well as the share buy-back programme for 2019/2020. Excluding transitional measures, the solvency ratio would have been 245%.	85–100

Due to rounding, there may be minor deviations in summations and in the calculation of percentages in the present report.

Business and performance

A

A Business and performance

A 1 Business

A 1.1 General information

The parent company of Munich Re (Group) is Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company Joint-Stock Company in Munich), Königinstrasse 107, 80802 München, Germany. Munich Reinsurance Company is a joint-stock company (Aktiengesellschaft) within the meaning of the German Stock Corporation Act (AktG). Its registered seat is Munich, Germany. In addition to its function as a reinsurer, the parent also fulfils the function of holding company for the Group.

Munich Reinsurance Company has three governing bodies: the Annual General Meeting, the Board of Management and the Supervisory Board. Further details about the governing bodies can be found in section B 1.1 Administrative, management or supervisory bodies (AMSB).

Owing to our international corporate structure, we are subject to a raft of national and international legal systems, standards and corporate governance regulations. Within the Group, our own Code of Conduct binds our management and staff members to engage in ethically and legally impeccable conduct. The principles of the United Nations Global Compact have been integrated in this Code of Conduct. Further information can be found at www.munichre.com/cg-en.

KPMG Bayerische Treuhandgesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft duly audited the Group and Company financial statements and the combined management report as at 31 December 2018, and issued them with an unqualified auditor's opinion. In accordance with Section 341k of the German Commercial Code (HGB), the external auditors of German insurance companies are appointed not by the Annual General Meeting, but by the Supervisory Board.

The supervision of Munich Re is conducted by the

Federal Financial Supervisory Authority
(Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin)
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A 1.2 Legal structure

Munich Re provides both insurance and reinsurance under one roof. This enables the Group to cover large stretches of the value chain in the risk market. At the same time, it leverages synergies in revenue and costs, whilst reducing the risk-based capital required through broad diversification. Almost all reinsurance units operate worldwide under the uniform brand of Munich Re. ERGO Group AG (ERGO) is active in nearly all lines of life, health and property-casualty insurance. Munich Re's investments worldwide are managed by MEAG, which also offers its expertise to private and institutional investors outside the Group. For up-to-date information about Munich Re, visit www.munichre.com.

The reinsurance companies of the Group operate globally and in virtually all classes of business. We offer a full range of products, from traditional reinsurance to innovative solutions for risk assumption. Our companies conduct their business from their respective headquarters and via a large number of branches, subsidiaries and affiliated companies. The reinsurance group also includes specialty primary insurers, whose business requires special competence in finding appropriate solutions. These primary insurers have the words "Risk Solutions" added to their logo.

In ERGO, we combine all of Munich Re's primary insurance activities. Some 68% of gross premiums written by ERGO derive from Germany, and 32% from international business – mainly from central and eastern European countries. ERGO has also extended its activities to Asian markets such as India, China, Singapore and Thailand.

Munich Reinsurance Company and ERGO Group AG are under unified control within the meaning of the German Stock Corporation Act (AktG). The relevant statutory regulations, control agreements and Group directives govern the distribution of responsibilities and competences for key decisions between Group management and ERGO. Control and profit-transfer agreements are in place with many Group companies, especially between ERGO Group AG and its subsidiaries.

A 1.3 Qualifying holdings in Munich Reinsurance Company

As at 31 December 2018, no shareholdings exceeded 10% of the voting rights.

A 1.4 Related undertakings

Related undertakings in the scope of the Group included in our solvency balance sheet can be found in the S.32.01.22 "Undertakings in the scope of the group" quantitative reporting template (QRT) in the annex to this report.

Intra-Group transactions

During the first and second quarters, by way of intra-Group transactions Munich Reinsurance Company withdrew a total of €1,745m from an investment subsidiary that mainly holds fixed-interest securities. The transactions were intended to provide liquidity.

During the fourth quarter, Munich Reinsurance Company provided real estate used by third parties to two investment subsidiaries as a contribution in kind against the granting of company shares with a value of €918m.

Munich Re pools cash for the purposes of financial management, pooling excess liquidity of the participating Group units in a centralised account at MEAG Cash Management GmbH. The funds are pooled for the purposes of optimising returns on investment, while taking account of the individual investment terms stipulated by the participants. Short-term liquidity from the cash pool is also available to participating undertakings. In the year under review, BaFin was notified of two particularly significant cash-pool transactions.

The networking of the undertakings in our Group results in further intra-Group business relationships. Intra-Group transactions resulted from areas such as financing, reinsurance contracts, service offsetting, cost-sharing agreements, and guarantee agreements. Regular reporting to the supervisory authority takes place by means of quantitative reporting templates provided under Solvency II. In accordance with Section 274(3) of the Insurance Supervision Act (VAG), the supervisory authority is notified immediately of particularly significant transactions.

A 1.5 Material lines of business and regions

Reinsurance

Our international life and health reinsurance business is written in the Life and Health division. This is split into three geographical regions and one international unit that develops specialised solutions for capital market risks. The focus of the division's business activities is on traditional reinsurance solutions that concentrate on the transfer of mortality risk. Moreover, we have been increasingly active in the market for living benefits products. These include products such as occupational disability, long-term care, and critical illness, which have seen increased demand. We also offer capacity for longevity risks. Until now, we have concentrated our efforts in this field on the United Kingdom, but are also closely monitoring other markets.

In order to ensure proximity to our clients, we are represented in many markets with local subsidiaries and branches. We write the main portion of our business via our Canadian branch and our subsidiary in the USA. We service the European markets from our operations in Germany, the United Kingdom, Spain and Italy. At the same time, we have a strong local presence in Australia and South Africa, and in all important growth markets in Latin America and Asia. Since 2017, we also have a branch in India. Asian business is centrally managed by a dedicated branch in Singapore, which underlines the strategic importance of this region for life and health reinsurance.

Three other divisions conduct property-casualty reinsurance. Global Clients and North America handles our accounts with major international insurance groups, globally operating Lloyd's syndicates and Bermuda companies. It also pools our know-how in the North American market and is responsible for our property-casualty subsidiaries in this region and for international special-lines business such as marine, aviation and space, as well as agricultural risks.

Our Europe and Latin America Division is responsible for property-casualty business with our clients from Europe, Latin America and the Caribbean. Business Units – for example, in London, Madrid, Paris and Milan – afford us market proximity and regional competence. In the South American markets, our Brazilian subsidiary Munich Re do Brasil Resseguradora S.A. and our branch office in Bogotá help to ensure client proximity. The division also includes the divisional unit Financial Risks. Great Lakes Insurance SE, which has its headquarters in Munich and a large branch office in London, is also assigned to this division. In future, we will pool a significant share of our Group-wide business activities in the United Kingdom in these units. In consultation with the relevant supervisory authorities, we have prepared for the various scenarios and consequences of the United Kingdom leaving the European Union and will be able to continue with our business operations in any of these cases. The necessary preparatory work and measures have been initiated.

The Asia Pacific and Africa Division conducts property-casualty business with our clients in Africa, Asia, Australia, New Zealand and the Pacific Islands. Branches in Mumbai, Beijing, Seoul, Singapore, Sydney and Tokyo allow us to take full advantage of the business opportunities in the rapidly growing Asia-Pacific insurance market. In the African market, we are represented by our subsidiary Munich Reinsurance Company of Africa Ltd., headquartered in Johannesburg. These branches and other liaison offices guarantee our competitiveness in these key growth markets.

The Special and Financial Risks Division (SFR) was dissolved with effect from 1 August 2018. Globally operating SFR units were assigned to the Global Clients and North America Division, whilst units whose business focus is on Europe were allocated to the Europe and Latin America Division. At the same time, responsibility for reinsurance business in Germany was shifted from the Germany, Asia Pacific and Africa Division to the Europe and Latin America Division, which shares the same regulatory environment and has similar business models. The purpose of the reorganisation was to leverage synergies in the best possible way and also to streamline structures and processes. The business models of all units concerned remained unchanged.

ERGO

Via ERGO, we offer products in all the main classes of insurance: life insurance, health insurance, and in nearly all lines of property-casualty insurance, as well as travel insurance and legal protection insurance. With these products – in combination with the provision of assistance, other services and individual consultancy – we cover the needs of private and corporate clients. ERGO serves over 35 million (mainly private) clients in more than 30 countries, with the focus on Europe and Asia.

With ERGO Versicherung AG, our primary insurance arm is one of Germany's largest providers of property and legal protection insurance. As a specialist in capital-market-oriented insurance, ERGO Vorsorge Lebensversicherung AG is shaping change in the area of private provision and biometric risk products. ERGO Lebensversicherung AG and Victoria Lebensversicherung AG are responsible for running off our traditional life insurance portfolio. DKV Deutsche Krankenversicherung AG is a leading provider and specialist in the healthcare market, catering for both privately and statutorily insured individuals with its broad range of supplementary covers. The specialist travel insurer ERV is a market leader internationally as well as in Germany.

Under the aegis of ERGO Digital Ventures AG, ERGO Direkt Versicherungen is the online centre of competence with responsibility for direct business and provides the expertise in digital marketing that is becoming increasingly important across the market. In Europe and Asia, ERGO is represented by life and property insurers and specialised travel and legal protection insurers.

Of ERGO's European companies, those in Poland, Belgium, Spain, Austria, the Baltic states and Greece have a particularly strong market presence. In Greece, ERGO is the market leader for property-casualty insurance. As experienced experts, our legal protection insurers number among the leading players in each of their markets.

In Asia, ERGO is represented through partnerships in joint ventures in the rapidly growing markets of India and China, and in other countries. In India, HDFC ERGO continues to perform very well. In China, ERGO China Life – a joint venture with the state-owned financial investor SSAIH – is tapping into the potential of the major provinces of Shandong and Jiangsu. And in Thailand, too, our investment is performing well.

A 1.6 Significant business events

The reporting period was heavily influenced by natural catastrophe losses from Hurricanes Florence and Michael in the USA, Typhoons Jebi and Trami in Japan, and two large wildfires in California. The loss expenditure from these events was around €1.5bn.

A 1.7 Determination of consolidated data (significant differences between IFRS and Solvency II)

As a general rule, under IFRS all subsidiaries over which the parent company can exercise control are fully consolidated in the IFRS consolidated financial statements, irrespective of the business they conduct. Under Solvency II, however, the nature of the business plays a role when determining which subsidiaries are included in the Group solvency balance sheet. Here, only those subsidiary undertakings that are insurance companies, insurance holding companies, special purpose vehicles and ancillary services undertakings are fully consolidated. Alternative investment funds and undertakings for the collective investment in transferable securities (UCITS[1]) over which control can be exercised are fully consolidated in the IFRS balance sheet. In accordance with the Solvency II rules, we only recognise these types of undertaking at fair value in the Group solvency balance sheet.

1 These are investment funds in statutorily defined types of securities and other financial instruments.

Under IFRS, joint ventures and associates are accounted for using the equity method. As a general rule, joint ventures are included in the solvency balance sheet in accordance with the principle of proportional consolidation of data. Currently, Munich Re does not include any proportionately consolidated undertakings in the solvency balance sheet. We recognise undertakings for which we hold at least 20% of the voting rights as associates in our IFRS consolidated financial statements. In the solvency balance sheet, undertakings for which we own a 20% or greater share of the capital or voting rights are categorised as participating interests. For the most part, they are accounted for using the adjusted equity method. Where the share in capital is not equal to that of the voting rights, there are reporting differences between the balance sheets produced under Solvency II and IFRS.

Further information on the determination of consolidated data under Solvency II can be found in section D 1.7.2 Holdings in related undertakings, including participations, and in section E 1.3 Consolidation methods for own funds.

A 2 Underwriting performance

The premiums and results shown below refer to the figures in our Group annual report in accordance with IFRS as at 31 December 2018.

A 2.1 Group underwriting performance

Munich Re generated a technical result of €2,779m (–292m) in the reporting year. The combined ratio in property-casualty reinsurance improved to 99.4% (114.1%) of net earned premium. The previous year had been marked by exceptionally high property losses from Hurricanes Harvey, Irma and Maria. The technical result in life and health reinsurance of €503m (376m) was significantly above the previous year's result. Favourable claims experience in the USA was one of the contributing factors to the very good result. The ERGO field of business posted a very good operating performance, particularly in the ERGO International segment. The technical result was €1,027m (593m).

A 2.2 Reinsurance

A 2.2.1 Life and health reinsurance

Gross premiums written declined due to the planned termination and/or conversion of two large-volume structured reinsurance treaties. Excluding these two treaties, our premium volume would have increased, partly reflecting the persistently high demand for financially motivated reinsurance. Geographically speaking, growth was spread across Europe, Asia and the USA.

Based on premium volume, around 40% of our global reinsurance business is written in North America, with the USA (around 25%) ranking before Canada (around 15%). Some 25% of our premium comes from Europe, with approximately 10% generated in the United Kingdom and about 5% in Germany. Further substantial shares derive from Asia (around 25%) and Australia/New Zealand (approximately 10%). Our activities in the MENA region are ascribed to Asia. We are also well positioned in Africa and Latin America, but due to the small size of these markets, their share of our global business is modest (less than 5% in total).

Premium income in Europe increased to €2.7bn (2.3bn), of which €1.2bn (1.2bn) was from the United Kingdom, and a further €676m (381m) from Germany. The technical result continued to develop at a very pleasing level. Run-off profits were generated from the recapture of a treaty, whilst the technical result was negatively impacted at a comparable level by the sale of group life specialist Ellipse in the United Kingdom.

In the USA, gross premium remained largely constant at €2.8bn (2.8bn), despite the adverse effect of currency exchange rates. We therefore continue to be one of the most important reinsurers in this market, which is the largest worldwide. The technical result was significantly up on the previous year and also gratifyingly higher than we expected – mainly thanks to favourable claims experience overall, particularly in mortality business, and positive reserving effects from health business in the process of being run off. We continue to be very satisfied with the development of our new business, both in terms of volume and profitability.

In Asia, which also comprises business written in the MENA region, our premium income climbed to €2.6bn (2.1bn). New business continued to develop very well. Thanks to our broad diversification, we are in a position to benefit from the growth potential in the region. The technical result was good, and in line with expectations.

We posted a significant decline in premium income to €1.5bn (5.1bn) in Canada, mainly owing to the planned termination and/or conversion of two large-volume structured reinsurance treaties. In traditional business, we were able to retain our leading market position. The technical result was somewhat lower than expected, but still accounts for a disproportionately large contribution to the overall result.

Premium generated by our business in Australia and New Zealand remained largely constant at €827m (850m). We continue to apply a very restrictive underwriting policy in the Australian market, as major parts of disability business still do not meet our profitability requirements. Our main focus here is on the rehabilitation of our existing portfolio. Claims expenditure in this market exceeded our expectations, and we have adjusted our provision for outstanding claims as a consequence. In addition, given the expected impact of planned changes in the applicable law, we have written off part of our deferred acquisition costs. On balance, we therefore posted a negative technical result.

At €503m, the technical result was significantly higher than in the previous year (€376m). The main reason for this positive development was favourable claims experience overall, mainly on account of mortality business in the USA. By contrast, claims expenditure in Canada was slightly higher than anticipated owing to what can be assumed to be random fluctuations.

As in the previous year, Australian disability business saw increased claims expenditure, which we took into account by strengthening our provisions for outstanding claims. Furthermore, we expect a planned change in legislation to adversely impact our Australian business. In order to make allowance for the foreseeable effects this will have, we have written off part of our deferred acquisition costs. The aforementioned negative developments were largely offset by net positive reserving effects in other portions of the portfolio, including reserve releases in health reinsurance in particular. The result also benefited from the development of new business. One-off business effects balanced each other out: run-off profits were generated from the recapture of a treaty in Europe, whilst the technical result was adversely impacted by the sale of group life specialist Ellipse in the United Kingdom.

A 2.2.2 Property-casualty reinsurance

The substantial increase in premium volume was due to an expansion of business across almost all lines and regions. Key drivers included growth of existing and new business with selected clients in North America, a new large-volume reinsurance quota share treaty in Australia, and selective growth in India and China. Motor, fire, liability and marine business were the main sources of growth.

The renewals for reinsurance treaties in 2018 saw prices rise in regions affected by natural catastrophes. In other markets and lines of business, prices remained stable or increased slightly. Despite the high losses from natural catastrophes in 2017, the supply of reinsurance capacity remained high during the 2018 renewals. While prices had fallen in the previous year, they rose by approximately 0.8% in the 2018 renewals. A higher interest-rate level compared with the previous year further strengthened the profitability of our business. Overall, we are adhering to our profit-oriented underwriting policy.

Based on premium volume, around 45% of our global property-casualty reinsurance business – including Risk Solutions – is written in North America (including Canada). Around 35% of our premium comes from Europe, of which more than half is generated in the United Kingdom. Further substantial shares are contributed by Asia (about 10%), Australia/New Zealand (approximately 5%) and Latin America (approximately 5%).

In the US market, we continued to grow our existing reinsurance business with selected clients and, in addition, wrote profitable new business in the past financial year. Consequently, as in the previous year, Munich Reinsurance America Inc. increased its premium volume to €4,348m (3,409m). Reinsurance prices improved in the wake of loss events in the previous year. The year's results were again negatively affected by Hurricanes Florence and Michael. In addition, other natural hazard events such as the wildfires in California, local hail events and tornadoes also had an impact on the results. Premium income at Hartford Steam Boiler Group (HSB Group) amounted to €950m (968m). Here, we are expanding our product range of Internet of Things (IoT) insurance solutions, and through the acquisition of Relayr have considerably enhanced our know-how. American Modern posted premium income of €1,032m (1,131m). In Canada, we are represented in the area of non-life business by the Munich Reinsurance Company of Canada and Temple Insurance Company. At €313m (284m), premium volume saw a gratifying increase thanks to the expansion of attractive business.

European business is dominated by property business and UK motor business. In the United Kingdom, premium volume was up at €3,588m (3,210m). This increase was mainly attributable to the expansion of our business relationships with strategic clients. In Continental Europe, premium volume increased moderately despite the difficult market environment. Targeted growth of business, for instance in France, and alternative capital solutions more than offset the decline from our consistent cycle- and profitability-oriented portfolio management in traditional reinsurance.

In Germany, we succeeded in keeping premium income largely stable at €612m (646m) in 2018 – despite the still-challenging market environment.

In Australia and New Zealand, we significantly grew our reinsurance business to €1,210m (698m) by providing a large-volume, multi-year proportional reinsurance solution for a major client.

Premium income in Japan was slightly up on the previous year; it totalled €336m (281m).

In China, premium volume grew strongly to €822m (615m) year on year as a result of organic growth and selective expansion of business.

In India, we continued to expand our business in 2018, and premium income increased to €206m (120m). Thanks to our local branch, we are well positioned to successfully participate in the expected future growth potential.

In the Caribbean, Central and South America, we still provide high capacity for the coverage of natural hazards, in particular windstorm and earthquake. We were able to hold our strong market position with stable premium volume of €1,052m (1,050m), benefiting from higher prices and thus improved margins in the wake of the previous year's windstorm events.

At €440m (756m), premium income in agricultural business was down by 42% because we did not renew the business with one major client. The combined ratio improved year on year as a result of more favourable claims experience.

In marine business, total premium volume was up around 15% to €884m (766m), supported by a positive market environment. In addition, the combined ratio improved.

At €657m (634m), credit and bond reinsurance saw a slight increase in premium volume compared with the previous year. The pressure on rates in traditional credit business was offset by profitable new business in specialty and niche segments.

Owing to a positive market environment, premium income in direct industrial business, which we operate in our Corporate Insurance Partner unit, rose to €554m (431m). At the same time, the result was impacted by high major losses.

In aviation and space business, premium income remained largely unchanged at €504m (502m).

Expenditure for major losses was down, and the technical result increased compared with the severely hurricane-affected 2017. Adjusted for commissions, Munich Re's customary review of provisions resulted in a reduction in the basic claims provisions for prior years of around €860m for the full year, which is equivalent to around 4.6 percentage points of the combined ratio. This positive development related to almost all lines in our portfolio. The safety margin in the provisions remained unchanged year on year.

Major losses – in excess of €10m each – totalled €2,152m (4,314m) in 2018, after retrocession and before tax. This amount includes run-off profits and losses for major claims from previous years, and is equivalent to 11.6% of net earned premium. It is much lower than in the previous year, and also slightly below our major-loss expectation of 12% of net earned premium.

Aggregate losses from natural catastrophes totalled €1,256m (3,678m) for the full year. This figure is equivalent to 6.7% (22.0%) of net earned premium. The biggest loss events of the year were Hurricanes Florence and Michael in the USA, for which we expect a total expenditure of around €560m, and Typhoons Jebi and Trami in Japan, with expected losses in the region of €540m. Two major wildfires in California in November 2018 caused additional losses of approximately €430m.

At €896m, man-made major losses were up on the previous year (€636m). This figure is equivalent to 4.8% (3.8%) of net earned premium. The number of losses above the major-loss threshold was randomly higher than in previous years. The most expensive individual loss resulted from structural damage to a hydroelectric power station in Colombia.

A 2.3 ERGO

A 2.3.1 ERGO Life and Health Germany

In the ERGO Life and Health Germany segment, we report on the ERGO divisions Life Germany, Health Germany and German direct business.

The decline in gross premiums written in Life Germany was mainly attributable to lower single-premium income. New life business did not compensate for the decline in regular premium income from traditional life business caused by the planned reduction of the portfolio. In terms of annual premium equivalent (APE, i.e. regular premium income plus one-tenth of single-premium volume), which is the performance measure customary among investors, our new business volume dropped by 4.3% compared with the previous year. The significant increase in the technical result is mainly attributable to a one-off effect from changed assumptions about profit appropriation.

In the Health Germany division, gross premiums written in 2018 were up on the previous year. Premiums showed year-on-year growth of 2.3% in supplementary health insurance, and remained approximately at the previous year's level (–0.4%) in comprehensive health insurance. Growth in supplementary health insurance largely benefited from the performance of business not similar to life insurance (+12.5%). The development in comprehensive health business was partly attributable to a reduced portfolio. In travel insurance, gross premiums written were up 24.8% to €579m (464m). Contributing factors included organic growth and the integration of the non-German company Globality S.A., which formerly transacted international health business, in the first quarter of 2018. The rise in the technical result was partly due to lower claims expenditure and higher premium income.

In German direct business, gross premiums written increased year on year, in particular on account of growth of 8.9% in health insurance, mainly from supplemental dental plans. Gross premiums written in property-casualty business were also up, by 7.5%. As expected, gross premiums written in life insurance respectively decreased by 4.9% and 3.9% compared with the previous year. The decline was chiefly attributable to lower regular premiums in lump-sum life insurance. By contrast, in terms of annual premium equivalent, the volume of new life business grew slightly by 2.1% compared with the previous year. The technical result was slightly higher than in the previous year.

A 2.3.2 ERGO Property-casualty Germany

As regards the segment's premium income, our most important classes of business are motor insurance and fire and property insurance, which respectively account for around 20% and 19% of gross premiums written. Gross premiums written developed favourably year on year, mainly on account of growth of 10.0% in the other classes of business. These included marine, where underwriting agent business developed positively, and engineering insurance, which saw an increase in new business. Fire and property insurance posted an increase of 7.4% in gross premiums written, mainly on account of growth in commercial building insurance, and positive development of our homeowners' insurance portfolio. By contrast, in motor insurance and personal accident insurance we posted slightly lower premium income than in 2017, with decreases of 0.7% and 1.9% respectively. The technical result in the ERGO Property-casualty Germany segment was up on the previous year. Overall, major-loss expenditure from natural catastrophes in the past financial year remained within normal bounds. Beyond this, claims experience was favourable in our core business. At the beginning of the reporting year, natural catastrophe losses, particularly those from Winter Storm Friederike, had exceeded expectations.

A 2.3.3 ERGO International

With regard to the segment's premium income, property-casualty insurance accounts for around 53%, health for about 26% and life insurance for approximately 21%. Our biggest markets include Poland, accounting for approximately 28% of the premium volume, Belgium (approx. 19%) and Spain (approx. 15%). Despite a streamlined international portfolio, total premium income and gross premiums written remained almost at the same level compared with the previous year, bolstered by growth in international property-casualty business. Adjusted to eliminate negative currency translation effects, gross premiums written in the ERGO International segment would have increased by 1.7% compared with the previous year.

In international property-casualty business, we posted gross premiums written of €2,840m, up 2.0% compared with the previous year (€2,783m). At 11.0%, growth was especially strong in Poland, our largest market. We also increased our premium volume in the Baltic States and Austria. In international health business, gross premiums written were down 2.2% to €1,374m (1,405m), partly due to the reallocation of Globality S.A.; by contrast, we posted higher premium income in our two major markets Spain and Belgium.

At €843m (855m), gross premiums written in international life insurance business were down on the previous year by 1.4%. This was partly due to developments in Belgium, where we deliberately stopped writing new business in the middle of 2017. Total premium income in international life insurance business was down 3.5% to €1,123m (1,164m).

The technical result in the ERGO International segment improved significantly year on year. The reasons for this positive development were quantitative growth in Polish motor business, the positive effects of price adjustments in this field of business in 2017, and a higher technical result in Belgian life insurance business due to the absence of negative one-off effects.

A 3 Investment performance

A 3.1 Income and expenses with respect to investment activities

Investment result

€m	2018	Prev. year
Regular income	6,586	6,438
Write-ups/write-downs of non-derivative investments	–1,054	–241
Gains/losses on the disposal of non-derivative investments	1,582	2,494
Net balance of derivatives	103	–470
Other income/expenses	–691	–609
Total	**6,526**	**7,611**

Regular income increased slightly on the previous year, primarily due to higher income from rent and higher interest income from deposits retained on assumed reinsurance. The average reinvestment yield increased to 2.2% (1.9%) in the financial year. Due to the low interest rate level in the reporting year, yields on new investments remained lower than the average return on our existing portfolio of fixed-interest investments.

We posted higher net write-downs of non-derivative investments than in the previous year, in particular of our equity portfolio, which was affected by heavy price falls on the stock markets, especially in the fourth quarter of the year.

Net gains on disposal were lower than in the previous year, and chiefly came from our portfolio of fixed-interest securities. This is attributable to the significant decrease in the ERGO Life and Health Germany segment, which in the previous year had required higher gains on disposal to finance the additional interest reserve.

We posted a net gain from write-ups and write-downs of derivatives and from the disposal of derivatives. This was primarily due to gains on equity derivatives, which counterbalanced losses on interest, commodity and credit derivatives.

The investment result can be broken down by asset class as follows:

Investment result by type of investment (before deduction of income from technical interest)

€m	2018	Prev. year
Land and buildings, including buildings on third-party land	**563**	**324**
Investments in affiliated companies	**-3**	**-40**
Investments in associates and joint ventures	**186**	**146**
Loans	**2,092**	**2,825**
Other securities available for sale		
Fixed-interest	3,408	3,637
Non-fixed-interest	389	1,359
Other securities at fair value through profit or loss		
Held for trading		
Fixed-interest	0	0
Non-fixed-interest	–6	7
Derivatives	246	–364
Designated at fair value through profit or loss		
Fixed-interest	3	–1
Non-fixed-interest	–23	26
Deposits retained on assumed reinsurance, and other investments	**280**	**247**
Expenses for the management of investments, other expenses	**-610**	**-554**
Total	**6,526**	**7,611**

The result for land and buildings includes rental income of €489m (427m). The expenses for the management of investments include running costs and expenses for repair and maintenance of property totalling €92m (79m). We earned interest income of €1,889m (1,929m) on loans. ↗ Other securities available for sale produced regular income of €3,506m (3,547m), while derivatives generated €151m (112m). Interest expenses on non-derivative investments amounted to €8m (12m), administrative expenses to €392m (380m), and other expenses to €126m (96m).

A 3.2 Gains and losses recognised directly in equity

Unrealised gains and losses

€m	31.12.2018	Prev. year
Unconsolidated affiliated companies, associates and joint ventures not accounted for using the equity method	66	78
Associates and joint ventures accounted for using the equity method	114	89
Other securities available for sale		
Fixed-interest	4,953	7,622
Non-fixed-interest	1,817	3,261
Less		
Provision for deferred premium refunds recognised in equity	–3,273	–4,837
Deferred taxes recognised in equity	–755	–1,193
Non-controlling interests	–1	–10
Consolidation and currency translation effects	–214	–200
Adjustment item for disposal group	7	0
Total	**2,715**	**4,811**

The higher level of risk spreads and the realisation of valuation reserves were chiefly responsible for the decline in net unrealised gains on fixed-interest securities available for sale. The valuation reserves on equities decreased primarily due to negative market development.

A 3.3 Investments in securitisations

The portfolio of structured credit products at fair value increased slightly as a result of acquisitions, and totalled 2% of the overall portfolio of interest-bearing securities as at the reporting date. This asset class involves securitised receivables (asset-backed securities or mortgage-backed securities), e.g. securitisations of real estate finance, consumer credit or student loans. Around 56% of our structured credit products have a rating of AAA.

A 4 Performance of other activities

A 4.1 Munich Re as lessee

Outstanding obligations under non-cancellable operating leases totalled €438m as at 31 December 2018. The agreements mainly concern offices and business premises of the Group, IT infrastructure, and land. They include extension options as well as restrictions regarding the agreement of subleases. In the period under review, minimum lease payments of €97m (91m) and contingent lease payments of €6m (10m) were recognised as an expense.

Future minimum lease payments under operating leases

€m	31.12.2018	Prev. year
Up to one year	95	92
Over one year and up to five years	181	184
Over five years	161	133
Total	**438**	**409**

A 4.2 Munich Re as lessor

Operating leases mainly involve leased property.

Future minimum lease payments under operating leases

€m	31.12.2018	Prev. year
Up to one year	264	255
Over one year and up to five years	772	691
Over five years	682	574
Total	**1,718**	**1,520**

There were also several finance leases for property as at 31 December 2018:

Due dates

	31.12.2018			Prev. year		
€m	Gross investment	Interest element	Net investment	Gross investment	Interest element	Net investment
Minimum lease payments up to one year	0	0	0	0	0	0
Minimum lease payments of over one year and up to five years	2	1	1	2	1	1
Minimum lease payments of over five years	71	56	15	71	56	15
Total minimum lease payments	**74**	**57**	**17**	**74**	**57**	**17**
Unguaranteed residual values	41	32	9	41	33	8
Total	**115**	**89**	**25**	**115**	**90**	**25**

A 5 Any other information

No circumstances in the reporting year require explanation in the “Any other information” section.

System of governance

B

B System of governance

B 1 General information on the system of governance

B 1.1 Administrative, management or supervisory bodies (AMSB)

Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in München (Munich Reinsurance Company) has three governing bodies: the Annual General Meeting, the Board of Management and the Supervisory Board. Their functions and powers are defined by law, the Articles of Association, the Co-determination Agreement applicable to Munich Reinsurance Company, and by rules of procedure and internal guidelines. Employee co-determination on the Supervisory Board is governed by the Co-determination Agreement concluded pursuant to the German Act on the Co-Determination of Employees in Cross-Border Mergers (MgVG). There, the principle of parity co-determination on the Supervisory Board has been strengthened by taking into account staff employed in the rest of Europe.

The supervisory requirements for (re)insurance undertakings, especially the German Insurance Supervision Act (VAG) and the European supervisory regulations (Solvency II implementing measures) are placing additional demands on responsible corporate governance. They include specific rules on various issues such as business organisation or the qualifications and remuneration of members of the Board of Management, Supervisory Board members and other individuals.

Annual General Meeting
The Annual General Meeting regularly reaches a resolution on the appropriation of profits and approval of the actions of the Board of Management and Supervisory Board. Besides this, the Annual General Meeting elects the shareholder representatives on the Supervisory Board and, in particular, votes on changes to the Articles of Association and on individual capital measures. To become effective, certain corporate contracts also require the approval of the Annual General Meeting.

Board of Management
Pursuant to Article 16 of the Articles of Association, the Board of Management consists of at least two members; beyond this, the number of members is determined by the Supervisory Board. When appointing the Board of Management, the Supervisory Board pays due regard to diversity. In 2018, the Board of Management of Munich Reinsurance Company comprised eight members, one woman and seven men.

The Board of Management is responsible for managing the Company, in particular for setting the Company's objectives and determining strategy. In doing so, it is obliged to safeguard Company interests and endeavour to achieve a sustainable long-term increase in the Company's value. It should take account of the interests of shareholders, employees, and other stakeholders of Munich Reinsurance Company. The Board of Management is responsible for effecting adequate risk management and risk control in the Company. It must ensure that statutory requirements and internal Company guidelines are observed, and works to achieve their compliance by Group companies.

Supervisory Board
In compliance with Munich Reinsurance Company's Articles of Association, the Supervisory Board has 20 members. Half are representatives of the shareholders, elected by the Annual General Meeting. The other half are elected representatives of the Group's employees in the European Economic Area.

The Supervisory Board monitors the Board of Management and gives counsel where appropriate, but it is not authorised to take management action in place of the Board of Management. In accordance with a special rule applicable to (re)insurance companies, the Supervisory Board in particular also appoints the external auditor for the Company and Group financial statements and for the Half-Year Financial Report.

Collaboration between Board of Management and Supervisory Board
The Board of Management and the Supervisory Board cooperate closely for the benefit of the Company.

The Board of Management coordinates the Company's strategic approach with the Supervisory Board and discusses the current state of strategy implementation with it at regular intervals. The Board of Management reports regularly and as needed to the Supervisory Board about all questions relevant to the Company. Beyond this, the Board of Management reports to the Audit Committee on specific topics falling within the latter's scope of responsibility. The Supervisory Board has defined the Board of Management's information and reporting obligations in detail. Specific types of transaction, such as certain investments and divestments, require the Supervisory Board's consent. The Supervisory Board's approval is also required for sideline activities assumed by members of the Board of Management, and for important transactions involving members of the Board of Management or persons or undertakings closely associated with them.

Supervisory Board committees
The Supervisory Board has set up six committees; the Standing Committee, the Personnel Committee, the Remuneration Committee, the Audit Committee, the Nomination Committee and the Conference Committee. The full Supervisory Board is regularly informed about the work of the committees by their respective chairs. The committees adopt decisions by the majority of votes cast. In the event of a tie, the Chair has the casting vote. The main responsibilities of the committees are as follows:

Standing Committee
The Standing Committee prepares meetings of the Supervisory Board, unless another committee is responsible for doing so. It decides on matters of Company business requiring the Supervisory Board's consent, unless the full Supervisory Board or another committee is responsible.

It also makes amendments to the Articles of Association that concern only the wording. Furthermore, pursuant to Section 161 of the German Stock Corporation Act (AktG), the Standing Committee prepares the annual Declaration of Conformity with the German Corporate Governance Code for the Supervisory Board. It also prepares the Supervisory Board's report on the Company's corporate governance for publication in the Annual Report. Every year, it reviews the efficiency of the Supervisory Board's work and, where necessary, submits proposals to the full Supervisory Board. The Committee approves certain Company loan transactions, in particular with Prokurists (holders of full commercial power of attorney) and Supervisory Board members or related parties, as well as other Company contracts with members of the Supervisory Board. The Committee is also responsible for preparing the Supervisory Board's review of the separate Non-financial Statement. This includes preparing the selection and engagement of the auditor for a voluntary external audit of the separate Non-financial (Group) Statement.

The members of the Standing Committee are Bernd Pischetsrieder (Chair), Gerd Häusler, Henning Kagermann, Marco Nörenberg and Andrés Ruiz Feger.

Personnel Committee

The Personnel Committee prepares the appointment of members of the Board of Management and, together with the Board of Management, ensures long-term succession planning. The Personnel Committee also represents the Company in matters concerning the members of the Board of Management, and is responsible for personnel matters involving members of the Board of Management, unless these are issues that are the responsibility of the full Supervisory Board or the Remuneration Committee. The Committee has to approve loan transactions between the Company and members of the Board of Management and their related parties. It is similarly responsible for approving significant transactions between the Company (or its affiliated companies) and members of the Board of Management (and their related parties). It also decides on sideline activities that members of the Board of Management may pursue and seats they may hold on the boards of other companies.

Members of the Personnel Committee are Bernd Pischetsrieder (Chair), Henning Kagermann and Angelika Wirtz.

Remuneration Committee

As of 1 January 2018, a new Remuneration Committee was formed that has taken over responsibility for some of the tasks of the Personnel Committee. The Remuneration Committee is responsible for preparing the Supervisory Board's resolutions on the design and regular review of the remuneration system for the Board of Management, and on the total remuneration of the individual members of the Board of Management. The Remuneration Committee also prepares the Supervisory Board's resolutions regarding the assessment basis and objectives for the variable remuneration of the Board of Management, the assessment of objectives in cooperation with the Personnel Committee, the determination of the amounts to be paid, and the sections of the Board members' contracts relating to remuneration. Its members are Bernd Pischetsrieder (Chair), Ann-Kristin Achleitner and Angelika Wirtz.

Audit Committee

The Audit Committee prepares Supervisory Board resolutions on the adoption of the Company's annual financial statements and approval of the Group financial statements. It discusses the quarterly reports, and receives the audit reports and other reports and statements by the external auditor. It also discusses the essential components of the Solvency II reporting with the Board of Management.

The Committee oversees the accounting and accounting process, and the appropriateness and effectiveness of the internal control system. It also oversees the appropriateness and effectiveness of the risk management system, the compliance management system (including whistleblowing), the actuarial function system and the internal audit system. Furthermore, the Audit Committee is responsible for examining potential claims due to breach of duty by members of the Board of Management. In this respect, some of its tasks may be completed of its own accord, and some involve merely preparatory work carried out on behalf of the full Supervisory Board.

The Audit Committee prepares decisions on the appointment of the external auditor, and makes recommendations in this regard to the full Supervisory Board. It also monitors the independence and quality of the audit of the annual financial statements. It appoints the external auditor for the Company and Group financial statements, determines focal points of the audits and agrees the auditor's fee for the annual audit; the same applies to the review of the Half-Year Financial Report. Beyond this, it handles the approval and monitoring of non-audit services. After in-depth deliberations by the Board of Management, the Audit Committee prepares the annual discussion of the risk strategy by the Supervisory Board, and discusses any changes or deviations from the risk strategy with the Board of Management during the year.

In this connection, the Audit Committee hears reports not only from the Board of Management but also directly from the Group Chief Compliance Officer, the Group Chief Auditor, the Group Chief Risk Officer, the Head of the Actuarial Function, or from corporate counsel.

The members are Henning Kagermann (Chair and independent financial expert), Ann-Kristin Achleitner, Christian Fuhrmann, Anne Horstmann and Bernd Pischetsrieder.

Nomination Committee

The Nomination Committee is made up exclusively of shareholder representatives.

The Committee provides the Supervisory Board with names of suitable candidates that the latter can nominate for election at the Annual General Meeting. It has drawn up and agreed on a list of criteria on which these proposals are to be based.

Its members are Bernd Pischetsrieder (Chair), Ann-Kristin Achleitner and Henning Kagermann.

Conference Committee

The Conference Committee makes personnel proposals to the full Supervisory Board if the requisite two-thirds majority is not achieved in the initial vote when it comes to appointing or dismissing members of the Board of Management. Members of the Conference Committee are Bernd Pischetsrieder (Chair), Henning Kagermann, Marco Nörenberg and Angelika Wirtz.

Please refer to the Munich Re (Group) annual report, Corporate governance, Report of the Supervisory Board on pages 16 to 21 for details regarding the main focus of the activities of the Supervisory Board committees in the 2018 reporting year and the changes on the Supervisory Board and Board of Management.

Board of Management committees

Three Board of Management committees ensure efficient work on the Board of Management: the Group Committee, the Reinsurance Committee, and the Strategy Committee.

Group Committee

The Group Committee (GC) comprises the Chairman of the Board of Management and at least one other member of the Board of Management; these persons are Joachim Wenning and, until 31 December 2018, Jörg Schneider (from 1 January 2019: Christoph Jurecka). The Chairman of the Board of Management is also Chair of the Group Committee.

The GC is the central management committee of the Group. It decides on fundamental issues of the strategic and financial management of the Group for all fields of business, and on the principles of general business policy and organisation within the Group. The Committee also makes decisions on all matters of fundamental importance relating to the divisions headed by its voting members. It also serves as an executive committee with responsibility for important ongoing issues, in particular the approval of significant individual transactions.

Reinsurance Committee

The Reinsurance Committee (RC) comprises the following members of the Board of Management: Torsten Jeworrek, Thomas Blunck, Doris Höpke, Hermann Pohlchristoph and Peter Röder. The Chief Financial Officer for the reinsurance field of business, Andrew Buchanan, is also a member. The Chair of the Committee is appointed by the Supervisory Board; this office is held by Torsten Jeworrek.

The Reinsurance Committee is the central management committee of the reinsurance field of business. It decides on all matters of fundamental importance for this field of business.

Strategy Committee

The Strategy Committee (StratC) comprises Joachim Wenning, Torsten Jeworrek, Markus Rieß and, until 31 December 2018, Jörg Schneider (from 1 January 2019: Christoph Jurecka). The Chairman of the Board of Management is also Chair of the Strategy Committee.

The Strategy Committee is the central management committee for fundamental strategic matters in the fields of business. It decides on all matters of strategic importance to those fields.

The following applies to all Board of Management committees: Where decisions within the sphere of responsibility of a committee relate to issues reserved for the full Board of Management, the respective committee will prepare these matters for decision. Committee meetings are held regularly, and as required. Only members of the Board of Management have voting rights on the committees. The committees are further governed by their respective rules of procedure, as adopted by the full Board of Management.

Subcommittees of the Board Committees

Both the Group Committee and the Reinsurance Committee have set up subcommittees. The Group Committee has set up the Group Investment Committee and the Group Risk Committee, and the Reinsurance Committee has set up the Global Underwriting and Risk Committee and the Board Committee IT Investments. The members of these subcommittees also include other senior executives from Munich Reinsurance Company and the Group. Only members of the Board of Management have voting rights on these subcommittees.

The work of these subcommittees is governed by their own written rules of procedure. The Group Investment Committee is responsible for all significant issues affecting the investments of the Group and the fields of business. Both the Group Risk Committee and the Global Underwriting and Risk Committee deal with risk management issues, albeit with different emphases. The role of the Board Committee IT Investments is to prioritise IT investments in the reinsurance field of business and in Group functions within the framework of the business strategy.

You will find details on the composition and responsibilities of the Board of Management, Supervisory Board and the relevant committees in Munich Re's Group Annual Report 2018 on pages 19–21.

More information on corporate governance can be found at www.munichre.com/cg-en.

B 1.2 Main duties and responsibilities of the key functions

The following four Group-wide key functions have been implemented at Munich Re:

Compliance
The Head of Group Compliance and Legal (GCL) is also the Group Chief Compliance Officer (GCCO) and is responsible for the compliance function at Munich Re. The GCCO has an unrestricted right to full disclosure of and access to all information required for the discharge of his compliance duties. GCL is responsible for the compliance function at Group level and at Munich Reinsurance Company level.

The GCCO compiles a written annual compliance report for the Board of Management and the Audit Committee of the Supervisory Board of Munich Reinsurance Company. This report includes compliance topics, incidents and risks of legal changes of relevance for the Group, the status of implementation of the Group-wide compliance management system (CMS) and other developments relevant for compliance.

