2019

SFCR

ASR Nederland N.V.
Cover

Object
Facade stone

About the object
On 14 May 1940, German bombers bombarded the inner city of Rotterdam. The 15-minute bombardment destroyed almost the entire inner city, partly as a result of the fires that flared up. Some 650 to 900 people lost their lives and around 80,000 people became homeless. The office buildings of the Bicker Caarten & Obreen insurance firms and that of M. van Marle – to which Stad Rotterdam belonged at that time – on the Wijnstraat were bombed. Little remains of them apart from the commemorative brick showing the Oude Hoofdpoort; a reference to the place where it all once began.
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Introduction

The structure of the Solvency and Financial Condition Report (SFCR) has been prepared as described in annex XX of the Solvency II Directive Delegated Regulation. The subjects addressed are based on article 51 to 56 of the Solvency II Directive and act 292 up to and including 298 and act 359 of the Delegated Regulation. Furthermore, the figures presented in this report are in line with the supervisor’s reported Quantitative Reporting Templates.

All amounts in this report, including the amounts quoted in the tables, are presented in millions of euros (€ million), being the functional currency of a.s.r. and all its group entities, unless otherwise stated.

In 2019, the NBA-handreiking 1143 was published. The alert describes how insurance companies handle their materiality policy for Solvency figures. The materiality policy of a.s.r. is aligned with the alert.
Summary

ASR Nederland N.V., hereinafter ‘a.s.r.’, is the Dutch insurance company for all types of insurance. As part of the Solvency II legislation, a.s.r. discloses the Solvency position, Governance and Risk management practices by means of a Solvency and Financial Condition Report (SFCR).

A Business and performance

The Solvency II ratio stood at 194% (excluding financial institutions) on 31 December 2019, after the proposed dividend. The ratio is based on the standard formula as a result of € 7,828 Eligible Own Funds and € 4,035 million Solvency Capital Requirement (SCR). Having generated € 4,666 million in Gross Written Premiums (GWP) in 2019. a.s.r. is one of the larger insurance companies in the Netherlands.

Operating result increased 14.5% to € 858 million (2018: € 749 million). A strong Non-life performance, the contribution of acquisitions and growth of fee based businesses were the main drivers of the increase in operating result.

The Organic Capital Creation (OCC) amounted to € 370 million and remained fairly stable compared to last year (2018: € 372 million). The higher UFR drag and lower release of risk margin was offset by a strong Non-life performance.

Full details on the a.s.r.’s business and performance are described in chapter A Business and performance (page 12).

B System of governance

General

a.s.r. is a public limited company which is listed on Euronext Amsterdam and governed by Dutch corporate law. It has a two-tier board governance structure consisting of an Executive Board (EB) and a Supervisory Board (SB). The EB is responsible for the realisation of corporate objectives, the strategy with its associated risks and the delivery of the results. The SB is responsible for advising the EB, supervising its policies and the general state of affairs relating to a.s.r. and its group entities. As of 1 February 2019 a.s.r. changed its management structure. This was effected through the appointment of a Business Executive Committee (BEC). The BEC works alongside the EB and shares responsibility for the implementation of the business strategy.

Risk management

It is of great importance to a.s.r. that risks within all business lines are timely and adequately controlled. In order to do so, a.s.r. has a Risk Management framework in place based on internationally recognised and accepted standards (such as COSO ERM and ISO 31000:2018 risk management principles and guidelines). Using this framework, material risks that a.s.r. is, or can be, exposed to, are identified, measured, managed, monitored and evaluated. The framework is applicable to a.s.r. group and the underlying (legal) business entities.

Control environment

In addition to risk management, a.s.r.’s Solvency II control environment consist of an internal control system, an actuarial function, a compliance function, a risk management function and an internal audit function. The system of internal control includes the management of risks at different levels in the organisation, both operational and strategic. Internal control at an operational level centres around identifying and managing risks within the critical processes that pose a threat to the achievement of the business line’s objectives. The actuarial function is responsible for expressing an opinion on the adequacy and reliability of reported technical provisions, reinsurance and underwriting. The mission of the compliance function is to enhance and ensure a controlled and sound business operation where impeccable, professional conduct is self-evident. The Audit Department evaluates the effectiveness of governance, risk management and internal control processes, and gives practical advice on process optimisation.

Full details on a.s.r.’s system of governance are described in chapter B System of governance (page 35).
C Risk profile

a.s.r. applies an integrated approach in managing risks, ensuring that our strategic goals (customer interests, financial solidity and efficiency of processes) are maintained. This integrated approach ensures that value will be created by identifying the right balance between risk and return, while ensuring that obligations towards our stakeholders are met. Risk management supports a.s.r. in the identification, measurement and management of risks and monitors to ensure adequate and immediate actions are taken in the event of changes in a.s.r.'s risk profile.

a.s.r. is exposed to the following types of risks: market risk, counterparty default risk, insurance risk, strategic risk and operational risk. The risk appetite is formulated at both group and legal entity level and establishes a framework that supports an effective selection of risks.

The solvency capital requirement is build up as follows:

Solvency capital requirement

<table>
<thead>
<tr>
<th>2019 in € m</th>
<th>2018 in € m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>Market</td>
</tr>
<tr>
<td>Insurance</td>
<td>Insurance</td>
</tr>
<tr>
<td>Counterparty</td>
<td>Counterparty</td>
</tr>
<tr>
<td>Operational</td>
<td>Operational</td>
</tr>
<tr>
<td>Diversification</td>
<td>Diversification</td>
</tr>
<tr>
<td>LAC DT</td>
<td>LAC DT</td>
</tr>
<tr>
<td>SCR</td>
<td>SCR</td>
</tr>
</tbody>
</table>

The required capital stood at € 4,035 million at 31 December 2019 (31 December 2018: € 3,523 million). This increase is mainly due to the acquisition of Loyalis, lower interest rates and an increase in equity risk due to rising stock prices.

Full details on the a.s.r.'s risk profile are described in chapter C Risk profile (page 76).
D Valuation for Solvency purposes

a.s.r. values its Solvency II balance sheet items on a basis that reflects their economic value. Where the IFRS fair value is consistent with Solvency II requirements, a.s.r. follows IFRS for valuing assets and liabilities other than technical provisions.

The reconciliation of IFRS equity to Solvency EOF can be summarised as follows:

- Adjustments related to hybrid loans;
- Total net revaluation as a result of revaluation differences of items which are valued different than fair value in the IFRS balance sheet;
- Derecognition of items on the Solvency II economic balance sheet which are admissible on the IFRS balance sheet;
- Recognition of Own Fund items like subordinated liabilities and foreseeable dividends which are in accordance with the Delegated Regulations part of the EOF.

A graphical representation of the reconciliation from IFRS equity to Solvency EOF is presented below:

Reconciliation total equity IFRS vs EOF Solvency II

The full details on the reconciliation between a.s.r.’s economic balance sheet based on Solvency II and consolidated financial statements based on IFRS are described in chapter D Valuation for solvency purposes (page 107).
E Capital management

Overall capital management is administered at group level. Capital generated by operating units and future capital releases will be allocated to profitable growth of new business or repatriated to shareholders, beyond the capital that is needed to achieve management’s targets.

a.s.r. has no internal model and follows the default method for the determination of the group solvency. a.s.r. maintains an internal minimum and management target for the Solvency II ratio. The internal minimum Solvency II ratio for a.s.r. as formulated in the risk appetite statement is 120%. The management threshold level for the Solvency II ratio is above 160%. a.s.r. only distributes cash dividends if the interest of the policyholders has been ensured (i.e. a Solvency II ratio above 140%). The solvency ratio was 194% at 31 December 2019.

The EOF are build up as follows:

**Eligible own funds**

<table>
<thead>
<tr>
<th></th>
<th>2019 in € m</th>
<th>2018 in € m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible own funds to meet SCR</td>
<td>7,828</td>
<td>6,924</td>
</tr>
<tr>
<td>Tier 1 capital - unrestricted</td>
<td>5,789</td>
<td>5,379</td>
</tr>
<tr>
<td>Tier 1 capital - restricted</td>
<td>524</td>
<td>501</td>
</tr>
<tr>
<td>Tier 2 capital</td>
<td>1,515</td>
<td>1,044</td>
</tr>
<tr>
<td>Tier 3 capital</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The eligible own funds increased to €7,828 million at 31 December 2019 (31 December 2018: €6,924 million). As a result of organic growth, the issuance of a Tier 2 loan and a Tier 1 loan, the acquisition of Loyalis, the increase in equity markets, lower interest rates and spread tightening on credits the eligible own funds increased. These effects were partially offset by a lower UFR, tightening of the VA, the redemption of Tier 1 loans and the interim and proposed final dividend.

Full details on the Capital management of a.s.r. can be found in chapter E Capital management (page 118).
ASR Nederland N.V., hereinafter, ‘a.s.r.’, is the Dutch insurance company for all types of insurance. a.s.r. offers a broad range of insurance products in the areas of non-life and life insurance for consumers, self-employed people and companies. a.s.r. offers investment products and mortgages and is active as an investor and in offering asset management services to institutional clients. Furthermore, a.s.r. is a full service provider for intermediaries and operates almost exclusively in the Dutch market.

a.s.r.’s operating segments

Non-life
- Property & Casualty (P&C)
- Disability
- Health

Life
- Pensions
- Individual life
- Funeral

ASR Nederland N.V.

Asset Management
- Mortgages
- Asset Management
- Real Estate
- Bank (discontinued)

Distribution and Services
- Van Kampen Groep
- Dutch ID
- SuperGarant
- Corins
- ANAC
- Loyalis Kennis & Consult
- Poliservice

Holding and Other

Our brands

Multi-brand and multi-channel distribution; focus on intermediary.
Company facts

- Founded in 1720, deeply rooted in Dutch society
- 3,906 employees (FTEs)
- #3 overall in Dutch market based on gross written premiums (excl. Health)
- Head office in Utrecht

Non-financial performance

- **Net Promoter Score**
  - 2019: 42
  - 2019: 44

- **Impact investing** (€ million)
  - 2018: €927
  - 2019: €346

- **Carbon footprint** % of portfolio for own account
  - 2019: 89%
  - 2019: NA

- **Employee contribution to local society**
  - 2019: 12,413 hours
  - 2019: 8,733 hours

Gender diversity (%)

- **Supervisory Board**
  - Male: 60/40
  - Female: 67/33

- **Executive Board**
  - Male: 75/25
  - Female: 67/33

- **Senior management**
  - Male: 71/29
  - Female: 75/25

- **Non-management**
  - Male: 60/40
  - Female: 58/42

Recognition in Benchmarks & Ratings

- **Fair insurance guide**
  - 2019: 1 number
  - 2018: 1 number

- **VBDO**
  - 2019: 1 number
  - 2018: 2 number

- **Transparency Benchmark**
  - 2019: 21 number
  - 2018: 46 number

- **Dow Jones Sustainability Index**
  - 2018: 71
  - 2019: 73

- **FTSE4Good** (out of 5)
  - 2019: 4.9
  - 2018: 3.5

- **CDP**
  - 2019: B
  - 2018: B

- **MSCI**
  - 2019: BBB
  - 2018: BB

- **ISS Oekom**
  - 2019: C (prime)

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1 The Transparency Benchmark takes place on a bi-annual basis. For that reason the 2017 result is presented.
A.1.2 General information
ASR Nederland N.V. (a.s.r.) ranks among the top 3 insurers in the Netherlands. a.s.r. offers products and services in the fields of insurance, pensions and mortgages for consumers, self-employed persons and companies. In addition, a.s.r. is active as an asset manager for third parties.

a.s.r. is listed on Euronext Amsterdam and is included in the AEX index. a.s.r. has a total of 3,906 internal FTE's (2018: 3,683).

a.s.r. is a public limited company under Dutch law having its registered office located at Archimedeslaan 10, 3584 BA in Utrecht, the Netherlands. a.s.r. has chosen the Netherlands as ‘country of origin’ (land van herkomst) for the issued share capital and corporate bonds which are listed on Euronext Amsterdam and the Irish Stock Exchange (Ticker: ASRNL).

The consolidated financial statements are presented in euros (€), being the functional currency of a.s.r. and all its group entities. All amounts quoted in these financial statements are in euros and rounded to the nearest million, unless otherwise indicated. Calculations are made using unrounded figures. As a result rounding differences can occur.

The financial statements for 2019 were approved by the Supervisory Board on 24 March 2020 and will be presented to the Annual General Meeting of Shareholders for adoption on 20 May 2020. The Executive Board released the financial statements for publication on 25 March 2020.

Name and contact details of the supervisory authority
Name: De Nederlandsche Bank
Visiting address: Westeinde 1, 1017 ZN Amsterdam
Phone number (general): +31 800 020 1068
Phone number (business purposes): +31 20 524 9111
Email: info@dnb.nl

Name and contact details of the external auditor
Name: EY
Visiting address: Cross Towers, Antonio Vivaldiistraat 150, 1083 HP Amsterdam
Phone number: +31 88 407 1000
## A.1.3 Structure

### A.1.3.1 Key figures

### Financial key figures

#### Result and return

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating result</td>
<td>858</td>
<td>749</td>
<td>15.1%</td>
<td>14.3%</td>
</tr>
<tr>
<td>IFRS net result</td>
<td>972</td>
<td>669</td>
<td>19.1%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Operating return on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFRS Return on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equity</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### Solvency, capital and dividend

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvency II</td>
<td>194%</td>
<td>197%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(standard formula)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend per share</td>
<td>1.90</td>
<td>1.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(€)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total equity</td>
<td>5,479</td>
<td>6,093</td>
<td>4,478</td>
<td>5,089</td>
</tr>
<tr>
<td>Total equity</td>
<td>2018</td>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>attributable to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shareholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(€ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total dividend</td>
<td>267</td>
<td>245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(€ million)</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Business performance

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross written</td>
<td>4,666</td>
<td>4,459</td>
<td>159</td>
<td>119</td>
</tr>
<tr>
<td>premiums (€ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New business Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>segment (APE) (€</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(€ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Non-life segment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Financial management

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash position holding</td>
<td>458</td>
<td>394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(€)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial leverage</td>
<td>29.2%</td>
<td>26.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic capital</td>
<td>370</td>
<td>372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>creation (€ million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ratio</td>
<td>12.9x</td>
<td>10.9x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2018</td>
<td>2019</td>
<td>2018</td>
<td>2019</td>
</tr>
</tbody>
</table>
A.1.3.2 Group Structure
The a.s.r. group comprises a number of operating and holding companies

Legal structure of the most significant a.s.r. group entities as per 31 December 2019

1 Registered Non-life insurance companies.
2 Registered life insurance companies.
3 Other Wft registered companies (included in the segments Asset Management and Distribution and Services.)
Segment information
The operations of a.s.r. have been divided into five (2018: six) operating segments. As of 2019, the Real Estate Development business is no longer a separate segment but is reported within the segment Holding and Other. The comparative figures have been restated accordingly. The Real Estate Development business decreased substantially over 2018 and is no longer considered a part of the a.s.r. strategy.

The main segments are the Non-life segment and Life segment in which all insurance activities are presented. The other activities are presented as three (previously four) separate segments being Asset Management, Distribution and Services and Holding and Other.

Segment Bank and Asset Management was renamed to segment Asset Management as the sale of ASR Bank N.V.’s (a.s.r. bank) savings operations was completed in 2019 and a start was made with transitioning the investment accounts.

Insurance activities
Insurance entities are entities that accept the transfer of insurance risks from policyholders. The Non-life segment consists of non-life insurance entities and their subsidiaries. These non-life insurance entities offer non-life insurance contracts. The Life segment comprises the life insurance entity and their subsidiaries. These life insurance entity offer financial products such as life insurance contracts and life insurance contracts on behalf of policyholders. The Non-life and Life segments have different levels of profitability and growth opportunities, as well as a different outlook and risk profile.

Other activities
The other activities consist of:

- The Asset Management segment involves all activities related to asset management including investment property management, and the discontinued banking activities. These activities include amongst others ASR Vermogensbeheer N.V., ASR Real Estate B.V., ASR Hypotheken B.V. and a.s.r. bank. As of October 2018, all activities of a.s.r. bank are classified as discontinued, and most of these activities were sold during the year.
- The Distribution and Services segment includes the activities related to distribution of insurance contracts and includes the financial intermediary business of PoliService B.V., Van Kampen Groep Holding B.V. (and Van Kampen Geld B.V.), Dutch ID B.V., SuperGarant Verzekeringen B.V. (and ZZP Nederland Verzekeringen B.V.), Corins B.V., ANAC, All-Finance Nederland Advies-Combinatie B.V. (Anac Verzekeringen B.V.) and Loyalis Kennis & Consult B.V.
- The Holding and Other segment consists primarily of the holding activities of ASR Nederland N.V. (including the group related activities), other holding and intermediate holding companies, the real estate development business (ASR Vastgoed Projecten B.V.) and the activities of ASR Deelnemingen N.V.

The a.s.r. segment reporting shows the financial performance of each segment. The purpose is to allocate all items in the balance sheet and income statement to the segments that hold full management responsibility for them.

Segment information has been prepared in accordance with the accounting principles used for the preparation of a.s.r.’s consolidated financial statements. Goodwill and other intangibles are presented in the related CGU’s segment. Intersegment transactions are conducted at arm’s length conditions. In general, cost related to centralised services are allocated to the segments based on the utilisation of these services.
A.2 Underwriting performance

A.2.1 Financial Performance

Key figures

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross written premiums</td>
<td>4,666</td>
<td>4,459</td>
<td>4.6%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>-656</td>
<td>-601</td>
<td>9.1%</td>
</tr>
<tr>
<td>Number of internal FTEs</td>
<td>3,906</td>
<td>3,683</td>
<td>6.1%</td>
</tr>
<tr>
<td>Operating result¹</td>
<td>858</td>
<td>749</td>
<td>2.0%</td>
</tr>
<tr>
<td>Operating return on equity</td>
<td>15.1%</td>
<td>14.3%</td>
<td>-1.8%-p</td>
</tr>
<tr>
<td>Net result (on IFRS basis)</td>
<td>972</td>
<td>655</td>
<td>-27.7%</td>
</tr>
<tr>
<td>Return on IFRS equity</td>
<td>19.1%</td>
<td>13.7%</td>
<td>-7.5%-p</td>
</tr>
<tr>
<td>Solvency II ratio</td>
<td>194%</td>
<td>197%</td>
<td>1.0%-p</td>
</tr>
<tr>
<td>Organic capital creation (OCC)</td>
<td>370</td>
<td>372</td>
<td>-0.5%</td>
</tr>
</tbody>
</table>

Gross written premiums
Gross written premiums increased with 4.6% to € 4,666 million (2018: € 4,459 million). Gross written premiums in the Non-life segment increased to € 3,192 million (2018: € 3,014 million), including the addition of Loyalis Disability (€ 67 million). Gross written premiums in the Life segment increased to € 1,619 million (2018: € 1,566 million). The increase is driven by growth of the “WerknemersPensioen” partly offset by the decline in in the existing DB portfolio and Individual Life, while recurring premiums at Funeral remained stable.

Operating expenses
Operating expenses increased by 9.1%, to € 656 million (2018: € 601 million). The operating expenses associated with ordinary activities (which excludes incidental expenses) increased by 5.6% to € 597 million (2018: € 565 million), due to the additional cost base of acquisitions (€ 37 million). Excluding these acquisitions, regular operating expenses declined by € 5 million. These lower costs are mainly IT-related due to the reduction of applications following the integration of Generali and lower project costs from system rationalisation at Individual, as well as lower FTE’s. The impact of acquisitions mainly relates to Loyalis (€ 32 million as of 1 May 2019) as well as the acquisitions of Melching Groep, ArGon Groep and ZZP Nederland (total impact € 5 million).

FTEs
The number of internal FTEs, including redundant employees still under contract, increased by 6.1% to 3,906 FTE (2018: 3,683 FTE). This increase is caused by the addition of the acquired companies. Excluding these acquisitions, internal FTEs decreased. The completed integration of Generali Nederland into a.s.r. platforms led to a reduction in internal IT-related employees.

Operating result
The operating result improved by € 109 million to € 858 million (2018: € 749 million), a record operating performance. A strong Non-life performance, the contribution of acquisitions and growth of fee based businesses were the main drivers of the increase in the operating result. The total contribution of Loyalis to the operating result, which mainly relates to Disability in the Non-life segment, is circa € 28 million³.

Operating return on equity
The operating return on equity improved 0.8%-point to 15.1% (2018: 14.3%) and is well above the medium-term target range of 12.14%. IFRS return on equity increased 5.4%-point to 19.1% (2018: 13.7%) and was also driven by a higher contribution from (indirect) incidental items.

1 The comparative figures have been restated for an adjustment in the definition of the operating result. The depreciation of the VOBA and intangible fixed assets of business combinations are from now on incidental. As a result, the operating result for 2018 increased by € 7 million from € 742 million to € 749 million.
2 After proposed dividend, exclusive of a.s.r. bank, a.s.r. asset management and a.s.r. real estate.
3 The integration is already in progress and therefore the result can no longer be precisely determined.
Solvency II ratio and Organic Capital Creation

The Solvency II-ratio per 2019 amounted to 194% (2018: 197%) after the proposed dividend. During 2019, the Solvency II ratio increased 32%-points from organic capital creation (+10%-points), hybrid capital transactions (+13%-points) and market and business developments (+9%-points). The increase was more than offset by the impact of the acquisition of Loyalis (-7%-points), the reduction of the UFR (-3%-points), tightening of the VA (-18%-points) and the 2019 dividend (-7%-points).

The Organic Capital Creation (OCC) amounted to €370 million and remained fairly stable compared to last year (2018: €372 million). Good performance of the business segments was offset by an increase in the “UFR drag” due to lower interest rates.

As from 2020, the OCC definition will be more aligned with market practice. Based on the new definition, OCC for 2019 amounted to €501 million. The main adjustment relates to the long term investment margins. The excess returns for fixed income have been changed to market observable spreads, while the post-tax total return assumptions for equities have been set at 5% and for real estate to 4.1%. Furthermore, refinements have been made to the new business strain in Non-life, the run-off of market risk from the life book and the addition of the time value of options and guarantees (TVOG). OCC, under the new definition, will remain sensitive to changes in the interest rates and will became more sensitive to credit spreads.
A.2.2 Financial Performance Non-life segment

The Non-life segment consists of P&C, Disability and Health. The main legal entities of the Non-life segment are ASR Schadeverzekering N.V., ASR Basis Ziektekostenverzekeringen N.V. and ASR Aanvullende Ziektekostenverzekeringen N.V.

Financial Performance

Key figures, Non-life

<table>
<thead>
<tr>
<th>(in € million, unless stated otherwise)</th>
<th>2019</th>
<th>2018</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross written premiums</td>
<td>3,192</td>
<td>3,014</td>
<td>5.9%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>-240</td>
<td>-222</td>
<td>8.5%</td>
</tr>
<tr>
<td>Operating result</td>
<td>226</td>
<td>143</td>
<td>58.5%</td>
</tr>
<tr>
<td>Profit / (loss) for the year attributable to holders of equity instruments</td>
<td>213</td>
<td>132</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

Combined ratio, Non-life

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Non-life segment</td>
<td>93.5%</td>
<td>95.7%</td>
<td>- 2.2%-p</td>
</tr>
<tr>
<td>- P&amp;C</td>
<td>96.9%</td>
<td>98.4%</td>
<td>-1.5 %-p</td>
</tr>
<tr>
<td>- Disability</td>
<td>88.3%</td>
<td>90.8%</td>
<td>-2.5 %-p</td>
</tr>
<tr>
<td>- Health</td>
<td>99.0%</td>
<td>99.2%</td>
<td>-0.3 %-p</td>
</tr>
</tbody>
</table>

Gross written premiums

Gross written premiums amounted to € 3,192 million, up +5.9% (2018: € 3,014 million). All product lines contributed to the € 111 million organic growth and an increase of € 67 million was due to the acquisition of Loyalis Disability. The organic growth of Disability (€ 66 million) was mainly related to the sickness leave portfolio, especially in the mandated brokers distribution channel driven by increased tariffs. The growth in Health (€ 19 million) reflects higher premiums including tariff adjustments for supplementary health insurances. The increase of the P&C business (€ 26 million) mainly relates to the corporate and mandated broker channel. The ‘Vernieuwd Voordeel Pakket’ (a product that combines several insurance coverages) remained successful.