You will find a detailed description of the main duties and responsibilities in section B 4.3.

Internal audit
Group Audit is responsible for the internal audit function at Group level and at Munich Reinsurance Company level.

As an independent control function, Group Audit is responsible for reviewing and assessing the effectiveness and efficiency of the internal control system (ICS) and of all other components of the system of governance at Munich Re. It prepares independent and objective analyses and recommendations for the Board of Management and senior management, and provides information on the audited activities.

A description of the authorities and independence of the internal audit function is available in section B 5 Internal audit function.

Risk management function
The Group Chief Risk Officer (Group CRO) is Head of Integrated Risk Management (IRM) and is responsible for the risk management function (RMF). In this role, the Group CRO is responsible for organising and implementing an adequate risk management system at Group level and at Munich Reinsurance Company level. This includes developing the risk strategy, assessing all risks throughout the Group, and ensuring the adequacy of risk management processes.

The independence of the RMF is safeguarded and laid down in the Risk Management Policy at Munich Re (Group). The RMF of the Group is supported by the local mirror functions in the Group undertakings and by specific risk management functions at Munich Reinsurance Company. You will find a detailed description of the main duties and responsibilities of the RMF in section B 3.2.

Actuarial function
The Head of IRM1.2 Risk Analytics & Reporting is responsible for the actuarial function (AF). The AF is in charge of all activities by the actuarial functions at Group level and at Munich Reinsurance Company level.

The independence of the AF, in particular from the RMF, is safeguarded and laid down in the Risk Management Policy at Munich Re (Group). To discharge its duties, the AF works in close collaboration with the internal actuarial services of the fields of business. The main duties and authorities, and basis of collaboration, are described in section B 6.

The human resources available for all key functions are sufficient in order to meet the internal and external requirements with regard to the adequate performance of the respective function. We also consider the budget and non-monetary resources available to be adequate overall.

B 1.3 Compensation

B 1.3.1 Principles of the compensation policy
The Munich Re Group Compensation Policy (MR GCP) sets uniform and generally applicable standards for compensation policy at Munich Re (Group). Existing compensation policies at the undertakings of Munich Re (Group) remain in force and apply in addition to the MR GCP. The standards comprise substantive, procedural and formal requirements. The object of the MR GCP is to implement the regulatory requirements resulting from Solvency II in accordance with uniform principles for Munich Re (Group). The undertakings of Munich Re (Group) that are obliged to implement these requirements must implement the MR GCP in their own compensation policies, which take into account local conditions.

Pursuant to the MR GCP, the remuneration schemes of Munich Re (Group) must be established, implemented and maintained in line with the respective undertaking’s business and risk management strategy, its risk profile, objectives, risk management practices and the long-term interests and performance of the undertaking as a whole. The remuneration schemes must also incorporate measures aimed at avoiding conflicts of interest. Furthermore, the remuneration schemes must promote effective risk management and must not encourage risk-taking that exceeds the risk-tolerance limits of the undertaking.

Pursuant to the MR GCP, specific agreements must be concluded for a group of individuals that includes AMSB members, persons who effectively run the business, key functions and risk takers. These agreements must take the following into account in particular:

Where the remuneration schemes for this group of individuals include both fixed and variable components, such components must be balanced so that the fixed or guaranteed component represents a sufficiently high proportion of the total remuneration. This ensures that employees are not overly dependent on the variable components.

The payment of a substantial portion of the variable remuneration component must contain a flexible, deferred component that takes account of the nature and time horizon of the undertaking's business. This deferral period must be no less than three years and must be aligned with the nature of the business, the risks, and the activities of the employees in question. Further general requirements and specific agreements are regulated by the MR GCP.

AMSB
The principles for the members of the AMSB of Munich Reinsurance Company are documented in the Compensation Policy of Munich Reinsurance Company. They are fully taken into consideration in the compensation systems of the AMSB of Munich Reinsurance Company. With regard to the remuneration for the Board of Management of Munich Reinsurance Company, the relation of fixed and variable remuneration components was chosen such that it is balanced as far as the amount of remuneration is concerned, and does not result in any misplaced incentives to take unreasonable risk.

For the members of the AMSB of other undertakings belonging to Munich Re (Group), the principles are set out in the compensation policy of the individual undertaking. All compensation policies of the undertakings of Munich Re (Group) that are obliged to implement these requirements must be in line with the aforementioned principles of the MR GCP.

Employees
The employees of Munich Reinsurance Company are subject to the principles laid down in the MR GCP.

Another policy sets out the principles of compensation and contract terms for top managers in Munich Re's International Organisation.

The Human Resources Policy regulates not only the compensation of all employees that are not covered by the Compensation Policy for top managers in Munich Re's International Organisation, but also other benefits after termination of employment, lump-sum settlements, succession planning and staff development. The Human Resources Policy is in line with regulations at Munich Re and with the MR GCP. The remuneration components are regulated by internal company agreements.

The remuneration scheme at ERGO is based on legal requirements and regulations. The principles of compensation are described in the Compensation Policy for ERGO Group AG and its subsidiaries.

B 1.3.2 Individual and collective performance criteria
AMSB
As at 1 January 2018, a new remuneration system was introduced for the members of the Board of Management of Munich Reinsurance Company. Details on the new structure of the remuneration system for the Board of Management of Munich Reinsurance Company and on the parameters used are available in the remuneration report of the 2018 Annual Report of Munich Re (Group) under "Remuneration of the members of the Board of Management in 2018".

Members of the Supervisory Board of Munich Reinsurance Company receive fixed remuneration only.

For members of the AMSB of Munich Re (Group) whose variable remuneration is performance-related, the total amount of the variable remuneration is based on a combination of assessments of the performance of the individual and of the divisional unit concerned on the one hand, and the overall performance of the relevant undertaking or the Group on the other. Financial and non-financial criteria must be taken into account as part of the assessment of an individual's performance.

The remuneration structure for the risk takers in the International Organisation is largely geared to the remuneration scheme for members of the Board of Management of Munich Reinsurance Company.

The remuneration system for risk takers on international assignments is largely geared to the principles of remuneration for top managers in Munich Re's International Organisation.

Senior executive staff
The fixed components for Munich Reinsurance Company senior executive staff (including holders of key functions) comprise a fixed annual basic remuneration, paid out as a monthly salary, plus standard market fringe benefits and remuneration in kind (most notably a company car and a company pension scheme). The variable components are made up of the short-term components "performance-related bonus" and "Company result bonus", and the share-price-linked component Mid-Term Incentive Plan.

The performance-related bonus is based on quantitative and qualitative objectives. We use indicators from operative planning for the quantitative objectives, while personal objectives are agreed on for the qualitative portion.

The Company result bonus gives employees a share in corporate success. The key indicator used for the Company result bonus is the return on risk-adjusted capital (RORAC).

The targets correspond to the Group objective for the variable remuneration of members of the Board of Management.

Depending on the degree to which the RORAC target is met, an aggregate amount is calculated that can be distributed among staff as a bonus. The higher the management level, the higher the share of the Company result bonus in the staff member's total remuneration. The way this bonus works ensures that the performance of Munich Re as a whole is systematically reflected in the remuneration of all staff and that the bonus amount bears a reasonable relationship to overall corporate performance.

The Mid-Term Incentive Plan, with a duration of three years, provides senior executive staff with a share in the Company's sustainable added value and is based on quantitative multi-year targets. In addition, the development of the total shareholder return is taken into account. By measuring the objectives and the total shareholder return over a period of three years, a flexible deferred component is achieved under the Mid-Term Incentive Plan. The possibility of a downwards adjustment for exposure to current and future risks is included.

Besides the senior executive staff in Munich, selected executives in Munich Reinsurance Company's International Organisation also participate in the Mid-Term Incentive Plan.

The individual variable components are granted – subject to different weightings – at all management levels. For the first management level below the Board of Management, the share of aggregate variable remuneration is more than 50% of total remuneration (fixed remuneration plus all variable components). Proceeding down the management hierarchy, this percentage decreases successively, making up around one-third at the lowest management level. There is a well-balanced combination of short- and long-term components. At the first management level below the Board of Management, the Mid-Term Incentive Plan makes up around 25% of total remuneration, or more than 50% of overall variable remuneration, so that there is provision for a longer-term incentive system. No guaranteed variable remuneration components are granted.

A total remuneration approach is applied to senior executive positions at ERGO. This includes not only basic and variable remuneration components but also provision for old age and any remuneration in kind.

The remuneration system for senior executive staff at ERGO is structured in such a way that

- it is geared to achievement of the objectives laid down ERGO's strategy; in the case of changes in strategy, the structure of the remuneration system is reviewed and adjusted as required;
- it avoids negative incentives, in particular conflicts of interest and taking disproportionately high risks, and does not run counter to the monitoring function of the control units;
- it takes adequate account of significant risks and their time horizon.

The monetary remuneration for senior executive office-based staff comprises fixed remuneration only. Agreements made prior to 1 January 2018 concerning variable remuneration, the payment of which depends on the achievement of long-term incentives, will remain unaffected until the end of the agreed period in question.

The monetary remuneration for senior executive sales staff comprises fixed remueration and a variable sales success component.

We regard all remuneration components – individually and as a whole – as adequate. Information on the structure and changes to the remuneration parameters relevant to senior executive staff are provided in writing.

Non-executive staff

The fixed components for Munich Reinsurance Company non-executive staff comprise a fixed annual basic remuneration, paid out as a monthly salary and as a holiday and Christmas bonus, plus standard market fringe benefits and remuneration in kind. The variable components are made up of the short-term components "performance-related bonus" and "Company result bonus". The components correspond to those of senior executive staff.

All other international staff in the reinsurance field of business are paid an annual Company result component, 50% of which is based on global financial performance indicators. The other 50% is based on local or regional value-based management indicators. Non-executive staff must also undergo individual performance appraisals on which their annual bonus payment depends. For this purpose, objectives are agreed with the staff member's manager at the beginning of the appraisal period, and the achievement of these objectives is appraised at the end of that period.

Non-executive positions at ERGO are appraised in accordance with standardised criteria that are anchored in the salary and collective bargaining agreement for the private insurance industry, and they are allocated to a pay-scale agreement category. Non-executive staff are subject to the relevant rules agreed between the collective bargaining parties.

In addition, internal company agreements apply, which have been negotiated and concluded with the co-determination committees at local or regional level. Non-executive staff receive fringe benefits that are described in the collective bargaining agreements for the private insurance industry and in internal company agreements concluded with the co-determination committees.

B 1.3.3 Supplementary pension or early retirement schemes

AMSB

Members of the AMSB of Munich Re (Group) are generally entitled to pension benefits from a defined contribution plan. Early retirement schemes are geared to the respective country-specific circumstances. Details on supplementary pensions or early retirement schemes for members of the Board of Management of Munich Reinsurance Company are available in the remuneration report of the 2018 Annual Report of Munich Re (Group).

Members of the Supervisory Board of Munich Reinsurance Company are not entitled to pension benefits.

Senior executive staff

Senior executive staff of Munich Reinsurance Company (including holders of key functions) are entitled to pension benefits from a defined contribution plan funded by means of insurance contracts. The amount of the pensions is based on the insurance cover and generally depends on salary and length of service. The benefits include disability and old-age pensions, and pensions for surviving dependants. They are paid out in the form of annuities.

Senior executive staff receive an old-age pension if they leave the Company after reaching the age of 63. The amount of the old-age pension is based on the insurance cover when the benefit stage is reached. Senior executive staff may also receive early retirement benefits from age 62. If employment commenced prior to 1 January 2012, early old-age pension benefits will be paid from age 60 rather than 62. The amount of early retirement benefits is based on the insurance cover when the benefit stage is reached.

If a disability is deemed to exist under the terms of the insurance cover, the senior executive will receive an occupational disability pension. The amount of disability pension depends on the amount of the insured old-age pension, and increases – in excess of a fixed base amount – in line with the staff member's length of service.

Surviving dependants of a senior executive receive 60% of the insured old-age pension, and orphans receive 20% of the insured old-age pension.

If a senior executive leaves the service of the Company before a benefit becomes payable, the rules and regulations of the German Company Pension Act (BetrAVG) apply.

Senior executive staff are also members of the Munich Re pension scheme, which is a defined contribution plan.

Senior executive staff and non-executive staff at ERGO are entitled to a company pension. Under this pension scheme, benefits for senior executive staff are based on individual contractual agreements in the staff member's employment contract.

B 1.4 Material transactions

If members of the Company's Board of Management or Supervisory Board or any persons closely associated with them undertake transactions with shares, debt instruments of Munich Reinsurance Company or with associated derivatives or other related financial instruments, these transactions must be immediately notified to the Company if the total amount of transactions carried out by the Board member or person closely associated with them in a calender year totals or exceeds €5,000 within that calendar year.

Munich Reinsurance Company publishes information of this kind on its website without undue delay at www.munichre.com/cg-en.

B 2 Fit and proper requirements

B 2.1 Description of the specific requirements

The Solvency II: Fit and Proper Policy (F&P Policy) of Munich Reinsurance Company, a revised version of which came into force in 2017, lays down criteria, procedures and responsibilities to ensure the fitness and propriety of persons who effectively run the undertaking or perform other key tasks. Insurance undertakings in the EU/EEA and insurance holding companies domiciled in Germany must adopt a policy that is equivalent to the F&P Policy of Munich Reinsurance Company. By contrast, insurance undertakings outside the EU/EEA and non-insurance undertakings worldwide that are classified as risk units are obliged to implement the main requirements of the F&P Policy. Non-insurance undertakings worldwide that are not classified as risk units are only obliged to comply with local legal fit and proper requirements.

Every undertaking that is obliged to implement these requirements must adapt its F&P Policy to the local legal requirements. In the event of a contradiction, local law takes precedence. If the local legal requirements are less stringent than the requirements of the Fit and Proper Policy of Munich Reinsurance Company, the requirements of the latter apply.

The specific requirements of Munich Reinsurance Company concerning skills, knowledge and expertise applicable to the persons who effectively run the undertaking or have other key tasks are based on the relevant supervisory requirements.

Only persons that have the skills, knowledge and expertise necessary to perform the tasks assigned to them in an orderly manner may be employed to effectively run the undertaking or to be responsible for other key tasks. The fitness requirements set out depend on the responsibilities they have and the work they do. Where management duties are to be undertaken, experience in management should be taken into consideration.

Proportionality is to be applied in meeting the requirements concerning the skills, knowledge and expertise of the persons concerned.

The assessment of whether the persons who effectively run the undertaking or perform other key tasks are deemed fit includes an assessment of their professional and formal qualifications, knowledge and relevant experience within the (re)insurance sector, in other financial sectors or in other undertakings, and takes into account the duties assigned to the persons concerned and – where relevant to the position in question – their (re)insurance, financial, accounting, actuarial and management skills.

B 2.1.1 Persons who effectively run the undertaking

The undertakings of Munich Re (Group) must determine individually which persons effectively run the undertaking.

The persons who effectively run Munich Reinsurance Company include the members of the Board of Management and the heads of branches both inside and – pursuant to a decision by the Board of Management and Supervisory Board – outside the EU/EEA.

Members of the Board of Management have individual responsibility for their divisions and overall responsibility for Munich Reinsurance Company, and must be fit to assume such responsibilities. They must also be able to ensure compliance with the governance requirements at Munich Re (Group) level.

The responsibilities assigned to each individual member of the Board of Management are set out in the distribution of responsibilities. They are documented in the requirement profile for each member of the Board of Management, where the fitness requirements for the function concerned are also described in detail.

Collectively, the members of the Board of Management must have appropriate qualifications, experience and knowledge in the following areas as a minimum:

- Insurance and financial markets
- Business strategy and business model
- System of governance
- Financial and actuarial analysis
- Regulatory framework and requirements
- Internal model (risk model)

Each individual member of the Board of Management must have sufficient knowledge of all areas to be in a position to understand and exercise supervision over the actions of other members of the Board of Management. When changes are made to the membership of the Board of Management, the collective knowledge of the members of the Board of Management should be maintained at an appropriate level at all times.

The members of the Board of Management of Munich Reinsurance Company in 2018 have the professional qualifications, knowledge and experience to guarantee the sound and prudent management of Munich Reinsurance Company. They therefore have the requisite fitness.

Heads of branches inside and outside the EU/EEA are subject to the aforementioned requirements concerning members of the Board of Management in proportion to

- the influence they are able to exert on decisions at Munich Reinsurance Company,
- the significance of their branch, and
- the ability of the head of a branch to exert specific influence over outcomes, results and decisions.

All heads of branches of Munich Reinsurance Company meet the fitness and propriety requirements.

B 2.1.2 Persons responsible for other key tasks

The undertakings of Munich Re (Group) both inside and outside the EU/EEA must determine individually which persons perform other key tasks.

Persons who perform other key tasks at Munich Reinsurance Company include:

- members of the Supervisory Board, and
- holders of key functions (RMF, compliance, internal audit and actuarial function) and their deputies. The holders of key functions have overall responsibility for the Group.

Munich Reinsurance Company currently has no staff who perform additional "other key tasks" at Group level, it has not outsourced key tasks, and it has no staff who perform tasks relating to other key tasks of Munich Reinsurance Company and tasks transferred to them that are specific to those key tasks.

Members of the Supervisory Board must always have the experience and knowledge required to exercise appropriate control over and supervise the Board of Management of Munich Reinsurance Company, and to actively oversee the development of the undertaking. In order to fulfil that function, they must understand the business conducted by the undertaking and be able to assess the risks for the undertaking. Members of the Supervisory Board must be familiar with laws and regulations of relevance to the undertaking. A basic knowledge of risk management specific to insurance is useful. Collectively, the Supervisory Board must in any case have expertise in the areas of investment, underwriting and accounting. Each time a new member of the Supervisory Board is appointed, but at least once annually, it is necessary to demonstrate to the Federal Financial Supervisory Authority (BaFin) which members of the Supervisory Board have expertise in these areas.

Maintenance of fitness includes ongoing training to ensure that the members of the Supervisory Board are in a position to meet changing or increasing requirements relating to their responsibilities at the undertaking.

Notwithstanding that, each and every member of the Supervisory Board must possess sufficient theoretical and practical knowledge of all areas of the business to guarantee that appropriate control is exercised. The knowledge and experience of other members of the Supervisory Board are no substitute for the fitness of an individual member. A member of the Supervisory Board does not, in principle, have to have specialist knowledge, but must be capable of recognising when it is necessary to seek advice.

At least one member of the Supervisory Board must have expertise in accounting or auditing. The members of the Supervisory Board must collectively be familiar with the sector in which Munich Reinsurance Company operates.

The skills, knowledge and expertise needed to exercise supervision may also have been acquired in the course of exercising (previous) functions in other sectors or in public administration, or political mandates, provided that such functions or mandates involved or involve dealing with economic and legal issues over a prolonged period, and were not or have not been purely secondary in nature.

Other specific requirements are set out in the sets of criteria for the shareholder and employee representatives.

The members of the Supervisory Board of Munich Reinsurance Company in 2018 have the professional qualifications, knowledge and experience to supervise the Board of Management of Munich Reinsurance Company in a professional manner. They therefore have the requisite fitness.

Holders of key functions must always be in possession of the professional qualifications, knowledge and experience necessary for them to fulfil their position in the key function. The tasks assigned to each holder of a key function arise from the current responsibilities, and are documented in the requirement profile for each holder of a key function, where the fitness requirements are also described in detail. Collectively, the key functions must guarantee the effectiveness of the system of governance at the undertaking. Deputies of holders of key functions must also be deemed to have the requisite fitness.

The holders of key functions in 2018 have the professional qualifications, knowledge and experience to perform the relevant tasks. They therefore have the requisite fitness.

B 2.2 Assessment of fitness and propriety

The undertakings of Munich Re (Group) that are obliged to implement these requirements must determine in their respective F&P Policy the applicable provisions concerning the assessment of the fitness and propriety of persons who effectively run the undertaking or perform other key tasks.

Munich Reinsurance Company carries out an internal assessment of the fitness and propriety of persons who effectively run the undertaking and perform other key tasks prior to a first appointment, election, assignment of responsibility, or necessary reassessment. A reassessment is performed after a maximum of five years if there have been no grounds for an earlier reassessment. This applies in particular when facts and circumstances give reason to believe that a person may no longer meet the fit or proper requirements, or significant changes are made to the duties assigned. In addition, a reassessment is always carried out when the appointment of a member of the Board of Management is due for renewal and a member of the Supervisory Board is due for re-election.

The assessment or reassessment is carried out on the basis of appropriate documents. When assessing professional qualifications, these documents include a detailed curriculum vitae, employer references and evidence of further training or education. With regard to propriety, these documents comprise the BaFin form "Persönliche Erklärung mit Angaben zur Zuverlässigkeit" (personal declaration with information on propriety), a police certificate of good conduct, and an excerpt from the Gewerbezentralregister (Central Trade Register).
The result of the assessment of fitness and propriety and the reasons for the result must be documented.

Munich Reinsurance Company notifies BaFin in writing of the following persons concerned who effectively run the undertaking or perform other key tasks:

- Members of the Board of Management
- Heads of branches in the EU/EEA
- Members of the Supervisory Board
- Holders of key functions

At Munich Reinsurance Company, the following bodies and organisational units are responsible for the assessment of the fitness and propriety of the persons who effectively run the undertaking or are responsible for other key tasks:

- The Supervisory Board is responsible for assessing members of the Board of Management and – taking account of the rules of co-determination – of the members of the Supervisory Board.
- The Board of Management is responsible for the assessment of heads of branches inside and outside the EU/EEA and of holders of key functions.

The persons concerned have a duty towards Munich Reinsurance Company to cooperate in the assessment of their fitness and propriety. In particular, they must submit to Munich Reinsurance Company all necessary documents and declarations on time, in full and in the required form. Members of the Supervisory Board must additionally submit an annual self-assessment of their fitness for the office.

B 3 Risk management system including the own risk and solvency assessment (ORSA)

B 3.1 Description of the risk management system: strategies, processes and reporting procedures

Organisational structure

Munich Re has set up a system of governance as required under Solvency II. The main elements of this system are the risk management, compliance, audit and actuarial functions. At Group level, risk management is part of the Integrated Risk Management Division (IRM) and reports to the Group Chief Risk Officer (Group CRO). In addition to the Group functions, there are further risk management units in the fields of business, each headed up by its own CRO.

Risk governance

Our risk governance ensures that an appropriate risk and control culture is in place by clearly assigning roles and responsibilities for all material risks. Risk governance is supported by various committees at Group and field-of-business level. The Board of Management must consult the risk management function (RMF) on major decisions to be taken.

Defining the risk strategy

The risk strategy, which is aligned with Munich Re's business strategy, defines where, how and to what extent we are prepared to incur risks. The further development of our risk strategy is embedded in the annual planning cycle, and hence in our business planning. It is approved by the Board of Management, and discussed regularly with the Audit Committee of the Supervisory Board as a material element of the own risk and solvency assessment (ORSA) process.

We determine the risk strategy by defining limits and triggers for a number of risk criteria that are based on the capital and liquidity available, and on our earnings target, and provide a frame of reference for the Group's operating divisions.

Implementation of strategy and the risk management cycle

The risk appetite defined by the Board of Management is reflected in our business planning and integrated into the management of our operations. If capacity shortages or conflicts with the limit system or regulations arise, defined escalation and decision-making processes are followed. These have been designed to ensure that the interests of the business and risk management considerations are weighed and reconciled with each other as far as possible. Our implementation of risk management at operational level embraces the identification, analysis and assessment of all material risks. This provides a basis for risk reporting, the control of limits and monitoring.

Risk identification is performed by means of appropriate processes and indicators, which are complemented by expert opinions. Our process for early identification of risks also encompasses emerging risks, which we define as potential trends or sudden events that are characterised by a high degree of uncertainty in terms of their occurrence probability, expected loss amount, and possible effects on Munich Re.

As part of the risk analysis, a quantitative and qualitative assessment of all risks at consolidated Group level is made in order to take into account possible interactions between risks across all fields of business. Internal risk reporting provides the Board of Management with regular, detailed information on the risk situation, as regards the individual risk categories and the entire Group alike. This ensures that negative trends are identified in sufficient time for countermeasures to be taken. The purpose of our external risk reporting is to provide clients, shareholders and the supervisory authorities with a clear overview of the Group's risk situation. Actual risk limits are derived from the risk strategy: taking the defined risk appetite as a basis, limits, rules and any risk-reducing measures required are approved and implemented. We also have a comprehensive early-warning system that draws our attention to any potential shortages of capacity.

Quantitative risk monitoring based on indicators is carried out both centrally and within units. We monitor risks that cannot be expressed directly as an amount either centrally or in our units, depending on their materiality and allocation. The risk management system is regularly audited by Group Audit, external auditors and the Federal Financial Supervisory Authority (BaFin).

Control and monitoring systems

Our internal control system (ICS) is described in section B 4.

B 3.2 Risk management function

The RMF is one of four key functions within (re)insurance undertakings under Solvency II. The RMF at Munich Re is carried out locally in the individual fields of business, at MEAG – the asset manager of the Group – and in the individual insurance undertakings of the Group, as well as centrally by the central division IRM.

IRM is responsible for an integrated and Group-wide view of all risks. Its responsibility encompasses the recognition of all relevant risks, the quantification of capital requirements and a qualitative risk management process, including the development of the Group's risk strategy.

IRM is responsible for the following in particular:

- Risk identification and control
- Group-wide risk reporting
- Group-wide emerging risk management
- Internal control system and operational risk management
- Group-wide accumulation control
- Information security and business continuity risk management
- Development and maintenance of the Munich Re capital model
- Models to quantify relevant risks; calculation of risk capital
- Allocation of risk capital for management purposes (in coordination with the gatekeeper process defined by Reinsurance Controlling)
- Scenario calibration
- Risk strategy, including the definition of limit and trigger values (risk tolerance) and the ORSA
- Development of replication portfolios for measuring market risk and managing assets (for the reinsurance group)
- Risk governance

B 3.3 Governance of the internal model

IRM informs the Board of Management and Supervisory Board of Munich Reinsurance Company on an ongoing basis about the correct functioning of the Group-wide internal model. The Group Risk Committee is informed annually by IRM about the results of the validation. It is the responsibility of the Group Risk Committee to guarantee that Munich Re has adequate systems in place for identifying and measuring risks at Group and segment level. This includes the setting of principles and minimum requirements that apply throughout the Group for the development of risk models and systems.

The results of the validation are included in the annual ORSA (see section B 3.5) and are challenged and approved by the Board of Management of Munich Reinsurance Company. Validation is largely carried out by internal staff in the RMF of Munich Reinsurance Company and ERGO Group AG on the basis of a guideline applicable throughout the Group.

The actuarial function supports the RMF, in particular in shaping and implementing the internal model, for instance with regard to homogeneous risk groups or significant risks. The actuarial function also provides its actuarial expertise when testing and validating the internal model.

To ensure the necessary regular exchange of information between the key functions of the Group, the heads of the key functions regularly share important findings, for instance in the form of reports.

B 3.4 Implementation of the risk management system in the Group

We implement risk management consistently throughout the Group with the help of local mirror functions in the Group companies and specific risk management functions at Munich Reinsurance Company. The risk management objectives and principles define the basic framework for a consistent application of risk management standards throughout the Group. Strict adherence to these principles, risk management components and functions may pose a challenge in smaller-sized Group undertakings with limited human resources. In these instances, practical solutions are sought in adherence with the principle of proportionality. This means that the minimum requirements with regard to risk management must always be met taking into account undertaking-specific risks and the nature, size and complexity of the undertaking and its operations.

There is a clear assignment of roles and responsibilities between the central RMF at Group level (central function) and the RMF at individual undertakings (local mirror functions). The central function develops a framework and sets standards, ensures consistent methods, defines risk appetite and permanently ensures a common risk culture. The local units adapt and implement the framework. They act within guidelines, incorporate local specifics (e.g. legal requirements and provisions) and provide local knowledge. Further principles are:

- Standardised risk management set-up for undertakings in terms of risk management components.
- Representation at Board level: Reporting directly to a member of the local board of management (e.g. the Chief Financial Officer, CFO, or Chief Executive Officer, CEO) or the local board or senior management.

In the primary insurance and reinsurance fields of business, important risk management structures, concepts and components such as the ICS and legal entity capital models have been implemented consistently in the bigger undertakings with complex risk situations.

B 3.5 Own risk and solvency assessment – ORSA

The ORSA encompasses processes in the area of risk management, business strategy/planning and capital management. The main task of the ORSA is to combine these processes, to collect and assess the outcome of the individual processes, and to report these results at regular intervals.

It lies within the responsibility of the Group CRO to carry out the Group ORSA. The adequacy of the ORSA Policy is reviewed by the Group Risk Committee on an annual basis. The Group Risk Committee (GRC) recommends to the Board of Management that they give final approval of the document.

The results and findings of the individual procedures and processes throughout the year serve as the basis for the ORSA result report. Once the ORSA has been performed and the results have been challenged and approved by the Board of Management, communication of the results and conclusions is ensured by the Group CRO (or local head of risk management).

Certain circumstances may require a non-regular ORSA (ad-hoc ORSA). Changes in internal and/or external factors leading to a fundamental change in the risk profile and/or own funds of Munich Re, may trigger the need for an ORSA outside the regular time-scale. The results of the non-regular ORSA are reported without delay to the group supervisor outside the regular reporting dates.

The ORSA is closely linked to the Group-wide planning process, the main element of the Group-wide risk strategy and the respective decision-making processes.

The regular ORSA activities associated with the business planning process are conducted annually. The risk and solvency position is monitored on a quarterly basis. The required frequencies for the entirety of processes that contribute to the regular ORSA are defined individually.

The ORSA results and conclusions of the business planning process are submitted to the Board of Management on an annual basis. Findings from regular risk and solvency monitoring activities that are relevant to the ORSA are included in the quarterly internal risk report.

The ORSA report is discussed with the Audit Committee of the Supervisory Board. The main findings and conclusions of the ORSA are presented to the Supervisory Board.

B 3.6 Interaction between capital and risk management

We manage our business on the basis of a consolidated Group view, using a comprehensive internal model to determine the capital needed to ensure that the Group is able to meet its commitments even after extreme loss events. We use the model to determine the capital required under Solvency II (the solvency capital requirement, or SCR). The SCR is the amount of eligible own funds that Munich Re needs to have available, with a given risk tolerance, to cover unexpected losses in the following year.

Other Munich Re undertakings within the scope of application of Solvency II use either the internal model, where available, or the standard formula under Solvency II to calculate their solvency capital requirement.

The results of the internal model are used for carrying out the ORSA. Further capital requirements (e.g. rating capital) are taken into account accordingly.

The forward-looking assessment of capital adequacy is based on projections of own funds without transitional measures and of capital needs over the business planning time horizon. Where necessary, this information may be complemented by an assessment based on other capital requirements (e.g. rating capital). To this end, the respective models are calibrated to the best estimate exposures pursuant to the planning process.

The target capitalisation levels are set out in the risk strategy of Munich Re. Capital adequacy is assessed on a quarterly basis.

The ORSA identifies the potential capital needed to manage Munich Re according to its risk and business strategy. More specifically, the outcome of the ORSA feeds into the development of a capital management plan over the business planning time horizon.

To sum up, the risk strategy, business strategy and capital management of Munich Re are closely interlinked.

B 4 Internal control system

B 4.1 Description of the internal control system

Our internal control system (ICS) is an integrated system for managing operational risks that covers all risk dimensions and areas of the Group. It addresses Group management requirements, while complying with local regulations.

For each field of business, the ICS delivers a risk map at process level, thereby systematically linking every step in a process to the significant risks and the controls relating to them. By making our risk situation transparent in this way, we can react to weaknesses in a targeted manner. This enables us to identify operational risks at an early stage, locate control shortcomings immediately and take effective remedial action.

Controls carried out for the ICS at undertaking level are based on internationally recognised internal control standards.

The Audit Committee of the Supervisory Board regularly requests reports on the effectiveness of the ICS and on changes to the risk and control landscape compared with the previous year. The reports describe the controls applied and state whether all controls considered necessary have been carried out correctly.

The reports of our external auditors and Group Audit support this.

The identification, management and control of risks arising out of the accounting process is indispensable for the production of reliable annual financial statements at both consolidated and solo-undertaking level. Risks significant for financial reporting from a Group perspective are integrated into the ICS in accordance with uniform criteria. The ICS risk map is checked annually by the risk takers, and updated and amended as necessary.

B 4.2 Implementation of the ICS

Based on a standardised methodology, the ICS has been implemented throughout Munich Re. The decision about whether to include a Group undertaking in the standardised ICS was taken on the basis of the principle of proportionality – with due consideration being given to the nature, scale and complexity of the risks inherent in the undertaking's operations, and to compliance with regulatory and legal requirements. The Group undertakings that have not been integrated into the Group standard process control their risks in compliance with the principles of good corporate governance, Group-wide principles of risk management and national laws.

B 4.3 Description of the compliance function

The Board of Management of Munich Reinsurance Company has assigned the development, implementation, monitoring and ongoing improvement of the Group-wide compliance management system (CMS) to the compliance function. The Board of Management of Munich Reinsurance Company expects the legally independent undertakings of the Group to implement these requirements accordingly.

It is the responsibility of the compliance function to define the necessary organisational measures for compliant behaviour at Munich Re for top management, senior management and staff, and to monitor compliance with these measures. Where there is a reasonable suspicion of non-compliant behaviour or there are doubts about compliance with legal or regulatory requirements, the Group Chief Compliance Officer (GCCO) can initiate measures or an investigation by Group Audit, Group Legal or external consultants. If the compliance requirements are not met, the GCCO reports the matter to the Board of Management or to the responsible member of the Board of Management of the undertaking in question.

To this end, the compliance function has set up an adequate Group-wide compliance organisation that takes into account the relevant structure, business, risks and special features of the business model of Munich Re, and performs the following tasks:

- The early-warning function comprises an assessment of the effects of emerging legal changes on Munich Re. In this context, the undertakings of Munich Re regularly report on changes in their legal environment and their effects (risk of legal change). These are assessed by the compliance function at Group level. Where necessary, follow-up measures are taken.
- Risk control duties include the identification, assessment and monitoring of compliance risks within Munich Re. There is a process that identifies risks and defines adequate measures for their clarification, solution and mitigation, and follows up the implementation of these measures.
- Monitoring duties refer to compliance with the relevant legal, regulatory and internal rules and regulations within Munich Re. The compliance organisations of Munich Re develop suitable compliance controls and monitor risk-based compliance with these controls.
- The compliance function of Munich Re and the Group-wide compliance organisation provide advice and training for top and senior management, managers and staff with regard to compliance issues.

Group Compliance manages the compliance activities of Munich Re by means of Group-wide terms of reference, and monitors their implementation on the basis of the compliance management system (CMS). The CMS is the methodological framework for the structured implementation of early warning, risk control, consulting and monitoring tasks, and the monitoring of the legal environment.

The seven core areas of the CMS are: compliance culture and strategy; compliance risk management; organisation and procedures; consulting, communication and training; compliance reporting; monitoring; and documentation of compliance activities.

Each core area comprises different, undertaking-specific compliance activities. The scale and nature of implementation of these compliance activities focuses on the size of the respective undertaking, and the nature and scale of the business. Irrespective of its organisational set-up, each undertaking belonging to the Group must have appropriate organisational measures in place in order to ensure that legal, regulatory and internal requirements are complied with, including but not limited to the following compliance topics:

- Financial crime
- Financial sanctions
- Antitrust law
- Data protection law

Where other departments or central divisions are responsible for compliance topics (for example, antitrust law or data protection), the compliance organisation must monitor the methodological adequacy and effective implementation of these activities (methodological expertise).

At the instigation of the Board of Management of Munich Re, the compliance whistleblowing portal was set up as another channel to complement the independent external ombudsman, and thus strengthen compliance within Munich Re. Staff and third parties can use this portal to anonymously report suspected criminal behaviour such as bribery and corruption, contraventions of antitrust laws, insider trading rules and data protection laws, and other activities that may cause reputational damage.

B 5 Internal audit function

B 5.1 Mandate of Group Audit

Group Audit supports the Board of Management in performing its monitoring tasks. It audits in particular the system of governance and the three key functions (compliance, RMF, and AF).

Organisational set-up

Group Audit is an independent central division of Munich Reinsurance Company. The Head of Group Audit reports directly to the Chairman of the Board of Management of Munich Reinsurance Company.

Some undertakings of Munich Re (Group) have their own audit units to do the audit work. Functionally, these are downstream audit units of Group Audit that have a direct administrative reporting line to the boards of management of the individual undertakings. These downstream audit units have a direct or indirect functional reporting line to the Head of Group Audit.

Main duties

Guidelines: A uniform management framework for all Munich Re audit units, including Group Audit itself, is based on the following binding requirements:

- Minimum requirements regarding the specific form of the audit function
- Minimum requirements for internal investigations
- Uniform processes, procedures and methods, instruments, software and standards for planning and executing audits (audit reports, quarterly and annual reports), measures tracking and quality management
- Reporting duties of downstream audit units

Audit work: Group Audit is responsible for auditing all functions and processes, including the system of internal governance. This also comprises the risk management system and internal control system (ICS), and the other Solvency II key functions. The audit mandate of Group Audit, as the internal audit function of Munich Re, directly covers all fields of business and their subsidiaries. The audit mandate of Group Audit also encompasses topics concerning the Group as a whole, and topics that are relevant for the management and risk management of Munich Re.

Group Audit conducts its audits on the basis of the guidelines applicable throughout the Group.

B 5.2 Independence and objectivity

The management and staff of Group Audit are aware of the national and international regulatory requirements and standards for professional internal audit practice, and they comply with these in carrying out their duties. This includes the principles and rules governing the independence and objectivity of the internal audit function. An appropriate position in the organisational structure, a strict segregation of duties, and comprehensive quality assurance for audits ensure that the independence and objectivity of the internal audit function is adequately protected.

We are not aware of any undue influence on the audit function that might have compromised its independence and objectivity in carrying out its duties in the year under review.

Independence

Group Audit is not subject to any instructions in planning and performing audits, or in evaluating and reporting the audit results.

The right of the Board of Management to request additional audits does not compromise the independence of Group Audit. Group Audit has the right to carry out ad-hoc audits outside the approved annual planning schedule. Group Audit is obliged to follow instructions only from the Board of Management or Chairman of the Board of Management of Munich Reinsurance Company.

The Head of Group Audit has the opportunity to draw attention to situations in which the independence of the internal audit function is endangered.

Objectivity

The staff working in Group Audit are not entrusted with non-audit work. Under no circumstances do they perform tasks that are incompatible with the audit function. Staff from other departments of the undertaking may not be entrusted with internal audit tasks. However, this does not rule out staff outside Group Audit that are not permanently employed in Group Audit on the grounds of their specialist knowledge or for personal development purposes.

When assigning audit staff to audits, care is taken to ensure that no conflicts of interest arise, and that auditors are able to perform their tasks impartially and without prejudice. It is also ensured that an auditor does not audit any area for which they were responsible or shared responsibility in the preceding 12 months. Staff are not operationally active as managers or members on projects outside Group Audit.

B 6 Actuarial function

Since 1 April 2013, the actuarial function (AF) of Munich Re has been part of the Integrated Risk Management central division that is within the responsibility of the Chief Financial Officer of Munich Reinsurance Company. The AF of the Group also serves as the AF of Munich Reinsurance Company. It defines standards and basic rules for the actuarial functions of all fields of business with regard to Solvency II. The AF of Munich Re is responsible for the following:

- Coordinating the calculations of technical provisions and their regular review
- Ensuring the appropriateness of the methodologies and underlying models used, as well as of the assumptions used in the calculation of the technical provisions
- Assessing the sufficiency and quality of the data used to calculate the technical provisions
- Expressing an opinion on the overall underwriting and acceptance policy
- Expressing an opinion on the adequacy of the reinsurance agreements of the Group
- Preparing a written report for the management and supervisory bodies

For the property-casualty reinsurance, life reinsurance, and ERGO segments, individual segment AFs have been put in place that implement the requirements of the AF in their respective areas and cooperate with the AF. The heads of the relevant central divisions have a direct functional reporting line to the Group AF.

The Group undertakings within the scope of application of Solvency II have their own AFs in place. The AFs of the undertakings allocated to the ERGO field of business have a direct functional reporting line to the segment AF; the AFs for the reinsurance field of business have a direct functional reporting line to the Group AF and also work together with the segment AFs.

The AF of Munich Re notifies the Board of Management of its main activities and their outcome in writing once a year in the Group Actuarial Function Report. Severe events regarding the aforementioned responsibilities are reported by the Group AF on an ad-hoc basis to the Group Committee of the Board of Management. The Group Actuarial Function Report is also submitted to the Audit Committee of the Supervisory Board.

B 7 Outsourcing

B 7.1 Outsourcing policy

In accordance with the relevant supervisory requirements, the Board of Management of Munich Reinsurance Company has adopted a policy defining the minimum requirements for outsourcing (re)insurance activities and functions to service providers. This outsourcing standard, which applies directly to Munich Reinsurance Company, has been communicated as a Group-wide standard throughout Munich Re (Group), and is monitored accordingly.

The outsourcing policy of Munich Reinsurance Company describes the principles, minimum requirements, responsibilities, processes and reporting requirements to be adhered to during all stages of the outsourcing process, i.e. planning, implementation and termination (including contingency planning) of the relevant organisational measures. In accordance with the principle of materiality, and depending on the risks identified in each case, Munich Reinsurance Company may set different requirements for the granularity of the measures and processes in order to adequately ensure the continuity and unimpaired quality of the outsourced services at all times.

B 7.2 Outsourcing of critical or important operational activities or functions

Munich Re outsources important (re)insurance activities and functions within the Group, and to external service providers. An indicator for important outsourcing is when a Group member outsources an essential part of its (re)insurance activities and functions to a service provider, and the respective Group member is no longer fully capable of delivering its services to policyholders without the outsourced activity or function. From the perspective of Munich Re (Group), on the other hand, the outsourcing is classified as important if it may also cause material risks for Munich Re (Group).

Munich Re (Group) has high expectations and standards regarding service provision, irrespective of whether the services are provided by internal service providers (intra-Group outsourcing) or by external service providers outside the Group. Nevertheless, different internal processes are applied for selecting and managing service providers in each case.

List of important outsourcing activities of Munich Re (Group)

Name of service provider	Scope of outsourcing
MEAG AMG	Outsourcing of asset management of Munich Re (Group).
ERGO Group AG	Outsourcing of important insurance activities and functions of the German insurance undertakings in the ERGO field of business.
ERGO Beratung und Vertrieb AG	Outsourcing of the operations of the German insurance undertakings within the ERGO field of business to a central sales entity.

B 8 Any other information

B 8.1 Assessment of the adequacy of the system of governance

Munich Re has a system of governance that is adequate for the nature, scale and complexity of the risks inherent in its business. Its organisational structure is transparent, and there is a clear allocation of tasks and responsibilities. The organisational structure of the entities within the Group is documented, and updated on a regular basis.