Operating expenses

The operating expenses increased by € 18 million to € 240 million (2018: € 222 million). Excluding the increase in cost base, due to the acquisition of Loyalis Disability (€ 19 million), operating expenses remained stable. The cost ratio of P&C and Disability (including Loyalis) remained stable at 8.4% (2018: 8.3%). Cost synergies were realised thanks to the integration of Generali Nederland and the migration of part of the Europeesche portfolio into the a.s.r. and Ditzo platforms.

Operating result

The operating result rose by 58.5% to € 226 million. Disability improved due to profitable growth, especially within sickness leave, where price increases led to an improvement in the combined ratio. P&C underwriting result improved due to a relatively low level of large claims and a lower impact from calamities, particularly compared to the € 30 million impact from the January storm in 2018, and profitable growth. Disability also absorbed the impact of a correction in the actuarial interest rate in the claims reserve (VPU) for recent years in the second half of 2019. P&C absorbed the impact of lower discount rate on further bodily injury claims.

Combined ratio

The combined ratio (COR) of P&C and Disability showed a strong improvement of 2.2%-points to 93.5% (2018: 95.7%) driven by both product lines.
P&C

With a market share of 15% in 2018, P&C business strengthened its position in the non-life market. a.s.r. was the third largest general provider of P&C insurance products in the Netherlands in 2019, as measured by GWP. a.s.r. offers a broad range of P&C insurance products under the brands a.s.r., Ditzo and Europeesche Verzekeringen. The P&C combined ratio improved 1.5%-point to 96.9% (2018: 98.4%) due to favourable underwriting results.

Combined ratio P&C (%)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>98.4</td>
<td>96.9</td>
</tr>
</tbody>
</table>

Products

a.s.r.’s broad P&C insurance product range offering can be divided into the following categories:

- **Motor**
  Motor policies for retail and commercial customers provide third-party liability coverage for motor vehicles and commercial fleets property damage and bodily injury as well as coverage against theft, fire and collision damage

- **Fire**
  Fire policies for retail and commercial customers provide coverage against various property risks, including fire, storm and burglary. Private coverage is provided on both a single-risk and a multi-risk basis, with multi-risk policies providing coverage both against loss of or damage to dwellings and damage to personal goods;

- **Other**
  Non-life insurance products such as travel, leisure, transport goods in transit only, liability, agricultural and construction motorised vehicles, construction all risk and assistance.

Product share P&C (%)

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>Motor</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

Market

The non-life market consists of many insurers with similar products, especially in the retail market. The market has become more rational in P&C pricing. Consolidation has led to a decrease in the number of P&C insurers in the Dutch market. The top 3 P&C insurers have a market share of approximately 70%. Compared to last year, the impact of calamity damage was low. Large claims and storms can impact the bottom line performance. Over the past years, a.s.r. has built and strengthened a solid foundation for a successful and profitable P&C business.

Insurers distribute their insurance policies either through intermediaries or directly. A shift in distribution is taking place from provincial to authorised agents. The authorised agents market has grown strongly in the last decade and currently amounts to approximately € 3.1 billion in GWP for non-life products (2018). The share of the authorised agents portfolio in the total GWP is also increasing. Online distribution in the P&C market has increased. Consumers use the internet to inform themselves, compare and purchase products. In the small and medium-sized enterprises market, advisors continue to maintain their dominant position, particularly due to the fact that products involved have become more complex.
Strategy and achievements

a.s.r. endeavours to leverage its existing strengths and achieve a COR of less than 98%. The P&C business is expected to grow in line with Gross Domestic Product (GDP) development. a.s.r. has been able to add organic and inorganic growth onto its platform with a marginal expense impact. a.s.r. aims to strengthen its current role of risk bearer and expand into a broad service provider of more relevant services. In addition, a.s.r. aims to make its services more sustainable in view of its social responsibility.

With an NPS score of 51 in 2019 (47 in 2018), the P&C business improved its customer satisfaction. In addition, the P&C business (concerning a.s.r. excluding Ditzo and Europeesche Verzekeringen) won first prize in the Adfiz Performance Survey in 3 categories of ‘Best Partner’ – Efficiency, SME insurability and Retail insurability.

NPS P&C

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>Target: 49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In reaction on the climate change process, a.s.r. has expanded the insurance for buildings with flood cover. As of 1 January 2020, all private and corporate customers will automatically be granted an extension of their current precipitation cover. This applies to the residential premises, home contents, leisure home, commercial buildings, movable property and inventory items insurance. With the extension of this precipitation cover, the customer is insured against loss caused by water that has unexpectedly entered the building as a result of flooding caused by the failure of a non-primary water-control structure.

To further improve efficiency, service levels and customer satisfaction, P&C has rationalised its product portfolio. Another important part of its business strategy is to further simplify its infrastructure. The new non-life platform will lead to improved and digitised services to customers and intermediaries. It will also reduce costs, which further strengthens a.s.r.’s competitive position. The retail portfolios of a.s.r., Generali and Europeesche Verzekeringen have been successfully converted into the new P&C platform. The organisations of both the Europeesche Verzekeringen and Generali have been integrated into the a.s.r. P&C and Ditzo organisation.

In the field of sustainability, P&C has taken several initiatives. The three pillars of the initiatives are: prevention, safety and sustainability. The ambitions of P&C are the following:

- To be recognised by customers, advisors and employees for its contribution to prevention, safety and sustainability;
- To advise and communicate on how to prevent damage;
- To make the customer’s environment safer;
- In the event of damage: to promote sustainable recovery.

To achieve these ambitions, P&C took the following actions in 2019:

- Knowledge sessions were organised for advisors on developments in the P&C market, such as climate change, emerging causes of damage and sustainable repairs;
- a.s.r. helps build and maintain relationships with business premises staff by assisting them with repairs in the event of defects in electrical installations of solar panels;
- Safety on the road thanks to a.s.r. Driver’s Day 2019. This day was dedicated to prevention and was held for professional drivers in freight transport;
- Online magazines are published with preventive and sustainable repair content.
Outlook 2020
In 2020, P&C will implement its SME products on the new non-life platform. Ditzo will convert the remaining Europeesche Verzekeringen portfolio, improving its service to customers and reducing its operating costs. In the new non-life platform, an online log-in portal will be available for retail customers. In addition, a.s.r. aims to strengthen its current role of risk bearer and expand into a broad service provider of more relevant services. A cyber proposition for the SME market is expected to be launched in 2020. The estimated growth of the GWP is 3-5% in 2020.

Ditzo and Europeesche Verzekeringen
As of the beginning of 2019, Ditzo and Europeesche Verzekeringen have operated as one integrated organisation with independent labels in the market and different distribution models. Ditzo aims to empower consumers to make their own decisions when insuring their properties and lives. Europeesche Verzekeringen aims to insure travellers sensibly as they explore the globe.

Key themes in their business strategies are as follows:
- A focus on customer satisfaction by enhancing customer service;
- A continuous optimisation of customer acquisition costs through online and touroperator channels;
- An increase in the share of bundled propositions for existing customers with regard to both health and non-life insurance policies.

In 2019, the Generali Nederland Direct non-life portfolio was migrated to the Ditzo platform with the help of process robotics.

In the beginning of 2019, the Ditzo and Europeesche Verzekeringen organisations were merged into one single organisation, supporting two different market propositions. By the end of 2019, all Europeesche Verzekeringen products were implemented in the Ditzo platform. The conversion of the Europeesche Verzekeringen portfolio into this new platform will take place in the beginning of 2020. Subsequently, the Europeesche Verzekeringen IT environment will be decommissioned, which will result in further cost reductions and a simplification of the IT environment.

Market research has shown that almost one third of Dutch travellers travel without taking out a travel insurance. This is predominantly a result of the fact that consumers perceive limited risks when travelling, find insurance policies too expensive and assume that their health insurance policies also cover medical expenses incurred abroad. Europeesche Verzekeringen has presented this research in a white paper to its business partners. Europeesche Verzekeringen supports travelers by its implementation of a tool that provides them with information on sensible travelling.

Disability
With a market share of 27.3%1 in 20182, measured in GWP, a.s.r. has been a traditional leader in this market. The Dutch disability insurance market measured in GWP amounts to € 3.71 billion in 2018. The combined ratio of Disability (including Loyalis) improved by 2.5%-points to 88.3% (2018: 90.8%) due to the inclusion of Loyalis and an improvement in the sickness leave portfolio.

<table>
<thead>
<tr>
<th>Combined ratio Disability (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.8</td>
</tr>
<tr>
<td>2018</td>
</tr>
</tbody>
</table>

Under the brands of ‘De Amersfoortse’ and ‘Loyalis’, a.s.r. offers a broad range of disability insurance products as well as services of in-house experts and external parties in the context of prevention and reintegration for large businesses, SMEs (employers and employees) and self-employed persons.

1 Including Europeesche Verzekeringen accidents, Generali and Loyalis.
2 Source: DNB (based on SII) - At the moment of writing, the market share figures for 2019 are unknown.
Products
The disability insurance product range offering can be divided into the following categories:

- **Disability of self-employed persons:**
  - Products for self-employed persons to protect against loss of income in the event of sickness or disability;
  - Products for employees to protect the payment of fixed expenses in the event of sickness or disability and to cover loss of income above the wage limit (WIA - Work and Income Act) supplementary insurance, in the event of disability.

- **Sickness leave:** Products for employers to cover the costs associated with the employers’ obligation to continue to pay wages in the event of employee sickness;

- **Group disability:**
  - Products for employers to cover their own Return to work (partially disable Regulation (WGA)) risk carrier status;
  - Products for the benefit of employees (taken out by employers) to cover loss of income due to the inability to (fully) perform work as a result of disability as defined by the WIA.

Product share Disability (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Disability</th>
<th>Sickness leave</th>
<th>Group disability</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>27%</td>
<td>15%</td>
<td>35%</td>
<td>20%</td>
</tr>
<tr>
<td>2019</td>
<td>26%</td>
<td>14%</td>
<td>34%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Market
The disability market is divided into several productlines.

- **Disability self-employed** (with 36% the largest) for the entrepreneur who has no social security concerning loss of income caused by sickness or occupational disability and is able to insure disability risk up to retirement age;
- **Sickness leave** (33%) which protects the employer for its responsibility for continued payment of salary to the employee in case of sickness leave up to 2 years. As an extension thereof the third division;
- **Group Disability** (25%), provides the employee, who may appeal to the WIA in covering possible significant loss of income. WIA is a public act covering all employees in the Netherlands and is administered by UWV (the Employee Insurance Agency).

The disability market is mainly distributed by intermediaries, where a.s.r. is well positioned with its brand De Amersfoortse at SMEs and self-employed. Loyalis has a strong position in direct distribution at large businesses. The authorised agents disability market in the Netherlands has grown strongly in the last decade up to €579 mln. 15% of total GWP. 24% of a.s.r.’s disability GWP comes from authorised agents

Strategy and achievements
Through its brands De Amersfoortse and Loyalis, a.s.r. has a strong position in the disability insurance market. a.s.r. is well positioned to capture profitable growth opportunities. On 1 January of 2020, a.s.r. acquired the insurer Veherex. With this acquisition, a.s.r.’s market share will increase. a.s.r. has a significant position in the intermediary distribution channel. Important elements for sustainable value creation are enhanced offering on pricing and underwriting, and deployment of dedicated multidisciplinary teams. With an NPS score of 46 in 2019 (45 in 2018), Disability slightly improved its customer satisfaction.

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1 a.s.r. also offers products relating to sickness leave and group disability via authorised agents and mandated brokers.

Due to the importance of this distribution channel, a.s.r. presents these sales as part of a separate product category (‘Other’).

2 Source: Marketreport 2018, CVS statistic Financial annual income results.
a.s.r. continues to provide high-quality products and services that focus on sustainable employability, for one, by encouraging its participations to cooperate. Recently introduced products and services include:

- The ‘Doorgaan’ policy, an integrated disability and health insurance, is expanded with a ‘natura’ policy;
- The ‘Langer Mee AOV’ affordable product with preventive care up to the retirement age;
- a.s.r. Vitality, a health programme - based on behavioural science – that encourages customers to get moving and live healthier lives in a positive way;
- The ‘MKB Verzuim ontzorgverzekering’ (SME sickness leave insurance to make life easier) with an ‘ontzorgmanager’ (a manager to make life easier), who is the contact during reintegration in case of sickness leave and who has knowledge of all relevant legislation and regulations.

As part of a.s.r.’s strategy to meet customer needs and improve cost effectiveness, Disability has developed and implemented several digital initiatives such as:

- Assisting intermediary channels with e-based underwriting systems and online channels to provide online product offerings;
- Making progress in the number of connections linking the payroll system and the insurance administration, as a result of which personnel transactions are processed directly in the administration;
- Linking health services administration and the insurance administration, as a result of which sickness leave transactions are processed directly in the administration.

Outlook for 2020

a.s.r. is not expecting any major changes in the country’s social systems. Recently, Disability developed a long-term vision focusing on sustainable employability as a growth area. Within that area, a.s.r. intends to become the thought leader/director by forward and backward integration of partners into the chain.

Health

With a market share of 1.9% (2018: 2.0%), a.s.r. was the seventh largest provider of health insurance products on the Dutch market in 2019, as measured by number of customers. a.s.r. offers health insurance products under the Ditzo and De Amersfoortse brands. The COR of Health improved by 0.2%-points to 99.0% (2018: 99.2%) mainly due to an improved pricing of the supplementary insurance portfolio.
Products
The health insurance market in the Netherlands comprises of two product types: basic insurance and supplementary insurance. Basic insurance provides a broad coverage of healthcare costs of which contents are prescribed by the government on an annual basis. Supplementary insurance covers specific risks that are not covered by basic insurance, such as the costs of dentistry, physiotherapy, orthodontics and medical support abroad.

Market
The health insurance market is a highly regulated market. All Dutch residents are obliged to have basic health insurance coverage. Basic coverage has limited variations across all insurers, since it is a statutory requirement. Although supplementary insurance coverage is not obligated, 84%¹ of the market chose a form of supplementary health insurance in 2019. Health insurance contracts are taken out for a year at the time. At 6-7%, the percentage of customers that switch between health insurance providers per calendar year has been relatively stable over the past four years. In 2019, the percentage of customers that switched was 7%.

It is mandatory for insurers to accept all persons who are statutory obliged to have basic health insurance coverage. This is made possible by a government-run system of risk spreading, which provides compensation to insurers related to the costs in their customer base. Government and the health insurance industry are constantly seeking to improve the system of risk-based cost compensation.

The GWP for basic coverage has been increasing across the board due to rising health care costs. In the period from 2017 to 2019, the GWP of the market as a whole rose by more than 9%¹.

Strategy and achievements
In line with a.s.r.’s mission statement, the strategy of Health is to help our customers to improve their health. It therefore provides information, services and products to customers that could help them improving their condition and general health. The introduction of a.s.r. Vitality, available for all health insurance customers, is an example of the execution of its mission.

Given that it considers the health of its customers as one of its main priorities, a.s.r. ended the outsourcing of healthcare procurement in 2017 and started to bring the contracting of healthcare providers in-house in 2018. This continued in 2019. With the switch to in-house healthcare procurement, a.s.r. aims to strengthen its relationship with healthcare providers for the benefit of its customers, while at the same time facilitating smooth declaration processes in order to benefit both customers and healthcare providers.

Health aims to increase customer satisfaction by organising an efficient and client-focused customer service process. Health puts considerable effort into streamlining and digitising the process of paying declarations, customer onboarding and other services, thereby leading to faster and more accurate payments to customers, lower operating costs and efficient processes. Furthermore, Health prides itself in continuously improving client interaction, and serving customers at the time and manner chosen by them. Health continuously updates the practical information it provides to its employees so that they can in turn improve the quality, accuracy and speed of the information they give to customers. With an NPS score of 43 in 2019 (39 in 2018), the health business improved its customer satisfaction.

NPS Health

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39</td>
<td>43</td>
</tr>
</tbody>
</table>

Target: 45
a.s.r. puts significant time and effort in evaluating and developing its high-quality products and services. In 2019, both Ditzo and De Amersfoortse launched a new type of basic health insurance policy; an in-kind policy which is the most common kind of policy in the Dutch market; 75% of the insured population have an in-kind policy\(^1\). An in-kind policy is also called contracted care. If an insured person visits a contracted care provider, the healthcare costs will be reimbursed. If they visit a non-contracted care provider, they will have to pay part of the healthcare costs, usually around 20-30%. This introduction enables Health to service a larger part of the market and supports the introduction of a.s.r. Vitality, which is available for clients of Health.

De Amersfoortse introduced a new proposition; Zorg voor Ondernemers (health for entrepreneurs). This proposition is made for entrepreneurs, including self-employed persons without a disability insurance. The proposition aims to reduce the risk of (physical) ailments by providing coverage, services and help to support entrepreneurs in staying healthy and productive before – or as soon as – ailments appear. This proposition could also increase the interest in the broader range of product and services for sustainable employability including disability insurance.

**Outlook for 2020**

a.s.r. aims to set up cross-sell programmes focusing on the Doorgaan proposition under De Amersfoortse brand, the benefit-package for Ditzo customers and health improvement through a.s.r. Vitality. Vitality focuses on health related themes such as exercise, nutrition and mental wellbeing. The programmes will be offered to customers in order to help them better understand health risks and motivate them to actively change their lifestyle. Customers will be able to subscribe to a programme and receive regular newsletters with tips and motivational challenges. The programmes can be used to provide customers with a better understanding of the benefits of a.s.r. Vitality and drive cross-sell. The main goal is to inspire and motivate customers to start and maintain a healthier lifestyle. a.s.r. believes that this goal can be impacted positively if more health customers become (more) active through the a.s.r. Vitality programme.

a.s.r. will also look into possibilities for further improving the unique proposition of Doorgaan (combination of health care insurance, disability insurance and services aimed at sustainable employability).

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\(^1\) Source: NZA Monitor Zorgverzekeringen 2019.
A.2.3 Financial Performance Life segment

The Life segment comprises the life insurance entities Pensions, Individual life and Funeral. The segment offers insurance policies that involve asset building, immediate (pension) annuities, asset protection, term life insurance and funeral expenses insurance for consumers and business owners. The market share of Life in 2018 was 14.3% (2017: 13.0%).

Financial Performance

<table>
<thead>
<tr>
<th>Key figures, Life</th>
<th>2019</th>
<th>2018</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in € million, unless stated otherwise)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross written premiums, of which:</td>
<td>1,619</td>
<td>1,566</td>
<td>3.4%</td>
</tr>
<tr>
<td>Recurring premiums</td>
<td>1,336</td>
<td>1,295</td>
<td>3.2%</td>
</tr>
<tr>
<td>Single premiums</td>
<td>283</td>
<td>271</td>
<td>4.5%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>-192</td>
<td>-185</td>
<td>3.4%</td>
</tr>
<tr>
<td>Operating result</td>
<td>696</td>
<td>664</td>
<td>3.7%</td>
</tr>
<tr>
<td>Profit/(loss) for the year attributable to holders of equity instruments</td>
<td>696</td>
<td>569</td>
<td>22.3%</td>
</tr>
<tr>
<td>Cost/premium ratio (APE)</td>
<td>10.9%</td>
<td>11.1%</td>
<td>-0.2%-p</td>
</tr>
<tr>
<td>New business (APE)</td>
<td>159</td>
<td>119</td>
<td>33.6%</td>
</tr>
</tbody>
</table>

Gross written premiums

The gross written premiums amounted to € 1,619 million (2018: € 1,566 million). Recurring premiums (€ + 41 million) as well as single premiums (€ + 12 million) increased. This year, the WerknemersPensioen product continued to be successful and the AuM further increased to € 1.3 billion (2018: € 0.7 billion) primarily due to the growth of the portfolio and higher stock markets. The number of active participants is now over 80,000 (2018: 55,000). The additional contribution from Loyalis (€ 59 million) and WnP portfolio growth exceeded the decrease of the existing DB/DC Pension portfolio and recurring premiums in Individual life. The level of surrenders of nominal policies at Individual life was stable at 0.79% (2018: 0.83%). Excluding the single premium in the figures of the previous year related to the acquisition of PC Uitvaart (as from October 2018), gross written premiums from Funeral increased this year (€ + 2 million).

Operating expenses

The acquisition of Loyalis resulted in an increase in operating expenses by € 6 million to € 192 million (2018: € 185 million). Underlying operating expenses decreased (€ 6 million) due to the integration of Generali Life and system rationalisation at Individual life. This year a.s.r. completed the large-scale migration to a.s.r.’s Software as a Service platform. In total, more than 800,000 policies from all nine different Individual life systems, including several ‘closed-book’ systems, have been converted.

Life operating expenses expressed in basis points of the basic life provision improved to 53 bps (2018: 56 bps), in line with the target of 45-55 bps for 2019-2021. Operating expenses in relation to the premiums (measured in APE) improved, which is reflected in a slightly improved cost-premium ratio (APE) of 10.9% (2018: 11.1%).

Operating result

The operating result increased by € 25 million to € 696 million (an increase of 3.7%). The increase was primarily driven by a higher investment margin (€ + 46 million). The increase in the investment margin is due to less required interest at Individual life and higher investment income as a result of the re-risking of investments and the integration of the Loyalis investments. The technical result decreased by € 11 million to € 98 million largely due to the decline of a substantial part of the book.

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1 Source: DNB (based on SII) - At the moment of writing, the market share figures for 2019 are unknown.
Pensions

a.s.r. is a major provider of pension insurance products in the Netherlands. The DB product forms the largest component of its portfolio followed by the growing DC proposition. The current customer base of these portfolios comprises approximately 25,000 companies and 728,000 participants. Under the brand of a.s.r. pensions has a joint venture with Brand New Day for an Institution for Occupational Retirement Provision (IORP).

Products

a.s.r. provides pension products based on DC with recurring premiums where benefits rebased on investment returns on specified funds, in some cases with guarantees. It has been five years since a.s.r. successfully launched its DC proposition, WnP. In 2019, WnP had more than 80,000 participants and € 1.3 billion in AuM in SRI funds.

In addition to the fixed annuity product a.s.r. introduced a new pension product, the variable pension. This product offers customers a sustainable product for the accrual phase of their pension, with a good balance between risk and return. Historically, a.s.r. also offered DB products but due to market changes DB products are no longer offered.

Market

As a provider of various insurance pension products, a.s.r. plays an important role in the Dutch pensions market, both under the brand of a.s.r. and in a joint venture with Brand New Day for an IORP. Driven by the low interest environment and the current pension debate in the Netherlands, there has been a steady shift in the pensions market towards capital-light products. This trend is expected to continue in the years to come. With its DC and IORP proposition, a.s.r. believes it is well positioned to increase its market share through high-level service, cost effectiveness and execution capabilities.

a.s.r.’s DB pension products are traditional insurance products based on lifelong guaranteed pension payments with recurring premiums, either with or without profit sharing, including an option for additional single premiums for indexation and back services. a.s.r. is also active in the DB pension market through Het nederlandse pensioenfonds (Hnpf), for which it provides pension administration and asset management.

Strategy and achievements

The business strategy in Pensions is to focus on clear, simple, cost-conscious pension products. a.s.r.’s DC proposition (WnP) is competitively priced and has been rewarded for its fund selection (SRI funds) by independent intermediaries.

The renewal of DB contracts is considered if customers intend to shift to DC in the near future and meet strict financial criteria. The strategy for the existing DB book is to maintain its value, reduce capital requirements, enhance cost coverage and minimise risks. The DB book will become a service book as more employers opt for other pension solutions.

In 2019, Pensions improved its digital customer service by taking further steps to introduce robotics into its day-to-day operations and by investing in more user-friendly client portals and a more fully integrated online environment for its portfolio. All communications to participants are digital. With an NPS score of 52 in 2019 (47 in 2018), Pensions improved its customer satisfaction.

NPS Pensions

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPS</td>
<td>47</td>
<td>52</td>
</tr>
<tr>
<td>Target</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

Cost control and cost variability are essential for value creation and value retention. Various plans were implemented in 2019 to further simplify the organisation and processes. The migration of the Generali Nederland and Loyalis books and their integration into the existing a.s.r. platform is on track (completion scheduled for 2020). The same services will be offered to customers and the market position will improve.
Outlook for 2020
Pensions’ focal areas include a further growth in WnP, Hnpf and immediate annuities, further improving customer satisfaction through enhancing online and personal customer services, and further developing client portals. In addition, attention will continue to be placed on cost variability by simplifying and computerising operational processes and by migrating the Loyalis and Generali Nederland pension portfolios. The Individual life and Pension departments of a.s.r. will be integrated in 2020.

Individual life
a.s.r. is one of the largest providers of individual life insurance products in the Netherlands, measured in GWP.

Products
Term life insurance, the sole selling proposition, consists of traditional life insurance policies that pay out death benefits without a savings or investment feature. a.s.r.’s term life insurance products are mainly sold in combination with mortgage loans or investment accounts and generally require recurring premium payments. a.s.r. only offers term life insurance products. All other products are managed as a closed service book.

Market
The premium volume in the individual life market has declined in recent years due to low interest rates and tax reforms. The decline is expected to continue in the years to come.

Strategy and achievements
Individual life aims to maximise and maintain the current value of the individual life book. To realise this aim, the strategy is to optimise customer satisfaction as it is crucial to efficiently manage the way in which customers behave and, in addition, it limits unnatural lapses. Life aims to further digitise and robotise its services to improve their quality and user friendliness. With an NPS score of 42 in 2019 (37 in 2018), the individual life business improved its customer satisfaction.

NPS Individual life

<table>
<thead>
<tr>
<th>Year</th>
<th>NPS</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>37</td>
<td>40</td>
</tr>
<tr>
<td>2019</td>
<td>42</td>
<td>40</td>
</tr>
</tbody>
</table>

In order to preserve the value of the individual life book, Life has simplified its organisation, shifting its cost base from fixed costs to more variable costs. Life is in the process of simplifying processes and rationalising and migrating its service book to a (Saas) platform. With the migration of more than 800,000 policies from 9 different Life systems to the Keylane platform (SAAS), including the book of Generali Nederland, the Service Books programme was finalised after five years. This successful project shows a.s.r.’s strength to carry out large-scale migrations. Migrating the recently acquired Loyalis and VvAA life books is planned for 2020.

a.s.r. plays an important part in consolidating the Dutch (life) insurance market. In 2018, Generali Nederland was acquired, in 2019 Loyalis, and in 2020 the life book of VvAA.

Outlook for 2020
The main focus will be further improving customer satisfaction through digitisation and robotisation, data management and operational excellence. Individual Life will complete the planned migrations of VvAA and Loyalis to the Saas platform. The individual life and pension departments will be integrated in 2020. Consolidation opportunities will be looked into seriously.
Funeral

As at 31 December 2019, the funeral portfolio consisted of 6.4 million policies and 4.7 million customers. Based on the volume of premiums, Ardanta, a.s.r.’s funeral brand, is the second largest funeral insurer in the Netherlands.

Products
Ardanta’s primary objective is to insure funeral expenses, for which it offers capital and in-kind insurance products.

Market
The market is characterised by rapid consolidations. Due to the low interest rate environment, funeral insurance premium levels increased in recent years. The distinguished proposition of Ardanta was recognised in the market: business targets were well exceeded in 2019. The ‘multichannel’ distribution strategy of Ardanta proved to be successful as 65% of new business was derived from direct channels (internet, direct mail and own advisors) whereas the remaining 35% came from the traditional independent intermediaries. For comparison: in 2014, 60% of new business was derived from indirect (broker) channels.

Strategy and achievements
The focus of Ardanta continues to be undiminished capital generation and a further strengthening of its competitive position through cost leadership.

Ardanta offers practical support to its customers and their relatives in overcoming personal losses and in practical matters relating to bereavement. Practical guidance consists of initiatives such as the portal www.doodgaanendoorgaan.nl and the services of a ‘funeral coach’, who assists relatives in the days immediately after a loved ones has passed away. In a recently developed online initiative, Ardanta provides answers to frequently asked questions in short video clips.

In 2019, the active product range was reviewed. In 2020, new products will be launched that focus on the theme of ‘enhanced flexibility for customers’.

Ardanta is committed to increasing digital process support. In 2019, the ‘100% digital in 2023 programme’ was launched. The digital transformation means fundamental changes in customer interaction and customer experience, value propositions and business models, as well as operational processes. Also in 2019, the first business processes were robotised. All of these actions aim to increase customer satisfaction with Ardanta.

With an NPS score of 40 in 2019 (41 in 2018), the funeral business slightly decreased its customer satisfaction.

NPS Funeral

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41</td>
<td>40</td>
</tr>
</tbody>
</table>

Target: 41

Ardanta’s CSR initiatives focus on ‘address enrichment’ in order to contact customers again with whom Ardanta has lost contact over the years. In addition, the ‘Old Case Team’ project tries to trace relatives of deceased customers in order to make payments they are entitled to.

Outlook for 2020
With regard to new consolidation opportunities, Ardanta will keep an eye on new developments. Ardanta will continue to focus on providing good and innovative services to existing customers and achieving organic growth through smart customer activation and care duty campaigns that create value for customers.
A.3 Investment performance

A.3.1 Revenues and costs of all assets

### Investments

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available for sale</td>
<td>31,893</td>
<td>25,328</td>
</tr>
<tr>
<td>At fair value through profit or loss</td>
<td>2,759</td>
<td>2,332</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34,651</strong></td>
<td><strong>27,660</strong></td>
</tr>
</tbody>
</table>

The investments at fair value through profit or loss increased in 2019 by € 427 million primarily due to additional investments in the mortgage equity funds and a.s.r. real estate funds.

### Breakdown of investments

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Available for sale</td>
<td>Fair value through profit or loss</td>
</tr>
<tr>
<td><strong>Fixed income investments</strong></td>
<td>16,132</td>
<td>-</td>
</tr>
<tr>
<td><strong>Government bonds</strong></td>
<td>11,590</td>
<td>-</td>
</tr>
<tr>
<td><strong>Corporate bonds</strong></td>
<td>524</td>
<td>-</td>
</tr>
<tr>
<td><strong>Asset-backed securities</strong></td>
<td>320</td>
<td>-</td>
</tr>
<tr>
<td><strong>Equities and similar investments</strong></td>
<td><strong>3,049</strong></td>
<td><strong>111</strong></td>
</tr>
<tr>
<td><strong>Real estate equity funds</strong></td>
<td>2,079</td>
<td>-</td>
</tr>
<tr>
<td><strong>Mortgage equity funds</strong></td>
<td>270</td>
<td><strong>569</strong></td>
</tr>
<tr>
<td><strong>Other participating interests</strong></td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td><strong>Other investments</strong></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total investments</strong></td>
<td><strong>31,893</strong></td>
<td><strong>2,759</strong></td>
</tr>
</tbody>
</table>

The equities consist primarily of listed equities and investment in investment funds (including open ended investment funds).

In 2019, government bonds increased to € 16,132 million (2018: € 11,773 million) mostly due to additional investments (€ 3,676 million) as a result of cash collateral received on derivative instruments which were reinvested into government bonds and the acquisition of Loyalis (€ 739 million). For more information in regards to cash collateral received see chapter 6.5.19. Equities increased to € 3,159 million (2017: € 2,822 million) mainly due to the development of the stock-market. The increase in the asset-backed securities and the mortgage equity funds held at available for sale are mostly due to the acquisition of Loyalis. The increase in mortgage equity funds held at fair value through profit or loss is due to additional investments in ASR Mortgage Fund and positive revaluation of this fund.

For the real estate equity funds and mortgage equity funds for which a.s.r. has significant influence, being ASR DMOF, ASR DPRF and ASR DCRF and ASR mortgage fund, the exemption of IAS 28 was used, thereby measuring the investments at fair value through profit or loss and presenting them as a separate category within the investments at fair value through profit or loss.

All investments at fair value through profit or loss are designated as such by a.s.r. upon initial recognition.

Based on their contractual maturity, an amount of € 24,403 million (2018: € 21,774 million) of fixed income investments is expected to be recovered after one year after the balance sheet date. For assets without a contractual maturity date, it is expected that they will be recovered after more than one year after the balance sheet date.
### Breakdown of investment income per category

<table>
<thead>
<tr>
<th>Category</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income from receivables due from credit institutions</td>
<td>130</td>
<td>149</td>
</tr>
<tr>
<td>Interest income from investments</td>
<td>370</td>
<td>394</td>
</tr>
<tr>
<td>Interest income from amounts due from customers</td>
<td>241</td>
<td>253</td>
</tr>
<tr>
<td>Interest income from trade receivables and derivatives</td>
<td>451</td>
<td>365</td>
</tr>
<tr>
<td>Other interest income</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total Interest income</strong></td>
<td>1,228</td>
<td>1,185</td>
</tr>
<tr>
<td>Dividend on equities</td>
<td>73</td>
<td>78</td>
</tr>
<tr>
<td>Dividend on real estate equity funds</td>
<td>67</td>
<td>65</td>
</tr>
<tr>
<td>Dividend on mortgage equity funds</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Rentals from investment property</td>
<td>57</td>
<td>50</td>
</tr>
<tr>
<td>Other investment income</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dividend and other investment income</strong></td>
<td>216</td>
<td>208</td>
</tr>
<tr>
<td><strong>Total Investment income</strong></td>
<td>1,444</td>
<td>1,393</td>
</tr>
</tbody>
</table>

The effective interest method has been applied to an amount of € 742 million (2018: € 794 million) of the interest income from financial assets not classified at fair value through profit or loss. Interest income includes € 6 million (2018: € 7 million) in interest received on impaired fixed-income securities.

### A.3.2 Information about profit and losses in equity

#### Consolidated statement of comprehensive income for the year ended 31 December

<table>
<thead>
<tr>
<th>(in € millions)</th>
<th>2019</th>
<th>2018 (restated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit for the year</td>
<td>972</td>
<td>671</td>
</tr>
<tr>
<td>Remeasurements of post-employment benefit obligation</td>
<td>-509</td>
<td>53</td>
</tr>
<tr>
<td>Unrealised change in value of property for own use</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Income tax on items that will not be reclassified to profit or loss</td>
<td>126</td>
<td>-15</td>
</tr>
<tr>
<td><strong>Total items that will not be reclassified to profit or loss</strong></td>
<td>-377</td>
<td>46</td>
</tr>
<tr>
<td>Unrealised change in value of available for sale assets</td>
<td>1,671</td>
<td>-429</td>
</tr>
<tr>
<td>Realised gains/(losses) on available for sale assets reclassified to profit or loss</td>
<td>-175</td>
<td>-236</td>
</tr>
<tr>
<td>Shadow accounting</td>
<td>-1,041</td>
<td>248</td>
</tr>
<tr>
<td>Segregated investment pools</td>
<td>-3</td>
<td>65</td>
</tr>
<tr>
<td>Income tax on items that may be reclassified subsequently to profit or loss</td>
<td>-106</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total items that may be reclassified subsequently to profit or loss</strong></td>
<td>346</td>
<td>-289</td>
</tr>
<tr>
<td><strong>Total other comprehensive income for the year, after tax</strong></td>
<td>-31</td>
<td>-244</td>
</tr>
<tr>
<td><strong>Total comprehensive income</strong></td>
<td>941</td>
<td>428</td>
</tr>
<tr>
<td>Attributable to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Non-controlling interests</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>- Shareholders of the parent</td>
<td>881</td>
<td>366</td>
</tr>
<tr>
<td>- Holders of other equity instruments</td>
<td>60</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total comprehensive income attributable to holders of equity instruments</strong></td>
<td>941</td>
<td>426</td>
</tr>
</tbody>
</table>
The tax related to interest payments on other equity instruments was until 2018 presented as part of equity. As from 2019, the tax impact is presented in the line item income tax (expense) / gain in the consolidated income statement. The comparative figures have been restated accordingly (2018: € 15 million). There is no impact on equity.

Shadow accounting allows a recognised but unrealised gain or loss on an asset to be transferred to liabilities arising from insurance contracts.

**A.3.3 Information about investments in securities**
As a.s.r. has no investments in securitisation, no further information is included here.

**A.4 Performance of other activities**
No other activities are material.

**A.5 Any other information**
In 2019 a.s.r. strengthened its position in Non-life by acquiring Loyalis N.V. (Disability) and Veherex Schade N.V. (Disability). In doing so, a.s.r. continued its strategy of bolt-on acquisitions. The acquisition of Veherex was finalised on January 1st 2020.

a.s.r. strengthened its position in Life by acquiring Loyalis N.V. (Individual life), VvAA Levensverzekeringen N.V. (Individual life) together with a partnership with VvAA Group B.V. The acquisition of VvAA was finalised on January 1st 2020.
B System of governance

B.1 General information on the system of governance

B.1.1 Corporate governance

B.1.1.1 Supervisory Board Committees

The Supervisory Board (SB) has three committees that discuss specific issues and prepare items on which the full SB takes decisions. The chairperson of each committee reports on the main points of discussion and the resulting recommendations are discussed at the subsequent SB meeting. The minutes of the committee meetings are available to the members of the SB.

The three committees are:
- The Audit & Risk Committee (A&RC);
- The Remuneration Committee (RC);
- The Selection & Appointment Committee (S&AC).

Audit & Risk Committee

- Cor van den Bos (Chairman)
- Sonja Barendregt
- Herman Hintzen

The A&RC comprises three SB members. The composition of the committee is such as to represent the specific business know-how, financial, accounting and actuarial expertise relating to the activities of a.s.r.

The committee held ten regular meetings in 2019. In accordance with the A&RC Rules of Procedure, committee meetings are also attended by the CFO, the Director of Group Risk Management (GRM), the Director of Finance, Risk and Performance Management (FRPM), the Manager of Compliance, the Director of Audit and the independent external auditor.

During the year, outside the regular meetings, the committee met on two occasions with the Audit, Compliance, Risk Management and Actuarial Functions in their roles as countervailing powers. The Chairman of the committee also had two one-on-one meetings with each of the directors of Audit, Compliance and GRM, and two meetings with the external auditor EY.

After each financial quarter, the committee discussed the financial results based on detailed financial, risk, compliance and internal and external audit reports and analyses. Progress on the recommendations of the internal and external auditor was monitored. The full 2019 reporting year was discussed in the first quarter of 2020 based on the (quarterly) internal finance report, the press release, the annual report, the financial statements, the Board Report and the actuarial report. The discussion of the actuarial report was also attended by the Actuarial Function (AF). The committee issued positive opinions on the annual report and on the financial statements to the SB.

The committee discussed and adopted the external auditor’s letter of engagement and the audit plan for 2019. The external auditors’ independence and additional fees were also reviewed each quarter. The management letter of the external auditor highlighting key internal control observations was discussed. Also, the audit results report of the external auditor was discussed. Special attention was given to the reported key audit matters: valuation of insurance contract liabilities including shadow accounting, fair value measurement of non-listed investments, Solvency II ratio and explanatory notes, unit-linked exposure, the reliability and continuity of electronic data processing and the acquisition of Loyalis. The A&RC approved the updated charters and annual plans for 2020 of the Actuarial and Risk Management Function and the Compliance Function. It advised the SB to approve the updated charter and the audit plan 2020 of the internal Audit Function; this advice was followed.

Specific topics discussed in the committee included (i) cyber risks and IT security, with a focus on outsourced activities, (ii) fraud issues (both from external clients - e.g. inappropriate claims behaviour - or from employees) and measures taken, (iii) decreasing interest rates and impact on solvency through the balance sheet plan 2019 and quarterly projection updates.
and (iv) following the completion of the acquisition of Loyalis in early 2019, the integration plan and status report in view of the integration of Loyalis. Special attention was given to KPMG’s transition plan, after their appointment at the AGM in May 2019 as the external auditor for the financial years 2020 to 2024.

a.s.r.’s solvency position was reviewed and discussed each quarter. Specific attention was paid to the UFR effect within the Solvency II framework, to the decreasing interest rates and to a.s.r.’s view on a more economic UFR scenario. The A&RC discussed the risk scenarios and the outcomes of the ORSA and discussed the balance sheet plan and the quarterly updates of this. In all risk scenarios of the ORSA, the solvency ratio remained – sometimes after specific management actions – within the boundaries set by a.s.r., demonstrating the robustness of a.s.r.’s solvency and the effectiveness of certain management actions. The future solvency ratio projections include the gradual decrease of the UFR as prescribed by EIOPA.

The a.s.r. risk appetite is based on a prudent approach to risk management and translates the risk appetite into qualitative business guidelines for non-financial risk matters and into requirements for solvency, liquidity and returns for the financial risks matters; solvency takes priority over profit and profit takes priority over premium income. Moreover, a.s.r.’s updated capital and dividend policy was discussed, after which the SB approved the updated policy.

The A&RC regularly monitored the status of the risk appetite during the year through a.s.r.’s Integrated Risk Dashboard and the status report on the management of risk priorities and at the end of the year, the Committee was informed of the outlines of the reinsurance programme for 2020.

**Remuneration Committee**

In 2019, the composition of the RC was as follows:
- Annet Aris (Chair until May 2019)
- Herman Hintzen (temporary Chairman in the period from May to November)
- Gisella van Vollenhoven (Chair as of November 2019)
- Kick van der Pol

The RC advises the SB on matters including the remuneration policy for the EB and SB and the terms and conditions of employment of the EB, and reviews the remuneration of senior management. The profiles of senior management have been adapted towards a more competence-based model, which improves the differentiation between the different roles.

The RC met six times in 2019. Its meetings were also attended by the CEO (except when issues relating to the EB were discussed) and the Director of Human Resources, who also acts as Secretary in association with the Company Secretary. The committee solicits support and advice from departments such as GRM, Compliance, Audit and Human Resources. Where needed, the committee is consulted by the expertise of independent legal and pay & benefit experts.

In line with the policy, the committee advised the SB on target-setting, performance appraisals and the ex-post assessments of variable payments awarded to identified staff.

From the 2018 AGM until the 2019 AGM the RC devoted considerable time and attention to the evaluation of the remuneration policy for the EB and SB. The committee carefully took into account the opinions of all stakeholders, since there was a risk of damaging the trust of a.s.r. and of jeopardising its market position as a socially responsible insurer. In May 2019, the remuneration policies for the EB and SB were approved by the AGM.

At the end of 2019, the ASR remuneration policy was updated in line with new regulations and the RC discussed the implementation of the remuneration policy for a.s.r.’s subsidiaries and participating interests. The Remuneration Disclosure 2018 was prepared and the results of the internal audit report on the application of a.s.r.’s remuneration policy were discussed.

**Selection & Appointment Committee**

In 2019, the composition of the Selection & Appointment Committee (S&AC) was as follows:
- Annet Aris (Chair until May 2019)
- Kick van der Pol (Chairman as of May 2019)
- Herman Hintzen (as of May 2019)
- Gisella van Vollenhoven (as of November 2019)
The S&AC advises the SB on selection and appointment procedures and the composition of the Boards; it also prepares the (re)appointment of members. The S&AC met eight times in 2019. Its meetings are also attended by the CEO and the Director of Human Resources, who also acts as Secretary of the committee in association with the Company Secretary.

At the EGM in 2019, Gisella van Vollenhoven and Gerard van Olphen were appointed as members of the SB. A selection process for the appointments of these new members began in 2019 with the help of an external agency and were prepared by the committee. Gisella van Vollenhoven was appointed with an enhanced right of recommendation from the Works Council.

The search for a new EB member as the result of the changed management structure announced in 2018 resulted in the appointment of Ingrid de Swart in December 2019. Following the announcement of the resignation of Chris Figee, the search for a new CFO started at the end of October 2019 and resulted in the announcement of the proposed candidate, Annemiek van Melick, and her appointment in February 2020.

Furthermore, the committee discussed the annual appraisals of senior management. The change to a more competence-based model for the profiles of senior managers was also a subject of discussion and was prepared by the committee. A nine-box grid was used to evaluate senior managers and to discuss their individual development and possible successors. The committee was also informed of the results of the Denison scan, a tool used to measure the success of the organisation.

Lastly, in 2019 the fourth re-appointment of Jos Baeten as CEO for a four-year term and the re-appointment of Herman Hintzen as a member of the SB were discussed and prepared by the committee. The proposals for the re-appointments will be included as agenda items at the AGM in 2020.

Financial statements and dividend
The EB prepared the 2019 Annual Report and discussed it with the SB in the presence of the external auditor. The 2019 financial statements will be submitted for adoption by the AGM on 20 May 2020. a.s.r. will propose a dividend of € 1.90 per ordinary share, or € 267 million in total, including the interim dividend paid.

Appreciation
The SB wishes to express its gratitude to all the employees of a.s.r. (both permanent and contract staff) for their dedication to a.s.r., especially for their efforts with regard to all aspects of ‘the story of a.s.r’. All our employees have worked collectively to achieve a.s.r.’s mission by helping customers to share risks and build up capital for the future. Together, we are building an insurance company that is both valuable and sustainable. The SB also wishes to express its gratitude to the members of the EB and the senior management for their impressive leadership of a.s.r. which has given a.s.r. a good position in the market. The SB greatly appreciated the ongoing and constructive open dialogue and cooperation with the EB.

Utrecht, the Netherlands, 24 March 2020

Kick van der Pol (Chairman)
Cor van de Bos
Herman Hintzen
Sonja Barendregt
Gisella van Vollenhoven
Gerard van Olphen
**B.1.1.2 Corporate Governance**

**General**

a.s.r. is a public limited company which is listed on Euronext Amsterdam and governed by Dutch corporate law. It has a two-tier board governance structure consisting of an EB and a SB. The EB is responsible for the realisation of corporate objectives, the strategy with its associated risks and the delivery of the results. The SB is responsible for advising the EB, supervising its policies and the general state of affairs relating to a.s.r. and its group entities. As of 1 February 2019 a.s.r. changed its management structure. This was effected through the appointment of a Business Executive Committee (BEC). The BEC works alongside the EB and shares responsibility for the implementation of the business strategy.

**Legal structure**

ASR Nederland N.V. is the Group’s holding company. The supervised entities (OTSOs) within the Group are ASR Levensverzekering N.V., ASR Schadeverzekering N.V., ASR Basis Ziektekostenverzekeringen N.V., ASR Aanvullende Ziektekostenverzekeringen N.V. and ASR Bank N.V. On 1 May 2019, ASR Nederland N.V. completed the acquisition of Loyalis N.V. Loyalis N.V. was legally merged into ASR Nederland N.V. on 1 August 2019. The operating companies Loyalis Leven N.V. and Loyalis Schade N.V. legally merged with ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. respectively on 1 October 2019. Loyalis’ non-life insurance business will remain in Heerlen and continue to offer products under the name Loyalis. On 19 July 2019, ASR Nederland N.V. announced the acquisition of VvAA Levensverzekeringen N.V. The completion of the acquisition was effected on 1 January 2020. In addition, ASR Nederland N.V. announced the acquisition of Veherex Schade N.V. on 23 August 2019. This acquisition was also completed on 1 January 2020 and will be integrated within the Loyalis brand.