The entities of the Group comply with the organisational principle of an adequate segregation of responsibilities. An effective internal communication system is in place. Clear functional and disciplinary reporting lines ensure the prompt transfer of information to all persons who need it in a way that enables them to recognise its importance as regards their respective responsibilities. The adequacy of Munich Re's organisational structure is reviewed on a regular basis by the organisational function at Group and field-of-business level.

The RMF, compliance, internal audit, and AF key functions are in place at Munich Re. At a minimum, they perform their tasks in accordance with supervisory requirements for the respective key function. The responsibilities of the key functions are defined at Group level, and at the level of the individual fields of business or entities of the Group. Outsourced key functions are monitored by the entities concerned in line with requirements.

The terms of reference regarding Munich Re's operational structure, and the responsibility for meeting these terms, are defined in a policy. Processes that are subject to material risks must fulfil the requirements regarding documentation and communication set out in the policy. Business continuity plans have been developed and implemented.

The Board of Management complies with its responsibility for checking the adequacy of the system of governance on a regular basis. In addition, all Group-wide key functions perform regular self-assessments.

B 8.2 Any other material information regarding the system of governance

For the reporting period, there is no other material information regarding the system of governance of Munich Re.

Risk profile

C

C Risk profile

C 1 Underwriting risk

C 1.1 Property-casualty

C 1.1.1 Risks and their assessment

The property-casualty risk category encompasses the underwriting risks in the property, motor, third-party liability, personal accident, marine, aviation and space, and credit classes of insurance, together with special lines also allocated to property-casualty.

Underwriting risk here is defined as the risk of insured losses being higher than our expectations. The premium and reserve risks are significant components of the underwriting risk. Premium risk is the risk of future claims payments relating to insured losses that have not yet occurred being higher than expected. Reserve risk is the risk of technical provisions established being insufficient to cover losses that have already been incurred. In measuring loss provisions, we follow a cautious reserving approach and assess uncertainties conservatively. In every quarter, we also compare notified losses with our loss expectancy, in order to sustain a high level of reserves.

We differentiate between large losses involving a cost exceeding €10m in one field of business, losses affecting more than one risk or more than one line of business (accumulation losses), and all other losses (basic losses). For basic losses, we calculate the risk of subsequent reserving being required for existing risks within a year (reserve risk) and the risk of under-rating (premium risk). To achieve this, we use actuarial methods that are based on standard reserving procedures, but take into account the one-year time horizon. The calibration for these methodologies is based on our own historical loss and run-off data. Appropriate homogeneous segments of our property-casualty portfolio are used for the calculation of the reserve and premium risks. To aggregate the risk to whole-portfolio level, we apply correlations that take account of our own historical loss experience.

The underwriting solvency capital requirement for property-casualty can be seen in the table "Solvency capital requirements (SCR) – Property-casualty".

The 21% jump in the reinsurance segment capital requirement is largely a consequence of the growth in the course of 2018 of business exposed to natural hazards. It should further be highlighted that a major change in the methodology used for the basic loss model has driven the SCR increase.

C 1.1.2 Risk concentration

Our internal model considers the accumulation-risk scenarios as independent events.

Munich Re's greatest exposure to natural catastrophes lies in the scenarios "Atlantic Hurricane" and "Earthquake North America". The exposure to cyber risks was up on the previous year, but remained much lower than the exposure to natural catastrophes.

The diagrams on the following page show our estimated exposure for the coming year to the peak scenarios for a return period of 200 years. This reflects the growth in business with natural hazard exposure.

Solvency capital requirements (SCR) – Property-casualty

	Reinsurance		ERGO		Diversification	
	31.12.2018	Prev. year	31.12.2018	Prev. year	31.12.2018	Prev. year
	€m	€m	€m	€m	€m	€m
Basic losses	3,894	3,330	368	351	–264	–237
Large and accumulation losses	7,003	5,654	192	197	–141	–154
Subtotal	**10,896**	**8,983**	**559**	**547**		
Diversification effect	–3,340	–2,774	–134	–144		
Total	**7,557**	**6,210**	**425**	**403**	**–347**	**–321**

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	Group			Change
	31.12.2018	Prev. year		Change
	€m	€m	€m	%
Basic losses	3,997	3,443	555	16.1
Large and accumulation losses	7,053	5,696	1,357	23.8
Subtotal	**11,051**	**9,139**	**1,912**	**20.9**
Diversification effect	–3,417	–2,847	–570	20.0
Total	**7,634**	**6,292**	**1,342**	**21.3**

Atlantic Hurricane
Aggregate VaR (return period: 200 years)
€bn (before tax), retained

Earthquake North America
Aggregate VaR (return period: 200 years)
€bn (before tax), retained

C 1.1.3 Risk-mitigation techniques and monitoring procedures

We limit our risk exposure by setting limits and budgets not only for natural catastrophe risks, for example, but also for potential man-made losses. Our experts develop scenarios for possible natural events, taking into account the scientific factors, occurrence probabilities and potential loss amounts. On the basis of these models, the impact of various events on our portfolio is calculated and represented in mathematical terms in the form of a stochastic model.

Another measure for controlling underwriting risks is the cession of a portion of our risks to other carriers via external reinsurance or retrocession. Most of our companies have intra-Group and/or external reinsurance and retrocession cover.

In addition to traditional retrocession, we use alternative risk transfer for natural catastrophe risks in particular. Under this process, underwriting risks are transferred to the capital markets via special purpose vehicles. The purpose of these vehicles is to securitise underwriting risks, mostly in the area of natural catastrophes, and to issue catastrophe bonds (insurance-linked securities).

Munich Re mainly uses special purpose vehicles registered in Ireland to transfer risk to the capital markets, but there are currently also two other special purpose vehicles from Bermuda. All special purpose vehicles are properly licensed and registered by the respective supervisory authorities. Underwriting liabilities are always fully funded. In order to minimise potential credit risk, investors' collateral is regularly invested in securities with the highest credit rating – for example, in US treasuries or World Bank bonds. The value of the collateral is checked regularly by a trustee and by means of regular reporting.

C 1.1.4 Risk sensitivity

The main stress scenarios in the property-casualty risk category arise from the accumulation risk scenarios shown in section C 1.1.2.

As well as analysing worst-case scenarios, we also look at the sensitivity of results produced by the risk model for large and accumulation losses to changes in the return periods or loss amounts for events, or a change in the business volumes written. We also consider the effect of changes of dependency assumptions on the results.

C 1.2 Life and health

C 1.2.1 Risks and their assessment

The underwriting risk is defined here as the risk of insured benefits payable in life or health insurance business being higher than expected. Of particular relevance are biometric risks and policyholder-behaviour risks, such as lapses and lump-sum options. We differentiate between risks that have a short-term or long-term effect on our portfolio. In addition to the simple risk of random fluctuations resulting in higher claims expenditure in a particular year, the adverse developments with a short-term impact that we model notably include rare – but costly – events such as pandemics.

Life primary insurance products in particular, and a large part of our health primary insurance business, are long term in nature, and the results they produce are spread over the entire duration of the policies. This can mean that negative developments in risk drivers with long-term effects sustainably reduce the value of the insurance portfolio (trend risks). The risk drivers mortality and disability are dominated by the reinsurance field of business, particularly by exposure in North America and Asia. The longevity risk driver can be found in the products marketed by ERGO in Germany together with typical risks related to policyholder behaviour, such as the lapse risk, but we also underwrite longevity risk in the reinsurance field of business, especially in the United Kingdom. To a lesser extent, risks connected with the increase in treatment costs arise in the ERGO field of business in particular.

Risk modelling attributes probabilities to potential modified assumptions, and produces a complete profit and loss distribution. We use primarily historical data extracted from our underlying portfolios to calibrate these probabilities, and additionally apply general mortality rates for the population to model the mortality trend risk. To enable us to define appropriate parameters for the modelling of the range of areas in which we operate,

Solvency capital requirements (SCR) Life and health

	Reinsurance		ERGO		Diversification		Group	
	31.12.2018	Prev. year	31.12.2018	Prev. year	31.12.2018	Prev. year	31.12.2018	Prev. year
	€m	€m	€m	€m	€m	€m	€m	€m
Health	292	220	517	344	–42	–21	766	543
Mortality	3,331	3,183	241	259	–16	–13	3,555	3,429
Disability	2,373	2,340	313	241	–15	–7	2,671	2,574
Longevity	813	666	722	509	–24	–14	1,511	1,162
Other	290	327					290	327
Diversification	–2,571	–2,404	–676	–546			–3,506	–3,121
Total	**4,527**	**4,331**	**1,116**	**808**	**–356**	**–224**	**5,288**	**4,914**

portfolios with a homogeneous risk structure are grouped together. We then aggregate the individual profit and loss distributions taking account of the dependency structure to obtain an overall distribution.

The solvency capital requirements can be seen in the table “Solvency capital requirements (SCR) Life and health”.

The solvency capital requirement for life and health increased by €374m as against the previous year to €5,288m. In the reinsurance field of business, the elevated solvency-capital requirement was primarily due to new business, while in the ERGO field of business, the lower euro interest rates and a change in method in health primary insurance led to an increase in the solvency capital requirement.

C 1.2.2 Risk concentration

Our largest short-term accumulation risk in the life and health risk category is a severe pandemic. We counter this risk by examining our overall exposure in detail using scenario analysis, and by defining appropriate measures to manage the risks.

C 1.2.3 Risk-mitigation techniques and monitoring procedures

In reinsurance, we control the assumption of biometric risks by means of a risk-commensurate underwriting policy. Interest-rate and other market risks are frequently ruled out by depositing the provisions with the cedant, with a guaranteed rate of interest from the deposit. In individual cases, these risks are also hedged by means of suitable capital-market instruments. We also limit our exposure in life insurance to individuals and groups of persons.

For primary insurance, substantial risk minimisation is achieved through product design. In case of adverse developments, parts of the provision for premium refunds – which are recognised and reversed in profit or loss – are of great significance for risk-balancing. In health primary insurance, most long-term contracts include the possibility and/or obligation to adjust premiums. Practically, however, there are limits to the resilience of policyholders. Limits are laid down for the pandemic scenarios, which affect the portfolio in the shorter term, and the longevity scenarios with their longer-term effect in conformity with the risk strategy.

C 1.2.4 Risk sensitivity

We continue to analyse the sensitivity of the internal model to the input parameters on a regular basis.
This relates to the interest rate, the biometric risk drivers, and behaviour.

C 2 Market risk

C 2.1 Risks and their assessment

We define market risk as the risk of economic losses resulting from price changes in the capital markets. It includes equity risk, general interest-rate risk, specific interest-rate risk, property-price risk and currency risk. The general interest-rate risk relates to changes in the basic yield curves, whereas the specific interest-rate risk arises from changes in credit risk spreads – for example, on euro government bonds from various issuers, or on corporate bonds. We also include in market risk the risk of changes in inflation rates and implicit volatilities (cost of options). Fluctuations in market prices affect not only our investments, but also the underwriting liabilities – especially in life insurance. Due to the long-term interest-rate guarantees given in some cases and the variety of options granted to policyholders in traditional life insurance, the amount of the liabilities can be highly dependent on conditions in the capital markets.

Market risks are modelled by means of Monte Carlo simulation of possible future market scenarios. We revalue our assets and liabilities for each simulated market scenario, thus showing the probability distribution for changes to basic own funds. ↗

The solvency capital requirements for market risks can be seen in the table "Solvency capital requirements (SCR) Market".

Equity risk

The lower equities exposure after derivatives compared with the previous year was reflected in a fall in the solvency capital requirement.

Interest-rate risks

The fall in the general interest-rate risk in the reinsurance field of business was substantially the result of a reduction in long-term liabilities. The specific interest-rate risk fell considerably in the ERGO field of business. A large part of the decrease was caused by an improved reflection of these risks in the life and health units.

In the reinsurance field of business, the market value of interest-sensitive investments as at 31 December 2018 was €67.8bn (66.6bn). Measured in terms of modified duration, the interest-rate sensitivity of those investments was 5.0 (5.8), while that of the liabilities[1] was 5.8 (5.8). The change in available own funds in the event of a decrease in interest rates of one basis point would be approximately €4.0m (7.5m).

Solvency capital requirements (SCR) – Market

	Reinsurance		ERGO		Diversification	
	31.12.2018	Prev. year	31.12.2018	Prev. year	31.12.2018	Prev. year
	€m	€m	€m	€m	€m	€m
Equity risk	2,433	3,333	1,169	1,059	–50	–50
General interest-rate risk	1,194	1,383	3,362	3,339	–891	–1,306
Specific interest-rate risk	1,381	1,394	2,530	3,329	–692	–798
Property risk	1,442	964	787	625	–91	–47
Currency risk	3,633	3,807	220	158	–80	–26
Subtotal	**10,084**	**10,881**	**8,068**	**8,510**	**–**	**–**
Diversification effect	–4,572	–4,991	–2,321	–2,903	–	–
Total	**5,513**	**5,890**	**5,746**	**5,607**	**–2,042**	**–2,276**

→

	Group			Change
	31.12.2018	Prev. year		
	€m	€m	€m	%
Equity risk	3,552	4,342	–790	–18.2
General interest-rate risk	3,664	3,416	248	7.3
Specific interest-rate risk	3,220	3,925	–705	–18.0
Property risk	2,138	1,542	596	38.7
Currency risk	3,773	3,939	–166	–4.2
Subtotal	**16,348**	**17,164**	**–816**	**–4.8**
Diversification effect	–7,131	–7,943	812	–10.2
Total	**9,217**	**9,221**	**–4**	**–0.0**

1 The liabilities mainly comprise the technical provisions in accordance with Solvency II (best estimate and risk margin). In the previous year, the entire liabilities side, including economic own funds, was considered here. The previous year's figures have been adjusted accordingly.

In the ERGO field of business, the market value of interest-sensitive investments as at 31 December 2018 was €127.8bn (130.6bn). The modified duration was 8.8 (8.8) for interest-sensitive investments and 9.2 (9.5) for liabilities. A decrease in interest rates of one basis point would have reduced the available own funds by approximately €7.6m (9.8m). This resulted in exposure to falling interest rates arising mainly out of the long-term options and guarantees in life insurance business.

Property risk

As a consequence of increases in market values of our property portfolio, there has been a significant increase in property risk.

Currency risk

The currency risk receded, primarily due to a reduction in USD positions.

C 2.2 Prudent person principle

A number of guidelines and internal processes ensure that we invest in accordance with the prudent person principle.

- We invest only if defined security, quality, profitability and liquidity criteria are met, taking account of adequate mix and diversification requirements. In addition, we ensure that we receive early warning if we are in danger of not meeting our strict liquidity requirements.
- We invest in products only if we understand the risks they involve. To ensure compliance with this principle, every single new investment product is subject to the new-product process for investments.
- We invest for the purpose of covering our underwriting liabilities, replicating significant characteristics of those liabilities on the assets side of our balance sheet and applying our own risk criterion to define a maximum deviation between underwriting and investment cash flows.
- We use derivative financial instruments to reduce our risks and manage our investment portfolio efficiently. The new-product process for investments is applied to any new type of financial derivative before it is used. All financial derivatives are recorded in our systems and taken into account in our risk measurement.
- We make very few investments in assets which are not admitted to trading on a regulated financial market. Furthermore, the investment mandates we give to our asset managers prescribe indices representing the permissible investment universe. Investments are made outside the prescribed indices only to a limited extent.
- We seek to avoid risk concentration where possible, using various risk criteria and early-warning indicators to avoid unwanted concentrations of risk on individual counterparties or sectors.

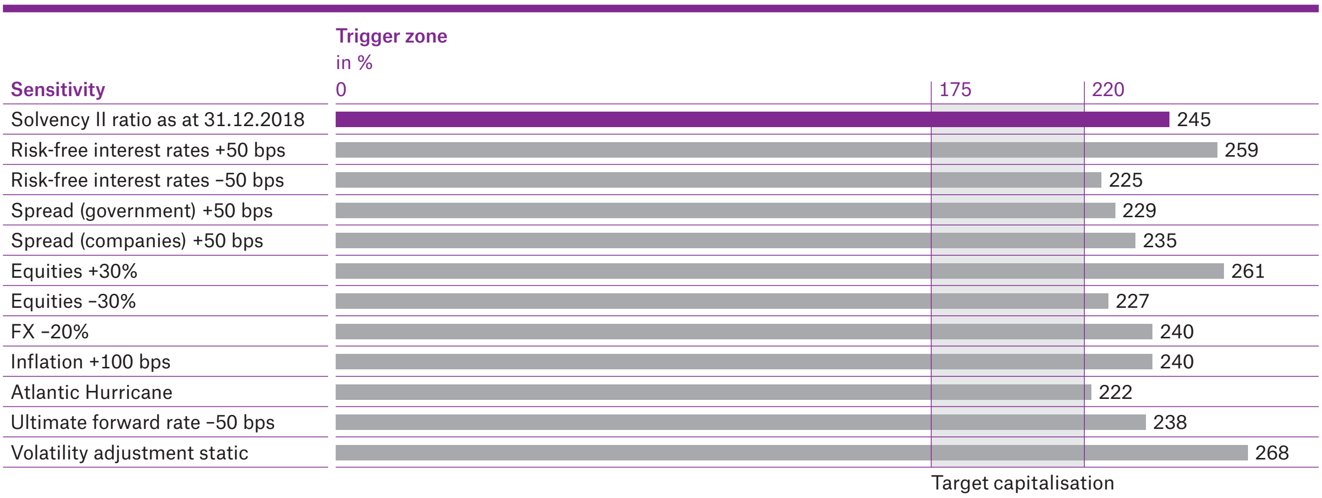
C 2.3 Risk concentration

In some instances, there are concentrations of market risks for individual issuers of loans and bonds, which we model adequately and manage. For details, please refer in particular to credit risk sections C 3.2 and C 3.3 of this report.

C 2.4 Risk-mitigation techniques and monitoring procedures

We use appropriate limit and early-warning systems in our asset-liability management to manage market risks. Derivatives such as equity futures, options and interest-rate swaps – which are used mainly for hedging purposes – also play a role in our management of the risks. The impact of options is taken into account in the calculation of solvency capital requirements.

Solvency II ratio – Sensitivity



C 2.5 Risk sensitivity

Market risks are established using a scenario-based simulation calculation. Independently of the scenarios in the risk models, we calculate the sensitivities of basic own funds with respect to possible future market scenarios. This involves analysing the mismatch position between assets and liabilities for the reinsurance field of business and property-casualty primary insurance (in particular, technical provisions). In life and health primary insurance, the effects of fluctuations in capital markets and foreign currencies on basic own funds are calculated and shown as sensitivities as follows.

The solvency ratio of 245% shown does not include transitional measures. The Atlantic Hurricane scenario corresponds to a 1-in-200-year event. The ultimate forward rate is not adjusted for stresses on the risk-free interest rate. In the ultimate-forward-rate scenario, the forward rate is reduced by 50 bps given unchanged term for the beginning of the extrapolation period.

For all evaluated scenarios, Munich Re's capitalisation remains comfortably in excess of the lower limits set at Group level.

If the same analysis is carried out for Munich Reinsurance Company, each of the solvency ratios for the individual scenarios would be about 50 percentage points higher. This difference is mainly due to the transitional measures applied at individual related undertakings. In calculating own funds for Munich Reinsurance Company, the respective adjustments by related undertakings for long-term guarantees are taken into account in the valuation of shareholdings.

C 3 Credit risk

C 3.1 Risks and their assessment

We define credit risk as the financial loss that Munich Re could incur as a result of a change in the financial situation of a counterparty. In addition to credit risks arising out of investments in securities and payment transactions with clients, we actively assume credit risk through the writing of credit and financial reinsurance and in corresponding primary insurance business.

Munich Re determines credit risks using a portfolio model, which is calibrated over a longer period (at least one full credit cycle), and which takes account of both changes in fair value caused by rating migrations and debtor default. The credit risk arising out of investments (including deposits retained on assumed reinsurance, government bonds and credit default swaps – CDSs) and reserves ceded is calculated by individual debtor. We use historical capital-market data to determine the associated migration and default probabilities. Correlation effects between debtors are derived from the sectors and countries in which they operate, and sector and country correlations are based on the interdependencies between the relevant stock indices. The calculation of the credit risk in "other receivables" is based on internal expert assessments. For life and health primary insurance business, we also take account of the share of the mitigating effect on the credit risk resulting from policyholders' participation in profits. We also capitalise the credit risk for highly rated government bonds.

Compared with the previous year, credit risk fell by €288m to €3,161m. The decline in the solvency capital requirement was mainly due to developments in the capital markets, particularly the heightened USD interest rates and a fall in the historical rating migration and default probabilities that are used to calibrate the models.

C 3.2 Risk concentration

There is risk concentration in particular with respect to government bonds from inside and outside the European Union. In addition, a large part of investments are in covered bonds and similar types of bonds. These partly result in issuer risk, and partly in risks related to the assets belonging to the cover pool. We always ensure that ratings are appropriate, and we monitor creditworthiness on an ongoing basis.

C 3.3 Risk-mitigation techniques and monitoring procedures

We use a cross-balance-sheet counterparty limit system valid throughout the Group to monitor and control our Group-wide credit risks. The limits for each counterparty (a group of companies or country) are based on its financial situation as determined by the results of our fundamental analyses, ratings and market data, and the risk appetite defined by the Board of Management. The utilisation of limits is calculated on the basis of credit-equivalent exposure (CEE). There are also volume limits for securities lending and repurchase transactions. Group-wide rules for collateral management – for example, for over-the-counter (OTC) derivatives and catastrophe bonds issued – enable the associated credit risk to be reduced. Exposure to issuers of interest-bearing securities and CDSs in the financial sector is limited by a financial sector limit at Group level.

In monitoring the country risks, we do not simply rely on the usual ratings, but perform independent analyses of the political, economic and fiscal situation in the most important of the countries issuing paper in which we might potentially invest. On this basis, and taking account of the investment requirements of the fields of business in the respective currency areas and countries, limits or action to be taken are approved. These are mandatory throughout the Group for investments and the insurance of political risks.

With the help of defined stress scenarios, our experts forecast potential consequences for the financial markets, the fair values of our investments, and the present values of our underwriting liabilities. At Group level, we counter any negative effects with the high degree of diversification in both our investments and our liability structure, and with our active Group-wide asset-liability management.

C 3.4 Risk sensitivity

The sensitivity in the credit risk model is regularly checked against the most important input parameters. This applies in particular to recovery rates in case of debtor insolvency, the probability of debtor migration between different rating classes, and the parameterisation of correlations among debtors. All validations demonstrated the adequacy of the modelling approaches selected.

C 4 Liquidity risk

C 4.1 Risks and their assessment

Our objective in managing liquidity risk is to ensure that we are in a position to meet our payment obligations at all times. To guarantee this, the liquidity position at our units is continuously monitored and subject to stringent requirements for the availability of liquidity. The short-term and medium-term liquidity planning is submitted to the Board of Management on a regular basis.

C 4.2 Risk concentration

We have not identified any risk concentration in liquidity risk.

The medium-term strategic build-up of more illiquid investments (such as infrastructure investments) leads to a gradual reduction of liquid funds as illiquid holdings increase. Within the framework of planned investments, this does not lead to any change in Munich Re's very good liquidity position.

Please refer to section C 3.2 for details about risk concentration in investments, and to section E 1.4 for information on possible restrictions on availability and transferability of own funds within the Group.

C 4.3 Expected profit included in future premiums (EPIFP)

For Munich Re (Group), the total amount of expected profit included in future premiums, calculated pursuant to Article 260(2) of Delegated Regulation (EU) 2015/35, amounts to €13,185m for life and health insurance and €955m for property-casualty insurance.

For Munich Reinsurance Company, the total amount of expected profit included in future premiums, calculated pursuant to Article 260(2) of Delegated Regulation (EU) 2015/35, amounts to €6,517m for life and health insurance and €463m for property-casualty insurance.

C 4.4 Risk-mitigation techniques and monitoring procedures

The liquidity risk is managed within the framework of our holistic risk strategy, with the Board of Management defining limits on which minimum liquidity requirements for our operations are based. These risk limits are reviewed annually, and compliance with the minimum requirements is continuously monitored. Using quantitative risk criteria, we ensure that Munich Re has sufficient liquidity available to meet its payment obligations even under adverse scenarios, with the liquidity position being assessed both for insurance catastrophe scenarios and for adverse situations in the capital markets.

The risk criteria are cumulative, and present successively greater requirements for the liquidity of investments. This includes the following:

Sub-criterion 1: Ability to meet known and expected liquidity requirements
This criterion assesses our ability to meet known and expected liquidity requirements. In the most important units of Munich Re, there is local liquidity planning, and in addition cash flows and fungible liquid investments are monitored centrally. Units with a forecast negative cash flow of at least €0.5bn over a two-year horizon are included in the internal Group risk-reporting system. Appropriate measures must be identified for these units.

Sub-criterion 2: Very large underwriting losses (insurance claims shock)
In addition to the requirements under sub-criterion 1, Munich Reinsurance Company must ensure that for Munich Re as a whole sufficient fungible and liquid investments are available to meet claims payments following a very large underwriting loss event.

Sub-criteria 1 and 2 are deemed to be fulfilled if there is a minimum of 100% cover of the liquidity requirements for various time horizons.

Sub-criterion 3: Margin and collateral requirements
This criterion applies to all units that use derivatives for investments or insurance contracts with simulated market fluctuations (daily value at risk (VaR) of 99.9% for investments and monthly VaR of 98% for insurance contracts) that can cause additional margin or collateral requirements. In this case, an additional cushion of at least the same amount of fungible, liquid investments and/or acceptable collateral must be maintained within the company concerned.

Sub-criterion 4: Liquidity stress testing
This criterion sets a framework for liquidity stress scenarios that are applied to important individual companies of Munich Re. It simulates both market losses for available liquid funds and significant additional liquidity requirements after extreme loss events in areas such as natural catastrophes or life. In addition, liquidity requirements are monitored regarding a possible fall in Munich Re's ratings.

C 4.5 Risk sensitivity

There is no sensitivity for liquidity risk in excess of the monitoring procedure.

C 5 Operational risk

C 5.1 Risks and their assessment

We define operational risk as the risk of losses resulting from inadequate or failed internal processes, incidents caused by the actions of personnel or system malfunctions, or external events. This includes criminal acts committed by employees or third parties, insider trading, infringements of antitrust law, business interruptions, inaccurate processing of transactions, non-compliance with reporting obligations, and disagreements with business partners.

We use scenario analyses to quantify operational risks. The results are fed into the modelling of the solvency capital requirement for operational risks and are validated using various sources of information, such as the ICS and internal and external loss data.

The solvency capital requirement for operational risk decreased by €175m to €1,063m as at 31 December 2018, due on the one hand to ERGO's more detailed appraisal of a number of scenarios, and risk-mitigating measures for cyber risks on the other.

C 5.2 Risk concentration

Munich Re does not have any risk concentration with respect to operational risk.

C 5.3 Risk-mitigation techniques and monitoring procedures

Operational risks are managed through our internal control system (ICS). It addresses Group management requirements, while complying with local regulations. Appropriate measures – up to and including larger projects – are used to correct identified weaknesses or mistakes. The identification of risks that are significant from a Group perspective is covered by our ICS, and these risks are reviewed by the risk carriers and process owners on a regular basis. Furthermore, the design of the ICS and compliance with the system is regularly reviewed by Group Audit.

C 5.4 Risk sensitivity

The sensitivity in the internal model is regularly checked against the most important input parameters. This mainly relates to the dependence of the result on frequency and loss amounts and the parameters for the correlations between scenarios. The analyses showed no anomalies in the year under review.

C 6 Other material risks

C 6.1 Further material risks

We use appropriate procedures to specifically identify and analyse reputational risk, strategic risk, liquidity risk and security risk. These risks are also assessed and managed in our risk management process.

C 6.1.1 Reputational risk

We define reputational risk as the risk of damage to Munich Re's reputation as a consequence of a negative public image resulting in a deterioration in its credit rating, corporate value, etc. The reputational-risk aspect of relevant issues is assessed in the fields of business by "Reputational Risk Committees". Where a reputational risk could potentially have an impact on Munich Re, central divisions at Group level are involved in the assessment.

C 6.1.2 Strategic risk

We define strategic risk as the risk of making wrong business decisions, implementing decisions poorly, or being unable to adapt to changes in the operating environment. Existing and new potential for success in the Group and the fields of business in which it operates creates strategic risks, which we manage by carrying out risk analyses for significant strategic issues and regularly monitoring the implementation of measures deemed necessary. The Chief Risk Officer is involved in operational business planning and the processes for company mergers and acquisitions.

C 6.1.3 Security risk

We define security risks as risks resulting from threats to the security of our employees, data, information, and property. We are intensifying our analysis of cyber risks in particular in recognition of the increasing importance of information technology for Munich Re's core processes and the dynamic growth of cyber crime. Security risk committees have been set up in the fields of business to steer and coordinate measures aimed at managing security risks. The members of the security risk committees are managers from operational units (e.g. IT Security), the control functions (e.g. Information Security Officer, Data Protection) and representatives of the divisional units and central divisions. To further improve cyber security, we are working together on initiatives across the fields of business.

C 6.2 Risk aggregation

The table "Solvency capital requirements (SCR)" shows the solvency capital requirement for Munich Re and its risk categories as at 31 December 2018. Compared with the status quo at 31 December of the previous year, the SCR at Group level were up slightly from €14.4bn to €14.7bn. The main drivers behind this rise was increased exposure in risk-capital intensive areas of the property-casualty and life and health reinsurance segments. The diversification effect between all categories is now just under 37%. Further information on the changes within individual risk categories can be found in the previous sections.

C 6.3 Risk concentration at Group level

Details about risk concentration in the Group can be found within the relevant subsections of sections C 1 to C 3 above. Within the Group, there is risk concentration for some subsidiaries with respect to other Group companies, particularly reinsurance relationships to Munich Reinsurance Company.

Solvency capital requirements (SCR)

	Reinsurance		ERGO		Diversification	
	31.12.2018	Prev. year	31.12.2018	Prev. year	31.12.2018	Prev. year
	€m	€m	€m	€m	€m	€m
Property-casualty	7,557	6,210	425	403	–347	–321
Life and health	4,527	4,331	1,116	808	–356	–224
Market	5,513	5,890	5,746	5,607	–2,042	–2,276
Credit	2,112	2,284	1,156	1,291	–107	–127
Operational risk	752	754	528	775	–218	–291
Other[1]	446	454	221	205		
Subtotal	**20,907**	**19,923**	**9,192**	**9,089**		
Diversification effect	–7,764	–7,397	–1,985	–1,923		
Tax	–2,346	–2,144	–633	–597		
Total	**10,798**	**10,382**	**6,574**	**6,569**	**–2,702**	**–2,597**

→

	Group			
	31.12.2018	Prev. year		Change
	€m	€m	€m	%
Property-casualty	7,634	6,292	1,342	21.3
Life and health	5,288	4,914	373	7.6
Market	9,217	9,221	–4	0.0
Credit	3,161	3,449	–288	–8.4
Operational risk	1,063	1,238	–175	–14.1
Other[1]	667	659	9	1.3
Subtotal	**27,030**	**25,773**	**1,257**	**4.9**
Diversification effect	–9,912	–9,133	–779	8.5
Tax	–2,448	–2,287	–160	7.0
Total	**14,670**	**14,353**	**317**	**2.2**

1 Capital requirements for other financial sectors, e.g. institutions for occupational retirement provisions.

C 7 Any other information

C 7.1 Global and regional economic and financial developments

Munich Re has substantial investments in the eurozone. We attach importance to maintaining a correspondingly broad diversification of investments to cover our technical provisions and liabilities in euros. However, low interest rates continue to pose major challenges, in particular for life insurance companies in the eurozone. Fluctuations in the capital markets give rise to considerable volatility in the balance sheet. We counter these risks with various risk-management measures.

Political risks in the eurozone continue to exist owing to the discord caused by conflicting national interests of the individual member states. In Italy, borrowing costs rose with the change of government in 2018. The reduction in the stimulus provided by the European Central Bank's monetary policy could cause borrowing costs to rise for some countries. Though progress has been made in the exit negotiations between the EU and the United Kingdom, it is still not possible to rule out a disorderly outcome (hard Brexit) with corresponding consequences for individual EU countries. A number of Munich Re insurance and reinsurance units conduct business in the United Kingdom, and the country's departure from the EU will have implications for that business. We have set up a Group-wide project to ensure that our local structure is adapted to the direct effects of Brexit. These preparation measures will enable Munich Re to continue to write business in the UK, regardless of the outcome of the Brexit negotiations. In addition, there may be indirect effects on our business – for instance, owing to negative economic development, falling exchange rates or rising inflation. However, also because there may be contrary effects, what this may mean for Munich Re is not currently foreseeable. Taking into account the various possible Brexit scenarios, as things stand at present we do not expect any significant negative direct or indirect effects overall on Munich Re's assets, liabilities, financial position or results.

Further escalation of the trade war, political imponderables in Europe, political and economic challenges in emerging markets (particularly Turkey and Argentina), a flare-up in the differences between the USA and North Korea, an escalation in the Middle East (especially where Iran is concerned), or heightened confrontation between Russia and the West could significantly elevate uncertainty and have noticeable consequences for the respective region and global capital markets alike.

We constantly analyse the potential impact that developments of this sort may have on our risk profile.

In Germany, government action with implications for private health insurance cannot be ruled out, especially if political parties advocating a "citizens' insurance scheme" influence the policies of a future German Federal Government. At the present time, however, it is not possible to predict what these implications might be.

Global players such as Munich Re are subject to increased fiscal pressure nationally and internationally, as well as a higher audit intensity. This trend is likely to strengthen yet further given the political spotlight on the appropriate taxation of international enterprises.

C 7.2 Climate change

Climate change represents one of the greatest long-term risks of change for the insurance industry. We expect climate change to lead to a lasting increase in extreme weather events. Our risk-management competence built up over many years and our highly developed risk models allow us to professionally assess these altered natural hazard risks and to adequately account for these risks in the solvency capital requirement as well as in contract wording and pricing.

C 7.3 Legal risks

As part of the normal course of business, Munich Re companies are involved in court, regulatory and arbitration proceedings in various countries. The outcome of pending or impending proceedings is neither certain nor predictable. However, we believe that none of these proceedings will ultimately have a significant negative effect on the financial position of Munich Re. In a ruling in December 2018, the German Federal Court of Justice endorsed the industry's existing practice with regard to trustee independence in private health insurance – an issue that had been the subject of much debate in the industry.

C 7.4 Emerging risks

We define emerging risks as trends or sudden events that are characterised by a high degree of uncertainty in terms of occurrence probability, expected loss amount, and potential impact on Munich Re.

Of course, such risks are extremely difficult to identify. We have an established, centrally coordinated emerging risk process in place that draws upon the expertise and experience available across the Group. It provides us with a solid basis of information and diverse opinions that feed into our efforts to adequately assess the risks involved.

We seek to identify trends and faint signals in many ways. For example, regular structured discussions are held in our emerging-risks think tank and our global emerging-risk community, a group of experts who investigate the possible impact of emerging risks on Munich Re. They look at interconnections and interdependencies between different risks and other consequences linked directly or indirectly to emerging risks. Cooperation with external partners, such as the CRO Forum's Emerging Risk Initiative, complements our internal early-warning system.

There is no other material information concerning the risk profile of Munich Re.

Valuation for solvency purposes

D

D Valuation for solvency purposes

D 1 Assets

Valuation of assets

Pursuant to Article 75(1)(a) of Directive 2009/138/EC, all assets shall be valued at the amount for which they could be exchanged between knowledgeable and willing parties ↗ in an arm's length transaction – that means at their fair values. In contrast, IFRS uses a mixed measurement model. That means that some assets are measured at fair value, and others are measured at amortised cost or at par value. If the valuation basis for Solvency II and IFRS is the same, we use the same fair values for both purposes. If the valuation basis is different, we explain the differences in greater detail for the respective assets. If the differences between fair values according to Solvency II and IFRS values are immaterial, assets are measured at their IFRS values.

Assets

€m	Solvency II value	Statutory accounts value
Goodwill		2,904
Deferred acquisition costs		9,212
Intangible assets	0	1,161
Deferred tax assets	303	545
Pension benefit surplus	293	0
Property, plant & equipment held for own use	3,292	2,400
Investments (other than assets held for index-linked and unit-linked contracts)	212,554	204,071
Property (other than for own use)	8,374	5,851
Holdings in related undertakings, including participations	4,341	2,509
Equities	2,402	13,073
Equities – listed	1,683	13,073
Equities – unlisted	719	0
Bonds	147,402	173,105
Government bonds	75,184	173,105
Corporate bonds	63,489	0
Structured notes	5,969	0
Collateralised securities	2,760	0
Collective investments undertakings	44,548	2,410
Derivatives	1,223	2,605
Deposits other than cash equivalents	2,921	3,219
Other investments	1,342	1,299
Assets held for index-linked and unit-linked contracts	7,621	7,399
Loans and mortgages	8,553	6,565
Loans on policies	240	239
Loans and mortgages to individuals	2,791	0
Other loans and mortgages	5,523	6,326
Reinsurance recoverables from:	4,060	4,263
Non-life and health similar to non-life	2,790	3,173
Non-life excluding health	2,550	3,071
Health similar to non-life	240	102
Life and health similar to life, excluding health and index-linked and unit-linked	1,270	1,089
Health similar to life	663	124
Life excluding health and index-linked and unit-linked	607	965
Life index-linked and unit-linked	0	0
Deposits to cedants	12,605	7,241
Insurance and intermediaries receivables	3,261	2,586
Reinsurance receivables	92	6,808
Receivables (trade, not insurance)	2,179	8,449
Own shares (held directly)	713	0
Amounts due in respect of own fund items or initial fund called up but not yet paid in	0	0
Cash and cash equivalents	2,711	4,986
Any other assets, not elsewhere shown	530	1,579
Total assets	**258,767**	**270,168**

In addition to the differences in the valuation of individual items, the structure of the solvency balance sheet also differs from that of the IFRS balance sheet. Not all balance sheet items are therefore directly comparable. Even where the valuations are identical, the figures within items may not be the same due to differences in composition. The differences are particularly significant for assets shown under investments. There are also differences in the classification of receivables and other assets, which are described under the individual items. Where it was possible to reclassify assets as per IFRS in order to comply with the structure prescribed for the solvency balance sheet, we made this reclassification for comparison purposes.

Use of judgements and estimates in recognition and measurement

Where measurement has to be based on models because no market prices are available for the calculation of the fair values required, judgement must be exercised and estimates and assumptions used. These affect both the assets and the other liabilities shown in the solvency balance sheet.

Our internal processes are geared to determining amounts as accurately as possible, taking into account all the relevant information. The basis for determining amounts is management's best knowledge regarding the items concerned at the reporting date. Nevertheless, it is in the nature of these items that estimates may have to be adjusted in the course of time to take account of new knowledge.

In the sections below, we provide a separate description of the bases, methods and main assumptions used for the recognition, measurement and reporting of each material class of assets in the solvency balance sheet and in financial reporting under IFRS.

D 1.1 Goodwill

No goodwill is shown in the solvency balance sheet.

Under IFRS, goodwill resulting from the initial consolidation of subsidiaries is recognised, and tested for impairment at least annually. We additionally carry out ad-hoc impairment tests if there are indications of impairment.

D 1.2 Deferred acquisition costs

Deferred acquisition costs are not shown as an asset in the solvency balance sheet, but are taken into account in the valuation of the technical provisions.

Under IFRS, deferred acquisition costs comprise commissions and other variable costs directly connected with the acquisition or renewal of insurance contracts.

In life business and long-term health primary insurance, deferred acquisition costs are capitalised and amortised over the duration of the contracts.

In property-casualty business, short-term health primary insurance and health reinsurance, the deferred acquisition costs are amortised on a straight-line basis over the average term of the policies of up to five years.

Deferred acquisition costs are regularly tested for impairment.

D 1.3 Intangible assets

Intangible assets are only shown in the solvency balance sheet if they are accounted for under IFRS and traded in an active market. The latter requirement is deemed to be met if an active market exists for similar assets. Since Munich Re's intangible assets currently do not meet this requirement, no amount is reported for this item in the solvency balance sheet.

Under IFRS, intangible assets mainly comprise acquired insurance portfolios and software. Acquired insurance portfolios are recognised at their present value on acquisition (PVFP – present value of future profits). This is determined as the present value of expected profits from the portfolio acquired, without consideration of new business and tax effects. The acquired insurance portfolios are amortised in accordance with the realisation of the profits from the insurance portfolios underlying the PVFP calculation. They are regularly tested for impairment.

Software is recognised at cost and amortised on a straight-line basis over a period of use of three to five years. We also recognise or reverse impairment losses if required.

D 1.4 Deferred tax assets

Under Solvency II, deferred taxes are determined pursuant to Article 15 in conjunction with Article 9 of Delegated Regulation (EU) 2015/35.

In accordance with Article 9(1) and (2) of the Delegated Regulation, assets and liabilities shall be recognised and valued in accordance with IFRS requirements, provided that these are consistent with Article 75 of Directive 2009/138/EC. Therefore, under Solvency II, deferred tax assets are recognised and valued in accordance with IAS 12. In addition, the relevant interpretative decisions issued by BaFin are taken into account.

Deferred tax assets are calculated on the basis of the difference between the values ascribed to assets recognised and valued in accordance with Article 75 of Directive 2009/138/EC, and the values ascribed to assets recognised and valued for tax purposes. Deferred taxes are determined on the basis of the tax rates of the countries concerned. Changes in tax rates and tax legislation that have already been adopted at the balance sheet date are taken into account.

Deferred tax assets are recognised in cases where asset items have to be valued lower, or liability items higher, in the solvency balance sheet than in the tax accounts of the Group company concerned, and these differences will be eliminated at a later date with a corresponding effect on taxable income (temporary differences). Also included are deferred tax assets deriving from tax loss carry-forwards and tax credits.

Deferred tax assets are recognised if there are sufficient taxable temporary differences which are expected to reverse in the same period as the deductible temporary differences. For any additional deductible temporary differences, deferred tax assets are recognised only to the extent that it is probable that future profits are available in the same period in which the deductible temporary differences are expected to reverse. A five-year result plan is used as a basis for this purpose.

Since the financial year 2017, deferred tax assets and deferred tax liabilities are disclosed on a net basis in the Munich Re solvency balance sheet, provided that they refer to the same taxable entity and tax office. The offsetting is made to the extent possible with respect to the underlying tax assets and liabilities. In 2018, deferred tax assets and deferred tax liabilities amounting to €7,352m were offset against each other. After offsetting assets and liabilities, Munich Re's net deferred tax assets amounted to €303m as at 31 December 2018. Net deferred tax liabilities came to €6,704m.

For technical provisions, there was a net surplus of deferred tax assets of €822m, taking into account a reduction of deferred tax assets of €3,282m resulting from the application of transitional measures for technical provisions. Differences in recognition and measurement between the solvency balance sheet and the tax accounts resulted in a net surplus of deferred tax assets of €479m derived from provisions for post-employment benefits. Intangible assets are not recognised in the solvency balance sheet, while expenses incurred for internally developed IT products and acquired intangible assets are recognised as assets in the tax accounts. As a result, deferred tax assets amounted to €300m. Furthermore, deferred tax assets of €665m arose from loss carry-forwards and tax credits. Net deferred tax assets for other balance-sheet items amounted to €1,243m.