A personal union exists between ASR Nederland N.V., ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. through cross-membership of the EB and the SB. ASR Basis Ziektekostenverzekeringen N.V., ASR Aanvullende Ziektekostenverzekeringen N.V. and ASR Bank N.V. have their own EBs. The SBs of these entities consist of a combination of members of the EB and members of the SB of ASR Nederland N.V.

ASR Vermogensbeheer N.V. and ASR Real Estate B.V. (formerly named: ASR Vastgoed Vermogensbeheer B.V.) are two AIFMD-licensed AIFMs. These entities have their own EBs.

**Group structure**

1 Situation as of 1 January 2020.
General Meeting of Shareholders and consultation with Shareholders

At least one AGM is held per annum, no later than 30 June. The main purpose of the AGM is to decide on matters as specified in a.s.r.’s articles of association and under Dutch law, such as the adoption of the financial statements. The articles of association also outline the procedures for convening and holding general meetings and the decision-making process.

The draft minutes of the AGM must be published on the corporate website (www.asrnl.com) no later than three months following the AGM. Shareholders are given three months to respond to the draft minutes. The minutes of the AGM are subsequently adopted and signed by the Chairman and Company Secretary.

The AGM in 2019 was held on Wednesday 22 May. A total of 71.1% of the total issued share capital with voting rights was present in person or represented by proxy or voting instructions. The agenda of the AGM included the proposal to adopt the annual financial statements, the approval of the proposed dividend payments for the financial year 2018, the proposal to grant a discharge to each (former) member of the EB and SB from liability in respect of the exercise of their duties in the financial year 2018, the proposal to adjust the remuneration policy for the members of the EB as of 1 January 2020 and the proposal to determine the remuneration of the members of the SB as of 1 July 2019, the proposal to appoint KPMG as external auditor for the financial years 2020 up to and including 2024, the proposal to reappoint Kick van der Pol as Chairman and member of the SB, and the proposals to extend the authorisation of the EB to issue ordinary shares and/or to grant rights to subscribe for ordinary shares, to restrict or exclude the statutory pre-emptive right and to acquire the company’s own shares. All agenda items were approved by the AGM. The next AGM will be held on Wednesday 20 May 2020.

An Extraordinary General Meeting (EGM) was held on 30 October 2019. The agenda of the EGM included the proposals to appoint Gisella van Vollenhoven and Gerard van Olphen as new members of the SB. A total of 71.5% of the total issued share capital entitled to vote was present in person or represented by proxy or voting instructions. The proposals were approved by the EGM.

Contacts with shareholders are currently conducted entirely in line with the Policy on fair disclosure and on the basis of bilateral dialogue with shareholders. The Policy on fair disclosure and the bilateral dialogue with shareholders is published on www.asrnl.com. The Group’s Disclosure Committee supervises compliance with laws and regulations in relation to the disclosure of price-sensitive information.

Anti-takeover measures

Stichting Continuïteit ASR Nederland (the ‘Foundation’) was established on 26 May 2016 under Dutch law in connection with a.s.r.’s listing on Euronext Amsterdam. The Foundation has an independent board consisting of three members. The role of the Foundation is to promote and protect the interests of a.s.r., its business and stakeholders, and to work against possible influences that could threaten the continuity, independence, strategy and/or identity of a.s.r. or its associated business to the extent that they could conflict with the aforementioned interests. If the interests of a.s.r., its business, stakeholders or continuity were to be undermined, the Foundation would be entitled – provided certain conditions under the call option agreement were to be met – to exercise a call option right on preference shares such that the number of preference shares acquired under the call option would never exceed the total number of shares forming the issued capital of a.s.r. at the time the call option was exercised, minus the number of preference shares already held by the Foundation (if any) at the time and minus one.

B.1.1.3 Executive Board

The EB is collectively responsible for the day-to-day conduct of business at a.s.r. and for its strategy, structure and performance. In carrying out its duties, the EB is guided by a.s.r.’s interests, which include the interests of the businesses connected with it, which in turn include the interests of customers, shareholders, employees and society at large. The EB is accountable to the SB and the AGM with regard to the performance of its duties.

Certain resolutions made by the EB require the approval of the SB and/or the AGM. These resolutions are outlined in the a.s.r. articles of association and the Rules of Procedure of the EB. Both can be viewed at www.asrnl.com.

Composition of the Executive Board

The articles of association specify that the EB must consist of a minimum of two members, including at least a CEO and CFO. Only candidates found to meet the ‘fit and proper test’ under the Dutch Financial Supervision Act are eligible for appointment. In accordance with Article 17.1 of the articles of association of ASR Nederland N.V., the SB appoints the members of the EB and may suspend or dismiss any EB member at any time. The SB also notifies the AGM of proposed (re)appointments. At the beginning of 2019, a.s.r. was in a period of transition following the previous announcement of a change in its management structure. Following the introduction of its new management structure, the EB now consists of three members: the CEO, CFO and a member. The existing Chief Operating Officer (COO) position has been withdrawn and Karin Bergstein and Michel Verwoest resigned as COOs of the EB with effect from 1 February 2019. The selection
procedure for a new EB member began in November 2018. Between 1 February and 1 December 2019, the EB temporarily consisted of two members under the chairmanship of Jos Baeten. In anticipation of the appointment of the new member, the portfolio was temporarily divided between the CEO and CFO. On 29 May 2019, the SB announced the nomination of Ingrid de Swart as member of the EB. At the 2019 EGM, the SB discussed the proposed appointment of Ingrid de Swart as a member of the EB. The SB subsequently appointed Ingrid de Swart for a four-year term with effect from 1 December 2019. On 1 October 2019, a.s.r. confirmed the resignation of Chris Figee as CFO and EB member. As of 1 February 2020, Chris Figee stepped down. The selection procedure for a suitable successor for the CFO position has begun immediately after the announcement. On 20 December 2019, a.s.r. announced the nomination of Annemiek van Melick as candidate as CFO and EB member. Annemiek van Melick was appointed by the SB after the EGM on 12 February 2020.

<table>
<thead>
<tr>
<th>Name</th>
<th>Current term of office</th>
<th>Appointed until</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jos Baeten</td>
<td>26 January 2017</td>
<td>General Meeting 2020</td>
</tr>
<tr>
<td>Chris Figee</td>
<td>31 May 2018</td>
<td>1 February 2020</td>
</tr>
<tr>
<td>Annemiek van Melick</td>
<td>12 February 2020</td>
<td>General Meeting 2023</td>
</tr>
<tr>
<td>Ingrid de Swart</td>
<td>1 December 2019</td>
<td>General Meeting 2023</td>
</tr>
</tbody>
</table>

**Executive Board**

**Business Executive Committee**

On 1 February 2019, a Business Executive Committee (BEC) was established. Through the creation of the BEC, a.s.r. increased direct involvement of the senior managers of the product lines in further strengthening a.s.r.’s innovative power. It also enables a.s.r. to act decisively with respect to potential inorganic opportunities. The BEC consists of the members of the EB, the Chief Risk Officer (CRO) and senior managers representing specific business areas. The following business areas are represented in the BEC: Service Books (Individual life & Funeral), Pensions, Disability, Health, P&C, Asset Management, Mortgages and Innovation & Digitisation. Through the creation of the BEC, a.s.r. increased direct involvement of the senior managers of the product lines in further strengthening a.s.r.’s innovative power. It also enables a.s.r. to act decisively with respect to potential inorganic opportunities.

The BEC supports the EB, and is co-responsible for the implementation and realisation of the business strategy. Only the members of the EB have voting rights in the meeting of the BEC. The BEC will ensure the direct involvement, knowledge and skills of a.s.r.’s senior management responsible for specific business areas in the decision-making process at board level. With part of the industry in motion, it is vital that a.s.r. is able to respond quickly to opportunities that arise and efficiently anticipate constantly changing customer needs.

The SB will continue to maintain contact with the members of the EB as its primary role. As is already common practice, relevant senior managers will join SB meetings depending on what is on the agenda. The SB supervises the functioning of the BEC as a whole and the relationship between the EB and the BEC. The performance of the senior managers is also discussed between the EB and SB in the context of the review of senior management and succession planning.

**Sustainability governance**

a.s.r. seeks to be a leader in sustainable business practices in the financial sector and takes account of sustainability wherever possible. It does so from five roles: ‘Sustainable insurer’, ‘Sustainable investor’, ‘Sustainable employer’, ‘A trusted company’ and ‘Role in society’.

a.s.r. engages in dialogue with all stakeholders on the principles and objectives of its sustainability policy. To this end, it maintains close contact with internal stakeholders and a broad group of external stakeholders, including customers, shareholders, regulators, politicians and government ministers, as well as trade bodies. In order to continue to drive and monitor sustainability in all its aspects within a.s.r., sustainability has been earmarked as a separate topic. Within the EB, the CEO is ultimately responsible for a.s.r.’s sustainability themes. The Task Force supports the CEO in his responsibility for the definition and implementation of a.s.r.’s sustainability strategy and policy. Each year, the SB discusses and approves the objectives and the progress made in these specific areas. The Director of Corporate Communications coordinates the implementation together with the CSR Task Force. All Task force members subsequently promote this vision and objectives within their own focus areas. The Task Force also sets sustainability Key Performance Indicators (KPIs) and targets.

A sustainability Work Force, with delegates from the business as well as staff departments, operates under the Task Force. It reports quarterly on the set sustainability KPIs to the Task Force, which evaluates the results achieved or takes action where necessary. Each focus has a sustainability Work Force for substantive discussions and to work out (subsidiary) activities.
From 2020 on the BEC will take over the responsibilities of the CSR Task Force.

**Diversity**

a.s.r. is committed to an inclusive culture. In 2017, the SB adopted a formal diversity policy. a.s.r. uses the following definition for diversity: a balanced composition of the workforce, based on age, gender, cultural or social origin, competences, views and working styles. In December 2019, the EB consisted of one woman and two men. Per February 2020 the EB consists of two women and one man and therefore the current composition of the EB meets the gender target of having at least 30% women and 30% men amongst the members of the EB. a.s.r. will continue to strive for an adequate and balanced composition of the EB in future appointments by taking into account its diversity policy and all relevant selection criteria such as executive experience, experience in finance and experience in the political and social environment.

**Permanent education and evaluation**

The 2019 self-evaluation session of the EB was conducted and discussed on the basis of a questionnaire. The general impression that emerged from this self-evaluation was positive. The main topic in this evaluation was the transition to a new composition of the EB and time will be invested in getting to know each other better in this new composition. In the context of the change of the CFO, attention is paid to knowledge transfer. Strategic themes that played a role in the past year will also play in the coming year. e.g. shrinkage of the life book and cost development. In addition other accents will also be laid, including a more customer-oriented organisation.

The performance of the members of the EB was also assessed by the SB as part of the scope of the annual assessment process. In this context, interviews are held twice a year with the individual members of the EB (by two SB members each time) in which the results of the aforementioned self-evaluation was included.

In 2019, specific sessions were also organised jointly with the SB and the senior management for the benefit of further education. The first session was a follow-up on the explanation of IFRS 17, the new accounting standard for insurance contracts, led by Finance, Risk & Performance Management. The new regulations will impact future external reporting on insurance contracts. The implementation of IFRS 17 within a.s.r. is a major project. The second session focused on investment management. This knowledge session was led by a.s.r. asset management and took place at the end of the year. During this session, the SB, EB and senior management were given an update on strategic investment management, AI and robotisation in investment management, economic development and the strategic vision for 2020.

The individual EB members attended (leadership) sessions on various topics in their capacity as board members and supervisory directorships in other organisations.

**Remuneration**

Information on the remuneration policy for EB members and their individual remunerations can be found in the Remuneration report, see chapter B.1.2.
## Biographies of Executive Board members

### Current members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Additional positions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jos Baeten</strong></td>
<td>Chairman of the Executive Board and Chief Executive Officer (CEO)</td>
<td>Chairman of the Board of Directors of Fortis ASR Verzekeringsgroep N.V.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional positions</td>
</tr>
<tr>
<td><strong>Annemiek van Melick</strong></td>
<td>Chief Financial Officer (CFO)</td>
<td>Member of the SB of Royal Swinkels Family Brewers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>As of 1 February 2020, Annemiek van Melick is responsible for Finance, Risk &amp; Performance Management, Group Balance Sheet Management, Group Asset Management and a.s.r. real estate.</td>
</tr>
</tbody>
</table>

Jos Baeten is responsible for Group Risk Management, Human Resources, Legal & Integrity, Corporate Communications and Audit.

Jos Baeten studied law at Erasmus University Rotterdam and began his career in 1980 when he joined Stad Rotterdam Verzekeringen N.V., one of a.s.r’s main predecessors. He attended the Advanced Management Programme at Wharton University in Pennsylvania in 2002. In 2005, he was appointed Chairman of the Board of Directors of Fortis ASR Verzekeringsgroep N.V.

**Additional positions**

Jos Baeten is currently a member of the EB of the Dutch Association of Insurers (Verbond van Verzekeraars) and a member of the SB of De Efteling B.V. In addition, he is a member of the General Administrative Board of VNO-NCW and a Board Member of Stichting Grote Ogen and Stichting Fietshelm is Hoofdzaak.

As of 1 February 2020, Annemiek van Melick is responsible for Finance, Risk & Performance Management, Group Balance Sheet Management, Group Asset Management and a.s.r. real estate.

Annemiek van Melick studied Dutch Law at the University of Utrecht and Financial Management at Nyenrode Business University. Annemiek van Melick previously worked at De Volksbank, where she was a member of de EB and CFO from 2014 to September 2019. Prior to that, she worked from 2012 to 2014 as Chief Financial & Risk Officer at SNS Retail Bank, a business unit of SNS REAAL and as Director Corporate Strategy and M&A at SNS REAAL from 2008 to 2012. Annemiek van Melick started her career in 2001 at Goldman Sachs in London within the investment banking division focused on capital market transactions and later on joined Lehman Brothers’s M&A team in Amsterdam, where she worked until 2008.

**Additional positions**

Annemiek van Melick is a member of the SB of Royal Swinkels Family Brewers.
As of 1 December 2019, Ingrid de Swart is responsible for IT&C, Innovation & Digitisation, Services and Distribution.

Ingrid de Swart studied Dutch language and literature at Utrecht University. At CEDEP in Fontainebleau, she followed the Young Executive Programme and the General Management Programme. In addition to various other leadership, management and intervision programmes, she attended the Advanced Management Programme at Wharton University in Pennsylvania in 2014. Ingrid de Swart previously worked at Aegon Nederland, where she has been a Board Member since 2017 as Chair of Aegon Retail. Between 2014 and 2017, Ingrid de Swart was a member of the EB of Delta Lloyd.

**Additional positions**

Ingrid de Swart does not currently hold any additional positions.

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Chris Figee was responsible for Finance, Risk & Performance Management, Group Balance Sheet Management, Group Asset Management and a.s.r. real estate.

Chris Figee has a degree in Financial Economics from the University of Groningen and is an EFFAS certified investment analyst. He also studied Risk management at Stanford University. Chris Figee began his career at Aegon N.V., where he held various positions. In 1999, he moved to McKinsey, where he became partner in 2006. After ten years at McKinsey, he joined Achmea as Director of Group Strategy & Performance Management in 2009. Chris Figee’s last position at Achmea was as Director of Group Finance.

**Additional positions**

Chris Figee is a member of the SB of Stichting Nederland Comité UNICEF.
B.1.1.4 Supervisory Board

The SB has three roles: the supervisory role, the advisory role and the employer’s role for the EB. The SB supervises the policy pursued by the EB and the general course of affairs at a.s.r. and its group entities. Specific powers are vested in the SB, including approving certain EB decisions.

Composition of the Supervisory Board

In line with a.s.r.’s articles of association, the SB should consist of at least three members. There were a few changes to the composition of the SB in 2019. According to the rotation schedule, the third term of office of the Chairman of the SB expired at the close of the 2019 AGM. With a view to preserving continuity in the SB, Kick van der Pol was nominated by the SB for a special extension of his term for (a maximum of) two years. The AGM reappointed Kick van der Pol as member and Chairman of the SB. Annet Aris resigned as a member of the SB at the end of the 2019 AGM. Due to the resignation of Annet Aris and the forthcoming changes in the composition of the SB (resignation of Cor van den Bos) in accordance with the retirement schedule, the SB nominated two candidates as new members in order to ensure continuity within the SB and its committees. At the EGM on 30 October 2019, the proposed candidates, Gisella van Vollenhoven and Gerard van Olphen, were appointed as new members of the SB. The SB now consists of six members: Kick van der Pol (Chairman), Cor van den Bos, Herman Hintzen, Sonja Barendregt, Gisella van Vollenhoven and Gerard van Olphen. The composition of the SB of ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. is the same as that of ASR Nederland N.V.

Supervisory Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of initial appointment</th>
<th>Date of reappointment</th>
<th>End of current term of appointment¹</th>
<th>End of the term of appointment at AGM²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick van der Pol</td>
<td>15 December 2008</td>
<td>22 May 2019</td>
<td>22 May 2021</td>
<td>2021</td>
</tr>
<tr>
<td>Cor van den Bos</td>
<td>15 December 2008</td>
<td>15 June 2015</td>
<td>15 June 2019</td>
<td>2020</td>
</tr>
<tr>
<td>Herman Hintzen</td>
<td>1 January 2016</td>
<td>-</td>
<td>1 January 2020</td>
<td>2028</td>
</tr>
<tr>
<td>Sonja Barendregt</td>
<td>31 May 2018</td>
<td>-</td>
<td>AGM2022</td>
<td>2030</td>
</tr>
<tr>
<td>Gerard van Olphen</td>
<td>30 October 2019</td>
<td>-</td>
<td>AGM2023</td>
<td>2031</td>
</tr>
<tr>
<td>Gisella van Vollenhoven</td>
<td>30 October 2019</td>
<td>-</td>
<td>AGM2023</td>
<td>2031</td>
</tr>
</tbody>
</table>

Diversity

The SB has drawn up a projected profile for its size and composition, taking into account the nature of a.s.r.’s business, its activities and the desired expertise and background of its members. The SB profile can be viewed on the a.s.r. website: www.asrnl.com. In 2017, the SB adopted a formal diversity policy. One of the objectives of the policy is to achieve a SB consisting of at least 30% women and at least 30% men. In 2019, the composition of the SB met this gender ratio, with 33% women and 67% men.

The composition of the SB is such that each member has the skills to assess the main aspects of overall policy and the SB as a whole matches the desired profile due to a combination of experience, expertise and independence of the individual members. The diversity of its members ensures the complementary profile of the SB. a.s.r. will continue to strive for an adequate and balanced composition of the SB in any future appointments by taking into account the diversity policy and all relevant selection criteria such as executive experience, experience in finance and experience in the political and social environment.

¹ SB members are reappointed or must resign no later than the next AGM held after this date.
² Based on the possibility of an appointment for a maximum of twelve years (2 x four years and 2 x two years in accordance with principle 2.2.2. of the Dutch Corporate Governance Code).
### Supervisory Board profile

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of initial appointment</th>
<th>End of current term of appointment</th>
<th>Years in Board</th>
<th>Year of birth</th>
<th>Gender</th>
<th>General business management</th>
<th>Strategy</th>
<th>Finance (balance, solvency &amp; reporting)</th>
<th>Financial markets/disclosure, communication</th>
<th>Audit, risk, compliance, legal &amp; governance</th>
<th>Insurance (life, non-life, asset management &amp; banking)</th>
<th>M&amp;A</th>
<th>M&amp;A &amp; innovation</th>
<th>Social/employment</th>
<th>Sustainability/politics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick van der Pol</td>
<td>12-2008</td>
<td>05-2021</td>
<td>11</td>
<td>1949</td>
<td>M</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cor van den Bos</td>
<td>12-2008</td>
<td>06-2019</td>
<td>11</td>
<td>1952</td>
<td>M</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Herman Hintzen</td>
<td>01-2016</td>
<td>01-2020</td>
<td>4</td>
<td>1955</td>
<td>M</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Sonja Barendregt</td>
<td>05-2018</td>
<td>05-2022</td>
<td>2</td>
<td>1957</td>
<td>F</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Gisella van Vollenhoven</td>
<td>11-2019</td>
<td>05-2023</td>
<td>1</td>
<td>1970</td>
<td>F</td>
<td>•</td>
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<td>•</td>
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<td></td>
</tr>
<tr>
<td>Gerard van Olphen</td>
<td>11-2019</td>
<td>05-2023</td>
<td></td>
<td>1962</td>
<td>M</td>
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</table>

### Independence and conflicts of interest

In line with the Dutch Corporate Governance Code, SB members are appointed by the AGM for a four-year term. They can be reappointed for a single additional four-year term and subsequently reappointed for a period of two years, which appointment may be extended by two years at most. Reappointments following an eight-year period must be justified in the SB report. SB members retire no later than by the AGM immediately following the end of their term of appointment.

All the SB members passed the ‘fit and proper test’ required under the Dutch Financial Supervision Act. In 2019, there were no reports of potential conflicts of interest relating to members of the SB. The SB was also able to carry out its tasks independently pursuant to principles 2.1.7 to 2.1.9 of the Dutch Corporate Governance Code.

### Permanent education and evaluation

The SB is responsible for assessing the quality of its own performance. It therefore performs an annual self-assessment and discussion of its own performance and that of its committees and members. A self-assessment with external supervision is carried out every three years. The self-assessment for 2019 was carried out with internal guidance. The assessment was based on written and oral input from the members of the SB, the EB and the Company Secretary. The following aspects were assessed:

- Composition and functioning of the SB (strengths and points for improvement);
- Effectiveness of processes (information-gathering and decision-making);
- Advisory role;
- Role as an employer.

The outcome of the assessment was discussed by the members of the SB and the Company Secretary. The SB has an open, constructive and professional relationship with the EB. Dilemmas, in general or in specific files, are openly discussed both during meetings and during informal (one-on-one) contact. The EB feels and knows that it is supported by the SB in its relationship with the supervisory authorities. In terms of composition, the SB is positive about the changes in the past year and the result thereof in the dynamics. With the entry of the two new members, Gisella van Vollenhoven and Gerard van Olphen, diversity has increased. The current composition is assessed as good and multiform. However, a high degree of knowledge/experience with innovation and digitisation is relatively limited and therefore a point for attention. This will be guaranteed, among other things, through continuing education and a possible external working visit in this context. The search for a new chairman (with relevant board experience and knowledge of the insurance sector) is also a point for attention. In addition, the SB will devote specific attention in the coming year to the onboarding of the new members of the EB and the relationship with the BEC. In the coming year there will also be attention for further digitisation in the interest of the customer and the development of costs.

In 2019, specific sessions were also organised jointly with the EB and the senior management for the benefit of further education. The first session was a follow-up on the explanation of IFRS 17, the new accounting standard for insurance contracts, led by FRPM. The new regulations will impact future external reporting on insurance contracts. The implementation of IFRS 17 within a.s.r. is a major project. The second session focused on investment management. This knowledge session was led by a.s.r. asset management and took place at the end of the year. During this session, the SB, EB and senior management were given an update on strategic investment management, AI and robotisation in investment management, economic development and the strategic vision for 2020.