Investments tend to be valued higher (at fair value) in the solvency balance sheet than in the tax accounts where they are measured at amortised cost, resulting in a significant net surplus of deferred tax liabilities of €7,514m. Deferred tax liabilities of €2,396m arose from the claims equalisation provision, which is shown in the tax accounts but not in the solvency balance sheet.

As at 31 December 2018, deductible temporary differences not recognised as deferred tax assets in the solvency balance sheet amounted to €769m.

Loss carry-forwards and tax credits totalled €5,269m in 2018, resulting in deferred tax assets of €665m.

Total tax loss carry-forwards and tax credits break down as shown in the table "Tax loss carry-forwards and tax credits".

D 1.5 Pension benefit surplus

Details about how we recognise the pension benefit surplus are set out in connection with pension benefit obligations in section D 3.3.

D 1.6 Property, plant & equipment held for own use

Property held for own use

In the solvency balance sheet, owner-occupied property is recognised under "Property, plant & equipment held for own use". In the IFRS accounts, it is shown under other assets.

Tax loss carry-forwards and tax credits

€m	For which deferred tax assets are recognised	For which deferred tax assets are not recognised	31.12.2018 Total
Tax loss carry-forwards	**2,932**	**2,209**	**5,141**
Corporation tax loss carry-forwards	**1,459**	**1,987**	**3,446**
Expiring in up to three years	29	35	64
Expiring in over three years and up to ten years	184	147	331
Expiring in over ten years	291	0	291
Not expiring	955	1,805	2,760
Trade tax loss carry-forwards	1,473	221	1,694
Not expiring	1,473	221	1,694
Tax credits	**54**	**74**	**128**
Expiring in up to three years	5	8	13
Expiring in over three years and up to ten years	49	66	115
Expiring in over ten years	0	0	0
Not expiring	0	0	0

Under Solvency II, we measure land and buildings at fair value. Valuations for the directly held portfolio are performed by valuers within the Group, and those for the indirectly held portfolio are carried out by external valuers. Determining the sustainability of cash inflows and outflows, taking into account the market conditions at the property location, is material for valuation. The fair value is determined individually per item by discounting the future cash flow to the valuation date.

Under IFRS, land and buildings are measured at amortised cost. Buildings are depreciated on a straight-line basis. If the recoverable amount of land and buildings falls below their carrying amount, the carrying amount is written down to the recoverable amount.

Plant and equipment held for own use

For reasons of simplification, plant and equipment is recognised at its IFRS value in the solvency balance sheet, i.e. at amortised cost. Items are depreciated over their useful lives to reflect the decline in utility, unless they are written down to a lower value for impairment.

Our lease agreements are mainly operating leases in accordance with IAS 17, which are recognised neither in the solvency balance sheet nor under IFRS.

Munich Re as lessee: At the balance sheet date, future minimum lease payments under non-cancellable operating leases totalled €438m. The agreements mainly concern offices and business premises of the Group, IT infrastructure, and land. They include extension options as well as restrictions regarding the agreement of subleases.

Munich Re as lessor: Operating leases mainly involve leased property. At the balance sheet date, future minimum lease payments under non-cancellable leases totalled €1,718m.

Finance lease agreements – which are disclosed in our IFRS consolidated financial statements – are not material for our solvency position.

D 1.7 Investments (other than assets held for index-linked and unit-linked contracts)

D 1.7.1 Property (other than for own use)

For both solvency balance sheet and IFRS purposes, land and buildings not held for own use are measured in the same way as owner-occupied property, i.e. fair values are used for the solvency balance sheet, and amortised cost for IFRS.

D 1.7.2 Holdings in related undertakings, including participations

This item comprises the following holdings in related undertakings:

- Subsidiary undertakings not fully consolidated
  These include certain collective investment undertakings having separate legal personality (investment companies), financial or credit institutions, investment firms, institutions for occupational retirement provision, alternative investment fund managers, UCITS management companies, non-regulated undertakings carrying out financial activities and ancillary services undertakings classified as immaterial from a Group perspective; and

- Jointly controlled entities not proportionally consolidated
  These include certain collective investment undertakings having separate legal personality (investment companies), financial or credit institutions, investment firms, institutions for occupational retirement provision, alternative investment fund managers, UCITS management companies, non-regulated undertakings carrying out financial activities and ancillary services undertakings classified as immaterial from a Group perspective; and

- Any Munich Re participations.

Not included in this item are related undertakings taken into account in the consolidated data for the calculation of Group solvency in accordance with Article 335(1)(a–c) of the Delegated Regulation. These include interests in special purpose vehicles as well as subsidiary undertakings and jointly controlled entities that are insurance or reinsurance undertakings (whether or not the latter are from the EEA), insurance holding companies, mixed financial holding companies or material ancillary services undertakings, as these interests must be fully or proportionally consolidated for the calculation of Group solvency. For holdings in jointly controlled entities not included through proportional consolidation, Munich Re uses the valuation hierarchy explained below.

Holdings in related undertakings that are financial or credit institutions, investment firms, institutions for occupational retirement provision, alternative investment fund managers, UCITS management companies or non-regulated undertakings carrying out financial activities are valued on the basis of the proportional share of the undertaking's own funds calculated in accordance with the relevant sectoral rules.

For any other holdings in related undertakings included in this item, Munich Re applies the following valuation hierarchy for determining fair value as at the balance sheet date:

- The default valuation approach is the use of quoted market prices in active markets for the same assets.

- If the use of quoted market prices in active markets for the same assets is not possible because the relevant related undertaking is not listed on a stock exchange, Munich Re measures its holdings
  - based on the share of the excess of assets over liabilities in accordance with the Solvency II valuation rules, if the relevant related undertaking is a collective investment undertaking having separate legal personality or an insurance or reinsurance undertaking from the EEA;
  - based on the equity method pursuant to IAS 28, Investments in Associates and Joint Ventures, if the relevant related undertaking is not a collective investment undertaking having separate legal personality and not an insurance or reinsurance undertaking from the EEA, but is valued based on the equity method in Munich Re's consolidated financial statements pursuant to IFRS as it is considered material. Contrary to IAS 28, goodwill and other intangible assets are deducted from the value determined under IFRS using the equity method;
  - based on an alternative valuation method if the relevant related undertaking is not a collective investment undertaking having separate legal personality and not an insurance or reinsurance undertaking, and in addition it is not valued based on the equity method in Munich Re's consolidated financial statements pursuant to IFRS as it is considered immaterial.

Taking into consideration the principles of materiality, Munich Re uses

- the equity method for related undertakings not listed on a stock exchange that are not subject to supervision at individual entity level, and where the share of the excess of assets over liabilities in accordance with Solvency II valuation rules would therefore have to be calculated for Group solvency purposes only;

- an alternative valuation method for related undertakings not listed on a stock exchange that are considered immaterial under IFRS and thus are not valued using the equity method in Munich Re's consolidated financial statements.

In contrast to IFRS, where any material subsidiary is fully consolidated (irrespective of the business activity or type of undertaking), for the calculation of the Group solvency balance sheet, subsidiary undertakings are subject to full consolidation only if they are insurance or reinsurance undertakings (whether or not the latter are from the EEA), insurance holding companies, mixed financial holding companies or material ancillary services undertakings.

Under IFRS, interests in material associates are always accounted for using the equity method, while interests in immaterial subsidiaries and associates are measured at quoted market prices if available. If quoted market prices are not available, the alternative valuation method outlined above is applied, i.e. the undertaking's net asset value or local equity value is normally used.

The complete list of holdings in related undertakings of Munich Re can be found in QRT S.32.01.22 (Undertakings in the scope of the group).

D 1.7.3 Other financial assets

In the solvency balance sheet, we value all other financial assets at fair value. Where a price is quoted in active markets (i.e. at market value), that price should be used. If no market price is available, valuation models are used in which observable market inputs are applied as far as possible. The same valuation principles are followed as under IFRS.

Determining fair values

Since market values are not available for all assets and liabilities, IFRS has a valuation hierarchy with three levels. Though Solvency II does not explicitly name the levels, it does provide for equivalent differentiation in the assessment of the fair values used. The allocation reflects which of the fair values derive from transactions in the market and where valuation is based on models because market transactions are lacking.

In the case of Level 1, valuation is based on unadjusted quoted prices in active markets for identical financial assets which Munich Re can refer to at the balance sheet date.

A market is deemed active if transactions take place with sufficient frequency and in sufficient quantity for price information to be available on an ongoing basis. Since a quoted price in an active market is the most reliable indicator of fair value, this should always be used if available. The financial instruments we have allocated to this level mainly comprise equities, equity funds and exchange-traded derivatives.

Assets allocated to Level 2 are valued using models based on observable market data. For this, we use inputs directly or indirectly observable in the market, other than quoted prices. Quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets in inactive markets are also considered Level 2 valuations. If the financial instrument concerned has a fixed contract period, the inputs used for valuation must be observable for the whole of this period. The financial instruments we have allocated to this level mainly comprise bearer bonds and bond funds, borrowers' note loans, covered bonds, subordinated securities and derivatives not traded on the stock market.

For assets allocated to Level 3, we use valuation techniques not based on inputs observable in the market. This is only permissible insofar as no observable market data is available. The inputs used reflect Munich Re's assumptions regarding the factors which market players would consider in their pricing. We use the best available information for this, including internal company data. The financial instruments allocated to this level of the fair value hierarchy largely comprise land and buildings, real estate funds, funds that mainly invest in theoretically valued instruments, investments in infrastructure and private equity, certain credit structures, and holdings in related undertakings and associates measured at fair value. Insurance-linked derivatives are also allocated to Level 3.

In the case of loans not traded on an active market, we have decided on a case-by-case basis to which level of the fair value hierarchy to allocate the respective fair values.

At each half-yearly reporting date, we assess whether the allocation of our assets and liabilities to the levels of the fair value hierarchy is still appropriate. If changes in the valuation basis have occurred – for instance, if a market is no longer active or the valuation was performed using inputs requiring another allocation – we make the necessary adjustments.

The following table provides an overview of the models used to measure the fair values of our investments when market prices are not available.

Valuation techniques for assets

Bonds	Pricing method	Parameters	Pricing model
Interest-rate risks			
Loans against borrower's note/ registered bonds	Theoretical price	Sector-, rating- or issuer-specific yield curve	Present-value method
Cat bond (host)	Theoretical price	Interest-rate curve	Present-value method
Mortgage loans	Theoretical price	Sector-specific yield curve	Present-value method

Derivatives	Pricing method	Parameters	Pricing model
Equity and index risks			
OTC stock options	Theoretical price	Listing of underlying shares Effective volatilities Money-market interest rate Dividend yield	Black-Scholes (European) Cox, Ross and Rubinstein (American) Monte Carlo simulation
Equity forwards	Theoretical price	Listing of underlying shares Money-market interest rate Dividend yield	Present-value method
Interest-rate risks			
Interest-rate swaps	Theoretical price	CSA/swap curve	Present-value method
Swaptions/interest-rate guarantee	Theoretical price	At-the-money volatility matrix and skew OIS/swap curve	Bachelier/ Normal Black
Interest-rate currency swaps	Theoretical price	Swap curve Currency spot rates Money-market interest-rate curve	Present-value method
Inflation swaps	Theoretical price	Zero-coupon inflation swap rates OIS curve	Present-value method
Bond forwards (forward transactions)	Theoretical price	Listing of underlying Swap curve	Present-value method
Currency risks			
Currency options	Theoretical price	Volatility skew Currency spot rates Money-market interest-rate curve	Garman-Kohlhagen (European)
Currency forwards	Theoretical price	Currency spot rates Currency forward rates/ticks Money-market rates	Present-value method
Other transactions			
Insurance derivatives (excluding variable annuities)	Theoretical price	Fair values of cat bonds Historical event data Interest-rate curve	Present-value method
Insurance derivatives (variable annuities)	Theoretical price	Biometric rates and lapse rates Volatilities Interest-rate curve Currency spot rates	Present-value method
Catastrophe swaps	Theoretical price	Fair values of cat bonds Interest-rate curve	Present-value method
Credit default swaps	Theoretical price	Credit spreads Recovery rates Interest-rate curve	Present-value method ISDA CDS Standard Model
Total return swaps on commodities	Theoretical price	Listing of underlying index	Index ratio calculation
Commodity options	Theoretical price	Listing of underlying Effective volatilities Money-market interest rate	Black-Scholes (European) Cox, Ross and Rubinstein (American)

Bonds with embedded derivatives	Pricing method	Parameters	Pricing model
Callable bonds	Theoretical price	Money-market/swap interest-rate curve Issuer-specific spreads Volatility matrix	Hull-White model
CMS floaters	Theoretical price	Money-market/swap interest-rate curve Issuer-specific spreads Volatility matrix	Hull-White model
CMS floaters with variable cap	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew	Replication model (Hagan)
Inverse CMS floaters	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew	Replication model (Hagan)
CMS steepeners	Theoretical price	OIS/swap interest-rate curve Issuer-specific spreads Volatility skew Correlation matrix	Replication model (Hagan) Stochastic volatility model
Convergence bonds	Theoretical price	Money-market/swap interest-rate curves Issuer-specific spreads Volatility matrix Correlation matrix	Replication model (Hagan) Stochastic volatility model
Multi-tranches	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
FIS loans against borrower's note	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield curve	Bachelier/ Normal Black, Present-value method
Swaption notes	Theoretical price	At-the-money volatility matrix and skew Swap curve Money-market interest-rate curve Sector-, rating- or issuer-specific yield rate curve	Bachelier/ Normal Black, Present-value method

Funds	Pricing method	Parameters	Pricing model
Real estate funds	–	–	Net asset value
Alternative investment funds (e.g. private equity, infrastructure, forestry)	–	–	Net asset value

Other	Pricing method	Parameters	Pricing model
Real estate	Theoretical market price	Interest-rate curve Market rents	Present-value method or valuation
Alternative direct investments (e.g. infrastructure, forestry)	Theoretical market price	Interest-rate curve (among others) Electricity price forecast and inflation forecast	Present-value method or valuation
Bank borrowing	Theoretical market price	Interest-rate curve	Present-value method

Insurance-linked derivatives (excluding variable annuities) are allocated to Level 3 of the fair value hierarchy. The valuation of the derivative components of catastrophe bonds is based on the values supplied by brokers for the underlying bonds, which is why it is not possible to quantify the inputs used that were not based on observable market data. If no observable inputs are available for customised insurance-linked derivatives, the present-value method on the basis of current interest-rate curves and historical event data is used. Due to the low volume involved, the effects of alternative inputs and assumptions are immaterial.

The inputs requiring consideration in the valuation of variable annuities are derived either directly from market data, in particular volatilities, interest-rate curves and currency spot rates, or from actuarial data, especially biometric and lapse rates. The lapse rates used are modelled dynamically and range between 0.5% and 50%, depending on the specific insurance product and current situation of the capital markets. Compared with the market risk parameters relevant for the calculation of fair values, the effects of an increase or decrease in lapse rates on fair value would be immaterial. The assumptions with regard to mortality are based on published mortality tables, which are adjusted with a view to the target markets and the actuaries' expectations. The impact of these and other non-observable assumptions is not material. The dependency between different capital market parameters is modelled by correlation matrices. We allocate these products to Level 3 of the fair value hierarchy.

The other investments allocated to Level 3 are mainly external fund units (in particular, private equity, real estate and funds that invest in a variety of assets that are subject to theoretical valuation) as well as relatively illiquid credit structures (especially commercial mortgage-backed securities and collateralised loan obligations). In the case of the former, market data are not available on a regular basis; rather, net asset values (NAVs) are provided by the asset managers. With regard to the latter, the quality of the market quotes available from market data providers is insufficient, so we resort to broker valuations. With these investments, we thus do not perform our own valuations using inputs not based on observable market data. We regularly subject the valuations supplied to plausibility tests on the basis of comparable investments.

Measurement categories according to IFRS

Unlike in the solvency balance sheet, pursuant to IAS 39 we have four categories of financial instruments with differing measurement requirements. The classification depends on the type and purpose of the financial assets and is determined when the instrument is acquired or issued.

Under IFRS, all financial instruments are initially measured at fair value. If an instrument is not subsequently measured at fair value through profit or loss, transaction costs relating directly to acquisition or issuance are to be taken into account.

The categories for subsequent measurement of financial assets under IAS 39 are listed below:

Loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, including loans on policies. They are measured at amortised cost in accordance with the effective interest method. Write-downs for impairments are made in cases where the repayment of a loan can no longer be expected.

The loans consist of mortgage loans (€6,326m), loans on policies (€239m) and other loans (€48,280m). The other loans mainly comprise covered bonds and government bonds.

In the solvency balance sheet, loans and mortgages – including loans on policies – are not shown as part of the investments, but are recognised at fair value separately from the investments (see D 1.9 Loans and mortgages).

Under IFRS, fixed-interest or non-fixed-interest securities available for sale that are not designated as at fair value through profit or loss or recognised under loans are accounted for at fair value. Unrealised gains or losses are calculated taking into account interest accrued and, after deduction of deferred taxes and the amounts apportionable to policyholders by the life and health insurers on realisation (provision for deferred premium refunds), are recognised directly in equity under "other reserves".

Securities at fair value through profit or loss comprise securities held for trading and securities designated as at fair value through profit or loss. Securities held for trading mainly include all derivative financial instruments with positive fair values. Securities designated as at fair value through profit or loss comprise structured securities and securities designated as at fair value in order to avoid accounting mismatches. Securities at fair value through profit or loss are accounted for at fair value at the balance sheet date.

In addition to the breakdown into different measurement categories, insurance-related investments are accounted for separately in our IFRS consolidated financial statements. These include investments for unit-linked life insurance contracts (see section D 1.8 Assets held for index-linked and unit-linked contracts) and other insurance-related investments.

The other insurance-related investments are investments that are not utilised for asset-liability management. These include insurance-linked derivatives, derivatives to hedge variable annuities, weather and commodity derivatives, and physical gas. Insurance risks are defined as risks which – in a modified form – can also be covered by an insurance contract within the meaning of IFRS 4. Other insurance-related investments are accounted for at fair value, and we recognise changes in value in profit or loss. For physical gas, the fair value is reduced by estimated costs to sell.

Other investments, which are also accounted for separately in the IFRS financial statements, comprise deposits with banks totalling €3,219m, investments in renewable energies amounting to €662m, forestry investments of €265m, and physical gold of €372m. Deposits with banks are measured at amortised cost in accordance with the effective interest method. Investments in renewable energies are generally accounted for at amortised cost. Forestry investments fall into the category of biological assets and include standing wood. They are accounted for at fair value less costs of disposal, with impact on profit or loss.

Where financial assets are also to be valued at fair value under IFRS, the valuation is exactly the same as for the solvency balance sheet.

The classification of investments in the solvency balance sheet is fundamentally different from that under IFRS. For supervisory purposes, investments are classified into different types on the basis of the Complementary Identification Codes (CIC). In financial reporting under IFRS, investments are broken down into the measurement categories described above. Therefore, the differences in valuation (compared with IFRS values) are not directly evident from the solvency balance sheet structure.
IFRS and the solvency balance sheet do not differ in the valuation of securities available for sale, securities measured at fair value through profit or loss and insurance-related investments. These are generally measured at fair value. Under IFRS, financial assets recognised under loans are measured at amortised cost. As at 31 December 2018, these came to €54,854m compared with a fair value of €64,298m recognised in the solvency balance sheet. Assets recognised as other investments under IFRS are also measured at amortised cost. They amounted to €4,518m at the balance sheet date, which was also the fair value recognised in the solvency balance sheet.

Impairment

For IFRS, at each balance sheet date we assess whether there is any substantial objective evidence of impairment in a financial asset or group of financial assets that are accounted for at amortised cost or at fair value without impact on profit or loss. We determine acquisition cost on the basis of the average purchase price. In the case of an impairment, a write-down is made to the fair value at the balance sheet date and recognised as an expense in the consolidated income statement.

As all assets in the solvency balance sheet are shown at fair value, no impairment rules are required.

For the same reason, no rules exist under Solvency II regarding the unbundling of embedded derivatives or hedge accounting.

D 1.8 Assets held for index-linked and unit-linked contracts

These are investments for policyholders under unit-linked life insurances. Both in the solvency balance sheet and under IFRS (investments for unit-linked life insurance contracts), we account for them at fair value. In our consolidated financial statements (IFRS), we show these investments under the item insurance-related investments.

D 1.9 Loans and mortgages

In the solvency balance sheet, loans and mortgages – including loans on policies – are shown as a separate line item outside the investments. They are measured at fair value.

Under IFRS, we recognise all loans as part of the investments, measuring them at amortised cost. We perform regular impairment tests to check whether their value has fallen and a write-down to fair value is required. If, in a subsequent period, the reasons for the impairment cease to apply, the impairment loss is reversed in profit or loss. The resultant carrying amount may not exceed the original amortised cost.

D 1.10 Reinsurance recoverables

Reinsurance recoverables are dealt with in section D 2 Technical provisions.

D 1.11 Deposits to cedants

Deposits to cedants serve directly as collateral for technical provisions covering business assumed and may not be used by cedants independently. The credit risk is therefore limited. The amount of and changes in these deposits in the financial year generally derive from the values for the changes in the related technical provisions for the reinsured business. Deposits to cedants thus do not have a fixed maturity date, their release generally being dependent on the run-off of the corresponding provisions.

In the solvency balance sheet, deposits to cedants are measured at fair value.

Under IFRS, deposits to cedants ("deposits retained on assumed reinsurance") are measured at nominal value. If receivables become doubtful, they are written down for impairment.

D 1.12 Insurance and intermediaries receivables

In the solvency balance sheet, insurance and intermediaries receivables are measured at fair value, taking counterparty default risk into account.

Under IFRS, we recognise insurance and intermediaries receivables at face value. We perform regular impairment tests to check whether their value has fallen. The amount of the probable loss is measured as the difference between the amortised cost and the present value of estimated future cash flows. If, in a subsequent period, the reasons for the impairment cease to apply, the impairment loss is reversed in profit or loss. The resultant carrying amount may not exceed the original amortised cost.

D 1.13 Reinsurance receivables

In the solvency balance sheet, reinsurance receivables are measured at fair value, taking counterparty default risk into account.

Under IFRS, we recognise reinsurance receivables at face value. We perform regular impairment tests to check whether their value has fallen. The amount of the probable loss is measured as the difference between the amortised cost and the present value of estimated future cash flows. If, in a subsequent period, the reasons for the impairment cease to apply, the impairment loss is reversed in profit or loss. The resultant carrying amount may not exceed the original amortised cost.

In the solvency balance sheet (unlike in IFRS), receivables from brokerage and from reinsurance business assumed are not recognised under reinsurance receivables, but under insurance and intermediaries receivables.

D 1.14 Receivables (trade, not insurance)

In the solvency balance sheet, the receivables (trade, not insurance) include in particular receivables from dividends, receivables from profit pooling or transfer agreements, receivables from taxes, and other receivables. These receivables must be measured at fair value. However, for reasons of simplification, receivables from dividends and receivables from profit pooling or transfer agreement s are recognised at their IFRS carrying amount, i.e. at amortised cost. Doubtful receivables are written down to the estimated recoverable amount.

Receivables from taxes and other receivables are discounted, taking into account the actual risk-free interest rates and relevant interest-rate spreads. The individual business partner's credit risk is also taken into consideration.

In the solvency balance sheet, all insurance contracts are recognised under technical provisions irrespective of the level of insurance risk involved in the individual contracts. Therefore, receivables resulting from reinsurance contracts without significant risk transfer, which do not fall within the scope of IFRS 4, are – notwithstanding IFRS – not reported as receivables, but as part of the technical provisions.

Under IFRS, we recognise receivables at amortised cost. Doubtful receivables are written down to the estimated recoverable amount, and an impairment loss is recognised in profit or loss.

Both reinsurance receivables and insurance and intermediaries receivables are included in other receivables under IFRS, but shown as separate items in the solvency balance sheet.

D 1.15 Own shares (held directly)

This item includes own shares held by Munich Re. Under Solvency II, own shares are measured at fair value. When determining own funds, this amount has to be deducted from basic own funds.

Under IFRS, own shares are not shown separately as an asset in the balance sheet, but have to be deducted from shareholders' equity.

D 1.16 Amounts due in respect of own fund items or initial fund called up but not yet paid in

This item is currently not relevant for Munich Re.

D 1.17 Cash and cash equivalents

Under Solvency II, the face value of cash is considered to be the fair value. Transferable deposits (including cheques) are valued at amortised cost (usually this is the par value). Credit risk is taken into account by write-downs of doubtful deposits and doubtful cheques to the estimated recoverable amount.

Under IFRS, cash held is accounted for at face value.

D 1.18 Any other assets, not elsewhere shown

"Any other assets, not elsewhere shown" covers all assets that cannot be allocated to any other class of assets. In contrast to our IFRS financial reporting, in the solvency balance sheet hedging derivatives (€20m) are reclassified as derivatives.

As a basic principle, in the solvency balance sheet all other assets are to be measured at fair value. Similar to IFRS, prepayments are calculated pro rata temporis and cover the period between the reporting date and the date the corresponding benefit is earned or becomes due. In contrast to IFRS, prepayments are discounted under Solvency II taking into account the actual relevant risk-free interest rate and relevant interest-rate spreads, unless the effect from discounting is immaterial.

In the solvency balance sheet, inventories are measured using the relevant IFRS carrying amounts, i.e. the estimated realisable value. If, in the normal course of business, the value falls below the value of the acquisition costs, inventories are to be written down to this value.

D 2 Technical provisions

D 2.1 Description of the valuation methodologies used for solvency purposes

D 2.1.1 Overall requirements for technical provisions

Insurance and reinsurance undertakings have to establish technical provisions with respect to all of their insurance and reinsurance obligations towards policyholders, cedants and beneficiaries. The value of the technical provisions corresponds to the current amount the undertakings would have to pay if they were to transfer their insurance and reinsurance liabilities immediately to another insurance or reinsurance undertaking. The calculation of technical provisions must make use of and be consistent with information provided by the financial markets and generally available data on underwriting risks (market consistency). Technical provisions must be calculated in a prudent, reliable and objective manner. Following the principles set out above, the calculation of technical provisions is carried out as described below. ↗

D 2.1.2 Calculation of technical provisions

Technical provisions are calculated using established principles for actuarial valuation. Manuals of methods for Solvency II – and for the calculation of technical provisions in particular – ensure consistent valuation approaches throughout Munich Re. In this context, we set out requirements regarding segmentation of business, data used, economic and operational (e.g. biometric) assumptions, and methods and models.

In general, the value of technical provisions is equal to the sum of a best estimate and a risk margin as explained below.

The best estimate corresponds to the probability-weighted average of future cash-flows, taking account of future developments and uncertainties. It also takes discount effects into account and uses the relevant risk-free interest rate term structure. As at the reporting date, we do not make use of any transitional measures regarding the relevant risk-free interest rate term structure, nor do we use matching adjustments. Three life primary insurance companies apply a transitional deduction on technical provisions. Another life primary insurance company makes use of volatility adjustment pursuant to Article 77(d) of Directive 2009/138/EC.

Technical provisions

€m	Solvency II value
Technical provisions – non-life	58,054
Technical provisions (TP) – non-life (excluding health)	54,742
TP calculated as a whole	112
Best estimate	53,211
Risk margin	1,420
Technical provisions – health (similar to non-life)	3,311
TP calculated as a whole	13
Best estimate	3,159
Risk margin	138
Technical provisions – life (excluding index-linked and unit-linked)	124,536
Technical provisions – health (similar to life)	58,849
TP calculated as a whole	0
Best estimate	54,765
Risk margin	4,084
Technical provisions – life (excluding health and index-linked and unit-linked)	65,686
TP calculated as a whole	0
Best estimate	61,574
Risk margin	4,112
Technical provisions – index-linked and unit-linked	8,453
TP calculated as a whole	41
Best estimate	8,280
Risk margin	132
Technical provisions total	**191,042**

The calculation of the best estimate is based upon up-to-date and credible information and realistic assumptions, and is performed using adequate, applicable and relevant actuarial and statistical methods. To ensure consistency where possible, most of the economic assumptions are derived at Group level. Non-economic assumptions are mostly based on the characteristics of the insurance portfolio. Expenses are assessed on a going-concern basis. The cash-flow projection used in the calculation of the best estimate takes account of all the cash inflows and outflows required to settle the insurance and reinsurance obligations over their lifetime. The best estimate is calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles (e.g. retrocession to the capital market via a cat bond). Those amounts are calculated and reported separately.

For property-casualty (re)insurance, the best estimate is calculated separately for the premium provision and the provision for claims outstanding. Premium provisions are established for future claim events covered by insurance and reinsurance obligations falling within the contract boundary. Provisions for claims outstanding are established for claim events that have already occurred, regardless of whether the claims arising from those events have been reported or not.

The risk margin is set at such a level as to ensure that the value of the technical provisions as a whole (best estimate plus risk margin) is equivalent to the amount that insurance and reinsurance undertakings would be expected to require in order to take over and meet the insurance and reinsurance obligations.

The general principle for the calculation of the risk margin assumes that the whole portfolio of insurance and reinsurance obligations of the entity that calculates the risk margin (the [re]insurance undertaking) is taken over by another undertaking (the reference undertaking). The risk margin covers the following risk categories: underwriting risk, credit risk with respect to reinsurance contracts, arrangements with special purpose vehicles, intermediaries, policyholders and any other material exposures which are closely related to the insurance and reinsurance obligations, and operational risk. The risk margin is calculated by projecting the solvency capital requirement (SCR), covering the risk categories above and using suitable risk drivers. The present value of the total solvency capital requirements is then multiplied by the cost-of-capital rate of 6% prescribed under Solvency II.

The risk margin is allocated to the lines of business on a proportional basis, taking into account both the risk and the best estimate of the technical provisions in the line of business concerned. The best estimate and the risk margin are valued separately. However, where future cash flows associated with insurance or reinsurance obligations can be reliably replicated using financial instruments for which a reliable market value is observable, the value of technical provisions associated with those future cash flows is determined on the basis of the market value of those financial instruments. In this case, separate calculations of the best estimate and the risk margin are not required.

There were two major changes to the models or assumptions used in calculating technical provisions compared with the previous year. The modelling of the retained portfolio was adjusted for DKV Belgium, which resulted in an increase in technical provisions in the high triple-digit millions. Medical inflation was also remodelled at DKV Belgium, which resulted in a reduction in technical provisions in the mid triple-digit millions. In addition, a new statutory provision for calculating the additional interest reserve (ZZR) (the corridor method) was included in the model for the German ERGO companies, which resulted in a reduction in technical provisions in the mid triple-digit millions.

Under Solvency II, we segment our insurance and reinsurance obligations into homogeneous risk groups, and as a minimum by line of business, when calculating technical provisions.

D 2.1.3 Valuation of financial guarantees and contractual options

When calculating technical provisions, we take account of the value of financial guarantees and contractual options included in insurance and reinsurance policies.

Any assumptions made with respect to the likelihood that policyholders will exercise contractual options, including lapses and surrenders, are based on current and credible information. The assumptions take account, either explicitly or implicitly, of the impact that future changes in financial and non-financial conditions may have on the exercise of those options.

D 2.1.4 Simplifications used in the calculation of technical provisions

Munich Re does not make use of the simplifications described in Title I, Chapter III, Section 6 of the Delegated Regulation with the exception of the application of Article 57 in the valuation of amounts recoverable from non-proportional reinsurance contracts for non-life primary insurance companies. These simplified calculations account for less than 5.0% of our total amounts recoverable from reinsurance contracts. The simplified calculation of the risk margin pursuant to Article 58(a) of the Delegated Regulation is applied for standard-model entities in primary insurance and a small number of non-EEA reinsurance subsidiaries only. These simplified calculations account for less than 2.0% of our total technical provisions.

In addition to these simplifications, Munich Re applies the proportionality principle as set out in Article 29(4) of Directive 2009/138/EC.

D 2.1.5 Impact of the transitional deduction on technical provisions and of the volatility adjustment

Three life primary insurance companies apply a transitional deduction on technical provisions. The quantitative impact is shown in QRT S.22.01.22 (Impact of long-term guarantees and transitional measures), attached in the annex to this report.

In line with the requirements defined in Directive 2009/138/EC, at the end of every year, the transitional deduction described in Article 308(d) (i.e. the impact of the transitional measure on technical provisions) will decrease on a straight-line basis from 100% during the year beginning on 1 January 2016 to 0% on 1 January 2032.

One life primary insurance company makes use of volatility adjustment pursuant to Article 77(d) of Directive 2009/138/EC. This company is unimportant for the calculation of the solvency of the Group, and the impact of volatility adjustment on the SCR is immaterial.

Furthermore, the use of the transitional deduction on technical provisions has no impact on the solvency capital requirement (SCR) at Group level. The use of transitional measures and volatility adjustment result in an immaterial reduction of the Group minimum capital requirement (MCR).

D 2.2 Uncertainty associated with the amount of technical provisions

The assessment of the best estimate of technical provisions is largely based on available data and actuarial models in conjunction with expert judgement. In view of the uncertainties involved, different experts will arrive at different assumptions based on their individual background, professional experience, or field of discipline. As a result, a certain degree of uncertainty in the models and parameters used is inevitable. Such uncertainty is taken into account in the validation of the technical provisions by testing sensitivities and developing scenarios.

Compared with the uncertainty involved in determining best estimates, the determination of the risk margin as part of the technical provisions is not characterised by a high degree of freedom when selecting assumptions. The risk margin is based on the present value of risk capital projections, and is largely prescribed by regulatory requirements. Some uncertainty is involved, for example, in selecting the specific projection patterns or the degree of diversification.

D 2.3 Description of methods used for IFRS valuation and main differences compared with Solvency II

In accordance with the provisions of IFRS 4, Insurance contracts, underwriting items are recognised and measured on the basis of US GAAP (United States Generally Accepted Accounting Principles).

D 2.3.1 Recognition and measurement of gross technical provisions under IFRS

The technical provisions are shown as gross figures in the balance sheet, i.e. before deduction of the ceded share. The ceded share is calculated and accounted for on the basis of the individual reinsurance agreements. Acquisition costs for insurance contracts are recognised and amortised over the terms of the contracts (see below).

The measurement of technical provisions is based on US GAAP FAS 60, FAS 97 and FAS 120. Credit insurance contracts are accounted for in accordance with the rules of IFRS 4.

Unearned premiums are accrued premiums already written for future risk periods. For primary insurance, these premiums are calculated separately for each insurance policy pro rata temporis; for reinsurance, nominal percentages are used in some cases where the data for a calculation pro rata temporis is not available. The posting of unearned premiums is restricted to short-term underwriting business; i.e. property-casualty business and parts of accident and health business. In the case of long-term business, a provision for future policy benefits is established.

The provision for future policy benefits in long-term underwriting business is posted for the actuarially calculated value of obligations arising from policyholders' guaranteed entitlements. As well as life insurance, this concerns portions of health and personal accident insurance, insofar as the business is conducted like life insurance. Measurement is usually based on the prospective method, by determining the difference between the present values of future benefits and future premiums. The actuarial assumptions used for their calculation include, in particular, assumptions relating to mortality, disability and morbidity, as well as assumptions regarding interest-rate development, lapses and costs. These are estimated on a realistic basis at the time the insurance contracts are concluded, and they include adequate provision for adverse deviation to make allowance for the risks of change, error and random fluctuations.

In reinsurance, measurement is carried out partly individually for each risk and partly collectively for reinsured portfolios, using biometric actuarial assumptions based on the tables of the national actuarial associations. These are adjusted for the respective reinsured portfolio, in line with the probabilities observed for the occurrence of an insured event. Discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin. For the major part of the portfolio, these assumptions are fixed at the beginning of the contract and not changed over its duration.

In primary insurance, measurement is generally carried out individually for each risk. In German life primary insurance, biometric actuarial assumptions are used. These are based on the tables of the German Association of Actuaries (Deutsche Aktuarvereinigung e. V.). We also largely use the tables of the national actuarial associations for the rest of primary insurance business. The actuarial interest rate employed for discounting in life primary insurance is limited by the respective maximum actuarial interest rate prescribed by the supervisory authorities. In health primary insurance, discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin.

The provision for outstanding claims is for payment obligations arising from insurance contracts in primary insurance and reinsurance where the size of the claim or the timing of the payment is still uncertain. Part of the provision is for known claims for which individually calculated provisions are posted. Another part is for expenses for claims whose occurrence is not yet known. There are also provisions for claims that are known, but whose extent has turned out to be greater than originally foreseen. All these provisions include expenses for internal and external loss adjustments. The provision for outstanding claims is based on estimates: the actual payments may be higher or lower. The amounts posted are the realistically estimated future amounts to be paid; they are calculated on the basis of past experience and assumptions about future developments (e.g. social, economic or technological factors). Future payment obligations are generally not discounted; exceptions are some provisions for occupational disability pensions and annuities in workers' compensation and other lines of property-casualty business. For determining the provision for outstanding claims, Munich Re uses a range of actuarial projection methods. Where ranges have been calculated, a realistic estimated value for the ultimate loss is determined within these. In applying the statistical methods, we regard large exposures separately.

Other technical provisions mainly include the provision for premium refunds in primary insurance and the provision for profit commission in reinsurance. The former is posted in life and health primary insurance for obligations involving policyholder bonuses and rebates that have not yet been irrevocably allocated to individual contracts at the balance sheet date. These provisions are posted on the basis of national regulations only for German primary insurance business; a retrospective approach is usually taken based on supervisory or individual contract regulations.

Besides this, there are provisions for deferred premium refunds, which are posted for the amounts apportionable to policyholders from the measurement differences between IFRS and local GAAP.

All technical provisions are regularly subjected to a liability adequacy test in accordance with IFRS 4. If current experience shows that the provisions posted on the basis of the original assumptions – less the related deferred acquisition costs and the present value of the related premiums – are inadequate to cover the expected future benefits, we adjust the relevant technical provisions with recognition in profit or loss and disclose this under impairment losses in the notes to the consolidated balance sheet. The appropriateness of unearned premiums and of the provision for outstanding claims is assessed in relation to the realistically estimated future amount to be paid. The appropriateness of the provision for future policy benefits is assessed on the basis of realistic estimates of the actuarial assumptions, the proportional investment result and, for contracts with participation in surplus, the future profit sharing.

D 2.3.2 IFRS recognition and measurement of gross technical provisions for life insurance policies where the investment risk is borne by the policyholders

This item encompasses the provision for future policy benefits in life primary insurance where policyholders bear the investment risk themselves (unit-linked life insurance). The value of the provision for future policy benefits essentially corresponds to the market value of the relevant investments shown under assets.

D 2.3.3 Recognition and measurement of deferred acquisition costs under IFRS

Deferred acquisition costs comprise commissions and other variable costs directly connected with the acquisition or renewal of insurance contracts. In accordance with IFRS 4, we do not use shadow accounting for deferred acquisition costs in life primary insurance. In life business and long-term health primary insurance, deferred acquisition costs are amortised over the duration of the contracts.

D 2.3.4 Recognition and measurement of ceded share of technical provisions

The share of technical provisions for business ceded by us is determined from the respective technical provisions in accordance with the terms of the reinsurance agreements (see above). Appropriate allowance is made for the credit risk.

D 2.3.5 Explanation of the differences between valuation methods under Solvency II and IFRS

Definition of insurance contract and scope

In line with Solvency II, technical provisions (and reinsurance recoverables, respectively) are established for all (re)insurance contracts independent of the level of insurance risk underlying a particular contract. This means that Solvency II covers all insurance business, including products or contracts which do not meet the definition of an insurance contract under IFRS 4 or US GAAP.

In cases where it can be verified that the basis risk is not material, technical provisions (and reinsurance recoverables, respectively) may be established for insurance-related non-indemnity contracts (e.g. cat bonds and client-specific insurance derivatives) under Solvency II.

Separating components from an insurance contract

In some cases, it may be required or permitted to separate certain components from insurance contracts. Such contracts may fall partially within the scope of IFRS 4 and partially within the scope of other standards. Under Solvency II, components may not be separated.

Recognition

In line with FAS 60, under IFRS a liability for unpaid claims costs, including estimates of incurred but not reported claims and claims adjustment expenses, is accrued when insured events occur. For long-term contracts, a liability for future policy benefits is accrued when premium revenue is recognised. Premiums for long-term contracts are recognised when due from policyholders. Usually, the liability for future policy benefits is established when the insurance contract begins, as this is the point in time when the first premium is due.

In contrast, Solvency II requires initial recognition at the date the (re)insurer becomes a party to the contract or the date the (re)insurance contract begins, whichever date occurs earlier.

Measurement

Cash flows

In accordance with IFRS, for obligations to policyholders that have not yet been irrevocably allocated to individual contracts at the balance sheet date, provisions for premium refunds are posted in life and health primary insurance. Besides this, there are provisions for deferred premium refunds, which are posted for the amounts apportionable to policyholders from the measurement differences between IFRS and local GAAP on the basis of the expected future participation quotas. For unrealised gains and losses on investments available for sale, which are recognised directly in equity, the resultant provision for deferred premium refunds is also posted without impact on profit or loss.

By contrast, Solvency II requirements explicitly prescribe that “all payments to policyholders and beneficiaries, including future discretionary bonuses, which insurance and reinsurance undertakings expect to make, whether or not those payments are contractually guaranteed” are to be taken into account in the calculation of technical provisions, unless those payments represent surplus funds. Consequently, expected future discretionary bonuses are taken into consideration in the cash flows used for the calculation of technical provisions in line with Solvency II.

Additional differences may occur, e.g. resulting from the inclusion of general overhead expenses in Solvency II technical provisions.

Contract boundary

In line with FAS 60, a liability for future policy benefits is established for long-term contracts under IFRS. The liability is the present value of estimated future policy benefits to be paid, less the present value of future premiums to be collected from policyholders. There are no specific provisions with respect to the boundary for the determination of future premiums and future policy benefits.

On the other hand, actuarial practice has evolved depending on the type of product. There might be cases where this leads to a differing contract boundary than under Solvency II requirements.

Discounting

Under Solvency II, we use the basic risk-free interest rates, depending on currency and maturity, when discounting technical provisions. As at the reporting date, we do not make use of any transitional measures regarding the relevant risk-free interest rate term structure. One life primary insurance company makes use of volatility adjustment pursuant to Article 77(d) of Directive 2009/138/EC.

In line with IFRS, assumptions regarding interest rates for the calculation of the provision for future policy benefits are estimated on a realistic basis at the time the insurance contracts are concluded. They include adequate provision for adverse deviation to make allowance for the risks of change, error and random fluctuations. In accordance with US GAAP, provision for adverse deviation is made for the individual assumptions. The same applies to the interest rates used for discounting purposes, which include a corresponding reduction.

In reinsurance, discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin. Under US GAAP, the best estimate of discount rates is determined on the basis of the expected investment income from the undertaking's investment portfolio. For the major part of the portfolio, these assumptions are fixed at the beginning of the contract and not changed over its duration.

In German life primary insurance, the actuarial interest rate employed for discounting is limited by the respective maximum actuarial interest rate prescribed by the supervisory authorities. In health primary insurance, discount rates are chosen that reflect the best estimate of expected investment income, less a safety margin. The actuarial assumptions for interest rates are adjusted if this is shown to be necessary by a liability adequacy test in accordance with IFRS 4.