The individual members were given updates and presentations on various topics in view of their supervisory directorships at several Dutch and foreign enterprises and institutions.
Biographies of Supervisory Board members

**C. (Kick) van der Pol**
(Dutch, 1949)

Chairman of the Supervisory Board and member of the Selection & Appointment Committee and the Remuneration Committee

Kick van der Pol also serves as Chairman of the Board of Directors of Ortec Finance and is a member of the SB of the Holding Nationale Goede Doelen Loterijen N.V. In April 2019, he became Chairman of the SB of Total Care B.V. He previously served as Vice-Chairman of the EB of Eureko/Achmea and as Chairman of the EB of Interpolis.

**S. (Sonja) Barendregt**
(Dutch, 1957)

Member of the Supervisory Board and member of the Audit & Risk Committee

Sonja Barendregt was a (senior) partner at PwC specialising in the financial services sector, until 1 July 2017. She was also Chair of PwC’s International Pension Group, a member of PwC’s European Strategic Diversity Council, chair of the Pension Funds Industry Group, chair of the Investment Management Industry Group and a member of the European Investment Management Leadership Team. Since 2017, Sonja Barendregt has been a member of the SB of Volksbank, of which she is also Chair of the Audit Committee. Sonja Barendregt was appointed as a member of the SB and Chair of the Audit Committee of Robeco Institutional Asset Management B.V. in 2018. She is also an accountancy examinations expert at the Erasmus School of Accounting & Assurance.

**C.H. (Cor) van den Bos**
(Dutch, 1952)

Vice-Chairman of the Supervisory Board and chairman of the Audit & Risk Committee

Until August 2008, Cor van den Bos served as member of the EB of SNS REAAL N.V., where he was responsible for all insurance operations, M&A and integration. Cor van den Bos is Vice-Chairman and a Non-EB Member of the investment firm Kardan N.V., where he is also Chairman of the Audit Committee.

**H.C. (Herman) Hintzen**
(Dutch, 1955)

Member of the Supervisory Board and member of the Audit & Risk Committee

Herman Hintzen acted as an adviser to the EB of APG Asset Management and served as Managing Director at the Financial Institutions Investment Banking Groups of Morgan Stanley, Credit Suisse and JP Morgan. Until January 2016, he was Chairman of Insurance EMEA at UBS Investment Bank. He currently serves as Non-EB Member of VCM Holdings Ltd. and Non-EB Member of TSC Power Ltd.

**G. (Gisella) van Vollenhoven**
(Dutch, 1970)

Member of the Supervisory Board, Chair of the Remuneration Committee and member of the Selection & Appointment Committee

Gisella van Vollenhoven is also a member of the SB of Waarborgfonds Sociale Woningbouw, where she is also Chair of the Remuneration Committee. She began her career at ING in 1994, holding the positions of Manager Corporate Accounts Employee Benefits at NN and later Senior Manager Credit Risk Management and Head Model Validation Corporate Risk Management at ING, among other roles. Since 2013, Gisella van Vollenhoven has worked at the DNB, where she was Division Director On-site Supervision and Banking Expertise from 2014 to 2017 and Division Director Pension Supervision from 2017 to April 2019.

**G. (Gerard) van Olphen**
(Dutch, 1962)

Member of the Supervisory Board

Gerard van Olphen was Manager Financial Information and CFO at Reaal Verzekeringen, CFO at NIB Capital and CEO at NIBC Asset Management, among other roles. From 2002 to 2013, Gerard van Olphen was CFO and subsequently Vice-Chairman of the EB of Achmea. From 2013 to 2015, he was Chairman of the EB of SNS Realal (then known as Vivat). Gerard van Olphen has been Chairman of the EB of APG since March 2016. He is also a member of the SB of the Dutch Heart Foundation and a member of the SB of Netspar.
B.1.1.5 Corporate Governance Codes and regulations

Articles of Association and rules of procedure
The current articles of association (dated 9 June 2016) have been published on a.s.r.’s corporate website: www.asrnl.com. The SB and EB rules are also available on the corporate website. These rules were most recently amended and adopted in 2017 in response to the revised Dutch Corporate Governance Code.

Dutch Corporate Governance Code
Since being listed on Euronext Amsterdam, a.s.r. has been required to abide by the Dutch Corporate Governance Code. a.s.r. has complied with all the principles and best practices of the Dutch Corporate Governance Code, with the exception of those that do not apply to it. In the Corporate Governance section of its website, a.s.r. also publishes a detailed ‘comply or explain’ list which indicates which principles and best practices do not apply to it.

Dutch Banking Code
ASR Bank N.V. is subject to the Dutch Banking Code (latest version 1 January 2015). This Code, which was drafted by the Dutch Banking Association, contains principles for governance and governance oversight, risk management, audit and remuneration policy. ASR Bank N.V. is governed by this Code. Details of how ASR Bank N.V. complies with the Dutch Banking Code can be found in its annual report, which is available at www.asrnl.com.

Professional oath
On 1 January 2013, the Dutch financial sector introduced a mandatory oath for EB and SB members of financial institutions licensed in the Netherlands. With regard to insurance companies, in addition to the EB and SB members, individuals holding a management position immediately below the EB who are responsible for staff who may have a significant influence on the risk profile of the insurance company, are also required to take the oath, as are certain other employees. This includes individuals who may (independently) significantly influence the risk profile of the undertaking as well as those who are or may be involved in the provision of financial services.

For banks based in the Netherlands, such as ASR Bank N.V., all individuals working under the responsibility of the bank are required to take a similar bankers’ oath with effect from 2015. Those who have taken the bankers’ oath are subject to disciplinary rules.

Notwithstanding the above, a.s.r. has decided that all employees and other individuals carrying out activities under its responsibility must take the oath. New employees must take the oath within three months of joining the company.

Decision concerning disclosure of non-financial information and Decision concerning disclosure of diversity policy
a.s.r. also wants to be transparent concerning the non-financial information in its Management Report. Since the 2017 reporting year, the relevant legal requirements have been tightened for large companies of public interest. Such organisations, which include a.s.r., are now expected to clarify how they deal with environmental, social and personnel issues, respect for human rights and the fight against corruption and bribery in their business operations and value chain. Large listed companies must also provide insight into their policy on diversity in relation to the EB and SB.

B.1.2 Remuneration report

Introduction
a.s.r. was nationalised in 2008 and from then on, the Dutch State was the sole owner of all a.s.r. shares. As a state-owned financial institution, a.s.r. placed considerable constraints on the remuneration of the EB and was not permitted to pay a variable remuneration or increase the fixed salary of the members of the EB, pursuant to the Dutch Act on limitation of liability DNB and AFM and bonus prohibition for state-supported enterprises. a.s.r.’s remuneration policy was therefore effectively put on hold and the remuneration of the EB was fixed for many years. In 2016, a.s.r. was re-listed on the stock exchange and has been fully independent from the Dutch State since 14 September 2017. As a result, the freeze of the EB’s remuneration by the act no longer applied. The SB has responded by deciding to reinstate and apply the existing remuneration policy, which included a periodic benchmark comparison.

The 2017 benchmark analysis showed that the salaries of the EB were substantially below the median of the relevant benchmarks. After a shareholder consultation a.s.r.’s SB decided in 2018 to gradually increase the individual remuneration of the members of the EB and reduce the gap with the peer group, in line with the existing remuneration policy. The increase was effected in multiple stages over time in 2018 and 2019. Additionally, the EB has committed itself to taking a
percentage of its remuneration in the form of a.s.r. shares. From the IPO in 2016 until the end of 2017 the members of the EB could not buy any a.s.r. shares due to arrangements with its main shareholder at that time, the Dutch State.

At the 2018 AGM, the SB announced that it would assess and evaluate the remuneration policy for the EB. This evaluation took place in 2018 and in the beginning of 2019. As promised, the SB held an extensive consultation round in order to arrive at a proposal for the changed remuneration policy. A large group of shareholders was consulted. Also the Works Council, as the representative body for the a.s.r. employees, several labor unions, and a number of financial spokespersons of the parliamentary parties in the Lower House were consulted. Finally, the SB commissioned a qualitative survey of the general Dutch public by an independent agency with regard to views on remuneration policy and the remuneration of top executives. During the consultation round, ample attention was devoted to public views on the remuneration of top executives in the financial sector and the different methods that can be applied for the remuneration policy, such as a variable component and remuneration in shares. Various scenario analyses were reviewed and assessed in that context.

Whereas the Anglo-Saxon shareholders in particular see variable remuneration as an important element of alignment, the sentiment with regard to this form of remuneration is different among employees, politicians and the general Dutch public. The social sentiment in the Netherlands with regard to variable remuneration in the financial sector is negative. The SB is also not convinced of the effect of variable remuneration, in which the cap of 20% for financial institutions in the Netherlands also plays a role. In addition, this form of remuneration by various stakeholders is not considered appropriate for a socially responsible insurer such as a.s.r. and does not match with the internal remuneration system. Also a payment in shares primarily evoked a negative reaction from politicians, media and employees.

In addition, the employees and the Works Council have called for the total remuneration of an EB member not to exceed the median of the relevant benchmark and to keep the remuneration methodology as similar as possible to that of the total workforce. The SB has tried to find the best possible balance in this respect, whereby the labor market position and the continuity of (the management of) the company also played an important role. Ultimately, the SB took a balanced decision that in its view fits in with the positioning of a.s.r. and is in the best interest of all stakeholders.

The proposed remuneration policy for the EB per 1 January 2020 was adopted by the shareholders at the 2019 AGM with 84% of the votes cast. Due to the fact that this new remuneration policy is applicable per 1 January 2020, in this (2019) report first the former policy is mentioned, which relates to the payments that were made in 2019. This is followed by the new policy. At the 2020 AGM there will not be a vote on the remuneration policy. The remuneration report (execution of the policy in 2019) will be put up for an advisory vote in line with current legislation.

Shareholder Rights Directive II (EU 2017/828)
With the current remuneration policy (per 2020) for the members of the EB as well as the SB a.s.r. is of the opinion that it is compliant with the requirements of the Shareholders Rights Directive II (as implemented in Dutch law) as far as it is applicable to a.s.r.

Both the remuneration policy of the EB and the SB has been adopted by more than 75% of the votes cast (84% and 99% respectively). In addition, the Works Council was kept fully informed and involved during the evaluation process. The Works Council was timely given the opportunity to determine a formal position with regard to the proposal, but has waived this. The opinion of and input from the Works Council obtained during various contact moments has been included. Regarding the content of the remuneration policy, a.s.r. believes that it is in accordance with current legal requirements. The remuneration policy is clear and understandable. An explanation has been included on how the remuneration policy contributes to the strategy of a.s.r., sustainability and the interests of stakeholders. Account has also been taken of the identity and positioning of a.s.r., the remuneration ratios within a.s.r. and the social support. This has been implemented through the use and concrete interpretation of the four perspectives: the organisational perspective, internal perspective, external perspective and the stakeholder perspective. Certain legal requirements do not apply to a.s.r., as the policy does not include a variable remuneration scheme or a remuneration in shares.

The current remuneration policy does not include any procedural conditions under which a deviation from the remuneration policy is possible, the SB is aware of this. The format (in concept) for the remuneration report of the European Commission has been broadly followed and the tables are filled in as far as applicable to a.s.r. (no variable remuneration scheme and no remuneration in shares). Finally, this report will be submitted to the AGM 2020 for advisory vote.
B.1.2.1 Executive Board

A. Remuneration Policy in force until 31 December 2019

The a.s.r. Group remuneration policy applies to all a.s.r. employees, including the EB. a.s.r.’s remuneration policy is controlled and sustainable and aims to improve and maintain the integrity and robustness of a.s.r. It supports the strategy, objectives, values, culture and long-term interests of a.s.r. and all its stakeholders. It enables a.s.r. to retain employees and attract the right people. An organisation-wide variable remuneration is not a part of the remuneration policy. The remuneration of the EB consists of a fixed remuneration. This comprises a fixed monthly amount, including holiday allowance. Pay is indexed in accordance with the a.s.r. CLA (collective labor agreement). The remuneration policy is based on the principle that the average level of total remuneration is just below the median of the benchmark group that is relevant to the company. Every three years, an independent consultant makes a market comparison (remuneration benchmark). The relevant peer group for the EB is a mix of Dutch financial institutions and medium-sized listed Dutch businesses outside the financial sector. The Remuneration Committee periodically checks whether that the choice of peer group is still adequate or if it should be revised.

The performance of each EB member is reviewed annually, based on a set of financial and non-financial targets determined by the SB. The targets for 2019 can be summarised as follows:
- Financial: Realisation of the multi-year budget within the established risk appetite;
- Customer: creating a recognisable positioning of a.s.r. for its customers and increasing the NPS;
- CSR: traction on realising CSR objectives for 2020 (among others, a CO2 neutral a.s.r. and distinctive capacity for SRI) and further development of a distinctive ESG position in asset management;
- Craftsmanship: further development of a.s.r. as a listed company and to manage the interests of all stakeholders in a balanced manner.

These goals are supplemented with specific strategic priorities for each board member, such as the integration of Loyalis Nederland and preparations for the implementation of IFRS 17. The remuneration is not directly dependent on the achievement of any targets, since the members of the EB do not receive variable remuneration. The objectives are, of course, constantly discussed during the various evaluation interviews between the SB and (the members of) the EB.

The members of the EB work on the basis of a contract for services for an indefinite period of time. These contracts for services expire by operation of law as soon as the parties concerned cease to be members of the EB. Furthermore, the contracts for services can be terminated (prematurely). In that case a.s.r. will observe a notice period of six months. A notice period of three months applies to the members of the EB. The contracts for services also contain a provision for dismissal due to a change of control.

The following conditions apply to severance pay for policymakers (including members of the EB).
- The maximum severance pay is 100% of the fixed annual remuneration;
- Severance pay is not awarded in the event of failure on the part of the company;
- Severance pay that can be classified as variable is not awarded to a.s.r.’s policymakers or to banks and insurers that are part of the Group.

Neither fixed nor variable severance pay may be awarded in the following cases:
- If an employment relationship is terminated early at the employee’s own initiative, except where this is due to serious culpable conduct or neglect on the part of the company;
- In the event of serious culpable conduct or gross negligence on the part of the employee in the performance of his or her role.

Remuneration in 2019

The SB realises that substantially salary increases were granted to members of the EB in 2018 and 2019, as previously announced at the beginning of 2018. The reason for this was that the salaries had hardly been adjusted for years due to the restrictions resulting from the shareholding of the Dutch State. As a result, salaries were far below the benchmark. In that context, the SB has decided to adjust the salaries in relation to this benchmark and due to their responsibilities. With the new remuneration policy as of 2020, salary increases will be in line with the methodology included in this policy and therefore will be more moderate and in line with the payments made to all employees and the company results. This is further explained hereinafter.

Pay ratio

a.s.r. is transparent about the remuneration of the EB. Not only in terms of actual amounts, but in accordance with Dutch law and the Dutch Corporate Governance Code also in comparison with the median of the remuneration of all staff.
When the remuneration of the EB is compared to the remuneration of all executive directors of all AEX-listed companies, the conclusions can be drawn that the remuneration of a.s.r.’s CEO is among the lowest compared with the CEO remuneration of all AEX companies and that the pay ratio is among the lowest compared with other AEX companies.

### Pay ratio

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual total compensation for the highest-paid individual</td>
<td>766,000</td>
<td>655,000</td>
<td>546,000</td>
</tr>
<tr>
<td>Median annual total compensation for all employees</td>
<td>61,000</td>
<td>61,000</td>
<td>59,000</td>
</tr>
<tr>
<td>Pay ratio</td>
<td>12.56</td>
<td>10.74</td>
<td>9.25</td>
</tr>
</tbody>
</table>

#### Total remuneration 2019 of the Executive Board

The remuneration of the current and former members of the EB is in accordance with the 2019 remuneration policy. There are no loans, advances or guarantees provided by a.s.r. or any undertaking belonging to the same group of a.s.r. on behalf of a member of the EB.

### Annual remuneration for members of the Executive Board

<table>
<thead>
<tr>
<th></th>
<th>Amounts for 2019 in € thousand</th>
<th>Fixed remuneration</th>
<th>Variable remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Base salary</td>
<td>Fees</td>
</tr>
<tr>
<td>Jos Baeten, CEO</td>
<td>752</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Chris Figee, CFO</td>
<td>630</td>
<td>-</td>
<td>76</td>
</tr>
<tr>
<td>Ingrid de Swart⁶</td>
<td>54</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

| Former member        |                                |          | -     | -             | -               | -                   | 618                  | 60            | 1,031            | 40%                             |
| Michel Verwoest⁶      | 43                             | -        | 6    | -             | -               | -                   | 561                  | 10            | 620              | 9%                              |
| **Total**            | **1,787**                      | -        | **141** | -             | -               | -                   | **1,280**           | **580**       | **3,788**        | **66%**                         |

1. Restated 2017 and 2018
2. Variations arise as a result of the fiscal treatment of lease vehicles depending on the price and private use of the car, personal allowance and social security.
3. The commitment on pensions did not change in 2019. The increase in annual pension expenses is caused by a decrease in the interest rates. The calculation of annual pension expenditure is based on the total pension rights granted during the term of service at a.s.r. Further changes in the cost of pension benefits are mainly due to the impact of age, terms of service, gender and age differentiated disability, mortality and other actuarial assumptions. The pension costs include pensions based on maximum pensionable salary cap, compensation for the maximum pensionable salary cap (to be used for pensions at the employees’ discretion) amounting to € 285,000 (2018: € 259,000) in total, and VPL. The pension benefits, excluding compensation for the maximum pensionable salary cap, represent post-employment benefits.
4. The proportion of fixed and variable remuneration is not relevant since the members of the EB do not receive any variable remuneration. The low proportion of fixed and variable remuneration of Ingrid de Swart, Karin Bergstein and Michel Verwoest in 2019 is caused by the amount of extraordinary items (severance payments and signing bonus) received by them during the financial year.
5. Ingrid de Swart was appointed to the Executive Board on 1 December 2019. The remuneration figures for 2019 reflect a partial year as a member of the EB. The fee relates to a signing bonus received.
6. Michel Verwoest left the EB and a.s.r. on 1 February 2019. Karin Bergstein left the EB on 1 February 2019 and left a.s.r. on 1 August 2019; observing the applicable cancellation period of 6 months. The remuneration figures for 2019 reflect the part of the year Michel Verwoest and Karin Bergstein were employed by a.s.r., except for the amounts under extraordinary items. These amounts concern severance payments which are based on their annualised fixed remuneration on their contract termination dates.
### Annual remuneration for members of the Executive Board

<table>
<thead>
<tr>
<th>Executive Board member</th>
<th>Base salary</th>
<th>Fees</th>
<th>Fringe benefits1</th>
<th>One-year variable</th>
<th>Multi-year variable</th>
<th>Extraordinary items</th>
<th>Pension expense2</th>
<th>Total remuneration</th>
<th>Fixed portion of the total remuneration3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jos Baeten, CEO</td>
<td>642</td>
<td>-</td>
<td>13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>301</td>
<td>956</td>
<td>100%</td>
</tr>
<tr>
<td>Chris Fige, CFO</td>
<td>455</td>
<td>-</td>
<td>77</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>95</td>
<td>627</td>
<td>100%</td>
</tr>
<tr>
<td>Karin Bergstein</td>
<td>439</td>
<td>-</td>
<td>74</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>148</td>
<td>661</td>
<td>100%</td>
</tr>
<tr>
<td>Michel Verwoest</td>
<td>439</td>
<td>-</td>
<td>76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>126</td>
<td>641</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>1,974</td>
<td>-</td>
<td>240</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>670</td>
<td>2,884</td>
<td>100%</td>
</tr>
</tbody>
</table>

1 Variations arise as a result of the fiscal treatment of lease vehicles depending on the price and private use of the car, personal allowance and social security.

2 The commitment on pensions did not change in 2019. The increase in annual pension expenses is caused by a decrease in the interest rates. The calculation of annual pension expenditure is based on the total pension rights granted during the term of service at a.s.r. Pension costs include:
- Pensions based on a maximum pensionable salary cap (€ 107,593, fiscal maximum);
- Compensation for the maximum pensionable salary cap (to be used for pensions at the employee’s discretion);
- Pension benefits related to historically awarded pension rights;
- VPL (early retirement and life cycle; ‘VUT, Prepensioen en Levensloop’).
All components of the remuneration of the EB are included in the base used for calculating the pension benefits. The members of the EB have the same pension scheme (Defined Benefit) as the employees of a.s.r.

### Comparative chart over the remuneration and company performance over the last five reported financial years

![Comparative chart over the remuneration and company performance over the last five reported financial years](chart.png)

1 Variations arise as a result of the fiscal treatment of lease vehicles depending on the price and private use of the car, personal allowance and social security.

2 The commitment on pensions did not change in 2019. The increase in annual pension expenses is caused by a decrease in the interest rates. The calculation of annual pension expenditure is based on the total pension rights granted during the term of service at a.s.r. Further changes in the cost of pension benefits are mainly due to the impact of age, terms of service, gender and age differentiated disability, mortality and other actuarial assumptions. The pension costs include pensions based on maximum pensionable salary cap, compensation for the maximum pensionable salary cap (to be used for pensions at the employees’ discretion) amounting to € 285,000 (2018: € 259,000) in total, and VPL. The pension benefits, excluding compensation for the maximum pensionable salary cap, represent post-employment benefits.

3 The proportion of fixed and variable remuneration is not relevant since the members of the Executive Board do not receive any variable remuneration. The low proportion of fixed and variable remuneration of Ingrid de Swart, Karin Bergstein and Michel Verwoest in 2019 is caused by the amount of extraordinary items (severance payments and signing bonus) received by them during the financial year.
A comparative chart is included above over the remuneration and company performance over the last five reported
financial years. The company performance is expressed in operating result per share. Also the median remuneration of
the employees (not being an EB member) is shown, also used for the pay ratio as mentioned before. Finally the average
remuneration of the EB (CEO and CFO) is presented. As also mentioned before is visible in this comparative chart that
substantially salary increases were granted to the members of the EB in 2018 and 2019. The reason for this was that the
salaries had hardly been adjusted for years due to the restrictions resulting from the shareholding of the Dutch State. As a
result, salaries were far below the benchmark. In that context, the SB has decided to adjust the salaries in 2018 and 2019 in
relation to this benchmark and due to their responsibilities. With the new remuneration policy as of 2020, salary increases
will be in line with the methodology included in this policy and therefore will be more moderate and in line with the
payments made to all employees and also the company results.

B. Remuneration Policy as of 1 January 2020
The most important elements for the revised remuneration policy as of 1 January 2020 are:
- No introduction of a variable remuneration scheme for the EB members;
- Introduction of salary scales for the EB, in line with the other employees of a.s.r. In principle, the EB members progress
  through the salary scales in the same way as the employees. For the employees, this concerns an annual increase of 3%
  (provided that there is scope for this in the salary scale). For the EB members, the SB has the option of adjusting this
  growth path slightly, upwardly or downwardly (increase of 0% to 6%);
- The a.s.r. CLA applies to the members of the EB in relation to pay indexation;
- The introduction of an adjusted reference group with purely Dutch financial and similar listed companies of a socially
  responsible character as far as possible, as one of the points for determination of the EB salary scales.

a.s.r.’s starting point is that society experiences it as a useful insurer that deals responsibly with the funds entrusted to it
and the environment in which it operates. With this in mind, the following four perspectives have been used to formulate
the proposal as a basis for the remuneration policy:
1. The organisational perspective: in line with how a.s.r. presents itself as a company;
2. The internal perspective: consistency in the internal salary structure;
3. The external perspective: competitive with the external market;
4. The stakeholders’ perspective: taking account of the views on remuneration of different stakeholder groups:
   customers, shareholders, employees and society.

Item 1. The organisational perspective
It is a.s.r.’s opinion that society may expect a.s.r. to be an efficient insurer who handles the funds entrusted to a.s.r. and
the environment in which it operates. With this in mind, the following four perspectives have been used to formulate
the proposal as a basis for the remuneration policy:
1. The organisational perspective: in line with how a.s.r. presents itself as a company;
2. The internal perspective: consistency in the internal salary structure;
3. The external perspective: competitive with the external market;
4. The stakeholders’ perspective: taking account of the views on remuneration of different stakeholder groups:
   customers, shareholders, employees and society.

Item 2. The internal perspective
All a.s.r. employees have a salary based on job weighting based on a classification in salary scales that they progress
through in stages. The remuneration of the EB members is also fixed on the basis of a classification into salary scales. This
creates a link with the salary scales for the other employees. The positions of members of the EB and the other employees
are subject to a salary scale with a range from 70% to 100%. For the employees and the EB members, this maximum is just
below the median of the adjusted reference group.

In principle, the EB members progress through the salary scales in the same way as the employees. For the employees, this
concerns an annual increase of 3% (provided that there is room for this in the scale). For the EB members, the SB has the
option of adjusting this growth path slightly, upwardly or downwardly (increase of 0% to 6%). The a.s.r. CLA applies to the
members of the EB in relation to pay indexation.

Item 3. The external perspective
a.s.r. offers its employees a market-compliant salary. Market compliance of the salary is assessed on the basis of a
reference group. The reference group of the EB consists of Dutch organisations only, many of which have a social
nature, to be distinguished according to comparable Dutch listed companies and Dutch financial institutions, including
insurance companies. The non-financial institutions must meet at least two of the three criteria set with respect to the
similar size of the companies for inclusion in the reference group. These criteria concern the organisation’s turnover,
market capitalisation, and the number of staff. A.s.r. finds itself around the middle of this reference group. In addition, all remuneration data of the organisations in the reference group must be published individually. The median is established using a conversion factor of 0.5 of ‘at target’ variable to fixed salary for the companies in the reference group that have a variable remuneration component.

The reference group of the other employees consists of the general market. The reference group for some positions within Group Asset Management and Real Estate, is Asset Management. To prevent the salary scales of the employees and the EB from diverging too much, partly due to the difference in reference groups, the salary scales of the EB are checked every 2 years against the reference group of the employees (the general market). If the differences become too substantial, this may be a reason to adjust the extent to which the maximum of the salary scales of the members of the EB is below the median. The remuneration ratio between the remuneration of the CEO and the median of the remuneration of the employees at a.s.r. will be less than 20.

Each year, the SB assesses whether, in addition to the increase in accordance with the CLA wage index, there is cause for a salary increase for the members of the EB within the salary scale. In principle, the members of the EB run through the salary scales in the same way as the employees. For employees, this concerns an annual growth of 3% (provided there is room for this in the salary scale). For the members of the EB, the SB has the option of adjusting this growth path slightly upwards or downwards in exceptional circumstances (a growth of 0% to 6%, provided there is room in the salary scale). In doing so, the SB will take into account the performance of a.s.r. and the principles laid down in the remuneration policy. The SB will account for this in the annual remuneration report.

**Item 4. The stakeholders’ perspective**

The structure of the remuneration policy has been tested against the views of shareholders, customers, employees and society. A proposal to change the remuneration policy will be discussed with various stakeholders. The remuneration policy will take into account the views and interests of these various stakeholder groups as much as possible.

**Periodical test**

The Remuneration Committee tests the principles of the remuneration policy (at least) once every four years against the four perspectives. The remuneration policy will be put to the vote (at least) once every four years at the General Meeting of Shareholders. The market comparison (remuneration benchmark) is carried out once every two years by an external consultancy firm.

The table on the next page shows a comparison of the previous remuneration policy with the current remuneration policy as of 1 January 2020:

---

1 A range of 0.25 - 4 applies to market capitalisation. A range of 0.4 - 2.5 applies to turnover and employees.
Executive Board remuneration policy until 31 December 2019

| Policy principles | External benchmark
| Salary level | Individual salary level
| | The average level of the total remuneration lies just below the median.
| | The a.s.r. CLA applies to the members of the EB.
| | Salary increases at the discretion of the SB.
| Benchmark | Groups composed of Dutch financial institutions and medium-sized (listed) Dutch non-financial institutions.
| | The non-financial institutions must comply with at least two of the three criteria set in relation to the comparable size of the companies for inclusion in the peer group (revenue, market capitalisation and number of employees).
| | All remuneration data of the organisations in the reference group must be published individually.
| | The median is fixed with a conversion factor of 0.5 from variable to fixed salary for the companies in the peer group with a variable remuneration component.
| | The benchmark is applied once every three years.
| Additional to the remuneration policy | Individual agreement as of 1 January 2018
| | CEO 50%
| | Other members 25%
| | 5-year share transfer restriction period

Executive Board remuneration policy as of 1 January 2020

| Policy principles | Four perspectives
| Salary level | Salary level based on salary scale (70% to 100%)
| | The maximum for the salary scale lies just below the median.
| | The a.s.r. CLA applies to the members of the EB in relation to pay indexation.
| | The SB assesses each year whether, in addition to the increase in accordance with the CLA salaries index, there are grounds for a salary increase for the members of the EB within the salary scale.
| | If the SB makes use of this, the increase will lie between 0% and 6%.
| Benchmark | A group of Dutch organisations, a significant proportion of which have a strong CSR reputation, distinguished into comparable Dutch listed companies and Dutch financial institutions, including insurers.
| | The benchmark is applied once every two years.
| | The salary scale is tested in relation to the internal salary structure once every two years.
| | The policy is presented to the General Meeting of Shareholders once every four years and in the event of material changes.
| | The benchmark is applied once every two years.
| | All remuneration data of the organisations in the reference group must be published individually.
| | The median is fixed with a conversion factor of 0.5 from variable to fixed salary for the companies in the peer group with a variable remuneration component.
| | The policy is presented to the General Meeting of Shareholders once every four years and in the event of material changes.
| Additional to the remuneration policy | Individual agreement as of 1 January 2018
| | CEO 75%
| | Other members 50%
| | To be realised within 7 years
| | Fiscal discount of 18.5%, related to the 5-year share transfer restriction period.

The full remuneration policy can be found at www.asrnl.com.
Remuneration in 2020

On the basis of the benchmark used for the 2019 AGM proposal and the mitigation principle, the salary of the CEO is currently at a level between €682,000 and €975,000. A salary scale of €530,000 to €756,000 applies for the CFO. For the other member of the EB, a scale of €505,000 to €722,000 applies. The maximum for the salary scale of the CEO is currently set at about 10% below the median for the reference group. The maximum for the salary scale of the CFO and the other member of the EB is currently set at about 5% below the median for the reference group. The benchmark is set every two years. The positioning, the scale maximum and the resulting bandwidth of the scale are then assessed and may be adjusted in relation to the resulting median.

Below the most recent reference group which consists of 20 companies:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aalberts Industries</td>
<td>AEX</td>
</tr>
<tr>
<td>Arcadis</td>
<td>AMX</td>
</tr>
<tr>
<td>BAM Groep</td>
<td>AMX</td>
</tr>
<tr>
<td>Boskalis</td>
<td>AMX</td>
</tr>
<tr>
<td>Fugro</td>
<td>AMX</td>
</tr>
<tr>
<td>Grandvision</td>
<td>AMX</td>
</tr>
<tr>
<td>KPN</td>
<td>AEX</td>
</tr>
<tr>
<td>PostNL</td>
<td>AMX</td>
</tr>
<tr>
<td>SBM Offshore</td>
<td>AMX</td>
</tr>
<tr>
<td>Sligro</td>
<td>AMX</td>
</tr>
<tr>
<td>Signify</td>
<td>AMX</td>
</tr>
<tr>
<td>TomTom</td>
<td>AMX</td>
</tr>
<tr>
<td>Vopak</td>
<td>AEX</td>
</tr>
<tr>
<td>ABN AMRO</td>
<td>Bank (AEX)</td>
</tr>
<tr>
<td>Achmea</td>
<td>Insurer</td>
</tr>
<tr>
<td>Aegon</td>
<td>Insurer (AEX)</td>
</tr>
<tr>
<td>NN Group</td>
<td>Insurer (AEX)</td>
</tr>
<tr>
<td>Triodos Bank</td>
<td>Bank</td>
</tr>
<tr>
<td>Van Lanschot Kempen</td>
<td>Bank (AScX)</td>
</tr>
<tr>
<td>Volksbank</td>
<td>Bank</td>
</tr>
</tbody>
</table>

Those employees who have not reached the end of their salary scale yet get a yearly guaranteed increase of 3% until they reach the maximum of their salary scale. The EB members who have not reached the maximum of their salary scale can get a yearly increase between 0% and 6% (not guaranteed) until they reach the maximum of their scale. Per 1 January 2020 the SB decided to increase the salary of the CEO with 3%. This increase is in line with the increase all employees receive.

Also under the current CLA the a.s.r. employees are given an indexation of their salary of 3% (per 1 March 2019 and per 1 March 2020). This increase would also apply to the EB. For 2020 this means that all members of the EB receive an increase of 3% per 1 March 2020.

Participation in a.s.r. shares

One of the outcomes of the consultation round is that shareholders attach importance to aligning the involvement and performance of the directors with the success of their own organisation. In addition to the remuneration policy, EB members have committed themselves to taking a percentage of their remuneration in a.s.r. shares, at their discretion. In 2018 each member has signed an individual agreement for the commitment to purchase these shares. The cumulative investment in a.s.r. shares will reach a minimum of 50% of annual gross salary for the CEO and a minimum of 25% of annual gross salary for the other members.

As of 2020, the members of the EB commit themselves into a shareholding of 75% for the CEO and 50% for the other members, of the most recent gross salary. The share interest will be achieved within a maximum period of seven years. The shares must be held for a minimum of five years (blocking period). This percentage may be considered low in relation to other companies, but it must be taken into account that the members of the EB purchase these shares from their own financial resources. The shares do not form part of a variable remuneration or a remuneration in shares. The SB has made agreements with the members of the EB that the intended target (a shareholding of 75% for the CEO and 50% for the other members of the EB, of the most recent gross salary) will be achieved by 2026 at the latest.

At year-end 2019, the CEO and (now former) CFO hold the following number of shares:
• Jos Baeten 2,324 (15% of the most recent gross salary);
• Chris Figee 775 (9% of the most recent gross salary);
• Ingrid de Swart holds no shares at year-end 2019, because she was appointed per 1 December 2019.

B.1.2.2 Supervisory Board
The remuneration policy for SB members, including fees, expense allowances and other benefits, was adopted by the AGM. The remuneration paid to the members of the SB does not depend on the financial performance of a.s.r. and none of the SB members own a.s.r. shares.

Until July 2019 the members of the SB were entitled to:
• A base fee for members or chair of the SB;
• A committee fee for members on each of the SB’s Committees.

As of July 2019 the members of the SB are entitled to, as adopted by the 2019 AGM:
• A base fee for members or chair of the SB;
• A committee fee for members or chair of each of the SB’s Committees.

In determining the remuneration level, the responsibilities and time spent of a SB of a listed financial institution is taken into account, including:
• Revised and expanding legislation and regulations;
• Fundamental changes in the nature and complexity of the company and governance;
• a.s.r.’s profile, in which organic growth, mergers, acquisitions and collaborations in complex insurance areas will be actively examined and/or pursued.

In addition, the remuneration level within the reference group used will be examined. This reference group is the same as the reference group used for the members of the EB.

The fees for the members of the SB have remained unchanged since 2009. The Dutch Corporate Governance Code states that the remuneration of the members of the SB should reflect the time spent and the responsibility of the function. In recent years, the responsibilities of the SB have increased due to changes in governance, legislation and regulation. A benchmark study was conducted as part of the periodical evaluation. The reference group is the same as the one used for the remuneration of the members of the EB. The benchmark showed that the remuneration was far below the median of the benchmark. Based on this it was proposed to adjust the remuneration of the SB, as the remuneration was not in line with the time spent and the increased responsibility of the position. The proposed remuneration policy for the SB per 1 July 2019 was adopted by the shareholders with 99%.

An overview of the former and current remuneration is given below:

<table>
<thead>
<tr>
<th>Type of remuneration</th>
<th>€</th>
<th>Since 2009</th>
<th>As of July 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervisory Board</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairperson</td>
<td>45,000</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>30,000</td>
<td>35,000</td>
<td></td>
</tr>
<tr>
<td><strong>Audit &amp; Risk Committee</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairperson</td>
<td>10,000</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>10,000</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td><strong>Remuneration Committee</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairperson</td>
<td>2,500</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>2,500</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td><strong>Selection and Appointment Committee</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairperson</td>
<td>2,500</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td>2,500</td>
<td>5,000</td>
<td></td>
</tr>
</tbody>
</table>

SB members who also serve on the SB of ASR Bank N.V. receive € 4,000 per annum and those on the SB of ASR Basis/ Aanvullende Ziektekostenverzekeringen N.V. also receive € 4,000 per annum. Annual fees are not paid to members of the EB who are also members of the SB of one of the Group entities, such as ASR Bank N.V.
Remuneration of the Supervisory Board members in 2019

The remuneration of the current and former members of the SB in accordance with the remuneration policy. There are no loans, advances or guarantees provided by a.s.r. or any undertaking belonging to the same group of a.s.r. on behalf of a member of the SB.

Annual remuneration for members of the Supervisory Board

<table>
<thead>
<tr>
<th>Amounts for 2019 in € thousand</th>
<th>Fixed remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory Board member</td>
<td>Base salary$^1$</td>
</tr>
<tr>
<td>Kick van der Pol$^1$</td>
<td>48</td>
</tr>
<tr>
<td>Cor van den Bos$^2$</td>
<td>33</td>
</tr>
<tr>
<td>Herman Hintzen$^4$</td>
<td>33</td>
</tr>
<tr>
<td>Sonja Barendregt$^6$</td>
<td>33</td>
</tr>
<tr>
<td>Gerard van Olphen$^6$</td>
<td>9</td>
</tr>
<tr>
<td>Gisella van Vollenhoven$^7$</td>
<td>9</td>
</tr>
<tr>
<td>Former member</td>
<td></td>
</tr>
<tr>
<td>Annet Aris$^8$</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>174</td>
</tr>
</tbody>
</table>

Annual remuneration for members of the Supervisory Board

<table>
<thead>
<tr>
<th>Amounts for 2018 in € thousand</th>
<th>Fixed remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisory Board member</td>
<td>Base salary$^1$</td>
</tr>
<tr>
<td>Kick van der Pol</td>
<td>45</td>
</tr>
<tr>
<td>Cor van den Bos</td>
<td>30</td>
</tr>
<tr>
<td>Herman Hintzen</td>
<td>30</td>
</tr>
<tr>
<td>Sonja Barendregt</td>
<td>23</td>
</tr>
<tr>
<td>Annet Aris</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
</tr>
</tbody>
</table>

2 Remuneration as a SB member of a.s.r.
3 Remuneration as a committee chairperson or member of a.s.r., SB member of ASR Bank N.V. or SB member of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V.
4 The fees relate to the amounts received as a committee member of the Audit & Risk Committee (€ 10,000) and the Selection and Appointment Committee (€ 3,125) and the Remuneration Committee (€ 4,375), and as a member of the SB of a.s.r. bank (€ 4,000).
5 The fees relate to the amounts received as a member of the Audit & Risk Committee (€ 10,000), and as a member of the SB of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V. (€ 3,000).
6 Gerard van Olphen was appointed to the SB on 30 October 2019. The remuneration figures for 2019 reflect a partial year as a member of the SB.
7 Gisella van Vollenhoven was appointed to the SB on 30 October 2019. The remuneration figures for 2019 reflect a partial year as a member of the SB. The fees relate to the amounts received as a committee member of the Selection and Appointment Committee and the Remuneration Committee (€ 1,942), and as a member of the SB of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V. (€ 1,553).
B.1.3 Related party transactions

A related party is a person or entity that has significant influence over another entity, or has the ability to affect the financial and operating policies of the other party. Parties related to a.s.r. include associates, joint ventures, members of the EB, members of the SB, close family members of any person referred to above, entities controlled or significantly influenced by any person referred to above and any other affiliated entity.

The group regularly enters into transactions with related parties during the conduct of its business. These transactions mainly involve loans, deposits and commissions, and are conducted on terms equivalent to those that prevail in arm’s length transactions.

The remuneration of the a.s.r. EB and SB members are described in chapter B.1.2.

Positions and transactions between a.s.r., associates, joint ventures and other related parties.

The table below shows the financial scope of a.s.r.’s related party transactions:

- Associates;
- Joint ventures (and real estate development joint ventures);
- Other related parties.

### Financial scope of a.s.r.’s related party transactions

<table>
<thead>
<tr>
<th>2019</th>
<th>Associates</th>
<th>Joint ventures</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and receivables</td>
<td>26</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>124</td>
<td>-</td>
<td>124</td>
</tr>
<tr>
<td><strong>Transactions in the income statement for the financial year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee and commission income</td>
<td>38</td>
<td>-</td>
<td>38</td>
</tr>
<tr>
<td>Fee and commission expenses</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2018</th>
<th>Associates</th>
<th>Joint ventures</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and receivables</td>
<td>24</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>74</td>
<td>-</td>
<td>74</td>
</tr>
<tr>
<td><strong>Transactions in the income statement for the financial year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fee and commission income</td>
<td>28</td>
<td>-</td>
<td>28</td>
</tr>
</tbody>
</table>

No provisions for impairments have been recognised on the loans and receivables for the years 2019 and 2018.

B.1.4 Consolidation method and aggregation of data

The diagram below provides an overview of the consolidation method at a.s.r. for Solvency II purposes.

### Overview of consolidation method for Solvency II purposes

<table>
<thead>
<tr>
<th>Entity</th>
<th>IFRS classification</th>
<th>Type of entity</th>
<th>Treatment SII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance subsidiary</td>
<td>Subsidiary</td>
<td>Insurer</td>
<td>Full consolidation</td>
</tr>
<tr>
<td>ASR Bank</td>
<td>Subsidiary</td>
<td>Credit institution</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>ASR Vermogensbeheer N.V.</td>
<td>Subsidiary</td>
<td>Credit institution</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>ASR Real Estate N.V</td>
<td>Subsidiary</td>
<td>Credit institution</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>BNP PPI</td>
<td>Subsidiary</td>
<td>Credit institution</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>Ancillary service entities¹</td>
<td>Subsidiary</td>
<td>Ancillary services</td>
<td>Full consolidation</td>
</tr>
<tr>
<td>Ancillary service entities</td>
<td>Participation</td>
<td>Ancillary services</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>Other entities</td>
<td>Participation</td>
<td>Ancillary services</td>
<td>Adjusted net equity</td>
</tr>
<tr>
<td>Various entities</td>
<td>Investment</td>
<td>n/a</td>
<td>Financial instrument</td>
</tr>
</tbody>
</table>
The classification of entities is based on Solvency II guidelines (Directive 2000/12/EG). Given the increased materiality of ASR Real Estate B.V. and BNP PPI, these entities were classified as financial institutions.

Since other entities do not have sectoral required or available capital which deviate from the SII volumes, the remaining entities are processed on the basis of full consolidation in accordance with IFRS principles and are part of the SCR calculation if applicable.

Furthermore, interpretation of a.s.r. is that all non-insurance entities have an ancillary character because they are supportive to the insurance process. In line all daughters who are not insurers, banks or asset managers, are classified as ‘ancillary’. This includes for example entities of ASR Deelnemingen or the entities acquired in the distribution channel as part of integration of insurance chain (Dutch ID, Van Kampen Groep).

The interpretation above is based on the Solvency II definition of an Ancillary entity: a non-regulated legal entity the principal activity of which consists in owning or managing property, managing data-processing services, health and care services, or any other similar activity which is ancillary to the principal activity of one or more insurance or reinsurance undertakings.

a.s.r. has many real estate entities. Given the definition of an ancillary entity (the main activity consists of the owning or managing property) a.s.r. classifies these entities as ancillary.

As part chain integration, a.s.r. did acquisitions in the distribution channel (for example Dutch ID, van Kampen). These entities are also ‘supportive to the main process’ and are classified as ancillary entity.
B.2 Fit and proper requirements

a.s.r. has a policy that sets out principles and criteria to ensure that persons who effectively run the undertaking and other key functions are fit and proper. The fit and proper policy provides guidance on the assessment process and contributes to controlled and sound business operations and promotes the stability and integrity of a.s.r. as well as customer confidence. a.s.r. assesses all prospective employees (internal and external FTE’s) for their reliability and integrity prior to their appointment.

The fit and proper requirements that are imposed on persons who effectively run the undertaking and other key functions are included in the job profile, which is used as a basis for recruitment. Each year, an assessment is made of the extent to which an employee may require additional training. In addition, a.s.r. has a program for the continuing education of persons who effectively run the undertaking and other key functions.

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

It is of great importance to a.s.r. that risks within all business lines are timely and adequately controlled. In order to do so, a.s.r. implemented a Risk Management framework based on internationally recognised and accepted standards (such as COSO ERM and ISO 31000:2018 risk management principles and guidelines). Using this framework, material risks that a.s.r. is, or can be, exposed to, are identified, measured, managed, monitored and evaluated. The framework is both applicable to a.s.r. group and the underlying (legal) business entities.

B.3.1 Risk Management Framework

The figure below is the risk management framework as applied by a.s.r.

Risk Management framework

The Risk Management (RM) framework consists of risk strategy (including risk appetite), risk governance, systems and data, risk policies and procedures, risk culture, and risk management process. The RM framework contributes to achieving the strategic, tactical and operational objectives as set out by a.s.r.

Risk strategy (incl. risk appetite)

Risk strategy is defined to contain at least the following elements:
• Strategic objectives that are pursued;
• The risk appetite in pursuit of those strategic objectives.
a.s.r.’s risk strategy aims to ensure that decisions are made within the boundaries of the risk appetite, as stipulated annually by the Executive Board (EB) and the Supervisory Board (SB) (see chapter B.3.1.1 Risk strategy and risk appetite).

**Risk governance**
Risk governance can be seen as the way in which risks are managed, through a sound risk governance structure and clear tasks and responsibilities, including risk ownership. a.s.r. employs a risk governance framework that entails the tasks and responsibilities of the risk management organisation and the structure of the Risk committees (see chapter B.3.1.2 Risk governance).

**Systems and data**
Systems and data support the risk management process and provide management information to the risk committees and other relevant bodies. a.s.r. finds it very important to have qualitatively adequate data, models and systems in place, in order to be able to report and steer correct figures and to apply risk-mitigating measures timely. To ensure this, a.s.r. has designed a policy for data quality and model validation in line with Solvency II. Tools, models and systems are implemented to support the risk management process by giving guidance to and insights into the key risk indicators, risk tolerance levels, boundaries and actions, and remediation plans to mitigate risks (see chapter B.3.1.3 Systems and data).

**Risk policies and procedures:**
Risk policies and procedures at least:
- Define the risk categories and the methods to measure the risks;
- Outline how each relevant category, risk area and any potential aggregation of risk is managed;
- Describe the connection with the overall solvency needs assessment as identified in the Own Risk & Solvency Assessment (ORSA), the regulatory capital requirements and the risk tolerances;
- Provide specific risk tolerances and limits within all relevant risk categories in line with the risk appetite statements;
- Describe the frequency and content of regular stress tests and the circumstances that would warrant ad-hoc stress tests.

The classification of risks within a.s.r. is performed in line with, but is not limited to, the Solvency II risks. Each risk category consists of a policy that explicates how risks are identified, measured and controlled within a.s.r. (see chapter B.3.1.4 Risk policies and procedures).

**Risk culture**
An effective risk culture is one that enables and rewards individuals and groups for taking risks in an informed manner. It is a term describing the values, beliefs, knowledge, attitudes and understanding about risk. All the elements of the RM framework combined make an effective risk culture.