The provision for outstanding claims is generally not discounted under IFRS; exceptions are some provisions for occupational disability pensions and annuities in workers' compensation and other lines of property-casualty business.

Unearned premiums are not discounted.

Other technical provisions mainly include the provision for premium refunds in primary insurance and the provision for profit commission in reinsurance. These technical provisions are not discounted.

Risk margin

Under Solvency II, the cost of capital for assuming risk has to be explicitly taken into account. It is referred to as the risk margin, and is calculated using a cost-of-capital approach.

By contrast, actuarial assumptions in line with IFRS include adequate provision for adverse deviation to make allowance for the risks of change, error and random fluctuations. No explicit risk margin is calculated.

Non-performance risk

Appropriate allowance for credit risk is made in line with both IFRS and Solvency II when calculating the ceded share of technical provisions (i.e. reinsurance recoverables under Solvency II). The methodology for determining the allowance for credit risk is not prescribed under IFRS. Under Solvency II, we comply with the relevant requirements for the determination of the counterparty default adjustment.

Acquisition costs

Under IFRS, acquisition costs for insurance contracts are capitalised and amortised over the terms of the contracts. They are regularly tested for impairment using a liability adequacy test.

Under Solvency II, acquisition costs are taken into consideration as part of the cash flows when calculating technical provisions.

Short-term contracts

For IFRS, a distinction is made between short-term and long-term (re)insurance business (see above). There is no equivalent concept under Solvency II.

Transitional deduction on technical provisions and volatility adjustment

Three life primary insurance companies apply a transitional deduction on technical provisions. Another life primary insurance company makes use of volatility adjustment pursuant to Article 77(d) of Directive 2009/138/EC. Under IFRS, there is no corresponding deduction or volatility adjustment.

D 2.4 Quantification of differences between IFRS and Solvency II technical provisions

In addition to the qualitative assessment of differences in the valuation of technical provisions between IFRS and Solvency II, the following table provides a quantitative overview. The starting point is IFRS technical provisions allocated to Solvency II lines of business.

The item “Reclassification of balance sheet items”, for example, includes deferred acquisition costs recognised under IFRS, accounts receivable and payable not yet due, and contracts not accounted for as insurance under IFRS. These are added to the technical provisions under IFRS to obtain a basis which is comparable to the technical provisions under Solvency II.

Subsequently, an adjustment is made for the underlying economic assumptions. It mainly comprises the effects of discounting based on the EIOPA interest rate in line with Solvency II requirements, offset by discount effects already included in the IFRS technical provisions.

The adjustment for quantified differences in methodology is derived from individual assessments of major methodological differences between IFRS and Solvency II. They allow for a detailed consideration of business-specific differences in the models and assumptions for technical provisions under IFRS and Solvency II.

For the remaining differences, no further quantitative attribution to specific drivers is carried out. They largely stem from methodological differences involving a variety of minor drivers.

In a last step, the risk margin is added to the Solvency II technical provisions, as it is not explicitly determined in the IFRS balance sheet.

D 2.5 Reinsurance recoverables under Solvency II

D 2.5.1 General requirements for calculation

The calculation of amounts recoverable from reinsurance contracts and special purpose vehicles by insurance and reinsurance undertakings complies with the rules relating to technical provisions. The amounts recoverable from reinsurance contracts and special purpose vehicles are calculated consistently with the boundaries of the insurance or reinsurance contracts to which they relate.

Reconciliation of technical provisions, IFRS vs. Solvency II

						31.12.2018
€m	Non-life	Health (similar to Non-life)	Health (similar to life)	Life	Unit- and index-linked	Total
IFRS technical provisions	**59,665**	**3,621**	**56,716**	**84,587**	**7,943**	**212,532**
Reclassification of balance sheet items	–3,214	–427	–3,376	–11,132	857	–17,293
Adjustment of economical assumptions	–2,906	–75	3,643	1,305	0	1,968
Quantified methodological differences	391	–122	–2,299	–3,381	0	–5,412
Other differences	–613	176	149	85	–20	–222
SII technical provisions – best estimate[1]	53,323	3,173	54,833	71,464	8,780	191,573
Risk margin	1,420	138	4,084	4,112	132	9,886
SII technical provisions without LTG guarantees and transitionals	54,742	3,311	58,917	75,576	8,912	201,459
Impact of transitionals	0	0	–67	–9,772	–457	–10,296
Impact of volatility adjustment	0	0	–1	–118	–2	–120
SII technical provisions with LTG guarantees and transitionals	**54,742**	**3,311**	**58,849**	**65,686**	**8,453**	**191,042**

1 Including technical provisions calculated as a whole and before impact of long-term guarantees and transitional measures.

Under Solvency II, separate calculations are carried out for

- the amounts recoverable from special purpose vehicles,
- the amounts recoverable from finite reinsurance contracts, and
- the amounts recoverable from other reinsurance contracts.

Furthermore, a separate calculation is carried out for the amounts recoverable from reinsurance contracts and special purpose vehicles for non-life insurance obligations regarding premium provisions and provisions for claims outstanding.

When calculating amounts recoverable from reinsurance contracts and special purpose vehicles, the time difference between recoverables and direct payments is taken into account.

Where cash flows from the special purpose vehicles to the insurance or reinsurance undertaking do not directly depend on the claims against the insurance or reinsurance undertaking ceding risks, the amounts recoverable from those special purpose vehicles for future claims are only taken into account to the extent that it can be verified in a prudent, reliable and objective manner that the structural mismatch between claims and amounts recoverable is not material.

For the purpose of calculating the amounts recoverable from reinsurance contracts and special purpose vehicles, cash flows only include payments in relation to compensation of insurance events and unsettled insurance claims. Payments in relation to other events or settled insurance claims are accounted for outside the amounts recoverable from reinsurance contracts and special purpose vehicles and other elements of the technical provisions. Where a deposit has been made for the cash flows, the amounts recoverable are adjusted accordingly to avoid a double counting of the assets and liabilities relating to the deposit.

The cash flows relating to provisions for claims outstanding include the compensation payments relating to the claims accounted for in the gross provisions for claims outstanding of the insurance or reinsurance undertaking ceding risks. The cash flows relating to premium provisions include all other payments.

D 2.5.2 Counterparty default adjustment

The result from the calculation of the best estimate is adjusted to take account of expected losses due to default of the counterparty. That adjustment is based on an assessment of the probability of default of the counterparty and the average loss resulting therefrom.

The adjustment to take account of expected losses due to default of a counterparty is calculated as the expected present value of the change in cash flows underlying the amounts recoverable from that counterparty that would arise if the counterparty defaults, including as a result of insolvency or dispute, at a certain point in time. For that purpose, the change in cash flows does not take into account the effect of any risk-mitigating technique that reduces the credit risk of the counterparty, other than risk-mitigating techniques based on collateral holdings. The risk-mitigating techniques that are not taken into account are recognised separately, without increasing the amount recoverable from reinsurance contracts and special purpose vehicles.

The calculation takes into account possible default events over the lifetime of the reinsurance contract or arrangement with the special purpose vehicle, and whether and how the probability of default varies over time. It is carried out separately by each counterparty and for each line of business. In non-life insurance, it is also carried out separately for premium provisions and provisions for claims outstanding.

D 3 Other liabilities

According to Article 75(1)(b) of Directive 2009/138/EC, all other liabilities are to be valued at fair value in the solvency balance sheet. When valuing liabilities, no adjustment is made to take account of the own credit standing of the insurance or reinsurance undertaking. Under IFRS, we generally measure other liabilities at amortised cost or at par value; only derivatives with negative market values are measured at fair value. As the valuation basis for Solvency II and IFRS is different, we explain the differences in greater detail for each of the liability items mentioned below. Where the differences between the fair values in the solvency balance sheet and the IFRS values are immaterial, we use the latter to measure other liabilities, as explained in more detail below.

In addition to the differences in valuation, the structure of the solvency balance sheet also differs from that of the IFRS balance sheet. Therefore, the balance sheet items are not directly comparable. Where such differences in allocation exist, they are explained for the individual items. Where it was possible to reclassify liabilities as per IFRS in order to comply with the structure prescribed for the solvency balance sheet, we made this reclassification.

D 3.1 Contingent liabilities

In the solvency balance sheet, contingent liabilities are to be recognised as a liability if they are material, i.e. if information about the current or potential amount or nature of the liability could influence the decision-making or judgement of the intended user of that information. As a further precondition for recognition, an outflow of resources must be more than a remote possibility.

We measure such contingent liabilities based on the expected present value of future cash flows required to settle the contingent liability over its lifetime, using the relevant risk-free interest rate term structure. At Munich Re, valuation is made on a market-consistent basis in accordance with CDS spreads observable in the capital markets. It is assumed that the (present) value of a contingent liability is the same as the present value of the (probability weighted) CDS premium payable in order to hedge against the financial risks arising from the contingent liability. Contingent liabilities that cannot be reliably measured and do not meet the recognition criteria are not recognised.

Under IFRS, contingent liabilities are generally not recognised. However, disclosure in the notes to the financial statements is required if there is more than a remote possibility that such a liability will result in an obligation to make a payment.

Other liabilities

€m	Solvency II value	Statutory accounts value
Contingent liabilities	13	0
Provisions other than technical provisions	1,335	1,391
Pension benefit obligations	2,950	2,992
Deposits from reinsurers	1,007	506
Deferred tax liabilities	6,704	1,368
Derivatives	548	1,579
Debts owed to credit institutions	126	674
Financial liabilities other than debts owed to credit institutions	1,138	292
Insurance and intermediaries payables	1,858	2,946
Reinsurance payables	203	4,555
Payables (trade, not insurance)	4,563	6,038
Subordinated liabilities	4,173	3,689
Subordinated liabilities not in BOF	95	0
Subordinated liabilities in BOF	4,079	3,689
Any other liabilities, not elsewhere shown	67	5,107
Other liabilities total	**24,683**	**31,136**

D 3.2 Provisions other than technical provisions

Both in the solvency balance sheet and under IFRS, our valuation of other provisions is based on a best estimate of the amount that would be required to settle the liabilities as at the balance sheet date, i.e. the amount we would reasonably have to pay to satisfy the liabilities or transfer them to a third party as at the balance sheet date. If there is a range of possible estimates having an equal degree of probability, the midpoint of the range is used. If the interest-rate effect is material, we value the provision at the present value of the expected expenditure. If it is immaterial, we disregard it.

D 3.3 Pension benefit obligations

The following explanations do not relate exclusively to pension benefit obligations, but also take into account other material employee benefits.

Under Solvency II, we measure obligations for employee benefits in accordance with IAS 19. According to IAS 19, there are two different types of pension obligations: defined contribution plans and defined benefit plans.

Under defined contribution plans, the undertakings pay fixed contributions to an insurer or a pension fund. This covers the undertakings' obligations in full. Therefore, under both IFRS and Solvency II, a defined contribution plan is not recognised as an obligation in the balance sheet. In 2018, the contributions paid to defined contribution plans totalled €64m.

Under defined benefit plans, the staff member is promised a particular level of retirement benefit either by the undertakings or by a pension fund. The undertakings' contributions needed to finance this are not fixed in advance. If pension obligations are covered by assets held by a legally separate entity (e.g. a fund or a contractual trust agreement in the form of a two-way trust) – assets that may only be used to cover the pension commitments given and are not accessible to creditors – the pension obligations are shown less the amount of these plan assets. If the fair value of the assets exceeds the related outsourced pension benefit obligations, this asset is recognised as a "pension benefit surplus".

Actuarial gains or losses from obligations for employee benefits and plan assets result from the deviation of actual risk experience from estimated risk experience. Since under IFRS, Munich Re recognises actuarial gains and losses directly in the period in which they occur, there is no difference to Solvency II.

In accordance with the definitions in IAS 19, the obligations for employee benefits recognised in the balance sheet break down as follows:

Major benefits for employees

	31.12.2018
€m	Solvency II value
Short-term obligations (provisions for holidays and overtime, bonuses)[1]	251
Defined benefit plans (including medical cover)	2,992
Other long-term benefits (semi-retirement and early retirement, provisions for anniversary benefits, multi-year performance)[2]	262
Benefits on termination of employment contract (semi-retirement, severance payments)	16

1 Part of SII balance sheet item "Payables (trade, not insurance)".
2 Part of SII balance sheet item "Provisions other than technical provisions".

Munich Re undertakings generally give commitments to their staff in the form of defined contribution plans or defined benefit plans (within the meaning of IAS 19). The type and the amount of the pension obligation are determined by the conditions of the respective pension plan.

The most important plans are the following:

The pension obligations of Munich Reinsurance Company include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The defined benefits granted up to 31 December 2007 are financed through a fund. New members joining on or after 1 January 2008 receive pension commitments in the form of defined contribution plans financed by means of insurance contracts securing the obligations under pension schemes. The fund and insurance contracts have been grouped in a contractual trust agreement (CTA).

The pension obligations of ERGO Group include disability and old-age pensions, and pensions for surviving dependants. The amount of the pensions generally depends on salary and length of service. The commitments are usually funded through pension provisions. New members receive pension commitments in the form of defined contribution plans financed by means of intra-Group insurance contracts securing the obligations under pension schemes. There are also medical-care benefit obligations.

The pension obligations of Munich Re America include pensions for employees and surviving dependants. The amount of the pensions generally depends on includable compensation and length of service. The plan is financed through a trust and pension provisions. The plan was closed to new members effective 1 January 2006 and to all remaining members effective 31 December 2011. With effect from 1 January 2012, all members now receive pension commitments in the form of defined contribution plans. There are also retiree medical-care benefit obligations.

Under Solvency II, pension obligations are recognised in accordance with IAS 19, using the projected unit credit method. The calculation includes not only the pension entitlements and current pensions known at the balance sheet date, but also their expected future development.

The discount rate applied to these obligations is based on the yields for high-quality bonds (e.g. corporate or government bonds). The currency and term of the bonds correspond to the currency and estimated term of the obligations.

The mortality and disability assumptions are based on local tables used for the valuation of pension benefit obligations; these may be adapted to reflect the experience of the respective undertaking. Rates of employee turnover and early retirement are based on the individual experience of the Munich Re undertakings.

Actuarial assumptions

%	2018	Prev. year
Discount rate	2.2	2.1
Future increases in entitlement/salary	1.8	2.0
Future pension increases	1.5	1.4
Medical cost trend rate	3.6	3.7

Breakdown of the fair value of plan assets for defined benefit plans

%	31.12.2018	Prev. year
Quoted market price in an active market		
Fixed-interest securities	41	40
Non-fixed-interest securities	22	23
Equities	4	4
Investment funds	17	19
Other	1	0
Other	1	0

Breakdown of the fair value of plan assets for defined benefit plans

%	31.12.2018	Prev. year
No quoted market price in an active market		
Cash or cash equivalents	0	1
Real estate	1	1
Fixed-interest securities	0	1
Non-fixed-interest securities	3	4
Equities	0	0
Investment funds	3	4
Other	0	0
Insurance contracts	31	29
Other	1	1

D 3.4 Deposits from reinsurers

Deposits from reinsurers are collateral for technical provisions covering business ceded to reinsurers and retrocessionaires. As a rule, the changes in these deposits derive from the changes in the relevant technical provisions covering ceded business. Deposits from reinsurers thus do not have a fixed maturity date, their release generally being dependent on run-off of the corresponding provisions.

In the solvency balance sheet, we measure deposits from reinsurers at fair value. Under IFRS, we recognise these liabilities at nominal value.

D 3.5 Deferred tax liabilities

Under Solvency II, deferred taxes are determined pursuant to Article 15 in conjunction with Article 9 of Delegated Regulation (EU) 2015/35.

In accordance with Article 9(1) and (2) of the Delegated Regulation, assets and liabilities shall be recognised and valued in accordance with IFRS requirements, provided that these are consistent with Article 75 of Directive 2009/138/EC. Therefore, under Solvency II, deferred tax liabilities are recognised and valued in accordance with IAS 12.

Deferred taxes are calculated on the basis of the difference between the values ascribed to liabilities recognised and valued in accordance with Article 75 of Directive 2009/138/EC, and the values ascribed to liabilities recognised and valued for tax purposes. Deferred tax liabilities are recognised in cases where asset items have to be valued higher, or liability items lower, in the solvency balance sheet than in the tax accounts of Munich Re, and these differences will be eliminated at a later date with a corresponding effect on taxable income (temporary differences).

Further information on the recognition of deferred taxes can be found in section D 1.4 Deferred tax assets.

D 3.6 Financial liabilities including derivatives and debts owed to credit institutions

In the solvency balance sheet, financial liabilities including derivatives and debts owed to credit institutions are to be measured at fair value. After initial recognition, no adjustments are made to take account of the own credit standing of the insurance or reinsurance undertaking. Thus, financial liabilities are measured at fair value at the reporting date without taking account of any improvement or deterioration in Munich Re's own credit risk. If the impact of such an improvement or deterioration is immaterial, we do not adjust the fair values accordingly.

For Munich Re bonds and derivatives traded on a stock exchange, the fair values are the stock-market prices, if available. For the other financial liabilities, we determine the fair values using net present-value methods with observable market inputs. Further details are set out below:

- With regard to the valuation models used for determining the fair value of derivatives, reference is made to the table “Valuation techniques for financial instruments” and the explanations given in section D 1.7.3 Determining fair values.
- For the bonds we have issued, we use the market prices provided by price quoters to determine fair value.
- The fair values of our debts owed to credit institutions are determined using the present-value method, in part exclusively using observable market inputs, and partly also taking into account non-observable inputs.

Under IFRS, we measure our financial liabilities at amortised cost using the effective interest method – except for derivatives with a negative market value, which are recognised at fair value.

More details on fair value measurement, the measurement hierarchy levels and the models used for determining fair values can be found in section D 1.7.3 under Determining fair values.

D 3.7 Insurance and intermediaries payables

In the solvency balance sheet, insurance and intermediaries payables must be recognised at fair value; under IFRS, they must be recognised at the amount actually required to redeem or settle them. In contrast to the solvency balance sheet, under IFRS we also recognise interest-bearing accumulated participation in life insurance surplus under this item.

D 3.8 Reinsurance payables

In the solvency balance sheet, reinsurance payables must be recognised at fair value; under IFRS, they are recognised at the amount actually required to redeem or settle those payables.

Unlike in financial reporting under IFRS, under Solvency II payables from brokerage and from reinsurance business assumed are not recognised under reinsurance payables, but under insurance and intermediaries payables.

D 3.9 Payables (trade, not insurance)

In the solvency balance sheet, the item “Payables (trade, not insurance)” covers in particular payables from dividends, payables from profit pooling or transfer agreements, payables from taxes, and other payables. These payables are measured at fair value at the reporting date without taking account of any improvement or deterioration in the undertaking’s own credit risk. However, for reasons of simplification, we measure payables from dividends and payables from profit pooling or transfer agreements at their IFRS carrying amount, i.e. at amortised cost.

Payables from taxes and other payables are discounted, taking into account the actual risk-free interest rates and relevant interest-rate spreads.

Both reinsurance payables and insurance and intermediaries payables are included in other payables under IFRS, but shown as separate items in the solvency balance sheet.

Under Solvency II, all insurance contracts are recognised under technical provisions irrespective of the level of insurance risk involved in the individual contracts. Therefore, payables resulting from insurance or reinsurance contracts without significant risk transfer are – notwithstanding IFRS – not reported as payables, but as part of the technical provisions.

D 3.10 Subordinated liabilities

Subordinated liabilities are liabilities which, in the event of liquidation or insolvency, are only satisfied after the claims of other creditors.

They are recognised at fair value in the solvency balance sheet. For Munich Re subordinated bonds, we take the stock market prices as fair values. Credit spreads relevant for Munich Re are obtained from an external provider and are based on CDS. For valuation purposes, the quoted stock-market prices are adjusted taking into account the change in credit spread from the date of issuance until the valuation date, multiplied by the modified duration for the stock-market price at the valuation date.

For the other subordinated liabilities, we determine the fair values using net present-value methods with observable market inputs. Whether or not subordinated liabilities are eligible for inclusion in own funds is of no importance for valuation purposes.

Under IFRS, we value all subordinated liabilities at amortised cost using the effective interest method.

D 3.11 Any other liabilities, not elsewhere shown

This item includes liabilities from prepayments received prior to the reporting date that are not earned or due until after the balance sheet date. Liabilities for these prepayments are recognised at the reporting date to take into account that the prepayments received relate to outstanding obligations of the undertaking. Thus, recognition is mandatory to represent the correct amount of own funds as at the reporting date.

In contrast to our financial reporting, in the solvency balance sheet derivatives (€548m) are reclassified as derivatives.

Any other liabilities generally have to be measured at fair value in the solvency balance sheet. Where the discounting effect is immaterial, we do not discount the liabilities concerned.

D 4 Alternative methods for valuation

Detailed information on determining the fair values of the individual assets and other liabilities can be found in section D 1.7.3 under Determining fair values. The valuation techniques described therein are regularly tested by our asset managers as regards their suitability for valuation of the assets and liabilities concerned, and adapted if necessary.

D 5 Any other information

We do not know of any other material information not already covered in the other sections of Part D.

Capital management

E

E Capital management

E 1 Own funds

E 1.1 Aims, policies and processes to manage own funds

Through active capital management, we strive to ensure that Munich Re's capital satisfies all applicable standards. In addition to the capital requirements determined using our internal risk model, there are more far-reaching requirements by regulatory authorities and rating agencies that apply to Munich Re and its subsidiaries.

Capital management planning takes place as part of our annual medium-range business planning. Relevant capital-management key performance indicators are regularly checked as part of the risk management system.

There were no significant changes during the reporting period.

We aim to ensure that our financial strength is such that it enables us to take advantage of profitable opportunities for growth, is not significantly affected by normal fluctuations in capital market conditions, and remains at a reasonable level even in the wake of major loss events or substantial falls in the stock markets. At the same time, we also define an appropriate level of Group own funds as one which does not lastingly exceed that which is required. Excess capital is returned to our shareholders via attractive dividends and share buy-backs. In practice, capital repatriation comes up against limits because German commercial law (the German Commercial Code; HGB) forces our parent, Munich Reinsurance Company, to maintain the claims equalisation provision in local GAAP accounting at a level that exceeds the economic requirements. This restricts the revenue reserves and profit distribution possibilities, but stabilises results in years with high claims expenditure.

Munich Re will pay a higher dividend of €9.25 per share for the past financial year, provided that the Annual General Meeting approves. Munich Re's shares thus remain a high-return investment. Furthermore, another share buy-back programme of €1bn will be proposed to the Annual General Meeting for the period 2019/2020.

E 1.2 Differences between IFRS equity and Solvency II excess of assets over liabilities

The main differences between the IFRS equity of Munich Re and the excess of assets over liabilities in the solvency balance sheet are due to the differing rules for recognition and valuation.

The Solvency II methodology makes more extensive use of market values in the balance sheet than IFRS. For example, investments are recognised in the solvency balance sheet at market value, whereas under IFRS this applies only to securities available for sale. By contrast, goodwill and other intangible assets are valued at zero. The valuation methodology for underwriting items in accordance with Solvency II differs significantly from the valuation in our IFRS consolidated financial statements. The value of the technical provisions in accordance with Solvency II corresponds to the current amount that insurance and reinsurance undertakings would have to pay if they were to transfer their insurance and reinsurance liabilities immediately to another insurance or reinsurance undertaking.

The quantitative statement of the differences can be seen in the table "Excess of assets over liabilities (Solvency II) in comparison with IFRS equity".

Excess of assets over liabilities (Solvency II) in comparison with IFRS equity

€m	Solvency II	IFRS[1]	Difference
a) Goodwill and other intangible assets	0	3,696	–3,696
b) Surplus funds	0	–2,606	2,606
c) Investments, including deposits retained on assumed reinsurance and cash	244,045	230,998	13,047
d) Subordinated liabilities	–4,173	–3,689	–484
e) Deferred tax (net)	–6,401	–792	–5,609
f) Other assets and liabilities	–4,738	–7,651	2,912
g) Underwriting assets and liabilities	–185,690	–193,457	7,767
Excess of assets over liabilities (Solvency II) in comparison with IFRS equity	**43,042**	**26,500**	**16,542**

1 Some IFRS figures have been reclassified to ensure comparability with Solvency II.

E 1.3 Consolidation methods for own funds

Group solvency is calculated on the basis of the consolidated accounts (Method 1; namely as set out in Article 230 of Directive 2009/138/EC). The table "Consolidation method for Group own funds" shows how consolidated data is calculated for the respective related undertakings in the Group.

Consolidation method for Group own funds

Type of undertaking	SII Delegated Regulation (EU) 2015/35 Article	Determination of consolidated data (method 1)
Dominant influence		
Insurance and reinsurance undertakings, insurance holding companies and mixed financial holding companies	335 (1) (a)	Full consolidation
Ancillary services undertakings	335 (1) (a)	Full consolidation
Institutions for occupational retirement provision	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Credit institutions, investment firms and financial institutions	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Alternative investment fund managers	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
UCITS management companies	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Special purpose vehicles meeting the requirements of Article 211	335 (1) (b) 329 (3)	Not taken into account
Other special purpose vehicles	335 (1) (b)	Full consolidation
Non-regulated undertakings that conduct financial transactions	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Other undertakings	335 (1) (f) 13	Other methods*
Undertakings for collective investment in transferable securities (UCITS/AIF)	335 (1) (f) 13	Other methods*
Significant influence/joint venture		
Insurance and reinsurance undertakings, insurance holding companies and mixed financial holding companies	335 (1) (c), (d)	Proportional consolidation and/or adjusted equity method
Ancillary services undertakings	335 (1) (c), (f)	Proportional consolidation and/or other methods*
Institutions for occupational retirement provision	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Credit institutions, investment firms and financial institutions	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Alternative investment fund managers	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
UCITS management companies	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Non-regulated undertakings that conduct financial transactions	335 (1) (e)	Proportional share of the own funds calculated in accordance with the relevant sectoral rules
Other undertakings	335 (1) (f) 13	Other methods*
Undertakings for collective investment in transferable securities (UCITS/AIF)	335 (1) (f) 13	Other methods*

* Other methods – valuation hierarchy in accordance with Article 13 of Delegated Regulation (EU) 2015/35

E 1.4 Composition of own funds

E 1.4.1 Eligible own funds

The starting point for the calculation of the eligible own funds is the excess of assets over liabilities.

Then the basic own funds are calculated by adjusting the excess of assets over liabilities according to Solvency II for the factors relevant to Munich Re.

Subordinated liabilities should be added provided that they are available at all times to cover losses on a going-concern basis. Munich Re's subordinated liabilities meet this requirement. Share buy-backs that have been announced but not completed as at the reporting date, own shares and foreseeable dividends must be deducted from own funds. Certain own-fund items belonging to Munich Re subsidiaries are subject to further restrictions with regard to their transferability and fungibility at Group level. These own-fund items must also be deducted.

In addition, the carrying amounts of shareholdings in companies in other financial sectors such as credit institutions and investment firms must be deducted. Finally, capital calculated in accordance with sectoral regulations that is allocated to other financial sectors is included to obtain the Group's eligible own funds.

For Solvency II, own funds are divided into four levels of quality – known as tiers – depending on their ability to absorb losses. Tier 1 unrestricted is the highest quality, and Tier 3 is the lowest.

The division into tiers meets the requirements of the Solvency II Directive (Articles 93 to 96), the Delegated Regulation (Articles 69 to 78) and EIOPA-BoS-14/168 – Guidelines on classification of own funds. The following own-fund items are classified as Tier 1 unrestricted: Share capital, share premium account related to ordinary share capital, surplus funds and the reconciliation reserve. Classification of the surplus funds as Tier 1 unrestricted takes into consideration the national legal provisions of the respective units. We have classified the subordinated liabilities essentially as Tier 2 owing to the underlying contractual terms and conditions.

Own funds

€m	Total	Tier 1 – unrestricted	Tier 1 – restricted	Tier 2	Tier 3
					31.12.2018
Basic own funds before deduction for participations in other financial sector					
Ordinary share capital (gross of own shares)	588	588		0	
Share premium account related to ordinary share capital	6,845	6,845		0	
Surplus funds	2,606	2,606			
Non-available surplus funds at group level	210	210			
Reconciliation reserve	29,088	29,088			
Subordinated liabilities	4,079		13	4,020	46
Non-available subordinated liabilities at group level	46		0	0	46
An amount equal to the value of net deferred tax assets	344				344
The amount equal to the value of net deferred tax assets not available at the group level	83				83
Minority interests (if not reported as part of a specific own fund item)	198	198	0	0	0
Non-available minority interests at group level	168	168	0	0	0
Deductions					
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	287	287	0	0	0
Total of non-available own fund items	506	378	0	0	129
Total deductions	**793**	**665**	**0**	**0**	**129**
Total basic own funds after deductions	**42,953**	**38,660**	**13**	**4,020**	**261**
Own funds of other financial sectors					
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies	86	86	0	0	
Institutions for occupational retirement provision	199	199	0	0	0
Non-regulated entities carrying out financial activities	3	3	0	0	
Total own funds of other financial sectors	287	287	0	0	0
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	42,953	38,660	13	4,020	261
Total available own funds to meet the minimum consolidated group SCR	42,692	38,660	13	4,020	
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	42,953	38,660	13	4,020	261
Total eligible own funds to meet the minimum consolidated group SCR	41,091	38,660	13	2,419	
Minimum consolidated Group SCR (Article 230)	**12,096**				
Ratio of eligible own funds to Minimum Consolidated Group SCR	**340%**				
Total eligible own funds to meet the group SCR (including own funds from other financial sector and from the undertakings included via D&A)	**43,241**	**38,947**	**13**	**4,020**	**261**
Group SCR	**14,670**				
Ratio of eligible own funds to group SCR including other financial sectors and the undertakings included via D&A	**295%**				

Own funds

€m	Total	Tier 1 – unrestricted	Tier 1 – restricted	Tier 2	Tier 3
					31.12.2017
Basic own funds before deduction for participations in other financial sector					
Ordinary share capital (gross of own shares)	588	588		0	
Share premium account related to ordinary share capital	6,845	6,845		0	
Surplus funds	2,400	2,400			
Non-available surplus funds at group level	399	399			
Reconciliation reserve	29,980	29,980			
Subordinated liabilities	2,941		13	2,886	42
Non-available subordinated liabilities at group level	42		0	0	42
An amount equal to the value of net deferred tax assets	369				369
The amount equal to the value of net deferred tax assets not available at the group level	90				90
Minority interests (if not reported as part of a specific own fund item)	235	235	0	0	0
Non-available minority interests at group level	201	201	0	0	0
Deductions					
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	682	682	0	0	0
Total of non-available own fund items	732	600	0	0	132
Total deductions	**1,415**	**1,282**	**0**	**0**	**132**
Total basic own funds after deductions	**41,943**	**38,766**	**13**	**2,886**	**279**
Own funds of other financial sectors					
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies	491	491	0	0	
Institutions for occupational retirement provision	189	189	0	0	0
Non-regulated entities carrying out financial activities	2	2	0	0	
Total own funds of other financial sectors	682	682	0	0	0
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	41,943	38,766	13	2,886	279
Total available own funds to meet the minimum consolidated group SCR	41,664	38,766	13	2,886	
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	41,943	38,766	13	2,886	279
Total eligible own funds to meet the minimum consolidated group SCR	41,104	38,766	13	2,325	
Minimum consolidated Group SCR (Article 230)	**11,627**				
Ratio of eligible own funds to Minimum Consolidated Group SCR	**354%**				
Total eligible own funds to meet the group SCR (including own funds from other financial sector and from the undertakings included via D&A)	**42,626**	**39,448**	**13**	**2,886**	**279**
Group SCR	**14,353**				
Ratio of eligible own funds to group SCR including other financial sectors and the undertakings included via D&A	**297%**				

Change in own funds

€m	
Eligible own funds as at 31 December 2017	42,626
Opening adjustments[1]	–95
Economic earnings	1,892
Operating impact	3,155
Market variances	–164
Other incl. tax	–1,099
Capital management	–1,088
Change in eligibility restrictions	226
Value change due to transitionals and volatility adjustments	–320
Eligible own funds as at 31 December 2018	**43,241**

1 Changes to eligible own funds that do not represent economic value added in the period – such as mergers and acquisitions, model changes and subsequent corrections.

An amount equal to the value of net deferred tax assets is classified as Tier 3 own funds.

The tables "Own funds" contain information about the structure, amount and tier allocation of eligible own funds as at 31 December 2018. They also show the deductions of non-available own funds as a result of restrictions on transferability and fungibility. At Munich Re, these are essentially surplus funds, subordinated liabilities, minority interests and net deferred tax assets.

As can be seen in the table "Own funds", there are no significant restrictions on the fungibility and transferability of eligible own funds to meet the Group's solvency capital requirement. Restrictions are considered significant if an ↗ omission or misstatement of related information could influence the decision-making process or judgement of the users. Furthermore, it is clear that there is no effect due to limits in respect of eligible own funds classified as Tier 2, Tier 3, or Tier 1 unrestricted. Allocation of the own-fund items to the individual tiers has remained unchanged compared with the previous year.

The solvency ratio shown of 295% (297%) includes transitional measures under Solvency II. The following capital measures are included as deductible items: the dividend of €1.3bn proposed by the Board of Management for the 2018 financial year and a share buy-back programme for 2019/2020 in the amount of €1bn. The purchases not yet made under the 2018 share buy-back programme (€303m) were also taken into account. Without transitional measures, the solvency ratio would have been 245% (244%) as at 31 December 2018.

Eligible own funds increased by €710m in the reporting period (after adjusting the opening balance). The main drivers are presented in the table "Change in own funds". The economic earnings led to an increase of €1,892m in eligible own funds in the reporting period, whilst the change in eligibility restrictions contributed a further €226m. Capital measures of –€1,088m and a decrease in value of €320m due in particular to some transitional measures expiring had a counterbalancing effect.

The table "Reconciliation reserve" shows the calculation of the Group's reconciliation reserve as at 31 December 2018 and the previous year. The EPIFP are also given.

Reconciliation reserve

€m	31.12.2018	31.12.2017
Excess of assets over liabilities	43,042	43,721
Own shares (held directly and indirectly)	713	681
Forseeable dividends, distributions and charges	2,661	2,623
Other basic own fund items	10,580	10,437
Reconciliation reserve before deduction for participations in other financial sector	**29,088**	**29,980**
Expected profits		
Expected profits included in future premiums (EPIFP) – Life business	13,185	12,449
Expected profits included in future premiums (EPIFP) – Non-life business	955	1,092
Total EPIFP	**14,140**	**13,540**

Composition of subordinated liabilities

€m	Total	Tier 1 total	Tier 1 counted under transitionals	Tier 2 total	Tier 2 counted under transitionals	Tier 3
Subordinated liabilities						
Dated subordinated liabilities	4,066			4,020		46
Undated subordinated liabilities with a contractual opportunity to redeem	13	13	13			
Total subordinated liabilities	**4,079**	**13**	**13**	**4,020**		**46**

The reconciliation reserve is subject to fluctuation during the year, mainly on account of the development of economic earnings and capital measures (share buy-back programmes, capital increases, dividends, etc.). ALM reflects the influence of the capital market environment on the valuation of asset and liability items in the solvency balance sheet, and hence the volatility of the reconciliation reserve. It is therefore a fundamental pillar of our value-based management system and the focal point of our investment strategy. Key characteristics of underwriting and other liabilities are taken into account in structuring our investment portfolio. With ALM, we aim to ensure that changes in macroeconomic factors influence the value of our investments and our technical provisions and liabilities in a similar way. For this purpose, where possible, we mirror important features of liabilities – such as maturity patterns, currency structures and inflation sensitivities – on the assets side of the balance sheet by acquiring investments with similar characteristics. This reduces our vulnerability to capital market fluctuations and stabilises our economic capital resources.

E 1.4.2 Subordinated liabilities

Munich Re's subordinated liabilities came to €4.1bn (2.9bn) as at the reporting date. In addition to Munich Reinsurance Company, ERGO Versicherung Aktiengesellschaft, Vienna, and HSB Group, Inc., Dover, also recognised subordinated liabilities totalling €59m (55m) as at the reporting date.

The increase in subordinated liabilities is due to the issuance of a subordinated bond worth €1.25bn for Munich Reinsurance Company in the fourth quarter of 2018.

The redemption of a subordinated bond callable in 2018 in the amount of £300m had already been anticipated as a deduction in eligible own funds for the 2017 financial year, and was made accordingly in 2018.

Subordinated liabilities subject to transitional measures[1] can be seen in the table "Composition of subordinated liabilities". Overall, two subordinated bonds of ERGO Versicherung Aktiengesellschaft, Vienna, totalling €13m are subject to transitional measures. They were issued before Solvency II came into force, and could be used as at 31 December 2015 to at least 50% to meet the available solvency margin requirements under Solvency I. They are thus classified as Tier 1 restricted.

The four (three) Munich Reinsurance Company subordinated bonds totalling €4.0bn (2.9bn) meet the criteria for Tier 2 classification under Solvency II. In particular, the following requirements are met; that the original maturity is at least ten years and that the earliest, first contractual opportunity to redeem is five years after the date of issuance.

1 Transitional measures for own funds pursuant to Article 308b(9) and (10) of Directive 2014/51/EU dated 16 April 2014 amending Directive 2009/138/EC

E 2 Solvency capital requirement and minimum capital requirement

The SCR is the amount of eligible own funds that Munich Re needs to have available, with a given risk tolerance, to cover unexpected losses in the following year. It corresponds to the value at risk of the economic profit and loss distribution over a one-year time horizon with a confidence level of 99.5%, and thus equates to the economic loss for Munich Re that, given unchanged exposures, will be exceeded each year with a statistical probability of 0.5%.

The application of long-term guarantee adjustments and transitional measures in some subsidiary undertakings has no effect on the solvency capital requirement of Munich Re (Group).

An SCR breakdown by risk category can be found in the annex to this report, QRT S.25.03.22 “Solvency capital requirements – for Groups on full internal models”. Under “Other risks”, we include contributions from institutions for occupational retirement provisions and financial institutions to Munich Re’s solvency capital requirement. The item also includes the SCR contributions of insurance or reinsurance undertakings, insurance or reinsurance undertakings in third countries, insurance holding companies and mixed financial holding companies that are not subsidiaries of the parent company. The increase in the SCR compared with the previous year is mainly due to increased exposure in risk-capital-intensive areas of the property-casualty and life and health reinsurance segments.

Further details about the SCR broken down by risk category can be found in Part C Risk profile.

The minimum consolidated Group SCR is calculated from the total minimum capital requirements for the solo undertakings in the Group. The minimum capital requirement (MCR) of the solo undertakings is calculated by means of a factor approach, primarily on the basis of premiums and technical provisions. At the same time, the MCR must constitute at least 25% but no more than 45% of the SCR. For solo undertakings outside the European Economic Area, the local minimum capital requirements are applied under which the licences to transact business could be revoked. The minimum consolidated Group SCR was €12.1bn as at 31 December 2018.

The main sources of diversification in the internal model are our broad spread across the different risk categories (underwriting, market, credit) and our combination of primary insurance and reinsurance business. We also take into account dependencies between the risks, which can result in higher capital requirements than would be the case if no dependency were assumed.

The following companies also use the Munich Re internal model to calculate their solvency capital requirement at solo undertaking level:

- Munich Reinsurance Company, Munich, Germany;
- Munich Re of Malta p.l.c., Ta’ Xbiex, Malta;
- DKV Deutsche Krankenversicherung AG, Cologne, Germany;
- ERGO Versicherung AG, Düsseldorf, Germany;
- ERGO DIREKT Versicherung AG, Nuremberg, Germany; and
- Great Lakes Insurance SE, Munich, Germany.

Munich Re underwrites risks as a member of the association of underwriters known as Lloyd’s via the companies Munich Re Syndicate Ltd., London, and Beaufort Underwriting Agency, London. The risks of these companies are taken into account in the Munich Re internal model; at the same time, they are also taken into account in the Lloyd’s internal model.

E 3 Use of the duration-based equity risk sub-module in the calculation of the solvency capital requirement

Munich Re does not use a duration-based equity risk sub-module to calculate the solvency capital requirement at the consolidated Group level.

Germany did not exercise the option to permit the use of a duration-based equity risk sub-module to calculate the solvency capital requirement.

E 4 Differences between the standard formula and any internal model used

E 4.1 Scope of the internal model

Our internal model is based on specially modelled distributions for the risk categories property-casualty, life and health, market, credit and operational risks. We use primarily historical data for the calibration of these distributions, complemented in some areas by expert judgement. Our historical data covers a long period to take account of the one-year time horizon and to provide a stable and appropriate estimate of our risk parameters.

The dependencies are calibrated by means of scenarios that affect more than one risk category simultaneously and comparisons with relevant standards. We also take account in our risk model of the risk-mitigating effect of technical provisions in life and health primary insurance.

We then determine the effect of the loss absorbency of deferred taxes.

The internal model adequately covers material quantifiable risks arising from underwriting (property-casualty, life and health), market risk, credit risk, and operational risk. It also covers biometric risks from pension liabilities in all of Munich Re's areas of operation.

Details about the stated categories and about non-quantified risks can be found in Part C Risk profile.

E 4.2 Methods of the internal model

The core principles used in modelling the individual risk categories are set out below:

Property-casualty underwriting risk

We apply appropriate methodology in our modelling for basic losses, large losses and accumulation losses (especially those resulting from natural catastrophes). Basic losses are modelled using stochastic simulation methods, which are used to calculate the difference in the ultimate loss status. For the modelling of large and accumulation losses, we use collective models, determining the frequency and loss amount using historical loss experience and based on physical models.

The methodology used for modelling property-casualty risks at the relevant undertakings of ERGO Group AG is generally the same as that applied at Munich Re (Group) level. Where the risk profiles of these undertakings display particular features, the methodology is adapted accordingly.

Life and health underwriting risk

Mortality, longevity, disability, customer behaviour, administration expenses and the costs of benefits paid in health insurance are modelled as separate risk drivers in the internal model.

In life reinsurance, possible future scenarios are determined by Monte Carlo simulations of those risk drivers.

The modelling in life primary insurance and German health primary insurance is based on stress scenarios; their effect on the stochastic valuation models is analysed.

Market risk

Market risks are modelled in the internal model by means of Monte Carlo simulation of possible future market scenarios, taking account of risk drivers relevant to Munich Re (Group) at a granular level. We revalue our assets and liabilities for each simulated market scenario, thus showing the probability distribution for changes to basic own funds.

Credit risk

A Monte Carlo simulation is used to model credit risk in the internal model, and we take particular account of the creditworthiness of each counterparty.

Operational risk

We use scenarios based on expert estimates to quantify operational risk in the internal model.