Within a.s.r. risk culture is an important element that emphasizes the human side of risk management. The EB has a distinguished role in expressing the appropriate norms and values (tone at the top). a.s.r. employs several measures to increase the risk awareness and, in doing so, the risk culture (see chapter B.3.1.5 Risk culture).

**Risk management process**
The risk management process contains all activities within the RM processes to structurally 1) identify risks; 2) measure risks; 3) manage risks; 4) monitor and report on risks; and 5) evaluate the risk profile and risk management framework.

At a.s.r., the risk management process is used to implement the risk strategy in the steps mentioned. These five steps are applicable to the risks within the company to be managed effectively (see chapter B.3.1.6 Risk Management process).

**B.3.1.1 Risk management strategy and risk appetite**
a.s.r.’s risk strategy aims to ensure that decisions are made within the boundaries of the risk appetite, as stipulated annually by the EB and the SB.

Risk appetite is defined as the level and type of risk a.s.r. is willing to bear in order to meet its strategic, tactical and operational objectives. The risk appetite is formulated to give direction to the management of the (strategic) risks. The risk appetite contains a number of qualitative and quantitative risk appetite statements and is defined for both financial (FR) and non-financial risks (NFR). The statements highlight the risk preferences and limits of the organisation and are viewed as key elements for the realisation of the strategy. The statements and limits are defined at both group level and at legal entity level and are determined by the Business Executive Committee – Risk meeting and approved by the SB. The statements are evaluated yearly to maintain alignment with the strategy.
## Risk appetite statement ASR Nederland N.V. 2019

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASR Nederland N.V. places long-term value creation at the forefront of its (strategic) operations. ASR Nederland N.V. is a socially responsible organisation which ensures that all stakeholders’ interests are met in a balanced and sustainable way.</td>
</tr>
</tbody>
</table>
| 2 | ASR Nederland N.V. ensures that operational risks are controlled efficiently and effectively:  
  a. ASR Nederland N.V. has efficient and effective business processes;  
  b. ASR Nederland N.V. has reliable financial reports;  
  c. ASR Nederland N.V. has controlled internal and external outsourcing;  
  d. ASR Nederland N.V. has IT that processes information reliably;  
  e. ASR Nederland N.V. has controlled (efficient and effective) projects |
| 3 | ASR Nederland N.V. complies with current laws, regulations and ethical (and inherent internal) norms. ASR Nederland N.V. meets the (reasonable) expectations of stakeholders and offers solid and reliable products which are cost-efficient, useful, safe and comprehensible to customers, intermediaries and ASR's internal organisation. Conducting honest business ensures that ASR's reputation is protected. |
| 4 | ASR Nederland N.V. has a minimum SCR ratio of 120%. |
| 5 | ASR Nederland N.V. remains within the bandwidth of periodically reassessed market risk budgets. |
| 6 | ASR Groep (including ASR Nederland N.V., ASR Levensverzekering N.V. and ASR Schadeverzekering N.V.) has at least a single A rating and therefore holds an AA rating in accordance with the S&P Capital Model. ASR Nederland N.V. assesses the amount of dividend payments against the current and expected future solvency ratio and economic outlook. Dividend payments are in line with the conditions laid down in the capital and dividend policy of ASR Nederland N.V. |
| 7 | ASR Nederland N.V. has a maximum financial leverage ratio of 40%.  
  Financial leverage ratio = Debt / (Debt + Equity) |
| 8 | ASR Nederland N.V. has a maximum double leverage ratio of 135%.  
  Double leverage ratio = Total value of associates / (equity attributable to shareholders + hybrids and subordinated liabilities) |
| 9 | ASR Nederland N.V. has a minimum interest coverage ratio of between 4 and 8.  
  Interest coverage ratio = EBIT operational / interest expense |
| 10 | ASR Nederland N.V. is capable of releasing liquidities worth up to € 1 billion over a 1-month period following stress and remains capable of meeting its collateral requirements in the event of a 3% interest increase. |
| 11 | ASR Nederland N.V. generates a robust and high-quality operational ROE, i.e. pursues an overall ROE > 12% and seeks an ROE > 10% for individual investment decisions, where in exceptional cases an ROE > 8% is accepted. |
| 12 | ASR Nederland N.V. has a maximum combined ratio of 99%. |
| 13 | ASR Nederland N.V., has total market risk which will be a maximum of 50% of the total risk |

Risk strategy aims to ensure that management decisions lead to a risk profile that remains within the risk limits. The risk strategy entails all processes to identifying, assessing and managing risks and opportunities. Through a combined top-down and bottom-up Strategic Risk Analysis (SRA) approach, the most important strategic risks are identified. For each of the strategic risks an estimation of the likelihood and impact is made to prioritize the risks. The main strategic risks are translated into ‘risk priorities’ (including emerging risks) at group level and are monitored throughout the year in the BEC – Risk meeting. Output from the SRA, combined with the risk appetite statements, provides insight into the strategic risk profile of a.s.r. and underlying legal entities. The entire risk profile is monitored in the relevant risk committees.
B.3.1.2 Risk governance

a.s.r.’s risk governance can be described by:

• Risk ownership;
• the implemented three lines of defence model and associated (clear delimitation of) tasks and responsibilities of key function holders; and
• the risk committee structure to ensure adequate decision making.

Risk ownership

The EB has the final responsibility for risk exposures and management within the organization. Part of the responsibilities have been delegated to persons that manage the divisions where the actual risk-taking takes place. Risk owners are accountable for one or more risk exposures that are inextricably linked to the department or product line they are responsible for. Through the risk committee structure, risk owners provide accountability for the risk exposures.

Three lines of defence

The risk governance structure is based on the ‘three lines of defence’ model. The ‘three lines of defence’ model consists of three defence lines with different responsibilities with respect to the ownership of controlling risks. The model below provides insight in the organisation of the three lines of defence within a.s.r.

### Three lines of defence model

<table>
<thead>
<tr>
<th>First line of defence</th>
<th>Second line of defence</th>
<th>Third line of defence</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Executive Board</td>
<td>• Group Risk Management department</td>
<td>• Audit department</td>
</tr>
<tr>
<td>• Management teams of the business lines and their employees</td>
<td>• - Risk management function</td>
<td>- Internal audit function</td>
</tr>
<tr>
<td>• Finance &amp; risk decentral</td>
<td>• - Actuarial function</td>
<td></td>
</tr>
<tr>
<td>Ownership and implementation</td>
<td>• Integrity department</td>
<td></td>
</tr>
<tr>
<td>• Responsible for the identification and the risks in the daily business</td>
<td>• - Compliance function</td>
<td></td>
</tr>
<tr>
<td>• Has the day-to-day responsibility for operations (sales, pricing, underwriting, claims handling, etc.) and is responsible for implementing risk frameworks and policies.</td>
<td>• Challenges the 1st line and supports the 1st line to achieve their business objectives in accordance with the risk appetite</td>
<td>• Responsible for providing dedicated assurance services and oversees and assesses the functioning and the effectiveness of the first two lines of defence</td>
</tr>
<tr>
<td>Policies and monitoring implementation by 1st line</td>
<td>• Has sufficient countervailing power to prevent risk concentrations and other forms of excessive risk taking</td>
<td></td>
</tr>
<tr>
<td>Independent assessment of 1st and 2nd lines</td>
<td>• Responsible for developing risk policies and monitoring the compliance with these policies</td>
<td></td>
</tr>
</tbody>
</table>

### Positioning of key functions

Within the risk governance, the key functions (compliance, risk, actuarial and audit) are organised in accordance with Solvency II regulation. They play an important role as countervailing power of management in the decision-making process. The four key functions are independently positioned within a.s.r. In all the risk committees one or more key functions participate. None of the functions has voting rights in the committees, in order to remain fully independent as countervailing power. All functions have direct communication lines with the EB and can escalate to the chairman of the Audit & Risk Committee of the SB. Furthermore, the key functions have regular meetings with the supervisors of the Dutch Central Bank (DNB) and/or The Dutch Authority for the Financial Markets (AFM).
**Group Risk Management**

Group Risk Management (GRM) is responsible for the execution of the risk management function (RMF) and the actuarial function (AF). The department is led by the CRO. GRM consists of the following sub-departments:

- Enterprise Risk Management;
- Financial Risk Management (including AF).

**Enterprise Risk Management**

Enterprise Risk Management (ERM) is responsible for second-line operational (including IT) risk management and the enhancement of the risk awareness for a.s.r. and its subsidiaries. The responsibilities of ERM include the development of risk policies, the annual review and update of the risk strategy (risk appetite), the coordination of the SRA process leading to the risk priorities and ORSA scenarios and the monitoring of the non-financial risk profile. For the management of operational risks, a.s.r. has a solid Risk-Control framework in place that contributes to its long-term solidity. The RMF monitors and reviews the non-financial strategic and operational risk profile. The quality of the framework is continuously enhanced by the analysis of operational incidents, periodic risk assessments and monitoring by the RMF. ERM actively promotes risk awareness at all levels to contribute to the vision of staying a socially relevant insurer.

**Financial Risk Management**

Financial Risk Management (FRM) is responsible for the second line financial risk management and supports both the AF and RMF. An important task of FRM is to be the countervailing power to the EB and management in managing financial risks for a.s.r. and its subsidiaries. FRM assesses the accuracy and reliability of the market risk, counterparty risk, insurance risk and liquidity risk, risk margin and best estimate liability. Other responsibilities are model validation and policies on valuation and risk. FRM is also responsible for the actuarial function. As part of the AF, FRM reviews the technical provisions, monitors methodologies, assumptions and models used in these calculations, and assesses the adequacy and quality of data used in the calculations. Furthermore, the AF expresses an opinion on the underwriting policy and determines if risks related to the profitability of new products are sufficiently addressed in the product development process. The AF also expresses an opinion on the adequacy of reinsurance arrangements.

**Compliance**

Compliance is responsible for the execution of the compliance function. An important task of Compliance is to be the countervailing power to the EB and other management in managing compliance risks for a.s.r. and its subsidiaries. The mission of the compliance function is to enhance and ensure controlled and sound business operations where impeccable, professional conduct is self-evident.

As second line of defence, Compliance encourages the organization to comply with relevant rules and regulations, ethical standards and the internal standards derived from them (‘rules’) by providing advice and devising policies. Compliance supports the first line in the identification of compliance risks and assesses the effectiveness of risk management on which Compliance reports to the relevant risk committees. In doing so, Compliance uses a compliance risk and monitoring framework. In line with risk management, Compliance also creates further awareness in order to promote a culture of integrity. Compliance coordinates contacts with regulators in order to maintain an effective relationship and keeps oversight of the current topics.

**Audit**

The Audit department, the third line of defence, provides an independent opinion on governance, risk and management processes, with the goal of supporting the EB and other management of a.s.r. in achieving the corporate objectives. To that end, Audit evaluates the effectiveness of governance, risk and management processes, and provides pragmatic advice that can be implemented to further optimize these processes. In addition, senior management can engage Audit for specific advisory projects.

Risk committee structure

a.s.r. has established a structure of risk committees with the objective to monitor the risk profile for a.s.r. group, its legal entities and its business lines in order to ensure that it remains within the risk appetite and the underlying risk tolerances and risk limits. When triggers are hit or likely to be hit, risk committees make decisions regarding measures to be taken, being risk-mitigating measures or measures regarding governance, such as the frequency of their meetings. For each of the risk committees a statute is drawn up in which the tasks, composition and responsibilities of the committee are defined.
Risk committee structure

Audit & Risk Committee
The Audit & Risk Committee was established by the Supervisory Board to gain support, among other things, in the following matters:
• Assessment of the risk appetite proposal and quarterly monitoring of the risk profile;
• Assessment of the annual report, including the financial statements of ASR Nederland N.V.;
• The relationship with the independent external auditor, including the assessment of the quality and independence of the independent external auditor and the proposal by the SB to the AGM to appoint the independent external auditor;
• The performance of the audit function, compliance function, the actuarial function and the risk management function;
• Compliance with rules and regulations; and
• The financial position.

The Audit & Risk Committee has three members of the SB, one of whom acts as the chairman.

Business Executive Committee – Risk meeting
The Business Executive Committee – Risk meeting (BEC – Risk meeting) monitors a.s.r.’s overall risk profile on a quarterly basis. At least annually, the BEC – Risk meeting determines the risk appetite statements, limits and targets for a.s.r. This relates to the overall a.s.r. risk appetite and the subdivision of risk appetite by financial and non-financial risks. The risk appetite is then submitted to the a.s.r. Audit & Risk Committee, which advises the SB on the approval of the risk appetite. The BEC – Risk meeting also monitors the progress made in managing risks included in the Risk Priorities of the EB.

All members of the EB participate in the BEC – Risk meeting, which is chaired by the CEO. The involvement of the EB ensures that risk decisions are being addressed at the appropriate level within the organization. In addition to the EB, the Key Functions (Risk management, Compliance, Internal audit, Actuarial function) are members of the Committee. In addition, it consists of a number of senior managers who present a number of focus areas.

Non-Financial Risk Committee
The Non-Financial Risk Committee (NFRC) discusses, advises and decides upon non-financial risk policies. The most relevant risk policies are approved by the BEC – Risk meeting. The NFRC monitors that non-financial risks are managed adequately and monitors that the risk profile stays within the agreed risk limits. If the risk profile exceeds the limits, the NFRC takes mitigating actions. The NFRC reports to the BEC – Risk meeting. The NFRC is chaired by a member of the EB.
Financial Risk Committee
The Financial Risk Committee (FRC) discusses and decides upon financial risk policies. The most relevant financial risk policies are approved by the BEC – Risk meeting. The FRC monitors and controls financial risks (market, insurance (life and non-life) and counterparty default risk). The FRC also monitors whether the risk profile stays within the risk limits. If the risk profile exceeds these limits, the FRC takes mitigating actions. The FRC reports to the BEC – Risk meeting. The Chairman of the FRC is the CFO.

Capital, Liquidity and Funding Committee
The Capital, Liquidity and Funding Committee (CLFC) is a subcommittee of the FRC. As such, the CLFC prepares and assesses the technical analysis of capital, liquidity and funding positions, rating policy, rating model reporting, and treasury activities. The Chairman of the CLFC is the Director of Group Asset Management.

Model Validation Committee
The model validation committee (MVC) is a subcommittee of the FRC and is responsible for the execution and update of the model validation policy and the approval of validation of existing or newly developed models. The MVC receives all required information for the validation of models (e.g. model documentation and validation reports) prepared by the validation board (MVB) that assures the quality of the validation process. The chairman of the MVC is the CRO.

Business Risk Committees
The business lines manage and control their risk profile through the Business Risk Committees (BRC). The BRC's monitor that the risk profile of the business lines stays within the risk appetite, limits and targets, as formulated by the EB. The BRC reports to the FRC and the NFRC. The Chairman of the BRC is the Managing Director of the business line.

Central Investment Committee
In addition to the risk committee structure, the Central Investment Committee (CIC) monitors tactical decisions and the execution of the investment policy. It takes investment decisions within the boundaries of the strategic asset allocation as agreed upon in the FRC. The CIC bears particular responsibility for investment decisions exceeding the mandate of the investment department. The CIC is chaired by the Director of Group Balance Sheet Management (GBSM).

Product Approval and Review Process Board
The Product Approval & Review Process Board (PARP Board) is responsible for the final decision-making process around the introduction of new products and adjustments in existing products. The committee evaluates if potential risks in newly developed products are sufficiently addressed. New products need to be developed in such a way that they are cost efficient, reliable, useful and secure. New products also need to have a strategic fit with a.s.r.’s mission to be a solid and trustful insurer. In addition, the risks of existing products are evaluated, as requested by the PARP as a result of product reviews. The PARP Board is chaired by the managing Director of the business line Health.

B.3.1.3 Systems and data
GRC tooling is implemented to support the risk management process by giving guidance and insight into the key risk indicators, risk tolerance levels, boundaries and actions and remediation plans to mitigate risks. The availability, adequacy and quality of data and IT systems is important in order to ensure that correct figures are reported and risk mitigating measures can be taken in time. It is important to establish under which conditions the management information that is submitted to the risk committees has been prepared and which quality safeguards were applied in the process of creating this information. This allows the risk committees to ascertain whether the information is sufficient to base further decisions upon.

a.s.r. has a Data Governance and Quality policy in place to support the availability of correct management information. This policy is evaluated on an annual basis and revised at least every three years to keep the standards in line with the latest developments on information management. The quality of the information is reviewed based on the following aspects, based on Solvency II:
• completeness (including documentation of accuracy of results);
• adequacy;
• reliability;
• timeliness.

The preparatory body or department checks the assumptions made and the plausibility of the results, and ensures coordination with relevant parties. When a preparatory body has established that the information is reliable and complete, it approves and formally submits the document(s) to a risk committee.
The information involved tends to be sensitive. To prevent unauthorised persons from accessing it, it is disseminated using a secure channel or protected files. a.s.r.'s information security policy contains guidelines in this respect.

a.s.r.'s information security policy is based on ISO 27002 ‘Code of practice for information security management’. This Code describes best practices for the implementation of information security.

The aim of the information security policy is to take measures to ensure that the requirements regarding availability, reliability and integer and confidential use of systems and data are met.

- Information availability refers to the degree to which the information is at hand as soon as the organisation needs it, meaning, for instance, that the information should be retrievable on demand and that it can be consulted and used at the right time;
- The integrity, i.e. reliability, of information is the degree to which it is up-to-date, complete and error-free;
- ‘Confidential use’ refers to the degree to which the information is available to authorised persons only and the extent to which it is not available to unauthorised persons.

There are technical solutions for accomplishing this, by enforcing a layered approach (defence-in-depth) of technical measures to avoid unauthorised persons (i.e. hackers) to compromise a.s.r. corporate data and systems. In this perspective, one may think of methods of logical access management, intrusion detection techniques, in combination with firewalls are aimed at preventing hackers and other unauthorised persons from accessing information stored on a.s.r. systems. Nevertheless, confidential information can also have been committed to paper. In addition to technical measures there are physical measures and measures that helps the right awareness of personnel as part of the information security environment.

When user defined models (e.g. spreadsheets) are used for supporting the RM Framework, the ‘a.s.r. Standard for End user computing’ - in addition to the general security policy - defines and describes best practices in order to guard the reliability and confidentiality of these tools and models. a.s.r. recognizes the importance of sound data quality and information management systems.

The management of IT and data risks of the implemented tools, models and systems (including data) is part of the Operational IT risk management.

B.3.1.4 Risk policies and procedures

a.s.r. has established guidelines, including policies that cover all main risk categories (market, counterparty default, liquidity, underwriting, strategic and operational). These policies address the accountabilities and responsibilities regarding management of the different risk types. Furthermore, the methodology for risk measurement is included in the policies. The content of the policies is aligned to create a consistent and complete set. The risk policy landscape is maintained by Group Risk Management and Compliance. These departments also monitor the proper implementation of the policies in the business. New risk policies or updates of existing risk policies are approved by the risk committees as mentioned previously.

B.3.1.5 Risk culture

Risk awareness is a vital component of building a sound risk culture within a.s.r. that emphasizes the human aspect in the management of risks. In addition to gaining sufficient knowledge, skills, capabilities and experience in risk management, it is essential that an organization enables objective and transparent risk reporting in order to manage them more effectively.

The EB clearly recognizes the importance of risk management and is therefore represented in all of the major group level risk committees. Risk Management is involved in the strategic decision-making process, where the company’s risk appetite is always considered. The awareness of risks during decision-making is continually addressed when making business decisions, for example by discussing and reviewing risk scenarios and the positive and/or negative impact of risks before finalising decisions.

It is very important that this risk awareness trickles down to all parts of the organization, and therefore management actively encourages personnel to be aware of risks during their tasks and projects, in order to avoid risks or mitigate them when required. The execution of risk analyses is embedded in daily business in, for example, projects, product design and outsourcing.
In doing so, a.s.r. aims to create a solid risk culture in which ethical values, desired behaviours and understanding of risk in the entity are fully embedded. Integrity is of the utmost importance at a.s.r.: this is translated into a code of conduct and strict application policies for new and existing personnel, such as taking an oath or promise when entering the company, and the ‘fit and proper’ aspect of the Solvency II regulation, ensuring that a.s.r. is overseen and managed in a professional manner.

Furthermore, a.s.r. believes it is important that a culture is created in which risks can be discussed openly and where risks are not merely perceived to be negative and highlight that risks can also present a.s.r. with opportunities. Risk Management (both centralised and decentralised) is positioned as such, that it can communicate and report on risks independently and transparently, which also contributes to creating a proper risk culture.

B.3.1.6 Risk management process
The risk management process typically comprises of five important steps: 1) identifying; 2) measuring; 3) managing; 4) monitoring and reporting; and 5) evaluating1. a.s.r. has defined a procedure for performing risk analyses and standards for specific assessments. The five different steps are explained in this chapter.

Identifying
Management should endeavour to identify all possible risks that may impact the strategic objectives of a.s.r., ranging from the larger and/or more significant risks posed on the overall business, down to the smaller risks associated with individual projects or smaller business lines. Risk identification comprises of the process of identifying and describing risk sources, events, and the causes and effects of those events.

Measuring
After risks have been identified, quantitative or qualitative assessments of these risks take place to estimate the likelihood and impact associated with them. Methods applicable to the assessment of risks are:
- Sensitivity analysis;
- Stress testing;
- Scenario analysis;
- Expert judgments (regarding likelihood and impact); and
- Portfolio analysis.

Managing
Typically, there are five strategies to managing risk:
- Accept: risk acceptance means accepting that a risk might have consequences, without taking any further mitigating measures;
- Avoid: risk avoidance is the elimination of activities that cause the risk;
- Transfer: risk transference is transferring the impact of the risk to a third party;
- Mitigate: risk mitigation involves the mitigation of the risk likelihood and/or impact;
- Exploit: risk exploitation revolves around the maximization of the risk likelihood and/or increasing the impact if the risk does happen.

Risk management strategies are chosen in a way that ensures that a.s.r. remains within the risk appetite tolerance levels and limits.

Monitoring and reporting
The risk identification process is not a continuous exercise. Therefore, risk monitoring and reporting are required to capture changes in environments and conditions. This also means that risk management strategies could, or perhaps should, be adapted in accordance with risk appetite tolerance levels and limits.

Evaluating
The evaluation step is twofold. On the one hand, evaluation means risk exposures are evaluated against risk appetite tolerance levels and limits, taking (the effectiveness of) existing mitigation measures into account. The outcome of the evaluation could lead to a decision regarding further mitigating measures or changes in risk management strategies. On the other hand, the risk management framework (including the risk management processes) is evaluated by the risk management function, in order to continuously improve the effectiveness of the risk management framework as a whole.

1 Based on COSO ERM and ISO 31000.
B.3.2 a.s.r.’s risk categories

a.s.r. is exposed to a variety of risks. There are six main risk categories that a.s.r. recognises, as described below.

**Insurance risk**
Insurance risk is the risk that premium and/or investment income or outstanding reserves will not be sufficient to cover current or future payment obligations, due to the application of inaccurate technical or other assumptions and principles when developing and pricing products. a.s.r. recognises the following insurance risk:
- Life insurance risk
- Health insurance risk
- Non-life insurance risk

**Market risk**
The risk of changes in values caused by market prices or volatility of market prices differing from their expected values. The following types of market risk are distinguished:
- Interest rate risk
- Equity risk
- Property risk
- Spread risk
- Currency risk
- Concentration risk/market concentration risk

**Counterparty default risk**
Counterparty default risk is the risk of losses due to the unexpected failure to pay or credit rating downgrade of counterparties and debtors. Counterparty default risk exists in respect of the following counterparties:
- Reinsurers
- Consumers
- Intermediaries
- Counterparties that offer cash facilities
- Counterparties with which derivatives contracts have been concluded
- Healthcare providers
- Zorginstituut Nederland

**Liquidity risk**
Liquidity risk is the risk that a.s.r. is not able to meet its financial obligations to policyholders and other creditors when they become due and payable, at a reasonable cost and in a timely manner.