E 4.3 Material differences to standard formula

The most relevant deviations between the assumptions of the standard formula and the risk profile of Munich Re are:

- The standard formula does not take sufficient account of the effects of Munich Re's diversified portfolio structure. This applies to both underlying exposures and markets, and to the broad geographic diversification.
- The standard formula oversimplifies risks that are not material for most European insurance undertakings. The most important examples of solvency capital requirements with respect to Munich Re that are insufficiently recognised in the standard formula are the requirements for
  - non-proportional property insurance,
  - our global portfolio of natural catastrophe covers,
  - life reinsurance, and
  - assets in foreign currencies that are required for the operation of non-European subsidiaries.
- By applying the standard formula to Munich Reinsurance Company, subsidiaries are depicted on the basis of equity stress and are therefore treated differently to Munich Re (Group) as regards the corresponding calculation. In contrast, the internal model takes account of the actual risk drivers for Munich Reinsurance Company and Munich Re (Group) in the same transparent way.

As a result of these limitations of the standard formula, Munich Re decided to use an internal model to calculate its solvency capital requirements. Below, we compare the assumptions of the internal model with those of the standard formula, and explain why the approach taken in the internal model is more appropriate.

The quantitative impact of the differences between the standard formula and the internal model on the resulting SCR is typically much larger in the reinsurance segment than in the primary insurance segment. This is mainly due to the fact that the standard formula was designed for an average-sized European insurance undertaking, and not for a global reinsurance portfolio as in the reinsurance segment. Consequently, the solvency capital requirements based on the standard formula are to a large extent inappropriate for most lines of business or geographical areas in reinsurance. For primary insurance in the European Economic Area (EEA), our business profile matches the assumptions of the standard formula better than in the reinsurance segment. Nevertheless, the internal model also provides a more appropriate view of the risks for Munich Re in this segment.

Life underwriting risk

The life reinsurance model simulates the deviations of projected net cash flows from the best estimate on the basis of stochastically varying biometric and lapse risk drivers. The value at risk of 99.5% over a one-year period is derived using the linear regression finance approach (LRFA). Each risk driver comprises a process, basis, trend and calamity risk component. The standard formula is less sophisticated, with each biometric risk driver being represented by only one deterministic scenario, which is generated by level stress on the best-estimate assumptions.

Where possible, the parameters of the Life Re module of the internal model are estimated from historical data. The mortality trend risk parameters are estimated based on historic population mortality rates. Basis risk is calibrated such that the model reproduces the standard deviation of historical operating assumption change rates. The stress parameters used for life primary insurance SCR calculations are derived from application of the Life Re model to ERGO portfolio data sets. This is carried out by means of stress scenarios on the basis of stochastic corporate models.

The pandemic model in the internal model explicitly contains an allowance for the portfolio's age distribution covered and its underlying base mortality.

Health underwriting risk

For NSLT (not similar to life techniques) health business, premium and reserve risk is calculated similar to the non-life underwriting risk in the standard formula (loading factors). Overall, reinsurance business is NSLT. Therefore, non-life insurance techniques are used to calculate the economic risk capital.

In primary insurance, health insurance using similar to life techniques (SLT health business) is handled similarly to life primary insurance business. Account is taken of the fact that in the health insurance segment, premiums or benefits may be adjusted after a certain period of time.

Non-life underwriting risk

In the standard formula, the premium and reserve risk is determined using loading factors applied to premium measures and technical provisions. In the internal model, premium and reserve risk is measured incorporating historical loss experience and loss development patterns, at the level of a Munich Re risk-specific segmentation.

For catastrophe risk, the standard formula distinguishes between EEA exposures (higher granularity of input data) and non-EEA exposures (more simplistic approach). In the internal model, the risk from natural catastrophes – one of the biggest risks on Munich Re's balance sheet – is modelled using a stochastic and risk-sensitive approach which captures key accumulation risks in all geographical locations. The same holds true for man-made catastrophe accumulations.

For both catastrophe and non-catastrophe risks, the geographical diversification inherent in Munich Re's global portfolio is only partially recognised in the standard formula.

Market risk

The calculation of market risk figures is based on risk drivers that describe the change in value of financial instruments.

The calibration of the scenarios describing the possible future realisation of these risk drivers is based on long-term historical data (over-the-cycle calibration). A comparison of the risk drivers used within the internal model with the standard formula approach shows that the granularity of the internal model (with more than 500 distinct risk drivers) is far more elaborate than the standard formula approach. In addition, the internal model captures specific risk drivers that are not accounted for in the standard formula, namely spreads on sovereign bonds, inflation expectations, and implied volatilities on equities and interest rates.

In most relevant cases, there is no significant difference between the corresponding quantiles of the scenarios and the shocks of the standard formula.

Credit risk

The counterparty default risk in the standard formula only captures the risk of default for specific assets (namely those that are not covered by the spread risk module in the market risk calculation). By contrast, the credit risk SCR under the internal model takes account of all items involving credit risk. Besides fixed-interest investments, this includes deposits with ceding institutions, reinsurance recoverables, receivables, counterparty risk on derivatives, cash, and guarantees.

In addition to losses from defaults, the internal model covers potential losses from rating downgrades.

Operational risk

Under the standard formula, the operational risk (OpRisk) SCR is determined using a simplistic factor-based approach as a function of premiums, technical provisions and the basic SCR. Under the internal model, individual OpRisk scenarios are determined which take into account information from relevant experts and insights from the internal control system.

E 4.4 Risk measures and time period used in the internal model

The risk measures and time period used in the internal model for purposes of calculating the SCR are compliant with the requirements of Article 101(3) of Directive 2009/138/EC.

The confidence level used for the SCR is the value-at-risk (VAR) measure on the 99.5% quantile.

E 4.5 Data used in the internal model

A common data policy has been established for Munich Re that sets Group-wide data quality standards. An individual data directory is compiled for each solo undertaking in the Group. This provides justification that the calculation of the regulatory capital according to the internal model is based on data of sufficient quality.

When using the term data, we refer to the numerical, statistical or classification information, but not qualitative information. This also applies to information used to develop model assumptions. The assumptions themselves are not regarded as data.

A specific Solvency II requirement is the compilation of a data directory. It comprises all data used in the internal model, specifying its source, characteristics and usage. Responsibility for the data directory's input and maintenance lies with the respective process owners.

In accordance with Solvency II requirements, the quality of data has to meet the criteria of accuracy, completeness and appropriateness.

The interpretation of the three data quality criteria is defined at a very high level, and is applicable to all areas where the assessment of the data quality is required. The data used in the respective areas is highly complex and diverse, and so the principle of proportionality is naturally important with the principles-based approach. Applying the principle of proportionality when considering data quality means that the requirements should be seen in relation to the intended purpose of the analysis or assessment. For portfolios where underlying risks are considered simple in terms of nature, scale and complexity, "appropriate" is interpreted differently than in a situation where the risks are complex. This means that we proceed on the assumption that less detailed data is required for the assessment of more simple risks.

While the assessment of the last two criteria (completeness and appropriateness) should be considered at a higher level, accuracy is assessed at a more granular level.

E 5 Non-compliance with the minimum capital requirement and non-compliance with the solvency capital requirement

Munich Re had adequate own funds at all times during the reporting period to cover MCR and SCR.

E 6 Any other information

We do not have any other material information about Munich Re's capital management.

Annex

Z

Z Annex

S.02.01.02

Balance sheet

€m	Solvency II value
Assets	
Intangible assets	0
Deferred tax assets	303
Pension benefit surplus	293
Property, plant & equipment held for own use	3,292
Investments (other than assets held for index-linked and unit-linked contracts)	212,554
Property (other than for own use)	8,374
Holdings in related undertakings, including participations	4,341
Equities	2,402
Equities – listed	1,683
Equities – unlisted	719
Bonds	147,402
Government Bonds	75,184
Corporate Bonds	63,489
Structured notes	5,969
Collateralised securities	2,760
Collective Investments Undertakings	44,548
Derivatives	1,223
Deposits other than cash equivalents	2,921
Other investments	1,342
Assets held for index-linked and unit-linked contracts	7,621
Loans and mortgages	8,553
Loans on policies	240
Loans and mortgages to individuals	2,791
Other loans and mortgages	5,523
Reinsurance recoverables from:	4,060
Non-life and health similar to non-life	2,790
Non-life excluding health	2,550
Health similar to non-life	240
Life and health similar to life, excluding health and index-linked and unit-linked	1,270
Health similar to life	663
Life excluding health and index-linked and unit-linked	607
Life index-linked and unit-linked	0
Deposits to cedants	12,605
Insurance and intermediaries receivables	3,261
Reinsurance receivables	92
Receivables (trade, not insurance)	2,179
Own shares (held directly)	713
Amounts due in respect of own fund items or initial fund called up but not yet paid in	0
Cash and cash equivalents	2,711
Any other assets, not elsewhere shown	530
Total assets	**258,767**

Balance sheet

€m	Solvency II value
Liabilities	
Technical provisions – non-life	58,054
Technical provisions – non-life (excluding health)	54,742
TP calculated as a whole	112
Best Estimate	53,211
Risk margin	1,420
Technical provisions – health (similar to non-life)	3,311
TP calculated as a whole	13
Best Estimate	3,159
Risk margin	138
Technical provisions – life (excluding index-linked and unit-linked)	124,536
Technical provisions – health (similar to life)	58,849
TP calculated as a whole	0
Best Estimate	54,765
Risk margin	4,084
Technical provisions – life (excluding health and index-linked and unit-linked)	65,686
TP calculated as a whole	0
Best Estimate	61,574
Risk margin	4,112
Technical provisions – index-linked and unit-linked	8,453
TP calculated as a whole	41
Best Estimate	8,280
Risk margin	132
Contingent liabilities	13
Provisions other than technical provisions	1,335
Pension benefit obligations	2,950
Deposits from reinsurers	1,007
Deferred tax liabilities	6,704
Derivatives	548
Debts owed to credit institutions	126
Financial liabilities other than debts owed to credit institutions	1,138
Insurance & intermediaries payables	1,858
Reinsurance payables	203
Payables (trade, not insurance)	4,563
Subordinated liabilities	4,173
Subordinated liabilities not in BOF	95
Subordinated liabilities in BOF	4,079
Any other liabilities, not elsewhere shown	67
Total liabilities	**215,725**
Excess of assets over liabilities	**43,042**

S.05.01.02

Premiums, claims and expenses by line of business

€m	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
Premiums written							
Gross – Direct Business	1,544	817	9	2,051	1,129	733	3,319
Gross – Proportional reinsurance accepted	416	234	121	2,041	1,702	800	5,147
Gross – Non-proportional reinsurance accepted							
Reinsurers' share	138	22	2	186	74	149	636
Net	1,822	1,030	128	3,906	2,757	1,384	7,830
Premiums earned							
Gross – Direct Business	1,504	813	11	2,009	1,112	753	3,202
Gross – Proportional reinsurance accepted	420	214	112	1,913	1,490	734	4,874
Gross – Non-proportional reinsurance accepted							
Reinsurers' share	137	22	2	181	66	150	575
Net	1,787	1,005	122	3,740	2,536	1,338	7,501
Claims incurred							
Gross – Direct Business	1,021	248	4	1,699	347	517	1,966
Gross – Proportional reinsurance accepted	277	117	27	2,152	922	193	2,867
Gross – Non-proportional reinsurance accepted							
Reinsurers' share	117	9	–5	389	57	63	393
Net	1,182	356	36	3,461	1,211	647	4,439
Changes in other technical provisions							
Gross – Direct Business	–22	1	0	0	–1	0	–16
Gross – Proportional reinsurance accepted	–1	0	0	1	0	0	0
Gross – Non-proportional reinsurance accepted							
Reinsurers' share	0	0	0	0	0	0	0
Net	–23	1	0	1	–1	0	–16
Expenses incurred	**577**	**424**	**48**	**1,257**	**914**	**468**	**3,178**
Other expenses							
Total expenses							

	Line of business for: non-life insurance and reinsurance obligations (direct business and accepted proportional reinsurance)					Line of business for: accepted non-proportional reinsurance				Total
	General liability insurance	Credit and suretyship insurance	Legal expenses insurance	Assistance	Miscel-laneous financial loss	Health	Casualty	Marine, aviation, transport	Property	
	1,378	121	1,030	79	232					12,444
	2,141	517	49	1	311					13,480
						97	802	121	2,172	3,192
	129	41	121	8	21	1	-27	1	132	1,634
	3,389	598	958	72	521	96	830	120	2,040	27,482
	1,353	106	1,029	77	270					12,237
	2,099	481	46	1	273					12,658
						98	772	121	2,166	3,157
	125	33	124	7	29	1	-22	-1	134	1,563
	3,326	554	950	71	514	98	794	121	2,032	26,489
	894	45	440	35	104					7,318
	1,561	193	21	1	108					8,439
						-88	-246	-93	1,576	1,149
	65	16	74	5	16	0	-190	-98	-88	822
	2,390	222	387	31	195	-88	-55	5	1,665	16,085
	0	0	1	0	-13					-52
	1	0	0	0	0					1
						-3	0	0	0	-3
	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	-13	-3	0	0	0	-53
	1,248	**240**	**525**	**37**	**236**	**29**	**227**	**38**	**434**	**9,880**
										44
										9,924

Premiums, claims and expenses by line of business

	Line of business for: life insurance obligations				Annuities stemming from non-life insurance contracts and relating to	
€m	Health insurance	Insurance with profit participation	Index-linked and unit-linked insurance	Other life insurance	Health insurance obligations	Other insurance obligations*
Premiums written						
Gross	5,974	3,078	584	279	0	0
Reinsurers' share	4	125	0	7	0	0
Net	5,969	2,953	583	272	0	0
Premiums earned						
Gross	5,957	3,080	583	280	0	0
Reinsurers' share	4	125	0	7	0	0
Net	5,953	2,954	583	272	0	0
Claims incurred						
Gross	4,847	4,313	733	147	35	48
Reinsurers' share	–12	98	0	3	0	4
Net	4,860	4,216	733	144	35	45
Changes in other technical provisions						
Gross	–546	311	1,093	56	0	0
Reinsurers' share	0	–25	0	1	0	0
Net	–546	337	1,093	55	0	0
Expenses incurred	**897**	**604**	**258**	**99**	**0**	**0**
Other expenses						
Total expenses						

* With the exception of health insurance obligations.

Premiums, claims and expenses by line of business

	Life reinsurance obligations		Total
€m	Health reinsurance	Life reinsurance	
Premiums written			
Gross	2,968	7,395	20,277
Reinsurers' share	241	607	985
Net	2,726	6,788	19,292
Premiums earned			
Gross	2,977	3,949	16,825
Reinsurers' share	241	505	884
Net	2,735	3,444	15,941
Claims incurred			
Gross	2,092	5,897	18,113
Reinsurers' share	54	74	220
Net	2,038	5,823	17,894
Changes in other technical provisions			
Gross	169	26	1,110
Reinsurers' share	99	205	279
Net	71	–179	831
Expenses incurred	**500**	**1,208**	**3,566**
Other expenses			**6**
Total expenses			**3,572**

S.05.02.01

Premiums, claims and expenses by country

€m	Home country	Top 5 countries (by amount of gross premiums written) – non-life obligations					Total – Top 5 and home country
		USA	United Kingdom	Poland	Australia	Spain	
Premiums written							
Gross – Direct Business	3,523	2,542	2,372	1,339	21	643	10,441
Gross – Proportional reinsurance accepted	508	4,982	1,473	100	1,009	304	8,376
Gross – Non-proportional reinsurance accepted	127	1,048	376	8	174	74	1,808
Reinsurers' share	118	492	342	113	10	8	1,083
Net	4,040	8,080	3,880	1,334	1,195	1,014	19,542
Premiums earned							
Gross – Direct Business	3,495	2,524	2,283	1,259	63	641	10,265
Gross – Proportional reinsurance accepted	513	4,767	1,377	62	755	344	7,818
Gross – Non-proportional reinsurance accepted	124	1,030	359	14	179	73	1,778
Reinsurers' share	116	479	332	102	9	7	1,044
Net	4,016	7,842	3,687	1,232	987	1,051	18,816
Claims incurred							
Gross – Direct Business	1,664	1,697	1,711	685	20	464	6,240
Gross – Proportional reinsurance accepted	830	2,749	756	15	525	229	5,104
Gross – Non-proportional reinsurance accepted	-1,664	1,075	354	11	246	111	133
Reinsurers' share	-18	381	336	68	4	0	771
Net	848	5,140	2,485	643	787	803	10,706
Changes in other technical provisions							
Gross – Direct Business	4	0	-21	0	0	0	-17
Gross – Proportional reinsurance accepted	2	-1		0			2
Gross – Non-proportional reinsurance accepted	0	-3					-3
Reinsurers' share	0		0		0		0
Net	6	-3	-21	0	0	0	-18
Expenses incurred	**2,336**	**2,996**	**1,272**	**471**	**220**	**245**	**7,540**
Other expenses							**37**
Total expenses							**7,578**

Premiums, claims and expenses by country

€m	Home country	USA	Canada	United Kingdom	Australia	Belgium	Total – Top 5 and home country
→	Top 5 countries (by amount of gross premiums written) – life obligations						
Premiums written							
Gross	9,106	2,750	1,521	1,251	776	745	16,150
Reinsurers' share	0	232	9	131	0	112	485
Net	9,106	2,518	1,512	1,120	776	633	15,665
Premiums earned							
Gross	9,105	112	1,521	1,251	0	729	12,718
Reinsurers' share	0	133	9	131		112	386
Net	9,105	-21	1,512	1,120	0	617	12,332
Claims incurred							
Gross	9,226	2,470	995	1,137	563	489	14,880
Reinsurers' share	1	99	7	31	0	67	206
Net	9,225	2,371	988	1,106	563	421	14,674
Changes in other technical provisions							
Gross	391	-13	69	65	26	13	550
Reinsurers' share	0	40	0	1	0	-25	15
Net	391	-52	69	64	26	38	535
Expenses incurred	**1,922**	**253**	**297**	**42**	**123**	**145**	**2,783**
Other expenses							**10**
Total expenses							**2,793**

S.22.01.22

Impact of long term guarantees and transitional measures

€m	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
Technical provisions	191,042	10,296	0	120	0
Basic own funds	42,953	-7,155	0	-90	0
Eligible own funds to meet Solvency Capital Requirement	43,241	-7,155	0	-90	0
Solvency Capital Requirement	14,670	0	0	0	0

S.23.01.22

Own funds

€m	Total	Tier 1 – unrestricted	Tier 1 – restricted	Tier 2	Tier 3
Basic own funds before deduction for participations in other financial sector					
Ordinary share capital (gross of own shares)	588	588		0	
Non-available called but not paid in ordinary share capital at group level	0	0		0	
Share premium account related to ordinary share capital	6,845	6,845		0	
Initial funds, members' contributions or the equivalent basic own – fund item for mutual and mutual-type undertakings	0	0		0	
Subordinated mutual member accounts	0		0	0	0
Non-available subordinated mutual member accounts at group level	0		0	0	0
Surplus funds	2,606	2,606			
Non-available surplus funds at group level	210	210			
Preference shares	0		0	0	0
Non-available surplus funds at group level	0		0	0	0
Share premium account related to preference shares	0		0	0	0
Non-available share premium account related to preference shares at group level	0		0	0	0
Reconciliation reserve	29,088	29,088			
Subordinated liabilities	4,079		13	4,020	46
Non-available subordinated liabilities at group level	46		0	0	46
An amount equal to the value of net deferred tax assets	344				344
The amount equal to the value of net deferred tax assets not available at the group level	83				83
Other items approved by supervisory authority as basic own funds not specified above	0	0	0	0	0
Non available own funds related to other own funds items approved by supervisory authority	0	0	0	0	0
Minority interests (if not reported as part of a specific own fund item)	198	198	0	0	0
Non-available minority interests at group level	168	168	0	0	0
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds					
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	0	0			
Deductions					
Deductions for participations in other financial undertakings, including non-regulated undertakings carrying out financial activities	287	287	0	0	
Whereof deducted according to art 228 of the Directive 2009/138/EC	0	0	0	0	0
Deductions for participations where there is non-availability of information (Article 229)	0	0	0	0	0
Deduction for participations included by using D&A when a combination of methods is used	0	0	0	0	0
Total of non-available own fund items	506	378	0	0	129
Total deductions	**793**	**665**	**0**	**0**	**129**
Total basic own funds after deductions	**42,953**	**38,660**	**13**	**4,020**	**261**

Own funds

€m	Total	Tier 1 – unrestricted	Tier 1 – restricted	Tier 2	Tier 3
Ancillary own funds					
Unpaid and uncalled ordinary share capital callable on demand	0			0	
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual – type undertakings, callable on demand	0			0	
Unpaid and uncalled preference shares callable on demand	0			0	0
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	0			0	0
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	0				
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	0			0	
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	0			0	
Supplementary members calls – other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	0			0	0
Non available ancillary own funds at group level	0			0	0
Other ancillary own funds	0			0	0
Total ancillary own funds	**0**			**0**	**0**
Own funds of other financial sectors					
Credit institutions, investment firms, financial institutions, alternative investment fund managers, UCITS management companies	86	86	0	0	
Institutions for occupational retirement provision	199	199	0	0	0
Non regulated entities carrying out financial activities	3	3	0	0	
Total own funds of other financial sectors	**287**	**287**	**0**	**0**	
Own funds when using the D&A, exclusively or in combination of method 1					
Own funds aggregated when using the D&A and combination of method	0	0	0	0	0
Own funds aggregated when using the D&A and a combination of method net of IGT	0	0	0	0	0
Total available own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	42,953	38,660	13	4,020	261
Total available own funds to meet the minimum consolidated group SCR	42,692	38,660	13	4,020	
Total eligible own funds to meet the consolidated group SCR (excluding own funds from other financial sector and from the undertakings included via D&A)	42,953	38,660	13	4,020	261
Total eligible own funds to meet the minimum consolidated group SCR	41,091	38,660	13	2,419	

Own funds

€m	Total	Tier 1 – unrestricted	Tier 1 – restricted	Tier 2	Tier 3
Minimum consolidated Group SCR (Article 230)	**12,096**				
Ratio of eligible own funds to Minimum Consolidated Group SCR	**340%**				
Total eligible own funds to meet the group SCR (including own funds from other financial sector and from the undertakings included via D&A)	**43,241**	**38,947**	**13**	**4,020**	**261**
Group SCR	**14,670**				
Ratio of eligible own funds to group SCR including other financial sectors and the undertakings included via D&A	**295%**				

Reconciliation reserve

€m	Total
Excess of assets over liabilities	43,042
Own shares (held directly and indirectly)	713
Forseeable dividends, distributions and charges	2,661
Other basic own fund items	10,580
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	0
Other non available own funds	0
Reconciliation reserve before deduction for participations in other financial sector	**29,088**
Expected profits	
Expected profits included in future premiums (EPIFP) – Life business	13,185
Expected profits included in future premiums (EPIFP) – Non- life business	955
Total EPIFP	**14,140**

S.25.03.22

Solvency capital requirement – for groups on full internal models

€m	Calculation of solvency capital requirement
Unique number of component	
201 – Property-casualty	7,634
202 – Life and health	5,288
203 – Market	9,217
204 – Credit	3,161
205 – Operational risk	1,063
207 – Loss-absorbing capacity of deferred taxes	–2,448
208 – Other risk	667
Calculation of solvency capital requirement	
Total undiversified components	24,582
Diversification	–9,912
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	0
Solvency capital requirement excluding capital add-on	**14,670**
Capital add-ons already set	0
Solvency capital requirement	**14,670**
Other information on SCR	
Amount/estimate of the overall loss-absorbing capacity of technical provisions	–4,640
Amount/estimate of the overall loss-absorbing capacity of deferred taxes	–2,448
Total amount of notional solvency capital requirements for remaining part	0
Total amount of notional solvency capital requirements for ring-fenced funds	0
Total amount of notional solvency capital requirement for matching adjustment portfolios	0
Diversification effects due to RFF nSCR aggregation for Article 304	0
Minimum consolidated Group solvency capital requirement	12,096
Information on other entities	
Capital requirement for other financial sectors (non-insurance capital requirements)	201
Capital requirement for other financial sectors (non-insurance capital requirements) – Credit institutions, investment firms and financial institutions, alternative investment fund managers, UCITS management companies	54
Capital requirement for other financial sectors (non-insurance capital requirements) – Institutions for occupational retirement provisions	146
Capital requirement for other financial sectors (non-insurance capital requirements) – Capital requirement for non-regulated entities carrying out financial activities	1
Capital requirement for non-controlled participation requirements	0
Capital requirement for residual undertakings	0

S.32.01.22

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	SC/LEI/529900MUF4C20K50JS49/DE/66237	Specific	„PORT ELISABETH“ GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/66117	Specific	„PORT LOUIS“ GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
US	LEI/549300N4FZ45G44J6793	LEI	13th & F Associates Limited Partnership	10	Limited Partnership	2
US	SC/LEI/529900MUF4C20K50JS49/US/12827	Specific	1440 New York Ave. Associates LP	10	Limited Partnership	2
US	SC/LEI/529900MUF4C20K50JS49/US/12807	Specific	1818 Acquisition LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
FR	LEI/969500SH0AJXIHL77L25	LEI	40 Courcelles	10	SAS Société par actions simplifée	2
ES	LEI/959800BL7UATAJDXPA14	LEI	Adelfa Servicios a Instalaciones Fotovoltaicas S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/529900AKQK4BF4C99681	LEI	AEVG 2004 GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
AT	SC/LEI/529900MUF4C20K50JS49/AT/10840	Specific	AGRA Ges. für landwirt. Entwicklung u. Beteiligung mbH	10	Gesellschaft mit beschränkter Haftung	2
IT	LEI/815600F7AD0D828FD829	LEI	Agricultural Management Services S.r.l.	10	Società a Responsabilità Limitata	2
ES	LEI/529900QKD0X56D7HU745	LEI	Aleama 150015 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/5299004UG0606GMBAT31	LEI	ALICE GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299008IGVZJ5TCIEO98	LEI	ALLYSCA Assistance GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300YWXT94H07IAR29	LEI	American Alternative Insurance Corporation	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/5493002MMIK8WTZ67713	LEI	American Family Home Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300J6XWKWQ9EI3J85	LEI	American Modern Home Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300XRGKDF37YCUX16	LEI	American Modern Home Service Company	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300SH0I83V0VXSB37	LEI	American Modern Insurance Company of Florida Inc.	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300FMGQAYYSP27L13	LEI	American Modern Insurance Group Inc.	5	Business Corporation (Public Corporation, Close Corporation)	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	32	32	32		Significant	32	yes		10
	26	26	26		Significant	26	yes		10
	98	98	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	21	21	21		Significant	21	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	0	0	0		Dominant	0	yes		3
	100	100	100		Dominant	100	yes		1
	33	33	33		Significant	33	yes		10
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
Insurance Department of the State of Delaware	100	100	100		Dominant	100	yes		1
State of Florida	100	100	100		Dominant	100	yes		1
State of Ohio	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
State of Florida	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/ non-mutual)[2]
US	LEI/549300UDGP9BINTJ5114	LEI	American Modern Lloyds Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300KEIVJ16HFQHC55	LEI	American Modern Property & Casualty Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300277CH4PAIVNL14	LEI	American Modern Select Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300UVCKNIZQCQBN25	LEI	American Modern Surplus Lines Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300NT0KLTG662VB79	LEI	American Southern Home Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300ZW3600ACLVVJ28	LEI	American Western Home Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800S7NNJW5XXBF959	LEI	Amicus Legal Ltd.	10	Private Company Limited by Shares	2
DE	LEI/529900MDR1P3VPDC0869	LEI	ANOVA GmbH	10	Gesellschaft mit beschränkter Haftung	2
IN	LEI/3358001SWQSDCNO5BD43	LEI	Apollo Munich Health Insurance Co. Ltd.	2	Private Limited	2
ES	LEI/5299009BUBQNCETSE853	LEI	Arridabra 130013 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/529900D52G52D0MJRJ25	LEI	ARTES Assekuranzservice GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900ANQMOQ50UNSA56	LEI	ArztPartner almeda AG	10	Aktiengesellschaft	2
DE	LEI/529900HEPKGGIJCBQ731	LEI	Assistance Partner GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
PL	SC/LEI/529900MUF4C20K50JS49/PL/60816	Specific	Atena Uslugi Informatyczne i Finansowe S.A.	10	Spólka akcyjna	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10380	Specific	ATU Landbau GmbH& Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
US	LEI/549300IVBWG76EWFXX03	LEI	Augury Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
NL	SC/LEI/529900MUF4C20K50JS49/NL/52072	Specific	B&D Business Solutions B.V.	10	Besloten vennootschap met	2
US	SC/LEI/529900MUF4C20K50JS49/US/12839	Specific	Backpack Insurance Agency Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
ES	LEI/5299005KHQ4XYL81CV45	LEI	Badozoc 1001 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
GB	LEI/2138005PU5PN6ZZPC440	LEI	Bagmoor Holdings Limited	10	Private Company Limited by Shares	2

						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
State of Texas	100	100	100		Dominant	100	yes		1
State of Ohio	100	100	100		Dominant	100	yes		1
State of Ohio	100	100	100		Dominant	100	yes		1
State of Ohio	100	100	100		Dominant	100	yes		1
State of Florida	100	100	100		Dominant	100	yes		1
State of Oklahoma	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
IRDA Insurance Regulatory and Development Authority	49	49	49		Significant	49	yes		3
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	22	22	22		Significant	22	yes		10
	100	100	100		Dominant	100	yes		3
	95	95	95		Dominant	100	yes		1
	13	13	13		Significant	13	yes		10
	100	51	100		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		10
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
GB	LEI/213800CH2LMPMH5FX706	LEI	Bagmoor Wind Limited	10	Private Company Limited by Shares	2
AT	LEI/529900CTWT6788GFR960	LEI	Bank Austria Creditanstalt Versicherungsdienst GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/529900X8ZUGJSGLCH258	LEI	Baqueda 7007 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12842	Specific	Bazos CIV L.P.	10	Limited Partnership	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/54805	Specific	BC European Capital X – 5A L.P.	99	Limited Partnership	2
GB	LEI/213800CGHZU8VMQQP627	LEI	Beaufort Dedicated No.1 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/213800QX5PFQY5U1N812	LEI	Beaufort Dedicated No.2 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/2138004D7D9KJXGGD736	LEI	Beaufort Dedicated No.3 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/213800QW9EKZC4UAX502	LEI	Beaufort Dedicated No.4 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/213800ZNW6CUERWIYD59	LEI	Beaufort Dedicated No.5 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/2138005M8N26853ANX40	LEI	Beaufort Dedicated No.6 Ltd.	10	Private Company Limited by Shares	2
GB	LEI/213800TI7Q6G7WDIU437	LEI	Beaufort Underwriting Agency Limited	10	Private Company Limited by Shares	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/10160	Specific	Beaufort Underwriting Services Limited	10	Private Company Limited by Shares	2
BM	LEI/213800VOVQKXA9FFOO95	LEI	Bell & Clements (Bermuda) Ltd.	99	Private Company Limited by shares	2
GB	LEI/21380064S1INI3RCDC83	LEI	Bell & Clements (London) Ltd.	10	Private Company Limited by Shares	2
US	LEI/21380079LOGIMVQET963	LEI	Bell & Clements (USA) Inc.	99	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/213800KQKD7QER8LLA11	LEI	Bell & Clements Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800TLPCZDH5RFHC04	LEI	Bell & Clements Ltd.	10	Private Company Limited by Shares	2
ES	LEI/529900QK692B8YLFFG29	LEI	Bobasbe 6006 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/52990033S2VUNITD3Z85	LEI	Botedazo 8008 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
KY	SC/LEI/529900MUF4C20K50JS49/KY/10833	Specific	Broad Street Loan Partners III Offshore – Unlevered LP III	99	Limited Partnership	2
ES	LEI/529900NM5ZPDR6NO5G10	LEI	Callopio 5005 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2

Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	75	100		Dominant	75	yes		10
	100	100	100		Significant	100	yes		3
	54	54	54		Significant	54	yes		3
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		3
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		1
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		10
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		10
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		3
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	25	25	8		Significant	25	yes		3
	100	75	100		Dominant	75	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
ES	LEI/529900Q442AA833QVP81	LEI	Camcichu 9009 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
NL	LEI/529900REKS515FKVAT67	LEI	Cannock Chase B.V.	10	Besloten vennootschap met	2
NL	LEI/5299007301MV9W7YXP82	LEI	Cannock Chase Holding B.V.	10	Besloten vennootschap met	2
NL	LEI/5299005J8F59Y32PUF14	LEI	Cannock Chase Incasso II B.V.	10	Besloten vennootschap met	2
NL	LEI/529900BU28IPOFJVFY35	LEI	Cannock Chase Purchase B.V.	10	Besloten vennootschap met	2
NL	LEI/529900O9VMD9G8JEEF56	LEI	Cannock Connect Center B.V.	10	Besloten vennootschap met	2
US	SC/LEI/529900MUF4C20K50JS49/US/56086	Specific	Capital Dynamics Champion Ventures VI, L.P.	99	Limited Partnership	2
DE	LEI/529900360ELYW55NSD04	LEI	CAPITAL PLAZA Holding GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/529900B9YUDSJQ4FGJ19	LEI	Caracuel Solar Catorce S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900IXFVCB1S6WK676	LEI	Caracuel Solar Cinco S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900WJ0Q0M51LTLO84	LEI	Caracuel Solar Cuatro S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900CV561CG90MV288	LEI	Caracuel Solar Dieciocho S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900OMLK9VGW57CV72	LEI	Caracuel Solar Dieciseis S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900J8NUSY9UK5RB35	LEI	Caracuel Solar Diecisiete S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299008XBYAWRO92Z885	LEI	Caracuel Solar Diez S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900O6VJ3X5CWIXE27	LEI	Caracuel Solar Doce S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299007WZHSGJQ4KE448	LEI	Caracuel Solar Dos S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299006VJ5O8424PCY56	LEI	Caracuel Solar Nueve S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900D70ZFN4CAUKS47	LEI	Caracuel Solar Ocho S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299000U9V4EQ00ZWE66	LEI	Caracuel Solar Once S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2

						Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	75	100		Dominant	75	yes		10
	100	51	100		Dominant	51	yes		3
	100	51	100		Dominant	100	yes		1
	100	51	100		Dominant	51	yes		10
	100	51	100		Dominant	51	yes		3
	100	51	100		Dominant	51	yes		3
	27	27	27		Significant	27	yes		3
	100	100	100		Dominant	100	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
ES	LEI/529900YQ7T69H967ZC43	LEI	Caracuel Solar Quince S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900LUFLEQ45A3Q477	LEI	Caracuel Solar Seis S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/52990086VYWI3KY03V98	LEI	Caracuel Solar Siete S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900ZAVW8KZJ54VA75	LEI	Caracuel Solar Trece S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900KP5LJLFHI16476	LEI	Caracuel Solar Tres S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299009ZEYQ8JG942893	LEI	Caracuel Solar Uno S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/5299005VXTHVWASMF326	LEI	carexpert Kfz-Sachverständigen GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/12795	Specific	CBRE U.S. Core Partners Parallel Limited Partnership	10	Limited Partnership	2
PL	LEI/259400R3WRBOV76F1409	LEI	Centrum Pomocy Osobom Poszkodowanym Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10373	Specific	Ceres Demetra GmbH	10	Gesellschaft mit beschränkter Haftung	2
BY	SC/LEI/529900MUF4C20K50JS49/BY/60811	Specific	Closed Joint Stock Company «ERGO» Insurance Company	4	Joint Stock Insurance Company	2
DE	LEI/39120001R09MQ1URNK04	LEI	Comino Beteiligung GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	SC/LEI/529900MUF4C20K50JS49/ES/10202	Specific	Consorcio Internacional de Aseguradores de Crédito S.A.	5	Sociedad Anónima	2
DE	LEI/391200CCPAYQE6OTSL29	LEI	Consortia Versicherungs-Beteiligungsges.	5	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300G9HIUZ50E53H77	LEI	Copper Leaf Research	10	Business Corporation (Public Corporation, Close Corporation)	2
AU	LEI/26170024S74LVA8GHA28	LEI	Corion Pty Ltd	10	Proprietary Limited Company	2
GB	LEI/529900E7GJE2DNYTNQ65	LEI	Cornwall Power (Polmaugan) Limited	10	Private Company Limited by Shares	2
ES	LEI/529900IDZQ5VL4LQS183	LEI	Cotatrillo 100010 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
GB	LEI/213800144FS2X86NV219	LEI	Countryside Renewables (Forest Heath) Limited	10	Private Company Limited by Shares	2
IE	SC/LEI/529900MUF4C20K50JS49/IE/60812	Specific	CUSTOM MARKETS QIAIF PLC (The HEMM Fund)	99	Public Limited Company	2
ES	LEI/959800VP29N7HZJ1KD83	LEI	D.A.S. Defensa del Automovilista y de Siniestros – Int. S.A.	2	Sociedad Anónima	2
IT	LEI/8156009A1E48E2F6A547	LEI	D.A.S. Difesa Automobilistica Sinistri S.p.A. di Assicurazione	2	Società per azioni	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	25	25	25		Significant	25	yes		10
	100	100	100		Significant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
Committee for Insurance Supervision	92	92	92		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	15	15	15		Significant	15	yes		3
	34	34	34		Significant	34	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	0		Significant	100	yes		3
Direccion General de Seguros (DGS)	100	100	100		Dominant	100	yes		1
Istituto per la Vigilanza sulle Assicurazioni	50	50	50		Significant	50	yes		3

Undertakings in the scope of the group

Coun-try	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of under-taking[1]	Legal form	Category (mutual/ non-mutual)[2]
GR	LEI/5299006RY4ESXQTQIF24	LEI	D.A.S. Hellas Insurance Company of Legal Protection S.A.	2	Anonymos Eteria	2
HU	LEI/529900O5HPVPPEUIC831	LEI	D.A.S. Jogvedelmi Biztosito Reszvenytarsasag	2	Biztosító részvénytársaság	2
LU	LEI/222100Q7NF5QRN2KAR88	LEI	D.A.S. Luxemburg Allgemeine Rechtsschutz-Versicherung S.A.	99	Société anonyme	2
PL	LEI/5299000B1I7SL89ZEU78	LEI	D.A.S. Prawo i Finanse Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
AT	LEI/529900OWFVDB8HL4R597	LEI	D.A.S. Rechtsschutz Aktiengesellschaft	2	Aktiengesellschaft	2
DE	LEI/529900R8LSJAGFV3Y282	LEI	D.A.S. Rechtsschutz Leistungs-GmbH	10	Gesellschaft mit beschränkter Haftung	2
BE	LEI/5299008ZCPR9YDKM2O49	LEI	D.A.S. S.A. belge d'assurances de Protection Juridique	2	Société anonyme	2
PL	LEI/529900L2AHAUE2CHYV74	LEI	D.A.S. Towarzystwo Ubezpieczen Ochrony Prawnej S.A.	2	Spólka akcyjna	2
PL	LEI/529900ZL6WMX9UXUVI64	LEI	D.A.S., Tomasz Niedzinski Kancelaria Prawna Sp.k.	10	Spolka Komandytowa	2
AE	SC/LEI/529900MUF4C20K50JS49/AE/10194	Specific	DAMAN – National Health	2	Public Limited by Shares	2
QA	SC/LEI/529900MUF4C20K50JS49/QA/10234	Specific	Daman Health Insurance – Qatar LLC	2	Limited Liability Company	2
DK	SC/LEI/529900MUF4C20K50JS49/DK/10852	Specific	Dansk Demetra ApS	10	Anpartsselbskab	2
GB	LEI/213800R8K1JS9F7O9Z25	LEI	DAS Assistance Limited	10	Private Company Limited by Shares	2
NL	LEI/529900KXSUIYJXY4A182	LEI	DAS Holding N.V.	5	Naamloze vennootschap	2
NL	LEI/5299004G0DL4JPXIM624	LEI	DAS Incasso Arnhem B.V.	10	Besloten vennootschap met	2
NL	LEI/5299001OG6JPJUD2FL05	LEI	DAS Incasso Eindhoven B.V.	10	Besloten vennootschap met	2
NL	LEI/529900QO9FJ96DGWHR51	LEI	DAS Incasso Rotterdam B.V.	10	Besloten vennootschap met	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/52090	Specific	DAS Law Limited	10	Private Company Limited by Shares	2
KR	LEI/529900U2KKAFZ9K3JU70	LEI	DAS Legal Expenses Insurance Co., Ltd.	2	Company Limited	2
GB	LEI/213800JP3DALOKFYGF63	LEI	DAS Legal Expenses Insurance Company Limited	2	Private Company Limited by Shares	2
NL	SC/LEI/529900MUF4C20K50JS49/NL/52035	Specific	DAS Legal Finance B.V.	10	Besloten vennootschap met	2
CA	LEI/5493005NOSQ6QKQ7PS83	LEI	DAS Legal Protection Inc.	10	Limited Partnership	2
NL	LEI/529900RR7FZJBRYIN725	LEI	DAS Legal Services B.V.	10	Besloten vennootschap met	2

						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
„Department of Private Insurance Supervision“ in Bank of Greece	100	100	100		Dominant	100	yes		1
Hungarian Financial Supervisory Authority (HFSA)	100	100	100		Dominant	100	yes		1
CAA Commissariat aux Assurances	100	100	100		Significant	100	yes		3
	100	100	100		Dominant	100	yes		10
Finanzmarktaufsicht (FMA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Financial Services and Markets Authority, National Bank of Belgium	100	100	100		Dominant	100	yes		1
Polish Financial Supervision Authority (KNF)	100	100	100		Dominant	100	yes		1
	95	95	95		Dominant	95	yes		10
Abu Dhabi Accountability Authority (ADAA)	20	20	20		Significant	20	yes		3
Qatar Financial Center Authority	100	51	100		Dominant	51	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	51	51	51		Dominant	100	yes		1
	100	51	100		Dominant	51	yes		10
	100	51	100		Dominant	51	yes		10
	100	51	100		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		3
Financial Supervisory Service	100	100	100		Dominant	100	yes		1
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		1
	100	51	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	51	100		Dominant	51	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
ES	LEI/959800KJF11BCCY0SY03	LEI	DAS Lex Assistance S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
GB	LEI/213800GXIHWBV5WELF12	LEI	DAS MEDICAL ASSIST LIMITED	10	Private Company Limited by Shares	2
NL	LEI/724500FCYQ71PUHWNM13	LEI	DAS Nederlandse Rechtsbijstand Verzekeringmaatschappij N.V.	2	Naamloze vennootschap	2
GB	LEI/213800ESOOCWUHNYCD64	LEI	DAS Services Limited	10	Private Company Limited by Shares	2
GB	LEI/213800SGSZOHSKG9BQ92	LEI	DAS UK Holdings Limited	5	Private Company Limited by Shares	2
LU	LEI/549300Q1ELGKGZGYST57	LEI	DB Platinum IV SICAV (Subfonds Instit. FI, Inh.-Ant. I6D oN)	99	Investment compartment of a SICAV	2
LU	LEI/549300Q1ELGKGZGYST57	LEI	DB Platinum IV SICAV (Subfonds Instit. FI, Inh.-Ant. I7D oN)	99	Investment compartment of a SICAV	2
LU	LEI/549300Q1ELGKGZGYST57	LEI	DB Platinum IV SICAV (Subfonds Instit. FI, Inh.-Ant. I8D oN)	99	Investment compartment of a SICAV	2
LU	LEI/549300Q1ELGKGZGYST57	LEI	DB Platinum IV SICAV (Subfonds Instit. FI, Inhaber-Ant. I4D)	99	Investment compartment of a SICAV	2
LU	LEI/549300Q1ELGKGZGYST57	LEI	DB Platinum IV SICAV (Subfonds Instit. FI, Inhaber-Ant. I5D)	99	Investment compartment of a SICAV	2
EE	SC/LEI/529900MUF4C20K50JS49/EE/60814	Specific	DEAX Oigusbüroo OÜ	10	Osaühing	2
US	SC/LEI/529900MUF4C20K50JS49/US/12833	Specific	Digital Advantage Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12832	Specific	Digital Affect Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12831	Specific	Digital Edge Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
CA	SC/LEI/529900MUF4C20K50JS49/CA/10823	Specific	Digital Porte Inc.	10	Corporation	2
BE	LEI/529900SS2ES08VQ69F51	LEI	DKV Belgium S.A.	2	Naamloze vennootschap	2
DE	LEI/529900OYDMK94Z6Z4S80	LEI	DKV Beteiligungs- und Vermögensverwaltungs GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900QWOC2PJX7RJV60	LEI	DKV Deutsche Krankenversicherung Aktiengesellschaft	2	Aktiengesellschaft	2
DE	LEI/529900G6OFVZT9249M23	LEI	DKV Erste Beteiligungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990080PZFAW0UIVJ51	LEI	DKV Pflegedienste & Residenzen GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/529900G6IMJJHYXFWN65	LEI	DKV Seguros y Reaseguros S.A. Espanola	4	Sociedad Anónima	2
ES	LEI/9598004T6F61X29YUK98	LEI	DKV Servicios S.A.	10	Sociedad Anónima	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
De Nederlandsche Bank (DNB)	100	51	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
Financial Supervision Authority (Finantsinspektsioon)	100	100	100		Dominant	100	yes		10
Rhode Island Department of Insurance	100	100	100		Dominant	100	yes		1
New York Department of Financial Services	100	100	100		Dominant	100	yes		1
Delaware Department of Insurance	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
Financial Services and Markets Authority, National Bank of Belgium	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
Direccion General de Seguros (DGS)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/ non-mutual)[2]
DE	LEI/5299007CPV3DTU8W7X21	LEI	DKV-Residenz am Tibusplatz gGmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900OD0RD1ICRX2W84	LEI	DKV-Residenz in der Contrescarpe GmbH	10	Gesellschaft mit beschränkter Haftung	2
IE	SC/LEI/529900MUF4C20K50JS49/IE/10838	Specific	DMS QIAIF Platform ICAV (FIVE LABS Subfonds)	99	Irish Collective Asset-management Vehicle	2
NL	LEI/529900YWS1PXD6CCBL15	LEI	DRA Debt Recovery Agency B.V.	10	Besloten vennootschap met	2
US	LEI/2138008ITC8C3BEMBZ59	LEI	E&S Claims Management Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
NL	LEI/529900ZAW1DYDFVTOG22	LEI	Economic Data Resources B.V.	10	Besloten vennootschap met	2
FR	LEI/391200SXYGWTDKZCTU60	LEI	EGM Wind SAS	10	SAS Société par actions simplifée	2
US	LEI/549300Q6OWF8V3Z8FP98	LEI	EIG Co.	6	Business Corporation (Public Corporation, Close Corporation)	2
CN	SC/LEI/529900MUF4C20K50JS49/CN/16031	Specific	ERGO (China) Consulting Ltd.	10	Limited	2
DE	LEI/529900BYQALNXZROHV07	LEI	ERGO Alpha GmbH	10	Gesellschaft mit beschränkter Haftung	2
SG	SC/LEI/529900MUF4C20K50JS49/SG/60127	Specific	ERGO Asia Management Pte. Ltd. (In Memb. Voluntary Liqui.)	10	Private Company Limited by Shares	2
RO	LEI/549300MK1V4X2UORUX05	LEI	ERGO ASIGURARI DE VIATA S.A.	1	Societate pe actiuni	2
RO	LEI/529900YST7L2SWPDWA12	LEI	ERGO ASIGURARI S.A.	2	Societate pe actiuni	2
AT	LEI/529900PK3FYD60LY8E40	LEI	ERGO Austria International AG	5	Aktiengesellschaft	2
DE	LEI/529900FPXXCQK14XAR74	LEI	ERGO Beratung und Vertrieb AG	10	Aktiengesellschaft	2
CN	LEI/529900BHJ66RO2PFW254	LEI	ERGO China Life Insurance Co., Ltd.	1	Company Limited	2
DE	LEI/529900XTL4KOTFF3Q453	LEI	ERGO Deutschland AG	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50109	Specific	ERGO Digital IT GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900VUW5YYQFX1Y745	LEI	ERGO Digital Ventures AG	10	Aktiengesellschaft	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/54807	Specific	ERGO Direkt AG	10	Aktiengesellschaft	2
DE	LEI/529900E2QCJZYS6TCV63	LEI	ERGO DIREKT Krankenversicherung AG	2	Aktiengesellschaft	2
DE	LEI/529900I23UL0E4H64H40	LEI	ERGO DIREKT Lebensversicherung AG	1	Aktiengesellschaft	2
DE	LEI/529900TR199NLPAZS345	LEI	ERGO DIREKT Versicherung AG	2	Aktiengesellschaft	2
HU	LEI/213800QGZ8165TV9L145	LEI	ERGO Eletbiztosito Zrt	1	Biztosító részvénytársaság	2

Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Criteria of influence: Proportional share used for Group solvency calculation	Inclusion in scope of Group supervision: Yes/no	Inclusion in scope of Group supervision: Date of decision if Art. 214 is applied	Group solvency calculation: Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	51	100		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		3
	100	51	100		Dominant	51	yes		10
	40	40	40		Significant	40	yes		3
	100	100	100		Dominant	100	yes		1
	100	99	100		Dominant	99	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Comisia de Supraveghere a Asigurarilor	100	100	100		Dominant	100	yes		1
Comisia de Supraveghere a Asigurarilor	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
CIRC China Insurance Regulatory Commission	50	50	50		Significant	50	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
Hungarian Financial Supervisory Authority (HFSA)	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900XSCZQHUR6ARI89	LEI	ERGO Elfte Beteiligungsgesell-schaft mbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300CX0OBPE6NJN106	LEI	ERGO Fund I LP	10	Limited Partnership	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50122	Specific	ERGO Fünfzehnte Beteiligungs AG	10	Gesellschaft bürgerlichen Rechts	2
ES	LEI/9598005RQFK6E65T5425	LEI	ERGO Generales Seguros y Reaseguros S.A.	2	Sociedad Anónima	2
DE	LEI/529900OF76TERZUFMW26	LEI	ERGO Gourmet GmbH	99	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990021CYIIW4B60I18	LEI	ERGO Group AG	5	Aktiengesellschaft	2
TR	LEI/789000YD8UU1INTZOH67	LEI	ERGO Grubu Holding A.Ş	5	Anonim Sirket	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/58002	Specific	ERGO Grundstücksverwaltung GbR	10	Gesellschaft bürgerlichen Rechts	2
DE	LEI/529900UG1WIHUB1IIU20	LEI	ERGO Infrastructure Investment Gesundheit GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900B1Y6FG90JECU51	LEI	ERGO Infrastructure Investment Komposit GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50107	Specific	ERGO Infrastructure Investment Leben GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50106	Specific	ERGO Infrastructure Investment Pensionskasse GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/58157	Specific	ERGO Infrastructure Investment Victoria Leben GmbH	10	Gesellschaft mit beschränkter Haftung	2
RU	LEI/529900Q8FHF156ZSVM40	LEI	ERGO Insurance Company	2	Zakrytoe Aktsioner-noe Obschestvo	2
GR	LEI/529900UQZRIC761SRM91	LEI	ERGO Insurance Company S.A.	4	Anonymos Eteria	2
BE	LEI/5299007TI9HJRE0V4G23	LEI	ERGO Insurance N.V.	4	Naamloze vennootschap	2
SG	LEI/529900S6R4IXNL9C5010	LEI	ERGO Insurance Pte. Ltd.	4	Private Company Limited by Shares	2
EE	LEI/549300WOSFHL8FRS5V57	LEI	ERGO Insurance SE	2	Aktsiaselts	2
DE	LEI/X4L6EOE6OMD2QIB37P03	LEI	ERGO International Aktiengesellschaft	5	Aktiengesellschaft	2
DE	LEI/529900GFWTRCD7ENFG39	LEI	ERGO International Services GmbH	10	Gesellschaft mit beschränkter Haftung	2
LV	LEI/529900NOCKDD68CRKF70	LEI	ERGO Invest SIA	10	Sabiedriba ar ierobežotu atbildibu	2
CO	SC/LEI/529900MUF4C20K50JS49/CO/60813	Specific	ERGO LatAm S.A.S.	10	Sociedad Anónima	2
DE	LEI/5299005PXQZRFZAFVF64	LEI	ERGO Leben Asien Verwaltungs GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900JFXJ4FC97TBH39	LEI	ERGO Lebensversicherung Aktiengesellschaft	1	Aktiengesellschaft	2
LT	LEI/5493001IOWSPIYMXRA82	LEI	ERGO Life Insurance SE	4	Societas Europaea	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
Direccion General de Seguros (DGS)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Federal Financial Markets Service (FFMS), Department of Insurance Supervision	100	100	100		Dominant	100	yes		1
Hellenic Capital Market Commission, Directorate of Insurance	100	100	100		Dominant	100	yes		1
Financial Services and Markets Authority, National Bank of Belgium	100	100	100		Dominant	100	yes		1
Monetary Authority of Singapore	100	100	100		Dominant	100	yes		1
Financial Supervision Authority (Finantsinspektsioon)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
Bank of Lithuania	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Coun-try	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of under-taking[1]	Legal form	Category (mutual/non-mutual)[2]
LU	LEI/529900FMF2P7MBTLRS77	LEI	ERGO Life S.A.	1	Société anonyme	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50111	Specific	ERGO Mobility Solutions GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900TWJYR44YARHR88	LEI	ERGO Neunte Beteiligungs-gesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
HR	LEI/529900YNUGX3BSF7UW33	LEI	ERGO osiguranje d.d.	2	Dionicko drustvo	2
BE	LEI/529900GIYAOULBX21J16	LEI	ERGO Partners N.V.	10	Naamloze vennootschap	2
DE	LEI/529900JZZGJ11RUVB627	LEI	ERGO Pensionsfonds Aktiengesellschaft	9	Aktiengesellschaft	2
DE	LEI/529900LG1TCV0M0OWU23	LEI	ERGO Pensionskasse AG	9	Aktiengesellschaft	2
SK	LEI/097900BFCD0000009725	LEI	ERGO Poist'ovna a.s.	4	Akciová spoločnosť	2
CZ	LEI/315700OLABZYLZ1JZU51	LEI	ERGO pojist'ovna, a.s.	4	Akciová spoločnosť	2
DE	LEI/529900TLPYZU5U9TBZ50	LEI	ERGO Private Capital Dritte GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900AGOAL9G5WPTD48	LEI	ERGO Private Capital Gesundheit GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900JO1K692QKHE964	LEI	ERGO Private Capital GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990029U2TVST16UD83	LEI	ERGO Private Capital Komposit GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900609SFSWP7OZ376	LEI	ERGO Private Capital Leben GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900OSJZZOZSOJK704	LEI	ERGO Private Capital Vierte GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/52990042QWZB0V2ZE889	LEI	ERGO Private Capital Zweite GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
IT	LEI/529900KKE2SMM6J5ZR35	LEI	ERGO PRO S.r.l.	10	Società a Responsa-bilità Limitata	2
PL	LEI/529900MTAXWZQN1HWY18	LEI	ERGO Pro Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
CZ	LEI/529900Z0JLEC0BH7ES95	LEI	ERGO Pro, spol.s.r.o.	10	Spolecnost s rucenim omezenym	2
TR	LEI/7890003IHMH2J1KG1C30	LEI	ERGO SIGORTA A.S.	2	Anonim Sirket	2
AT	LEI/5299007W3TDXUG0DIK38	LEI	ERGO Versicherung Aktiengesellschaft	4	Aktiengesellschaft	2

Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Inclusion in scope of Group supervision: Yes/no	Inclusion in scope of Group supervision: Date of decision if Art. 214 is applied	Group solvency calculation: Method used and, under Method 1, treatment of the undertaking[3]
CAA Commissariat aux Assurances	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
Croatian Financial Services Supervisory Agency (HANFA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		4
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		4
Národná banka Slovenska	100	100	100		Dominant	100	yes		1
Česká národní banka – Dohled v pojišťovnictví	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Undersecretariat of Treasury/Insurance Supervisory Board	100	100	100		Dominant	100	yes		1
Finanzmarktaufsicht (FMA)	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900TZURIWZSMOYV38	LEI	ERGO Versicherung Aktiengesellschaft	2	Aktiengesellschaft	2
DE	LEI/529900X74BHF8B8PYY92	LEI	ERGO Versicherungs- und Finanzierungs-Vermittlung GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/5299003NVOZ58BDXCC38	LEI	ERGO Vida Seguros y Reaseguros S.A.	1	Sociedad Anónima	2
DE	LEI/529900KGSLBWVSQMMY03	LEI	ERGO Vorsorge Lebensversicherung AG	1	Aktiengesellschaft	2
AT	LEI/529900BQNFVAHM6B1N64	LEI	ERGO Vorsorgemanagement GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900ROKJEOHMGVSM75	LEI	ERGO Zehnte Beteiligungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
HR	LEI/529900X5KXMQKTW28N82	LEI	ERGO Zivotno osiguranje d.d.	1	Dionicko drustvo	2
DE	LEI/529900YOLW49KLOUVS14	LEI	ERGO Zwölfte Beteiligungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
CZ	LEI/315700A0UB9Q7DOQIZ00	LEI	ERV Evropska pojist’ovna, a.s.	2	Akciová společnost	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/16058	Specific	ERV Services Ltd.	10	Private Company Limited by Shares	2
TR	SC/LEI/529900MUF4C20K50JS49/TR/16035	Specific	ERV Sigorta Aracılık Hizmetleri Ltd. Şti.	10	Limited Sirket	2
CZ	LEI/5299005O34B1URHGOW07	LEI	Etics, s.r.o.	10	Spolecnost s rucenim omezenym	2
ES	LEI/529900O27OX0M3IU4U36	LEI	Etoblete 160016 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
CY	SC/LEI/529900MUF4C20K50JS49/CY/16041	Specific	Euro-Center (Cyprus) Ltd.	10	Limited	2
TH	SC/LEI/529900MUF4C20K50JS49/TH/16037	Specific	Euro-Center (Thailand) Co., Ltd.	10	Company Limited	2
ZA	SC/LEI/529900MUF4C20K50JS49/ZA/16046	Specific	Euro-Center Cape Town (Pty) Ltd	10	Private/Propriety Company (Limited by Shares)	2
HK	LEI/529900V1I95DZATOFI03	LEI	Euro-Center Holding North Asia (HK) Pte. Ltd.	10	Private Company Limited by Shares	2
CZ	LEI/529900RQ720EGQ4P2854	LEI	Euro-Center Holding SE	10	Societas Europaea	2
BR	SC/LEI/529900MUF4C20K50JS49/BR/16036	Specific	Euro-Center Ltda	10	Sociedade por Quotas de Responsabiliadade Limitada	2
CN	SC/LEI/529900MUF4C20K50JS49/CN/16055	Specific	Euro-Center North Asia Consulting Serv. (Beijing) Co., Ltd.	10	Company Limited	2
CZ	LEI/529900SSAZPEILTBGU79	LEI	Euro-Center Prague, s.r.o.	10	Spolecnost s rucenim omezenym	2
ES	SC/LEI/529900MUF4C20K50JS49/ES/16039	Specific	EUROCENTER S.A.	10	Sociedad Anónima	2
US	SC/LEI/529900MUF4C20K50JS49/US/16044	Specific	Euro-Center USA, Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Direccion General de Seguros (DGS)	100	100	100		Dominant	100	yes		1
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Croatian Financial Services Supervisory Agency (HANFA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Česká národní banka – Dohled v pojišťovnictví	90	90	90		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	90	100		Dominant	90	yes		10
	100	75	100		Dominant	75	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	83	82	83		Dominant	82	yes		3
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10
	100	82	100		Dominant	82	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
TR	SC/LEI/529900MUF4C20K50JS49/TR/16043	Specific	EURO-CENTER YEREL YARDIM HIZMETLERI Ltd. Sti.	10	Limited Sirket	2
DK	LEI/529900XCDP67EU703X29	LEI	Europaeiske Rejseforsikring A/S	2	Aktieselskab	2
HU	LEI/529900MLIDA51W4RTR25	LEI	Europai Utazasi Biztosito Rt	2	Biztosító részvénytársaság	2
DE	LEI/529900GPC0BEXNKO6N32	LEI	EUROPÄISCHE Reiseversicherung Aktiengesellschaft	2	Aktiengesellschaft	2
AT	LEI/52990097HEM6G3FED703	LEI	Europäische Reiseversicherungs-Aktiengesellschaft	2	Aktiengesellschaft	2
DE	LEI/529900SFBVYR5M6G9092	LEI	European Assistance Holding GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/959800U4XJJDBPT4EB89	LEI	Evaluación Médica TUW S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
GB	LEI/213800S1MCEO6QNFXN82	LEI	Everything Legal Ltd.	10	Private Company Limited by Shares	2
DE	LEI/529900NTBJ7S6QY8BM79	LEI	Exolvo GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900Q6ZNCYDJ9G4443	LEI	Fairance GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/12845	Specific	Faunus Silva LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/56054	Specific	Fernkälte Geschäftsstadt Nord GbR	10	Gesellschaft bürgerlichen Rechts	2
US	SC/LEI/529900MUF4C20K50JS49/US/10214	Specific	FIA Timber Parnters II LP	99	Limited Partnership	2
ZW	LEI/213800MA9DXB33AO6B38	LEI	Finsure Investments (Private) Limited	99	Private/Propriety Company (Limited by Shares)	2
DE	LEI/5299001QYPPZ26VRJY30	LEI	Flexitel Telefonservice GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/3912005DKSYK5D0KRZ40	LEI	Forst Ebnath AG	10	Aktiengesellschaft	2
IT	LEI/815600DA9D4D4AC03729	LEI	FOTOUNO S.r.l.	10	Società a Responsabilità Limitata	2
IT	LEI/815600688B2328245670	LEI	FOTOWATIO ITALIA GALATINA S.r.l.	10	Società a Responsabilità Limitata	2
ES	SC/LEI/529900MUF4C20K50JS49/ES/56807	Specific	FREE MOUNTAIN SYSTEMS S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12846	Specific	FS Louisiana I LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12848	Specific	FS Louisiana II LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12847	Specific	FS San Augustine LLC	10	Business Corporation (Public Corporation, Close Corporation)	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	82	100		Dominant	82	yes		10
Finanstilsynet (DFSA)	100	100	100		Dominant	100	yes		1
Pénzügyi Szervezetek Állami Felügyelete (PSZAF)	26	26	26		Significant	26	yes		3
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		1
Finanzmarktaufsicht (FMA)	25	25	25		Significant	25	yes		3
	100	99	100		Dominant	99	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	37	37	37		Significant	37	yes		10
	39	39	39		Significant	39	yes		3
	25	25	25		Significant	25	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
ES	LEI/529900P391JSTYKRC860	LEI	Gamaponti 140014 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/529900GN7FT2ANZ0YX56	LEI	GBG Vogelsanger Straße GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900R572DRA58YKO86	LEI	Gebäude Service Gesellschaft Überseering 35 mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900JVWYKSHRPVWA29	LEI	GIG City Nord GmbH	10	Gesellschaft mit beschränkter Haftung	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/10107	Specific	Global Aerospace Underwriting Managers Ltd.	10	Limited Partnership	2
VN	LEI/529900U8PC365JIZWR18	LEI	Global Insurance Corporation	4	Joint Stock Company	2
US	LEI/549300C0QOSX08KH1X10	LEI	Global Standards LLC	6	Business Corporation (Public Corporation, Close Corporation)	2
LU	LEI/222100M5YXWXWJ8ING43	LEI	Globality S.A.	2	Société anonyme	2
DE	LEI/529900O65EWT1DOZ6S44	LEI	goDentis – Ges. für Innovation in der Zahnheilkunde mbH	10	Gesellschaft mit beschränkter Haftung	2
GI	SC/LEI/529900MUF4C20K50JS49/GI/10847	Specific	Great Lakes (Gibraltar) Plc	99	Public Limited Company	2
DE	LEI/529900L9ZF0WUNQRKY64	LEI	Great Lakes Insurance SE	2	Aktiengesellschaft	2
US	SC/LEI/529900MUF4C20K50JS49/US/10351	Specific	Green Acre LLC	99	Business Corporation (Public Corporation, Close Corporation)	2
CA	SC/LEI/529900MUF4C20K50JS49/CA/10809	Specific	Group Health Group Holdings Inc., Surrey	10	Corporation	2
GB	LEI/213800RI83XHCVPE1T22	LEI	Groves, John & Westrup Limited	10	Private Company Limited by Shares	2
ES	LEI/529900ODKY723MV2E538	LEI	Guanzu 2002 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/39120001JPKHKZUSYT32	LEI	Hamburger Hof Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
DK	LEI/529900PA0KJ7B9TVFK24	LEI	Hamburg-Mannheimer ForsikringService A/S	10	Aktieselskab	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10399	Specific	Hansekuranz Kontor GmbH	99	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300UKHLTQENP69I26	LEI	Hartford Research LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
MY	LEI/549300OZBTHQB280DQ07	LEI	Hartford Steam Boiler (M) SDN BHD	10	Sendirian Berhad	2
SG	LEI/549300BGKJVNK34VQ746	LEI	Hartford Steam Boiler (Singapore) Pte. Ltd.	10	Public Company Limited by Shares	2
CO	LEI/5493006ZOUD41AN25563	LEI	Hartford Steam Boiler Colombia Ltda	10	Sociedad Anónima	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	75	100		Dominant	75	yes		10
	95	95	95		Dominant	95	yes		10
	100	100	100		Dominant	100	yes		10
	20	20	20		Significant	20	yes		10
	51	51	51		Significant	51	yes		3
Insurance Supervisory Authority, Ministry of Finance Vietnam	44	44	44		Significant	44	yes		3
	100	100	100		Dominant	100	yes		1
CAA Commissariat aux Assurances	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	32	32	32		Significant	32	yes		3
	40	40	40		Significant	40	yes		3
	100	100	100		Dominant	100	yes		3
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	51	51	51		Dominant	51	yes		10
	42	42	20		Significant	42	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/549300CZVEVGCN86R028	LEI	Hartford Steam Boiler International GmbH	10	Aktiengesellschaft	2
GB	LEI/549300K27SI0JXMTHW31	LEI	Hartford Steam Boiler UK Limited	10	Public Company Limited by Shares	2
IN	LEI/529900XS7H6CPQS1IO14	LEI	HDFC ERGO General Insurance Company Ltd.	4	Private Limited	2
PL	LEI/259400SG385SKQXYKF60	LEI	Hestia Loss Control Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
DE	LEI/529900EQ5TBSULYUOY50	LEI	HMV GFKL Beteiligungs GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900T4DHN5F6S2L477	LEI	Horbach GmbH Vers.-Verm. und Finanzdienstleistungen	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/56087	Specific	HRJ Capital Global Buy-Out III (U.S.), L.P.	99	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300V2X2ZV1EF0C234	LEI	HSB Associates Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
BR	LEI/549300BPPG4MX2ZZ0W19	LEI	HSB Brasil Servicos de Engenharia e Inspecao Ltda	10	Sociedade por Quotas de Responsabiliadade Limitada	2
US	LEI/549300CXZ613N6A4FE05	LEI	HSB Engineering Finance Corporation	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800NLHHFJLPIYTF50	LEI	HSB Engineering Insurance Limited	2	Private Company Limited by Shares	2
GB	LEI/213800TUNRI2RDXJ5W28	LEI	HSB Engineering Insurance Services Limited	10	Private Company Limited by Shares	2
US	LEI/5493001EP22SNN5SQU95	LEI	HSB Fund I LP	10	Limited Partnership	2
US	LEI/549300YBYP3KZS5URX14	LEI	HSB Group Inc.	6	Business Corporation (Public Corporation, Close Corporation)	2
IN	LEI/549300USNPM6R2GR7B64	LEI	HSB International (India) Private Limited	10	Private Limited	2
JP	LEI/549300O30SZHCT8H1X04	LEI	HSB Japan K.K.	10	Kabushiki Kaisha	2
US	LEI/549300Z6EK4JLRW12Y47	LEI	HSB Secure Services Inc.	2	Business Corporation (Public Corporation, Close Corporation)	2
CA	LEI/549300E0UYKSTI5PM755	LEI	HSB Solomon Associates Canada Ltd	10	Corporation	2
US	LEI/549300M4QNRF2STP1358	LEI	HSB Solomon Associates LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300WKX003S16OH493	LEI	HSB Speciality Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
CN	LEI/549300DC6S636FGMSP43	LEI	HSB Technical Consulting & Service (Shanghai) Co. Ltd.	10	Limited liability corporation	2
US	LEI/549300XIK1EC4LHEDQ58	LEI	HSB Ventures Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2

						Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establish-ment of consoli-dated accounts	% voting rights	Other criteria	Level of influence	Propor-tional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the under-taking[3]
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
IRDA Insurance Regulatory and Develop-ment Authority	48	48	48		Significant	48	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	70	70	70		Dominant	70	yes		10
	45	45	45		Significant	45	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
Connecticut Department of Insurance	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900KKPN5Y29EXTG88	LEI	IDEENKAPITAL Anlagebetreuungs GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900GDS4X6TH0XOD89	LEI	Ideenkapital Client Service GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900STAAMM5WWKAS53	LEI	Ideenkapital erste Investoren Service GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990082RDQBJWE1R163	LEI	IDEENKAPITAL Financial Engineering GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900YA8OXMSG6THI43	LEI	IDEENKAPITAL Financial Service GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299005C5SN6ALZSPG63	LEI	Ideenkapital Fonds Treuhand GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900TY3XQKPELOT966	LEI	IDEENKAPITAL GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299001CGXVO6RQ19331	LEI	IDEENKAPITAL Media Finance GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900YAFNSUTCJM0Z80	LEI	Ideenkapital MediaTreuhand GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900XG38UN8LPE9A29	LEI	IDEENKAPITAL Metropolen Europa GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900S5S9XR3LR8ZA75	LEI	IDEENKAPITAL Metropolen Europa Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900TJC2V3RI9KHT14	LEI	IDEENKAPITAL PRORENDITA EINS Treuhandgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900XF5DK4E2ZW1N40	LEI	IDEENKAPITAL Schiffsfonds Treuhand GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900DUZVTOVCXY4J17	LEI	IDEENKAPITAL Treuhand US Real Estate eins GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50088	Specific	IK Einkauf Objekt Eins GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900SMSRWZBK56OF71	LEI	IK Einkauf Objektmanagement GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299001S8RE04ILT3441	LEI	IK Einkauf Objektverwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299008P7VE24WEMD067	LEI	IK Einkaufsmärkte Deutschland GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900CEB7BQD28BJD22	LEI	IK Einkaufsmärkte Deutschland Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299001ELDYF7WU5HZ53	LEI	IK FE Fonds Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900XCL1OPSQUTOV22	LEI	IK Komp GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900ASO8TYBL3MOR37	LEI	IK Objekt Bensheim GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900SMDCHL24NDV129	LEI	IK Objekt Frankfurt Theodor-Heuss-Allee GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900TDIDXXZXFEWZ94	LEI	IK Objektges. Frankfurt Theodor-Heuss-Allee GmbH & Co. KG	10	Gesellschaft mit beschränkter Haftung	2

Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	50	50	50		Dominant	50	yes		3
	100	100	100		Dominant	100	yes		10
	72	72	72		Dominant	72	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	52	100		Dominant	52	yes		3
	100	55	100		Dominant	55	yes		3
	100	100	100		Dominant	100	yes		10
	52	52	52		Dominant	52	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	47	47	47		Significant	47	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/5299002XBVAQDS2GVA47	LEI	IK Pflegezentrum Uelzen Verwaltungs-GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900RO54RRWAV5EI40	LEI	IK Premium Fonds GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900T36Y7TO0HPMH55	LEI	IK Premium Fonds zwei GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/5299005P0YWMZD0U8I59	LEI	IK Property Eins Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900BVJWRO5AH2ZF96	LEI	IK Property Treuhand GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900LD5STI0OXRDJ24	LEI	IK US Portfolio Invest DREI Verwaltungs-GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990032NUMM3O7DAO41	LEI	IK US Portfolio Invest Verwaltungs-GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900R6PZYE49H0S150	LEI	IK US Portfolio Invest ZWEI Verwaltungs-GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
CH	LEI/5299002HOIX645JM2F46	LEI	IKFE Properties I AG	10	Aktiengesellschaft	2
LU	LEI/529900ABVINK51Z7B232	LEI	Infra IV-D Investments, S.C.A.	99	Société en Commandite par Actions	2
US	SC/LEI/529900MUF4C20K50JS49/US/12863	Specific	Inshur Holdings Corp	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/64023	Specific	Invenergy Miami Wind I Holdings #2 LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/529900V83SB37T0MIO53	LEI	IRIS Capital Fund II German Investors GmbH & Co. KG	99	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900QCOY36P1FVN503	LEI	ITERGO Informationstechnologie GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/50113	Specific	ITERGO Service GmbH	10	Gesellschaft mit beschränkter Haftung	2
HU	LEI/529900FTFENWYHL3BT49	LEI	Jogszerviz Kft	10	Biztosító részvénytársaság	2
RU	LEI/52990038AQSVZ5F0S189	LEI	JSC „ERV Travel Insurance“	2	Zakrytoe Aktsionernoe Obschestvo	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10803	Specific	Junos Verwaltungs GmbH	99	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299009SCZ5KELNSAG40	LEI	K & P Objekt Hamburg Hamburger Str. Immo-Fonds GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/5299005IP7RTMCRFVT35	LEI	K & P Objekt Hamburg Hamburger Straße GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900PP7VBLQ6T63B78	LEI	K & P Objekt München Hufelandstraße GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299008BDDKMJ4G39479	LEI	K & P Pflegezentrum Uelzen IMMAC Renditefonds GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2

						Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	64	64	64		Dominant	64	yes		3
	100	100	100		Significant	100	yes		3
	16	16	16		Significant	16	yes		10
	49	49	49		Significant	49	yes		3
	86	86	86		Significant	86	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Federal Financial Markets Service (FFMS), Department of Insurance Supervision	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	37	37	37		Dominant	37	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	85	85	85		Dominant	85	yes		3

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of under-taking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900OK36X9ZY0OV619	LEI	KA Köln.Assekuranz Agentur GmbH	10	Gesellschaft mit beschränkter Haftung	2
RU	LEI/529900NC9S3RKJQQRV02	LEI	Kapdom-Invest GmbH	10	obschestvo s ogranitschennoi otvetstvennostiu	2
DE	LEI/529900PFE7K0QKIT9E07	LEI	KarstadtQuelle Finanz Service GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
ZA	SC/LEI/529900MUF4C20K50JS49/ZA/10394	Specific	King Price Financial Services (Pty) Ltd	5	Private/Propriety Company (Limited by Shares)	2
DE	LEI/5299004DQHWQOC6LX718	LEI	KQV Solarpark Franken 1 GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
GB	LEI/529900LLW2QG38G78884	LEI	KS SPV 23 Limited	10	Private Company Limited by Shares	2
DE	LEI/391200017FPMPRYX7B40	LEI	Larus Vermögensverwaltungsges. mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900EK6TSJ5O5BJH16	LEI	LCM Logistic Center Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900WE3GAWIQ2MOD86	LEI	Legal Net GmbH	10	Gesellschaft mit beschränkter Haftung	2
NL	LEI/529900KT04IM3H3S5I09	LEI	Leggle B.V.	10	Besloten vennootschap met	2
DE	LEI/529900C5NLONQIQ6QD33	LEI	LEGIAL AG	10	Aktiengesellschaft	2
DE	LEI/39120001NWO1HJVJXR37	LEI	Lietuva Demetra GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300MPUZ03XA1UND03	LEI	Lloyds Modern Corporation	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/529900M4FIG3F389A961	LEI	Longial GmbH	10	Gesellschaft mit beschränkter Haftung	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/10384	Specific	Lynt Farm Solar Limited	10	Private Company Limited by Shares	2
IT	LEI/529900FBKGWDDJVARS45	LEI	m:editerran Power S.a.s. di welivit Solar Italia S.r.l.	10	Società a Responsa-bilità Limitata	2
AU	SC/LEI/529900MUF4C20K50JS49/AU/10837	Specific	Macquarie Agriculture Fund – Crop Australia	99	Limited Partnership	2
ES	LEI/959800QXU50QYJWN5C57	LEI	MAGAZ FOTOVOLTAICA S.L.U.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
NL	LEI/529900EG1IYONEN0W603	LEI	Mandaat B.V.	10	Besloten vennootschap met	2
US	LEI/549300A73O4N6M720W61	LEI	Marbury Agency Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800HY4N747Z7WNP82	LEI	Marchwood Power Limited	10	Private Company Limited by Shares	2
ES	LEI/959800KY19VUHH7CF489	LEI	Marina Salud	99	Sociedad Anónima	2
PL	LEI/259400HQS1YTSS46QI37	LEI	Marina Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
DE	LEI/529900FZ483SPZS0GL40	LEI	MAYFAIR Financing GmbH	10	Gesellschaft mit beschränkter Haftung	2

Supervisory Authority						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	50	50	50		Significant	50	yes		3
	15	15	15		Significant	15	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	50	50	50		Significant	50	yes		10
	100	100	100		Dominant	100	yes		10
	100	51	100		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	41	41	41		Significant	41	yes		3
	100	100	100		Dominant	100	yes		1
	100	51	100		Dominant	51	yes		3
	100	100	100		Dominant	100	yes		10
	50	50	50		Significant	50	yes		3
	65	65	65		Dominant	65	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/5299002DW1CW0Y5GDQ71	LEI	MAYFAIR Holding GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299009VFYRF10VDQ794	LEI	MCAF Management GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900KMH13K8Z7VN302	LEI	MEAG Cash Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
HK	LEI/549300Z7RZCODQ04AC90	LEI	MEAG Hong Kong Limited	8	Business Corporation (Public Corporation, Close Corporation)	2
LU	LEI/5299004WRHIBDKHAPQ37	LEI	MEAG Luxembourg	8	Société à Responsabilité Limitée	2
DE	LEI/5299002M3PV07NR8CC24	LEI	MEAG Munich ERGO Asset Management	8	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900UCDILVT7WI6S55	LEI	MEAG MUNICH ERGO KAG (formerly ME Real Estate)	8	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300GYV8QBOBYJ6239	LEI	MEAG New York Corporation	8	Business Corporation (Public Corporation, Close Corporation)	2
HK	LEI/529900YO7UV8B3F9SM50	LEI	MEAG Pacific Star Holdings	10	Private Company Limited by Shares	2
DE	LEI/529900Z944EB0JVQYS73	LEI	MEAG Real Estate Erste Beteilungsgesellschaft i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900UTOQZS6ZEBNV89	LEI	Mediastream Consulting GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900HEM2I20ECNWK82	LEI	Mediastream Dritte Film GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990078MU6FJRYY7O64	LEI	Mediastream Film GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900AW8C9UN6T0QP24	LEI	Mediastream Zweite Film GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299007ZHUSGAJRMWH73	LEI	MEDICLIN Aktiengesellschaft	10	Aktiengesellschaft	2
BH	LEI/52990056JPIJDUSRF552	LEI	MedNet Bahrain W.L.L.	10	The With Limited Liability Company	2
EG	SC/LEI/529900MUF4C20K50JS49/EG/10372	Specific	MedNet Egypt LLC	10	Limited Liability Company	2
DE	LEI/529900JYRQ70PG68QR62	LEI	MedNet Europa GmbH	10	Gesellschaft mit beschränkter Haftung	2
AE	SC/LEI/529900MUF4C20K50JS49/AE/10814	Specific	MedNet Global Healthcare Solutions LLC	10	Limited Liability Company	2
GR	LEI/529900ZPRXAYAWDLEG62	LEI	MedNet Greece S.A.	10	Anonymos Eteria	2
DE	LEI/52990062SNNGIFY2Z991	LEI	MedNet Holding GmbH	10	Gesellschaft mit beschränkter Haftung	2
JO	LEI/529900IGTKVAXQ775F81	LEI	MedNet Jordan Co. W.L.L.	10	Gesellschaft mit beschränkter Haftung	2
SA	SC/LEI/529900MUF4C20K50JS49/SA/10197	Specific	MedNet Saudi Arabia LLC	10	Gesellschaft mit beschränkter Haftung	2
AE	LEI/529900PTUVJ9DGUVQF88	LEI	MedNet UAE FZ LLC	10	Limited Liability Company	2
DE	LEI/529900506UO48VYB5U83	LEI	MedWell Gesundheits-AG	10	Aktiengesellschaft	2

Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
	100	100	100		Dominant	100	yes		10
	50	50	50		Significant	50	yes		10
	100	100	100		Dominant	100	yes		1
Hong Kong Securities and Futures Commission	100	100	100		Dominant	100	yes		4
Commission de Surveillance du Secteur Financier (CSSF)	100	100	100		Dominant	100	yes		4
	100	100	100		Dominant	100	yes		4
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		4
U.S. Securities and Exchange Commission	100	100	100		Dominant	100	yes		4
	50	50	50		Significant	50	yes		3
	100	100	100		Dominant	100	yes		10
	100	50	100		Dominant	50	yes		10
	100	50	100		Dominant	50	yes		10
	100	50	100		Dominant	50	yes		10
	100	50	100		Dominant	50	yes		10
	35	35	35		Significant	35	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	78	78	78		Dominant	78	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900RRAAIQPDGMYV22	LEI	Merkur Grundstücks- und Beteiligungs-Gesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/5493007XD8CX7MQGOV89	LEI	Meshify, Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
MT	LEI/529900EJ60QTVISPO015	LEI	MFI Munich Finance and Investment Holding Ltd	10	Limited liability company/kumpannija b' responsabbilta' lim.	2
MT	LEI/529900QIGJMVZKJSLI97	LEI	MFI Munich Finance and Investment Ltd	10	Limited liability company/kumpannija b' responsabbilta' lim.	2
DE	LEI/529900HXG5ZCPH4CL512	LEI	miCura Pflegedienste Berlin GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900VJ60FB4WS4W102	LEI	miCura Pflegedienste Bremen GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900KC5RPTCWGIS588	LEI	miCura Pflegedienste Düsseldorf GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900L7DGAPBVY8L458	LEI	miCura Pflegedienste GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299009FRS9EJKHE1W35	LEI	miCura Pflegedienste Hamburg GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900Y4J4C10OZ4UZ95	LEI	miCura Pflegedienste Krefeld GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900JVK8UW3T2KB297	LEI	miCura Pflegedienste München/ Dachau GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900OKCWP4JDYS8172	LEI	miCura Pflegedienste München GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900KZF9U0Y3L92655	LEI	miCura Pflegedienste München Ost GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900WVPO6QGL1I7G24	LEI	miCura Pflegedienste Münster GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900DGK1ZJSA8YAS31	LEI	miCura Pflegedienste Nürnberg GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/5493006LTYZJFYEQT745	LEI	Midland-Guardian Co.	5	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/54930060IG29SI27EC66	LEI	Midwest Enterprises Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
CA	SC/LEI/529900MUF4C20K50JS49/CA/12828	Specific	Mnubo Inc.	10	Corporation	2
US	SC/LEI/529900MUF4C20K50JS49/US/12838	Specific	MR Bazos LP	10	Limited Partnership	2
DE	LEI/39120001GWUDQZEY1X54	LEI	MR Beteiligungen 1. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001XCVAA91XBS35	LEI	MR Beteiligungen 15. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001OJNZKBEEEZ36	LEI	MR Beteiligungen 16. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/391200PBDDWENXYOH119	LEI	MR Beteiligungen 17. GmbH	10	Gesellschaft mit beschränkter Haftung	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	51	51	51		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		10
	65	65	65		Dominant	65	yes		10
	100	100	100		Dominant	100	yes		10
	51	51	51		Dominant	51	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	16	16	16		Significant	16	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/39120001BGQ7BNGFBV17	LEI	MR Beteiligungen 18. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001808GMNGZGQ79	LEI	MR Beteiligungen 18. GmbH & Co. Immobilien KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10856	Specific	MR Beteiligungen 18. GmbH & Co. Real Estate KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/39120001VRP3N9EG7Y96	LEI	MR Beteiligungen 19. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/391200010KKQP2YFI368	LEI	MR Beteiligungen 2. EUR AG & Co. KG	10	Kommanditgesellschaft mit AG als Komplementär	2
DE	LEI/391200RV1WNMPNWUWB13	LEI	MR Beteiligungen 2. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001KILQFR4KUU86	LEI	MR Beteiligungen 3. EUR AG & Co. KG	10	Kommanditgesellschaft mit AG als Komplementär	2
DE	LEI/391200WXJC5NFU73HO11	LEI	MR Beteiligungen 3. GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001ATKYXXQ8LY53	LEI	MR Beteiligungen AG	10	Aktiengesellschaft	2
DE	LEI/391200011ZEQ13TB1914	LEI	MR Beteiligungen EUR AG & Co. KG	10	Kommanditgesellschaft mit AG als Komplementär	2
DE	LEI/39120001WEY9JSYGPK54	LEI	MR Beteiligungen GBP AG & Co. KG	10	Kommanditgesellschaft mit AG als Komplementär	2
DE	LEI/39120001MGCBTUNCGF98	LEI	MR Beteiligungen USD AG & Co. KG	10	Kommanditgesellschaft mit AG als Komplementär	2
DE	LEI/39120001LZG1RRMASM69	LEI	MR Debt Finance GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/22011	Specific	MR Digital Innovation Partners Insurance Agency LLC	99	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12813	Specific	MR Electra LP	10	Limited Partnership	2
DE	LEI/39120001SM6Q7Q8UZN04	LEI	MR ERGO Beteiligungen GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001LRYDBL4DIX43	LEI	MR Financial Group GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/391200LACMSR66BYMZ43	LEI	MR Forest GmbH	10	Gesellschaft mit beschränkter Haftung	2
CY	LEI/529900Z6JCLNPNHJI984	LEI	MR HealthTech Ltd.	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/549300OHMATNMIMO6X93	LEI	MR Infrastructure Inc.	11	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/39120001DLPY5QXPYX29	LEI	MR Infrastructure Investment GmbH	10	Gesellschaft mit beschränkter Haftung	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	0	0	100		Dominant	0	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		4
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
US	SC/LEI/529900MUF4C20K50JS49/US/12794	Specific	MR Investment Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12806	Specific	MR Jordan LP	10	Limited Partnership	2
GB	LEI/2138007PE4IRBI7SL147	LEI	MR RENT UK Investment Limited	10	Private Company Limited by Shares	2
DE	LEI/3912000173QT0N9PAM86	LEI	MR RENT-Investment GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001XNXTQQ1TQC32	LEI	MR RENT-Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900OYM0YFWK1BYX71	LEI	MR Solar GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
IT	LEI/529900C68UYG88QC1938	LEI	MR Solar S.a.s. di welivit Solar Italia S.r.l.	10	Società a Responsabilità Limitata	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/20024	Specific	MRHCUK Dormant No.1 Limited	99	Private Company Limited by Shares	2
GB	LEI/213800317W9U9XNTVN39	LEI	MSP Underwriting Ltd	5	Private Company Limited by Shares	2
MX	LEI/21380092AQVPU6GYPP03	LEI	Muenchener de Mexico, S.A.	10	Sociedad Anónima	2
AR	LEI/391200GXJSC8VFL03L02	LEI	Münchener Argentina Servicios Técnicos	10	Sociedad de Responsabilidad Limitada	2
CL	LEI/9598006V5U7LNGU0RW23	LEI	Münchener Consultora Internacional SRL	10	Sociedad de Responsibilidad Limitada	2
VE	LEI/213800NLR23J8X27O981	LEI	Münchener de Venezuela C.A. Intermediaria de Reaseguros	10	Sociedad Anónima	2
DE	LEI/39120001L2OAJEPANS21	LEI	Münchener Finanzgruppe AG Beteiligungen	10	Aktiengesellschaft	2
DE	LEI/529900MUF4C20K50JS49	LEI	Münchener Rückversicherungs-Gesellschaft AG	3	Aktiengesellschaft	2
DE	LEI/39120001Z5AF1TAWEF29	LEI	Münchener Vermögensverwaltung GmbH	10	Gesellschaft mit beschränkter Haftung	2
BR	SC/LEI/529900MUF4C20K50JS49/BR/10366	Specific	Münchener, ESCRITÓRIO DE REPRESENTACAO DO BRASIL LTDA	10	Sociedade Anônima	2
US	LEI/5493008IKPBNR8EIQH39	LEI	Munich American Holding Corporation	6	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300Q72FKJO67OE921	LEI	Munich American Life Reinsurance Company	3	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300MKW8R09C045D07	LEI	Munich American Reassurance Company	3	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12779	Specific	Munich American Reassurance Company PAC Inc.	99	Business Corporation (Public Corporation, Close Corporation)	2

						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
The Georgia Department of Insurance	100	100	100		Dominant	100	yes		1
The Georgia Department of Insurance	100	100	100		Dominant	100	yes		1
	0	0	0	SPV, Vorkaufsrecht, Ausübung Sale Option	Dominant	0	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
US	LEI/549300ZUTE5NMQ6ECZ13	LEI	Munich Atlanta Financial Corporation	10	Business Corporation (Public Corporation, Close Corporation)	2
CA	LEI/549300V8R0YO5OPQ7M85	LEI	Munich Canada Systems Corporation	10	Corporation	2
US	LEI/54930044BRRARMIYFR63	LEI	Munich Colombia Square Corp.	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/39120001QTOWXEHUZW64	LEI	Munich Health Alpha GmbH	5	Gesellschaft mit beschränkter Haftung	2
AE	SC/LEI/529900MUF4C20K50JS49/AE/10218	Specific	Munich Health Daman Holding	5	Public Limited by Shares	2
DE	LEI/39120001S9WBIPKOHE13	LEI	Munich Health Holding AG	5	Aktiengesellschaft	2
CA	LEI/549300C06PNU1TUR4E70	LEI	Munich Holdings Limited	5	Corporation	2
AU	LEI/261700W0B2RGPK571Y13	LEI	Munich Holdings of Australasia Pty Ltd.	6	Proprietary Limited Company	2
US	LEI/549300YG3CVD0SJ1K445	LEI	Munich Life Holding Corporation	5	Business Corporation (Public Corporation, Close Corporation)	2
CA	LEI/529900WT5DKEL0WCJP34	LEI	Munich Life Management Corp. Ltd.	10	Corporation	2
SG	SC/LEI/529900MUF4C20K50JS49/SG/26010	Specific	Munich Management Pte. Ltd.	10	Private Company Limited by Shares	2
MU	SC/LEI/529900MUF4C20K50JS49/MU/28017	Specific	Munich Mauritius Reinsurance Co. Ltd.	4	International Business Company	2
US	LEI/549300NDDKW5G2O7IR05	LEI	Munich Re America Brokers Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/5493000NTMGI8RSQK217	LEI	Munich Re America Corporation	5	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/549300WY4YBLCJ665R79	LEI	Munich Re America Management Ltd.	10	Incorporated companies limited by shares/guarantee or unlim.	2
US	LEI/5493001MXIHFQXOERW68	LEI	Munich Re America Services, Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/213800H31MDE114N9B91	LEI	Munich Re Automation Solutions GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	LEI/213800XVXN7IEP3HHT67	LEI	Munich Re Automation Solutions Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
JP	LEI/213800DWEY9RAKD5JZ41	LEI	Munich Re Automation Solutions K.K.	10	Kabushiki Kaisha	2
IE	LEI/213800HHNOQSRMXNCU36	LEI	Munich Re Automation Solutions Limited	10	Private Limited Company	2
SG	LEI/213800AA9WU54TQWU380	LEI	Munich Re Automation Solutions Pte. Ltd.	10	Private Company Limited by Shares	2
AU	LEI/2138008896QCOO9VY484	LEI	Munich Re Automation Solutions Pty Ltd	10	Proprietary Limited Company	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	51	51	51		Dominant	51	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Financial Services Commission (FSC)	100	100	100		Dominant	100	yes		1
Insurance Department of the State of New York	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
GB	LEI/21380012PFTS5AWP2310	LEI	Munich Re Capital Limited	10	Private Company Limited by Shares	2
DE	LEI/529900LVLCVUBV7NOI75	LEI	Munich Re Capital Markets GmbH	8	Gesellschaft mit beschränkter Haftung	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/20025	Specific	Munich Re Capital No.2 Limited	10	Private Company Limited by Shares	2
CA	LEI/549300TJ7HNZG7OI6S41	LEI	Munich Re Company of Canada	3	Corporation	2
US	LEI/549300EEZFIJOXRJ3K81	LEI	Munich Re CVC Investment Corp.	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/10396	Specific	Munich Re Digital Partners Limited	99	Private Company Limited by Shares	2
US	LEI/5493000J0MSQTA30FI44	LEI	Munich Re Digital Partners US Holding Corporation	5	Business Corporation (Public Corporation, Close Corporation)	2
BR	LEI/391200L6TADEO9SLD581	LEI	Munich Re do Brasil Resseguradora SA	4	Sociedade Anônima	2
US	LEI/5493002YUEK6KCVH5V20	LEI	Munich Re Fund I LP	10	Limited Partnership	2
IN	LEI/335800BKNCCI9U3YFC61	LEI	Munich Re India Services Private Limited	10	Private Limited	2
CA	SC/LEI/529900MUF4C20K50JS49/CA/10836	Specific	Munich Re Innovation Systems Inc.	99	Corporation	2
US	SC/LEI/529900MUF4C20K50JS49/US/12796	Specific	Munich Re Life Insurance Company of Vermont	3	Business Corporation (Public Corporation, Close Corporation)	2
CA	SC/LEI/529900MUF4C20K50JS49/CA/10805	Specific	Munich Re New Ventures Inc.	10	Corporation	2
BM	LEI/549300BZUNQY0Y377L84	LEI	Munich Re of Bermuda Ltd.	2	Business Corporation (Public Corporation, Close Corporation)	2
MT	LEI/529900AUL1UUUN0PWZ51	LEI	Munich Re of Malta Holding Limited	5	Limited liability company/kumpannija b' responsabbilta' lim.	2
MT	LEI/5299004V4S625766IJ96	LEI	Munich Re of Malta p.l.c.	3	Limited liability company/kumpannija b' responsabbilta' lim.	2
MT	LEI/6354009HGIEMUJPTCD02	LEI	Munich Re PCC Limited	1	Limited liability company/kumpannija b' responsabbilta' lim.	2
MT	SC/LEI/529900MUF4C20K50JS49/MT/10820	Specific	Munich Re PCC Limited – Savings & Investments Cell	1	Limited liability company/kumpannija b' responsabbilta' lim.	2
US	SC/LEI/529900MUF4C20K50JS49/US/12793	Specific	Munich Re Reserve Risk Financing Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
IE	SC/LEI/529900MUF4C20K50JS49/IE/20026	Specific	Munich Re Risk Solution Ireland Limited	10	Private Limited Company	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10849	Specific	Munich Re Service GmbH	10	Gesellschaft mit beschränkter Haftung	2

						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
Prudential Regulatory Authority (PRA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		4
	100	100	100		Dominant	100	yes		10
Office of Superintendent of Financial Institutions (OSFI)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
Superintendence of Private Insurance (SUSEP)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
Vermont Department of Insurance	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
Bermuda Monetary Authority (BMA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
Malta Financial Services Authority (MFSA)	100	100	100		Dominant	100	yes		1
Malta Financial Services Authority (MFSA)	100	100	100		Dominant	100	yes		1
Malta Financial Services Authority (MFSA)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
GB	LEI/2138009EZ5GGI9J6JL60	LEI	Munich Re Specialty Group Ltd.	6	Private Company Limited by Shares	2
MY	LEI/2138002X3H5UHJMZY848	LEI	Munich Re Syndicate Labuan Limited	10	Private Company Limited by Shares	2
GB	LEI/529900OCG63Y1HQMZI14	LEI	Munich Re Syndicate Limited	10	Private Company Limited by Shares	2
AE	LEI/2138004I7XU41VJQD822	LEI	Munich Re Syndicate Middle East Ltd.	10	Private Limited	2
SG	LEI/213800W8BMV94CNLPI68	LEI	Munich Re Syndicate Singapore Ltd.	10	Private Company Limited by Shares	2
US	LEI/RD672E7VR60YQE4BIJ69	LEI	Munich Re Trading LLC	8	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800D6S7QZGHD3LS20	LEI	Munich Re UK Services Limited	10	Private Company Limited by Shares	2
AE	SC/LEI/529900MUF4C20K50JS49/AE/10210	Specific	Munich Re Underwriting Agents DIFC Ltd.	10	Public Limited by Shares	2
US	SC/LEI/529900MUF4C20K50JS49/US/12812	Specific	Munich Re US Life Corporation	1	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300C9KI0UWO4F2P36	LEI	Munich Re Ventures Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/54930022GGJCYRQVU332	LEI	Munich Re Ventures LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12788	Specific	Munich Re Weather & Commodity Risk Holding Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300CMMHU26QXWNQ47	LEI	Munich Reinsurance America Inc.	3	Business Corporation (Public Corporation, Close Corporation)	2
AU	LEI/261700B89YG4614FUA51	LEI	Munich Reinsurance Comp. Australasia	3	Proprietary Limited Company	2
ZA	LEI/213800LD4C4D71FDPU88	LEI	Munich Reinsurance Company of Africa Ltd	4	Private/Propriety Company (Limited by Shares)	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10853	Specific	Munich ReThink GmbH	99	Gesellschaft mit beschränkter Haftung	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10082	Specific	Munich-American RiskPartners GmbH	10	Gesellschaft mit beschränkter Haftung	2
CA	LEI/549300T1R2GX3K7Q6T15	LEI	Munich-Canada Management Corp.	10	Limited Partnership	2
DE	LEI/39120001UYK1ULJGNA80	LEI	MunichFinancialGroup AG Holding	10	Aktiengesellschaft	2
DE	LEI/39120001FVSF4PKKSA11	LEI	MunichFinancialGroup GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/391200014IANPZD50P95	LEI	MunichFinancialServices AG	10	Aktiengesellschaft	2
NZ	LEI/213800CBVXWEI7BQWB92	LEI	Munichre New Zealand Service Limited	10	Proprietary Limited Company	2
HK	LEI/529900DVDA2GPD1P5R25	LEI	Munichre Service Limited	10	Private Company Limited by Shares	2

						Criteria of influence	Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		4
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Georgia Department of Insurance	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
Insurance Department of the State of Delaware	100	100	100		Dominant	100	yes		1
Australian Prudential Regulation Authority (APRA)	100	100	100		Dominant	100	yes		1
Financial Services Board (FSB)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of under-taking[1]	Legal form	Category (mutual/ non-mutual)[2]
ES	LEI/52990062ONBOXQS8EP66	LEI	Naretoblera 170017 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/12858	Specific	Neokami GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/12857	Specific	Neokami Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/12811	Specific	Neos Ventures Limited	10	Private Company Limited by Shares	2
ES	LEI/529900172N06IAT1VX95	LEI	Nerruze 120012 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
CH	LEI/HX9HSZRU3BFOU9KUWD17	LEI	New Reinsurance Company Ltd.	3	Aktiengesellschaft	2
DE	SC/LEI/529900MUF4C20K50JS49/US/54801	Specific	nexible GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900V2K6GHJG485616	LEI	nexible Versicherung AG	2	Aktiengesellschaft	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/52942	Specific	Nightingale Legal Services Ltd.	10	Private Company Limited by Shares	2
GB	LEI/2138001VLNJE4I52IA87	LEI	NMU Specialty Ltd.	10	Private Company Limited by Shares	2
KY	SC/LEI/529900MUF4C20K50JS49/KY/50078	Specific	North Haven Infrastructure German Investors, L.P.	99	Limited Partnership	2
US	SC/LEI/529900MUF4C20K50JS49/US/10299	Specific	ORM Timber Fund III (Foreign) LLC	99	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/10812	Specific	ORM TIMBER FUND IV LLC	99	Business Corporation (Public Corporation, Close Corporation)	2
ES	LEI/529900NE9PP1RLU6ZV61	LEI	Orrazipo 110011 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
DE	LEI/391200010V0UOSHF6R35	LEI	P.A.N. Verwaltungs GmbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/10381	Specific	Pan Estates LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10832	Specific	Pegasos Holding GmbH	10	Gesellschaft mit beschränkter Haftung	2
CH	LEI/3912000M1W6HCPOJ4C07	LEI	PERILS	10	Aktiengesellschaft	2
US	SC/LEI/529900MUF4C20K50JS49/US/10826	Specific	Picus Silva Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/529900S59JD7QHD18328	LEI	PLATINIA Verwaltungs-GmbH	10	Gesellschaft mit beschränkter Haftung	2
PL	SC/LEI/529900MUF4C20K50JS49/PL/60072	Specific	POOL Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
DE	LEI/529900AQ48E4RST3IH54	LEI	PRORENDITA Drei Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2

					Criteria of influence			Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	10	10	10		Significant	10	yes		10
	100	75	100		Dominant	75	yes		10
Finanzmarktaufsicht FINMA	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		1
	33	33	33		Significant	33	yes		3
	39	39	39		Significant	39	yes		3
	27	27	27		Significant	27	yes		3
	100	75	100		Dominant	75	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	10	10	10		Significant	10	yes		10
	100	100	100		Dominant	100	yes		1
	100	50	100		Dominant	50	yes		10
	34	34	34		Significant	34	yes		10
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/52990085SZ6HNOCMYG15	LEI	PRORENDITA EINS Verwaltungs-gesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900KENN6LH62B4695	LEI	PRORENDITA FÜNF Verwaltungs-gesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299005MPOFYWETE4Q60	LEI	PRORENDITA VIER Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900LI4OVTU5X7JU84	LEI	PRORENDITA Zwei Verwaltungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/DUS12855	Specific	Proximetry LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
PL	SC/LEI/529900MUF4C20K50JS49/PL/12856	Specific	Proximetry Poland Sp. Z o.o	10	Spolka z ograniczona odpowiedzialnoscia	2
US	SC/LEI/529900MUF4C20K50JS49/US/12849	Specific	PS Louisiana I LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12850	Specific	PS Louisiana II LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
CU	SC/LEI/529900MUF4C20K50JS49/CU/10093	Specific	Reaseguradora de las Americas	10	Sociedad Anónima	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/12853	Specific	Relayr Gmbh	10	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/12802	Specific	Relayr Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/12854	Specific	Relayr Limited	10	Private Company Limited by Shares	2
AT	LEI/529900DG2IUTMG8TT623	LEI	Renaissance Hotel Realbesitz GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900IQQBSL8OXN3321	LEI	Rendite Partner Ges. für Vermögensverwaltung mbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
AU	SC/LEI/529900MUF4C20K50JS49/AU/24014	Specific	Residential Builders Underwriting Agency Pty Ltd	10	Proprietary Limited Company	2
KY	SC/LEI/529900MUF4C20K50JS49/KY/10371	Specific	RMS Australian Forests Fund I	99	Limited Duration Company	2
KY	SC/LEI/529900MUF4C20K50JS49/KY/10285	Specific	RMS Forest Growth International L.P.	99	Limited Duration Company	2
US	LEI/5493000YXMQHFW0K1R66	LEI	Roanoke Group Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300SE787LZJ53OQ23	LEI	Roanoke Insurance Group Inc., Schaumburg	10	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/213800LFVT6BTVN5F257	LEI	Roanoke International Brokers Limited	10	Private Company Limited by Shares	2
US	LEI/549300K7HI2NW4M8VA38	LEI	Roanoke Trade Insurance Inc.	10	Private Company Limited by Shares	2
DE	LEI/529900CP8WU2C6A7KW42	LEI	RP Vilbeler Fondsgesellschaft mbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
FR	LEI/529900UDDFLBV9AIRG78	LEI	SAINT LEON ENERGIE S.A.R.L.	10	Société à Responsa-bilité Limitée	2

						Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
		100	100	100		Dominant	100	yes		10
		100	100	100		Dominant	100	yes		10
		100	100	100		Dominant	100	yes		10
		100	100	100		Dominant	100	yes		10
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		10
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		3
		60	60	60		Dominant	60	yes		3
		33	20	33		Significant	20	yes		3
		20	20	20		Significant	20	yes		10
		37	37	37		Significant	37	yes		3
		43	43	43		Significant	43	yes		3
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		3
		100	100	100		Dominant	100	yes		10
		40	40	40		Significant	40	yes		3
		100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/529900AV3WTFYOT5F419	LEI	Sana Kliniken AG	10	Aktiengesellschaft	2
DE	LEI/3912005G6RBAASCEYR48	LEI	Schloß Hohenkammer GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900Q5RE20YBHFCZ61	LEI	Schrömbgens & Stephan GmbH Versicherungsmakler	10	Gesellschaft mit beschränkter Haftung	2
GB	LEI/213800KQPC54GW2HLH37	LEI	Scout Moor Group Limited	10	Private Company Limited by Shares	2
GB	LEI/213800QBXJHXYRF53A88	LEI	Scout Moor Holdings (No. 1) Limited	10	Private Company Limited by Shares	2
GB	LEI/213800Q9YHTR3RL8MS59	LEI	Scout Moor Holdings (No. 2) Limited	10	Private Company Limited by Shares	2
GB	LEI/213800RFWT44UMPDX616	LEI	Scout Moor Wind Farm (No. 2) Limited	10	Private Company Limited by Shares	2
GB	LEI/213800GR476QAVR9XC76	LEI	Scout Moor Wind Farm Limited	10	Private Company Limited by Shares	2
DE	LEI/391200HVV3UHEMNWZU35	LEI	SEBA Beteiligungsgesellschaft	5	Gesellschaft mit beschränkter Haftung	2
US	SC/LEI/529900MUF4C20K50JS49/US/12817	Specific	SEIF II Texas Wind Holdings 1 LLC	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	LEI/39120001PIFSKK4AFV80	LEI	Silvanus Vermögensverwaltungs-ges.mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001WVCGETGDTY97	LEI	SIP Social Impact Partners GmbH	10	Gesellschaft mit beschränkter Haftung	2
CN	SC/LEI/529900MUF4C20K50JS49/CN/10835	Specific	Smart Thinking Consulting (Beijing) Co. Ltd.	10	Limited	2
BH	SC/LEI/529900MUF4C20K50JS49/BH/10022	Specific	SNIC Insurance B.S.C. ©	2	Bahrain Shareholding Company	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10169	Specific	Solarfonds Göttelborn 2 GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900FMWFYL06PLCE43	LEI	Solarpark Fusion 3 GmbH	10	Gesellschaft mit beschränkter Haftung	2
GB	LEI/549300MZJXUOXNK57V51	LEI	Solomon Associates Limited	10	Public Company Limited by Shares	2
PL	LEI/259400VWXB0MU1DTBR37	LEI	Sopockie Towarzystwo Doradcze Sp.z.o.o.	10	Spolka z ograniczona odpowiedzialnoscia	2
PL	LEI/259400GGL5VECMUS2X04	LEI	Sopockie Towarzystwo Ubezpie-czen Ergo Hestia Spolka Akcyjna	2	Spólka akcyjna	2
PL	LEI/259400U4BI8QGN8SLJ29	LEI	Sopockie Towarzystwo Ubezpie-czen na Zycie Ergo Hestia S.A.	1	Spólka akcyjna	2
US	LEI/549300EHJKRPDUIPR548	LEI	Speciality Insurance Services Corporation	10	Business Corporation (Public Corporation, Close Corporation)	2
US	SC/LEI/529900MUF4C20K50JS49/US/12843	Specific	Spruce Holdings Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10834	Specific	STEAG Fernwärme GmbH	10	Gesellschaft mit beschränkter Haftung	2
NL	LEI/5299000WNAEUJI0BRP95	LEI	Stichting Aandelen Beheer D.A.S. Holding	10	Stichting	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	22	22	22		Significant	22	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	49	49	49		Significant	49	yes		3
	49	49	49		Significant	49	yes		3
	100	100	100		Dominant	100	yes		1
	50	50	50		Significant	50	yes		10
	100	100	100		Dominant	100	yes		10
Central Bank of Bahrain	23	23	23		Significant	23	yes		3
	34	34	36		Dominant	34	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
Polish Financial Supervision Authority (KNF)	100	100	100		Dominant	100	yes		1
Polish Financial Supervision Authority (KNF)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	12	12	12		Significant	12	yes		10
	49	49	49		Significant	49	yes		3
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
NO	LEI/5967007LIEEXZX849444	LEI	Storebrand Helseforsikring AS	2	Alksjeselskap	2
IT	LEI/8156009E151F79BA8206	LEI	SunEnergy & Partners S.r.l.	10	Società a Responsabilità Limitata	2
US	SC/LEI/529900MUF4C20K50JS49/US/12805	Specific	Super Home Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
CO	LEI/391200HI1K0GVSPGAS83	LEI	Suramericana S.A.	5	Sociedad Anónima	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10813	Specific	Sustainable Finance Risk Consulting GmbH	10	Gesellschaft mit beschränkter Haftung	2
AU	LEI/529900XDRZWOMIHJBS83	LEI	Sydney Euro-Center Pty Ltd	10	Proprietary Limited Company	2
DE	LEI/529900TO30U6QA7UEM47	LEI	TAS Assekuranz Service GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299000W5ZPVS8ALYU52	LEI	TAS Touristik Assekuranz-Service GmbH	10	Gesellschaft mit beschränkter Haftung	2
NL	SC/LEI/529900MUF4C20K50JS49/NL/10314	Specific	Taunus Holding B.V.	10	Besloten vennootschap met	2
DE	LEI/529900IEVFYZRG1LAZ12	LEI	Teko – Technisches Kontor für Versicherungen GmbH	10	Gesellschaft mit beschränkter Haftung	2
CA	LEI/5493006NQCP23P2CK653	LEI	Temple Insurance Company	2	Corporation	2
TH	SC/529900MUF4C20K50JS49/TH/60165	Specific	Thaisri Insurance Public Co., Ltd.	2	Public Company Limited	2
US	LEI/54930041MESNMSGVW560	LEI	The Atlas Insurance Agency Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
CA	LEI/549300FOKPVMM7YUA955	LEI	The Boiler Inspection and Insurance Company of Canada	2	Corporation	2
US	LEI/549300DQPMR2TQKNLE68	LEI	The Hartford Steam Boiler Inspection and Insurance Company	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/5493007KEIOUC4JBRQ78	LEI	The HSB Inspection and Insurance Company of Conneticut	2	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300I4EZH2C4L19J28	LEI	The Midland Company	5	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300GHLC2MNBWJQO61	LEI	The Polytechnic Club Inc.	10	Business Corporation (Public Corporation, Close Corporation)	2
US	LEI/549300QIRMA0CCZ12W27	LEI	The Princeton Excess and Surplus Lines Insurance	2	Business Corporation (Public Corporation, Close Corporation)	2
GB	LEI/5299004AHRBEY8PK0T68	LEI	Three Lions Underwriting Ltd.	10	Private Company Limited by Shares	2
DE	SC/529900DFY0PCCSB5LA51	Specific	TIERdirekt GmbH	10	Gesellschaft mit beschränkter Haftung	2
ES	LEI/529900KNC2LGICEAP478	LEI	Tillobesta 180018 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
Finanstilsynet	50	50	50		Significant	50	yes		3
	100	100	100		Dominant	100	yes		1
	17	17	17		Significant	17	yes		10
	19	19	19		Significant	19	yes		3
	100	100	100		Dominant	100	yes		10
	100	82	100		Dominant	82	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	23	23	23		Significant	23	yes		3
	30	30	30		Significant	30	yes		10
Office of Superintendent of Financial Institutions (OSFI)	100	100	100		Dominant	100	yes		1
Office of Insurance Commission	40	40	40		Significant	40	yes		3
	100	100	100		Dominant	100	yes		3
Office of Superintendent of Financial Institutions (OSFI)	100	100	100		Dominant	100	yes		1
Connecticut Department of Insurance	100	100	100		Dominant	100	yes		1
Connecticut Department of Insurance	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
Insurance Department of the State of Delaware	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	75	75	75		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
GB	LEI/213800LXBERFQLQQWH39	LEI	Tir Mostyn and Foel Goch Limited	10	Private Company Limited by Shares	2
NL	LEI/529900P4T2VFZJEEWB49	LEI	Triple IP B.V.	10	Besloten vennootschap met	2
ES	LEI/959800XEZ015X77A2D40	LEI	T-Solar Global Operating Assets S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
LU	LEI/222100RYFBTZO68MWR14	LEI	T-Solar Luxembourg GP S.à.r.l.	10	Société à Responsabilité Limitée	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10845	Specific	UAB Agra Aurata	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10842	Specific	UAB Agra Corp.	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10843	Specific	UAB Agra Optima	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10386	Specific	UAB Agrofondas	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10387	Specific	UAB Agrolaukai	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10846	Specific	UAB Agrora	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10389	Specific	UAB Agrovalda	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/lt/10388	Specific	UAB Agrovesta	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10390	Specific	UAB G.Q.F	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10844	Specific	UAB Lila	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10385	Specific	UAB Sietuve	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10841	Specific	UAB Terra Culta	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10391	Specific	UAB Ukelis	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10392	Specific	UAB Vasaros Brizas	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10358	Specific	UAB VL Investment Vilnius 5	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10359	Specific	UAB VL Investment Vilnius 6	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10360	Specific	UAB VL Investment Vilnius 7	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10361	Specific	UAB VL Investment Vilnius 8	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10362	Specific	UAB VL Investment Vilnius 9	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10353	Specific	UAB VL Investment Vilnius	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10354	Specific	UAB VL Investment Vilnius 1	10	uždaroji akcinė bendrovė	2

	Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	37	37	37		Significant	37	yes		3
	37	37	37		Significant	37	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
LT	SC/LEI/529900MUF4C20K50JS49/LT/10363	Specific	UAB VL Investment Vilnius 10	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10355	Specific	UAB VL Investment Vilnius 2	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10356	Specific	UAB VL Investment Vilnius 3	10	uždaroji akcinė bendrovė	2
LT	SC/LEI/529900MUF4C20K50JS49/LT/10357	Specific	UAB VL Investment Vilnius 4	10	uždaroji akcinė bendrovė	2
GB	LEI/213800SWNQ26R3LYOF06	LEI	UK Wind Holdings Ltd.	10	Private Company Limited by Shares	2
ES	LEI/959800H5T5F7W8DPCK13	LEI	Union Medica La Fuencisla S.A.	2	Sociedad Anónima	2
DE	LEI/529900QIX02RO74BDS59	LEI	US PROPERTIES VA GmbH & Co. KG i.L.	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/529900M3P2FS7GCI9856	LEI	US PROPERTIES VA Verwaltungs-GmbH	10	Gesellschaft mit beschränkter Haftung	2
IL	SC/LEI/529900MUF4C20K50JS49/IL/10382	Specific	Vectis Claims Services Ltd.	10	Limited	2
DE	SC/LEI/529900MUF4C20K50JS49/DE/10825	Specific	vers.diagnose GmbH	99	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900USEYMYH364TY24	LEI	Verwaltungsgesellschaft „PORT ELISABETH“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900M8WH9Z0MTFEY10	LEI	Verwaltungsgesellschaft „PORT KELANG“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900YB51J503N4S082	LEI	Verwaltungsgesellschaft „PORT LOUIS“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900TZUPUDE7C0EC49	LEI	Verwaltungsgesellschaft „PORT MAUBERT“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900Q4O9ATXYVSQ493	LEI	Verwaltungsgesellschaft „PORT MELBOURNE“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900NGY1BHRU6CAR20	LEI	Verwaltungsgesellschaft „PORT MENIER“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900FFOI5SKLMZKM19	LEI	Verwaltungsgesellschaft „PORT MOODY“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900I8B3RRY5XNWZ60	LEI	Verwaltungsgesellschaft „PORT MORESBY“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900UEJRGK8MPNVL89	LEI	Verwaltungsgesellschaft „PORT MOUTON“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990055XIV8V36WXN54	LEI	Verwaltungsgesellschaft „PORT NELSON“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900EMI2Z5RKA12H91	LEI	Verwaltungsgesellschaft „PORT RUSSEL“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900B1TREE2AAPIV79	LEI	Verwaltungsgesellschaft „PORT SAID“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900N4PKRDYVP7OF86	LEI	Verwaltungsgesellschaft „PORT STANLEY“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990025Q3XIAZ9TGD63	LEI	Verwaltungsgesellschaft „PORT STEWART“ mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900Y9DZPML2H1DY24	LEI	Verwaltungsgesellschaft „PORT UNION“ mbH	10	Gesellschaft mit beschränkter Haftung	2

		Criteria of influence						Inclusion in scope of Group supervision		Group solvency calculation
	Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		1
		100	100	100		Dominant	100	yes		1
	Direccion General de Seguros (DGS)	100	100	100		Dominant	100	yes		1
		46	46	46		Dominant	46	yes		3
		100	100	100		Dominant	100	yes		10
		75	75	75		Dominant	75	yes		10
		49	49	49		Significant	49	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10
		50	50	50		Significant	50	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
DE	LEI/52990041KKYYQRU6KH07	LEI	VHDK Beteiligungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900EK6D4DHSDLIS88	LEI	VICTORIA Asien Immobilien-beteiligungs GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900MQTEENTBGORC20	LEI	VICTORIA Immobilien Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900R6LB2VI75FAZ16	LEI	VICTORIA Immobilien-Fonds GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900JIIMTQ5HAGCK66	LEI	VICTORIA Italy Property GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900WY879RDTUH2615	LEI	Victoria Lebensversicherung Aktiengesellschaft	1	Aktiengesellschaft	2
DE	LEI/529900VVQ1O6V5267V84	LEI	Victoria US Property Investment GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/39120001A2B3G01CCI34	LEI	VICTORIA US Property Zwei GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900SGSNLTDV1L8L32	LEI	VICTORIA Vierte Beteiligungsgesellschaft mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990013S1AUCVFTMU49	LEI	Victoria Vierter Bauabschnitt GmbH & Co. KG	10	Kommanditgesell-schaft mit GmbH als Komplementär	2
DE	LEI/529900P8QI4N4MTN0506	LEI	Victoria Vierter Bauabschnitt Management GmbH	10	Gesellschaft mit beschränkter Haftung	2
LU	LEI/549300LT0CSCQEZVR480	LEI	Vier Gas Investments S.à.r.l.	10	Société à Responsa-bilité Limitée	2
DE	LEI/391200NUJ6WKN311DA37	LEI	VisEq GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990063RYEPA6ISYI72	LEI	Viwis GmbH	10	Gesellschaft mit beschränkter Haftung	2
AT	LEI/529900H9UAV272KDY325	LEI	Volksbanken-Versicherungsdienst GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900D14JKG30EK9975	LEI	Vorsorge Service GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/549300N2GWIWB1MCFS83	LEI	VV Immobilien Verw.u. Beteiligungs GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/54930085P3E55PI70554	LEI	VV Immobilien Verwaltungs GmbH i.L.	10	Gesellschaft mit beschränkter Haftung	2
AT	LEI/529900JTU3UY3SXC4Z28	LEI	VV-Consulting Ges. f. Risikoa., Vorsorgeb., Vers.Verm. GmbH	10	Gesellschaft mit beschränkter Haftung	2
HU	LEI/529900PL3NIODBRFJE42	LEI	VV-Consulting Többesügynöki Kft	10	Korlatolt Felelössegü Tarsasag	2
GB	SC/LEI/529900MUF4C20K50JS49/GB/12814	Specific	We Predict Limited	10	Private Company Limited by Shares	2
DE	LEI/5299009ZR4JK4ID1PP08	LEI	welivit GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/529900M65XGTKXCXI425	LEI	welivit New Energy GmbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/52990093KG08TZXAU759	LEI	welivit Solar Espana GmbH	10	Gesellschaft mit beschränkter Haftung	2

					Criteria of influence		Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establish-ment of consoli-dated accounts	% voting rights	Other criteria	Level of influence	Propor-tional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the under-taking[3]
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		10
	44	44	44		Significant	44	yes		3
	34	34	34		Significant	34	yes		10
	100	100	100		Dominant	100	yes		10
	25	25	25		Significant	25	yes		10
	100	100	100		Dominant	100	yes		1
	30	30	30		Significant	30	yes		10
	30	30	30		Significant	30	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	18	18	18		Significant	18	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10

Undertakings in the scope of the group

Country	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of undertaking[1]	Legal form	Category (mutual/non-mutual)[2]
IT	LEI/529900PD6Z9WGEXRKK41	LEI	welivit Solar Italia s.r.l.	10	Società a Responsabilità Limitata	2
DE	LEI/529900LPFOGV4SRZGY50	LEI	welivit Solarfonds GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
IT	LEI/529900VNTHOAZQ7YAV52	LEI	welivit Solarfonds S.a.s. di welivit Solar Italia S.r.l.	10	Società a Responsabilità Limitata	2
SE	LEI/5299008O4S9410QOW018	LEI	WFB Stockholm Management AB	10	Aktiebolag	2
SE	SC/LEI/529900MUF4C20K50JS49/SE/10854	Specific	Wind Farm Jenasen AB	10	Aktiebolag	2
SE	LEI/549300YXRYOJVHOO3467	LEI	Wind Farms Götaland Svealand AB	10	Aktiebolag	2
DE	LEI/391200V8FCKDBCTWOZ42	LEI	Windpark Langengrassau Infrastruktur GbR	10	Gesellschaft bürgerlichen Rechts	2
DE	LEI/3912007AWOGFAJQCEA79	LEI	Windpark MR-B GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/391200TBXTA4EK3ZTG94	LEI	Windpark MR-D GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/391200G4ZSY0A1UX6N75	LEI	Windpark MR-N GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/391200T2PBY3KSV5XX21	LEI	Windpark MR-S GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/391200IKJIHRL5OFH253	LEI	Windpark MR-T GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/391200R1UZDZYCBBQ297	LEI	Windpark Osterhausen-Mittelhausen Infrastruktur GbR	10	Gesellschaft bürgerlichen Rechts	2
DE	LEI/529900P44D4OBG4GVB58	LEI	WISMA ATRIA Holding GmbH i. L.	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/5299002PTKF09OHK0M02	LEI	WNE Solarfonds Süddeutschland 2 GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
DE	LEI/52990057QJO1O4VI7Q59	LEI	Wohnungsgesellschaft Brela mbH	10	Gesellschaft mit beschränkter Haftung	2
DE	LEI/391200YVCJHU4QFCR410	LEI	WP Kladrum/Dargelütz GbR	10	Gesellschaft bürgerlichen Rechts	2
DE	LEI/529900X9WSGHT8WCJ285	LEI	wse Solarpark Spanien 1 GmbH & Co. KG	10	Kommanditgesellschaft mit GmbH als Komplementär	2
NL	LEI/529900GRF6SXM8R51D57	LEI	X-Pact B.V.	10	Besloten vennootschap met	2
ES	LEI/5299006Y5PPRD3WCJB42	LEI	Zacobu 110011 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2
ES	LEI/52990030NNWC97PB0190	LEI	Zacuba 6006 S.L.	10	Sociedad de Responsabilidad Limitada (Sociedad Limitada)	2

					Criteria of influence			Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		3
	100	100	100		Dominant	100	yes		3
	50	78	50		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	83	83	83		Dominant	83	yes		10
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	100	100	100		Dominant	100	yes		1
	59	59	60		Significant	59	yes		10
	50	50	50		Significant	50	yes		10
	100	100	100		Dominant	100	yes		10
	100	100	100		Dominant	100	yes		10
	55	55	55		Dominant	55	yes		10
	75	75	75		Dominant	75	yes		3
	63	32	63		Dominant	32	yes		3
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10

Undertakings in the scope of the group

Coun-try	Identification code of the undertaking	Type of code of the ID of the undertaking	Legal name of undertaking	Type of under-taking[1]	Legal form	Category (mutual/non-mutual)[2]
ES	LEI/529900I83N8JH47CKN53	LEI	Zacubacon 150015 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900UNHGPQHJHUW310	LEI	Zafacesbe 120012 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900WW1CYR37PXKN51	LEI	Zapacubi 8008 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299006SI4VSIF5PLL03	LEI	Zarzucolumbu 100010 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299006SUDDH703Y2S60	LEI	Zetaza 4004 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900FWPUJZ7GIGA390	LEI	Zicobucar 140014 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900YI8TYJ5U2PX521	LEI	Zucaelo 130013 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900WUVQJO8OAO8J60	LEI	Zucampobi 3003 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900E6PMCQF1ZDLN37	LEI	Zucarrobiso 2002 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900MG7EVV9IGVYP26	LEI	Zucobaco 7007 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299009W39B2JFZZR284	LEI	Zulazor 3003 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/529900FWT4Z4ICBFHW68	LEI	Zumbicobi 5005 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299001G472TM1GG1H52	LEI	Zumcasba 1001 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/5299008BMY03Q5QA0F48	LEI	Zuncabu 4004 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2
ES	LEI/52990058I6EPT5WN2O45	LEI	Zuncolubo 9009 S.L.	10	Sociedad de Respon-sabilidad Limitada (Sociedad Limitada)	2

The details of the footnotes can be seen on the following page.

					Criteria of influence			Inclusion in scope of Group supervision		Group solvency calculation
Supervisory Authority	% capital share	% used for the establishment of consolidated accounts	% voting rights	Other criteria	Level of influence	Proportional share used for Group solvency calculation	Yes/no	Date of decision if Art. 214 is applied	Method used and, under Method 1, treatment of the undertaking[3]
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10
	100	75	100		Dominant	75	yes		10

1 Type of undertaking:
1 – Life insurance undertaking
2 – Non-life insurance undertaking
3 – Reinsurance undertaking
4 – Composite insurance undertaking
5 – Insurance holding company within the meaning of Article 212(1)(f) of Directive 2009/138/EC
6 – Mixed-activity insurance holding company within the meaning of Article 212(1)(g) of Directive 2009/138/EC
7 – Mixed financial holding company within the meaning of Article 212 (1)(h) of Directive 2009/138/EC
8 – Credit institution, investment firm or financial institution
9 – Institutions for occupational retirement provision
10 – Ancillary services undertaking within the meaning of Article 1(53) of Commission Delegated Regulation (EU) 2015/35
11 – Non-regulated undertaking carrying out financial activities within the meaning of Article 1(52) of Commission Delegated Regulation (EU) 2015/35
12 – Special purpose vehicle authorised in accordance with Article 211 of Directive 2009/138/EC
13 – Special purpose vehicle other than special purpose vehicle authorised in accordance with Article 211 of Directive 2009/138/EC
14 – UCITS management company within the meaning of Article 1(54) of Commission Delegated Regulation (EU) 2015/35
15 – Alternative investment fund manager within the meaning of Article 1(55) of Commission Delegated Regulation (EU) 2015/35
99 – Other

2 Category (mutual/non-mutual):
1 – Mutual
2 – Non-mutual

3 Method used, under Method 1, treatment of the undertaking:
1 – Method 1: Full consolidation
2 – Method 1: Proportional consolidation
3 – Method 1: Adjusted equity method
4 – Method 1: Sectoral rules
5 – Method 2: Solvency II
6 – Method 2: Other sectoral rules
7 – Method 2: Local regulations
8 – Deduction of book value within the meaning of Article 229 of Directive 2009/138/EC
9 – Not included in scope of Group supervision within the meaning of Article 214 of Directive 2009/138/EC
10 – Other methods

List of abbreviations

ABS	Asset-backed securities
AF	Actuarial Function
AG	Aktiengesellschaft (German joint-stock company)
AIF	Alternative investment fund
ALM	Asset-liability management
AMG	Asset management company
AMSB	Administrative, management or supervisory body
BaFin	German Federal Financial Supervisory Authority
Bps	Basis point
CDS	Credit default swap
CEE	Credit-equivalent exposure
CIC	Complementary Identification Code
CMS	Compliance management system
CRO	Chief Risk Officer
CTA	Contractual trust agreement
DA	Delegated Acts
DKV	Deutsche Krankenversicherung
EC	European Community
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
EOF	Eligible own funds
EPIFP	Expected profit included in future premiums
ERV	Europäische Reiseversicherung
EU	European Union
FAS	Financial accounting standard
F&P	Fit and proper
GC	Group Committee
GCCO	Group Chief Compliance Officer
GCL	Group Compliance and Legal
GmbH	Gesellschaft mit beschränkter Haftung (German limited liability company)
HGB	German Commercial Code
HSB	Hartford Steam Boiler
IAS	International Accounting Standard
ICS	Internal control system
IFRS	International Financial Reporting Standard
Inc.	Incorporated
IoT	Internet of Things
IRM	Integrated Risk Management
ISDA	International Swaps and Derivatives Association
IT	Information technology
LLC	Limited liability company
LRFA	Linear regression finance approach
Ltd.	Limited
M&A	Mergers and acquisitions
MBS	Mortgage-backed securities
MCR	Minimum capital requirement
MEAG	MUNICH ERGO Asset Management GmbH
MR GCP	Munich Re Group Compensation Policy
NAVs	Net asset values
OIS	Overnight index swap
OpRisk	Operational risk
ORSA	Own risk and solvency assessment
OTC	Over the counter
p.l.c.	Public limited company
Pty. Ltd.	Proprietary Limited
PVFP	Present value of future profits
QRT	Quantitative reporting template
RC	Reinsurance Committee
RI	Reinsurance
RMF	Risk management function
RORAC	Return on risk-adjusted capital
S&P	Standard & Poor's
SCR	Solvency capital requirement
SFCR	Solvency and Financial Condition Report
SFR	Special and Financial Risks
SII	Solvency II
StratC	Strategy Committee
UCITS	Undertakings for collective investment in transferable securities
US GAAP	United States Generally Accepted Accounting Principles
VAG	German Insurance Supervision Act
VaR	Value at risk

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Editorial note
Munich Re publications generally refer to all persons in the masculine form to make reading easier. Such references should be understood as applying to both men and women, according to context.

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