**Operational risk**
Operational risk is the risk of losses caused by weak or failing internal procedures, weaknesses in the action taken by personnel, weaknesses in systems or because of external events. The following subcategories of operational risk are used:
- Compliance
- Business process
- Financial reporting
- Outsourcing
- Information technology
- Project risks

**Strategic risk**
Strategic risk is the risk of a.s.r. or its business lines failing to achieve the objectives due to incorrect decision-making, incorrect implementation and/or an inadequate response to changes in the environment. Such changes may arise in the following areas:
- Climate
- Demographics
- Competitive conditions
- Technology
- Macroeconomic conditions
- Laws and regulations and ethical standards
- Stakeholders
- Group structure (for product lines only)
Strategic risk may arise due to a mismatch between two or more of the following components: the objectives (resulting from the strategy), the resources used to achieve the objectives, the quality of implementation, the economic climate and/or the market in which a.s.r. and/or its business lines operate.

B.4 Internal control system

Within a.s.r., internal control is defined as the processes, affected by the board of directors, senior management, and other personnel within the organisation, implemented to obtain a reasonable level of certainty with regard to achieving the following objectives:
- High-level goals, aligned with and supporting the organisation’s mission
- Effective and efficient use of resources
- Reliability of operational and financial reporting
- Compliance with applicable laws regulations and ethical standards
- Safeguarding of company assets

B.4.1 Strategic and operational risk management

The system of internal control includes the management of risks at different levels in the organisation, both operational and strategic.

B.4.1.1 Strategic Risk Management

Strategic risk management aims to identify and manage the most significant risks that may impact a.s.r.’s strategic objectives. Subsequently, the aim is to identify and analyse the risk profile as a whole, including risk interdependencies. The ORSA process is designed to identify, measure, manage and evaluate those risks that are of strategic importance to a.s.r.:

Identifying
Through the ORSA process, identification of risks is structurally organised through the combined top-down and bottom-up SRA approach. The SRA outcomes are jointly translated into risk scenarios and ‘risk priorities’, in which the most significant risks for a.s.r. are represented.

Measuring
Through the ORSA process, the likelihood and impact of the identified risks are assessed, taking into account (the effectiveness of) risk mitigating measures and planned improvement actions. Information from other processes ¹ is used to gain additional insights into the likelihood and impact. One single risk scenario takes multiple risks into account. In this manner, the risk scenarios provide (further) insights into risk interdependencies.

Managing
As part of the SRA processes, the effectiveness of risk mitigating measures and planned measures of improvement is assessed. This means risk management strategies are discussed, resulting in refined risk management strategies.

Monitoring and reporting
The output of the ORSA process is translated into day-to-day risk management and monitoring and reporting, both at group level and product line levels. At group level, the risk priorities are discussed on a quarterly basis in the BEC – Risk meeting. At the level of the product lines, risks are discussed in the BRC’s.

Evaluating
Insights regarding likelihood and impact are evaluated against solvency targets. Based on this evaluation, conclusions are formulated regarding the adequacy of solvency objectives at group and individual legal entity level.

B.4.1.2 Operational Risk Management

Operational Risk Management (ORM) involves the management of all possible risks that may influence the achievement of the business goals and that can cause financial or reputational damage. ORM includes the identification, analysis, prioritization and management of these risks in line with the risk appetite. The policy on ORM is drafted and periodically evaluated under the coordination of ERM. The policy is implemented in the decentralised business entities under the responsibility of the management boards. A variety of risks is covered by ORM policy: IT risk, outsourcing, data quality, project, underwriting etc.

¹ For example, the SAA-study, analyses in the context of reinsurance renewals, ad hoc sensitivity analyses and/or stress tests.
Identifying
With the operational targets as a starting point, each business entity performs risk assessments to identify events that could influence these targets. In each business entity the business risk manager facilitates the periodic identification of the key operational risks. All business processes are taken into account to identify the risks. All identified risks are prioritised and recorded in a risk-control framework.

The risk policies prescribe specific risk analyses to be performed to identify and analyse the risks. For important IT systems, Information Security Analyses (IVA – Informatie Veiligheids Analyse) have to be performed and for large outsourcing projects a specific risk analysis is required.

Measuring
All risks in the risk-control frameworks are assessed on likelihood of defaults and impact. Where applicable, the variables are quantified, but often judgments of subject matter experts are required. Based on the estimation of the variables, each risk is labelled with a specific level of concern (1 to 4). Gross risks with a level of concern 3 or 4 are considered ‘key’.

Managing
For each risk, identified controls are implemented into the processes to keep the level of risk within the agreed risk appetite (level of concern 1 or 2). In general, risks can be accepted, mitigated, avoided or transferred. A large range of options is available to mitigate operational risks, depending on the type. An estimation is made of the net risk, after implementing the control(s).

Monitoring and reporting
The effectiveness of operational risk management is periodically monitored by the business risk manager at each business line or legal entity. For each key control in the risk-control framework a testing calendar is established, based on accounting standards. Each control is tested regularly and the outcomes of the effectiveness of the management of key risks are reported to the management board. Outcomes are also reported to the NFRC and BEC – Risk meeting.

Evaluating
Periodically, yet at least annually, the risk-control frameworks and ORM policies are evaluated to see if revisions are necessary. The risk management function also challenges the business lines and legal entities regarding their risk-control frameworks.

Operational incidents
Operational incidents are reported to GRM, in accordance with the operational risk policy. The causes of losses are evaluated in order to learn from these experiences. An overview of the largest operational incidents and the level of operational losses is reported to the NFRC. Actions are defined and implemented to avoid repetition of operational losses.

ICT
Through IT risk management, a.s.r. devotes attention to the efficiency, effectiveness and integrity of ICT, including End User Computing applications. The logical access control for key applications used in the financial reporting process remains a high priority in order to enhance the integrity of applications of data. The logical access control procedures also prevent fraud by improving segregation of duties and by conducting regular checks of actual access levels within the applications. Proper understanding of information, security and cyber risks is essential, reason for which continuous actions are carried out to create awareness among employees and management.

Business Continuity Management
Operational management can be disrupted significantly by unforeseen circumstances or calamities which could ultimately disrupt the execution of critical and operational processes. Business Continuity Management enables a.s.r. to continue its daily business uninterruptedly and to react quickly and effectively during such situations.

Critical processes and activities and the tools necessary to use for these processes are identified during the Business Impact Analysis. This includes the resources required to establish similar activities at a remote location. The factors that can threaten the availability of those tools necessary for the critical processes are identified in the Threat Analysis.

a.s.r. considers something a crisis when one or more business lines are (in danger of being) disrupted in the operational management, due to a calamity, or when there is a reputational threat. In order to reduce the impact of the crisis, to stabilize the crisis, and to be able to react timely, efficiently and effectively, a.s.r. has assigned a crisis organization.
There is a central crisis team led by member of the board. Each business line has their own crisis team led by the director of the management team. The continuity of activities and the recovery systems supporting critical activities are regularly tested and crisis teams are trained annually. The objective of the training is to give the teams insights into how they function during emergencies and to help them perform their duties more effectively during such situations. The training also sets out to clarify the roles, duties and responsibilities of the crisis teams. One important training scenario used is a scenario that includes cyber threats.

Preparatory Crisis Plan

On 1 January 2019 new legislation entered into force that addresses the recovery and settlement of insurance companies ("Wet herstel en afwikkeling van verzekeraars" in Dutch). The objective is that insurance companies and supervisors are better prepared against a crisis and that insurance companies can recover from a crisis without government aid. a.s.r. is obliged to have a Preparatory Crisis Plan ("Voorbereidend Crisisplan" in Dutch) in place that has been approved by DNB. a.s.r.’s Preparatory Crisis Plan helps to be prepared and have the capacity to act in various forms of extreme financial stress. The Preparatory Crisis Plan describes and quantifies the measures that can be applied to live through a crisis situation. These measures are tested in the scenario analysis, in which the effects of each recovery measure on a.s.r.’s financial position (solvency and liquidity) are quantified. The required preparations for implementing the measures, their implementation time and effectiveness, potential obstacles, impact on policy holders and operational effects are also assessed. The main purpose of the Preparatory Crisis Plan is to increase the chances of successful early intervention in the event of a financial crisis situation and to further guarantee that the interest of policyholders and other stakeholders are protected.

Reasonable assurance and model validation

a.s.r. aims to obtain reasonable assurance regarding the adequacy and accuracy of the outcomes of models that are used to provide best estimate values and solvency capital requirements. To this end, multiple instruments are applied, including model validation. Materiality is determined by means of an assessment of impact and complexity. Impact and complexity is expressed in terms of High (H), Medium (M), or Low (L).

In the pursuit of reasonable assurance, model risk is mitigated and unacceptable deviations are avoided, against acceptable costs.

B.4.2 Compliance function

The mission of the Compliance function is to enhance and ensure a controlled and sound business operation where impeccable professional conduct is self-evident.

Positioning and structure of the compliance function

The Compliance function is a centralised function which is headed by the a.s.r. Compliance Manager for both a.s.r. and the supervised entities. The compliance function, the second line of defense, is considered a key function in line with the Solvency II regulation. The CEO bears ultimate responsibility for the compliance function and the a.s.r. compliance manager has a direct reporting line and access to him. The a.s.r. compliance manager also has an escalation line to the Chairman of the a.s.r. Audit & Risk Committee and/or the Chairman of the SB in order to safeguard the independent position of the compliance function and enable it to operate autonomously. The a.s.r. compliance manager is entitled to scale up critical compliance matters to the highest organisational level or to the SB.

Responsibilities and duties

The Compliance function, as part of the second line of defense, is responsible for:

- Encouraging compliance with relevant rules and regulations, ethical standards and the internal standards derived from them ("rules") by providing advice and formulating policies;
- Monitoring compliance with rules;
- Monitoring the management of compliance risks by further developing adequate compliance risk management, including monitoring and, where necessary, making arrangements relating to measures and actions;
- Creating awareness of the need to comply with rules and of social and ethical issues, in which ethical behavior within a.s.r. is self-evident;
- Coordinating contacts with regulators in order to maintain effective and transparent relationships with them.

Annual compliance plan

Developments in rules and the management of high compliance risks and action plans provide the basis for the annual compliance plans and the compliance monitoring activities. a.s.r. continuously monitors changing legislation and regulations and assesses their impact and corresponding actions to be taken. In 2019, Compliance largely realised its annual compliance plan as planned. Various monitoring activities were performed on group and division level. Compliance monitored compliance with the Customer Due Diligence (CDD) regulation, the IDD regulation, the outsourcing policy
(in cooperation with the group risk management department) and the quality of information provided to customers. The Compliance department played a central role in a.s.r.’s CDD optimisation project. In order to guarantee sound and controlled business operations, a.s.r. has taken a number of control measures to prevent, identify and combat unethical behaviour, including corruption.

**Reporting**

The a.s.r. Compliance Manager issues quarterly reports on compliance matters and the progress made in the relevant actions at Group level, supervised entity level and division level. The quarterly report at division level is discussed with the responsible management and scheduled for discussion by the Business Risk Committee.

The quarterly report at Group level and supervised entity level is presented to and discussed with the individual members of the EB and a.s.r. BEC and submitted to the Audit & Risk Committee of the Supervisory Board. The report is shared and discussed with the DNB, the AFM and the (internal and) external auditor.

**B.5 Internal audit function**

The Audit Department evaluates the effectiveness of governance, risk management and internal control processes, and gives practical advice on process optimization. This statement of duties has been set down in the Audit Charter for ASR Nederland N.V. and its subsidiaries. The Audit Department reports its findings to the EB of ASR Nederland N.V., to the managing boards of the legal entities and, by means of the quarterly audit management report, to the a.s.r. BEC and to the Audit and Risk Committee. For ASR Bank N.V., a separate Audit Charter is applicable.

The Audit Department has an independent position within a.s.r., as set down in the Audit Charter. The SB guarantees Audit and its employees an independent, impartial and autonomous position in order to execute the mission of Audit. The head of the Audit Department reports to the chairman of the EB and has a direct reporting line to the chairman of the Audit and Risk Committee. The Chief Audit Executive is appointed by the SB. In order to maintain the independence and impartiality of the internal audit function, the audit function is not influenced by the EB and managing boards of the legal entities in the execution of an audit and the evaluation of and reporting on audit outcomes. The audit function is not subjected to any inappropriate influence from any other function, including the key functions.

The persons carrying out the internal audit function do not assume any responsibility for any other (key) function. The Audit Department has periodic consultations with DNB to discuss the risk assessment, findings and audit plan. The Audit Department’s risk assessment is performed in close consultation with the independent external auditor. The department also takes the initiative to organize a ‘tripartite consultation’ with DNB and the independent external auditor at least once a year. In 2019, two tripartite consultations were held.

The Audit Department sets up a multi-year audit plan based upon an extensive risk assessment. The audit plan is approved by the Audit and Risk Committee. At least once a year, the audit plan is evaluated and any changes to the plan must be approved by the Audit and Risk Committee.

All auditors took the oath for the financial sector and are subject to disciplinary proceedings. All auditors have committed themselves to the applicable code of conduct of a.s.r., follow the Code of Ethics of the Institute of Internal Auditors (IIA) and comply with the specific professional rules of the Netherlands Institute of Chartered Accountants (NBA) and the professional association for IT-auditors in the Netherlands (NOREA).

Audit applies the standards of the IIA, NBA and NOREA for the profession of internal auditing. Each year, Audit performs a self-assessment and an internal quality review and reports the results to the chairman of the board and to the members of the Audit and Risk Committee. In accordance with the standards of the IIA, an external quality review is performed every five years. During the last review in 2016, Audit was approved by the IIA and received the Institute’s quality certificate.
B.6 Actuarial function

The Actuarial Function (AF) is one of four key functions in a.s.r.’s system of governance. The main tasks and responsibilities of the AF are to:

- coordinate the calculation of technical provisions;
- ensure the appropriateness of the methodologies, underlying models and the assumptions made in the calculation of technical provisions;
- assess the sufficiency and quality of the data used in the calculation of technical provisions;
- compare best estimates against experience;
- inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;
- express an opinion on the overall underwriting policy;
- express an opinion on the adequacy of reinsurance arrangements; and
- contribute to the effective implementation of the risk management system.

The AF is part of the second line of defense and operates independently of both the first line (responsible for determining the technical provisions, reinsurance and underwriting), as well as the other three key functions (internal audit, risk management and compliance).

The AF for both ASR Nederland N.V. and the insurance legal entities is operationally part of a.s.r. Group Risk Management. The AF is performed by persons who have profound knowledge of actuarial and financial mathematics, proportionate to the nature, scale and complexity of the risks present in a.s.r.’s businesses.

There are two function holders. One is responsible for the legal entities in the Life segment (Individual Life, Funeral and Pensions business lines) as well as for the overall Life segment of ASR Nederland N.V.. The other for the entities in the Non-life segment (Property & Casualty, Disability and Health business lines) as well as for the overall Non-life segment of ASR Nederland N.V.

The AF function is represented in several risk committees. Each year, the AF drafts a formal report, which it discusses with the BEC – Risk meeting (or EB) and the a.s.r. Audit & Risk Committee.

Independence of the AF is secured through several measures:

- The AF holders are appointed and dismissed by the Board. Both the appointment and the dismissal of the holders is, together with an advice from the Audit and Risk Committee, submitted to the SB for approval;
- The AF holders have unrestricted access to all relevant information necessary for the exercise of their function;
- The AF holders have a direct reporting line to the BEC – Risk meeting or EB and the Audit and Risk Committee of a.s.r.
- The AF is free to report to one of the management or risk committees when considered necessary;
- The AF is free to report all relevant issues;
- In case of a conflict of interest with the CRO, the function holders may escalate directly to the CEO and to the Chairperson of the Audit & Risk Committee of a.s.r.;
- If the AF is asked to perform tasks that are outside the formal scope described in a charter, the function holder(s) assess if there is a conflict of interest. If so, the AF will not execute the task unless there are sufficient additional measures to mitigate conflicts of interest;
- The Internal Audit Department conducts an annual assessment of the functioning of the governance of a.s.r. including the (independent) operation of the AF;
- Target Setting and assessment of the function holders is done by the CEO taking into account the opinion of the Audit & Risk Committee.

B.7 Outsourcing

a.s.r. has outsourced some of its (operational) activities and/or processes to external service providers. When activities are outsourced, a.s.r. is fully accountable for these activities and data used and a.s.r. retains full control over the outsourced activities. To manage the risks related to outsourcing, a.s.r. has implemented a policy to safeguard controlled and sound business operations which ensures compliance with laws and regulatory requirements. Solid risk management, governance, monitoring and a complete overview are essential to manage outsourced activities. The outsourcing policy outlines the relevant procedures and is applicable to a.s.r. and its subsidiaries. The policy is also applicable to intragroup outsourcing.
To define the respective rights and obligations, a.s.r. drafts a written outsourcing contract with the service provider. The contract includes amongst others the obligations for all parties involved, commitment to comply with applicable laws and regulatory requirements, right to audit and information security requirements. Confidentiality, quality of service, and continuity are key for a.s.r. in carrying out its activities. To safeguard the quality of outsourced activities, service providers are carefully examined prior to selection and during the period of service provision. a.s.r. monitors compliancy with the terms of the contract. The findings of the monitoring activities serve as input for the regular consultation on operational, tactical and strategic level with the service provider.

a.s.r. has outsourced certain critical and/or important activities that are part of material (operational) processes. Outsourced activities are related to front-, mid- or back office activities related to the supervised entities. In addition, the management and service of some supporting systems is outsourced.

**B.8 Any other information**

Other material information about the system of governance does not apply.
Risk management is an integral part of a.s.r.’s day-to-day business operations. a.s.r. applies an integrated approach to managing risks, ensuring that strategic objectives are met. Value is created by striking the right balance between risk, return and capital whilst ensuring that obligations to stakeholders are met.

**Risk appetite**

a.s.r. is exposed to a number of risks, including strategic risks, market risks, counterparty default risks, liquidity risks, underwriting risks (Life and Non-life) and operational risks.

Risk appetite is defined as the level and type of risk a.s.r. is willing to bear in order to meet its objectives while maintaining the right balance between risk, return and capital. Risk appetite is formulated to give direction to the management of (strategic) risks. Risk appetite contains a number of qualitative and quantitative risk appetite statements and is defined for both financial risks (FR) and non-financial risks (NFR). The statements highlight the organisation’s risk preferences and limits and are viewed as key elements for the realisation of a.s.r.’s strategy.

In 2019, to ensure alignment with a.s.r.’s strategy, the risk appetite statements and limits were evaluated and updated by the EB and approved by the SB. The risk appetite statement (RAS) of ASR Nederland N.V. can be found in B.3.1.1 Risk management strategy and risk appetite.

**Management of financial risks**

a.s.r. strives for an optimum trade-off between capital, risk and return. Steering on capital, risk and return is done by decision-making throughout the entire product cycle from PARP to the payment of benefits and claims. At a more strategic level, decision-making takes place through balance sheet management. A robust solvency position takes precedence over profit, premium income and direct investment income. Risk tolerance levels and limits are disclosed in the financial risk appetite statements (RAS) and are monitored by the Financial Risk Committee (FRC). The FRC evaluates financial risk positions against the RAS on a monthly basis. Where appropriate, a.s.r. takes additional mitigating measures.

In 2019, the Actuarial Function (AF) performed its regulatory tasks by assessing the adequacy of the Solvency II technical provisions, giving an opinion on reinsurance and underwriting, and contributing to the Risk Management Framework (RMF). The AF report on these topics was discussed by the EB, Risk Committee and A&RC.

**Coronavirus**

In December 2019, a pneumonia outbreak was reported in China which in 2020 rapidly developed into what is now commonly referred to as the coronavirus. The virus has resulted in a significant number of confirmed cases of infection in large portions of the world, including the Netherlands. Globally, governments are taking various measures to contain the outbreak and to mitigate its impact on the economy. In the Netherlands, the Dutch government issued a series of far reaching measures to stop the spread of the coronavirus. Both the virus and the countermeasures have a significant impact on Dutch society and economics in the short term. The government has also presented a significant economic relief program to support both companies and individuals that are financially impacted by the corona outbreak. As the number of infections caused by the virus is still increasing, and the result of both the countermeasures to the virus outbreak as well as the economic relief program still has yet to take effect, the impact of the coronavirus is unsure, specifically in the longer term.

At this point in time it is too early to make a realistic and credible assessment of what the impact of the coronavirus will be on a.s.r.’s business and financial performance. The effect on our financial results will depend on a number of factors, including the extent and duration of the period of disruption and the impact on the global economy and financial markets. As published in this report, a.s.r. is financially healthy and its capital position is solid. In the recent weeks, a.s.r.’s Solvency II ratio proved resilient to absorb these extraordinary developments in the financial markets. Based on the closing market position as of 19 March 2020, which is the most recent analysis available at the time of publication of this annual report, a.s.r. estimates its Solvency II ratio, on the standard formula, to be substantially higher than year-end 2019. The ratio reflects observed market movements as at 19 March 2020, but does not yet allow for any change in insurance claims or changes in experience or assumptions that may arise from the corona crisis. The estimate includes the positive impact from the significantly higher volatility adjustment which increased with over 40 bps since year-end 2019, as well as the flattening of the interest rate curve. It also includes the negative impact of the further reduction of the UFR and the € 75 million share buyback that is currently being executed. Because of the current high volatility in the financial markets,
the estimated Solvency II ratio may vary substantially from day to day. a.s.r.’s liquidity position of € 1.6 billion at year-end 2019 has also proven resilient. We continue to closely monitor the impact of the corona outbreak on the operating performance of our various business lines. We furthermore continue to monitor the potential IFRS impact relating to the valuation of financial instruments and valuation of technical provisions which are sensitive to developments in the (long-term) interest rates.

a.s.r.’s prime concern is the personal well-being of its customers and its employees, their partners and their families. As a leading Dutch insurer, a.s.r. is committed to help its customers through this challenging period and to do everything in its power to help overcome the corona crisis in the Netherlands. To protect its employees all a.s.r. employees are working from home which most employees are already very familiar with, given the ‘independent time and place working’ policy of a.s.r.

Management of non-financial risks

Non-financial risk appetite statements are in place to manage the risk profile within the limits determined by the EB and approved by the SB. The Non-Financial Risk Committee (NFRC) monitors and discusses on a quarterly basis whether non-financial risks are adequately managed. Should the risk profile exceed the risk appetite, the NFRC will decide on the steps to be taken. The risk profile and internal control performance of each business is discussed with senior management in the business risk committees and the NFRC each quarter.

The most important operational risks in 2019 are described below:
- Outsourcing risk (internal and external) remains relevant for a.s.r., especially in view of the increasing focus from regulators, i.e. European Insurance and Occupational Pensions (EIOPA). a.s.r. is fully aware of the potential risks and regulatory developments. An outsourcing policy is in place defining responsibilities, processes, risk assessment and mandatory controls. Outsourcing risk is managed and reported as part of the overall operational risk. An update for the outsourcing policy is scheduled for the forthcoming year;
- Information security risk is highly relevant for a.s.r. See risk priority 3. Information (cyber) security risks for further information;
- Data quality and end-user computing are also relevant for a.s.r. When user-defined models (e.g. spreadsheets) are used to support the RM Framework, the ‘a.s.r. Standard for end-user computing’- as well as the general security policy - defines and describes best practices in order to guard the reliability and confidentiality of these tools and models. a.s.r. recognises the importance of sound data quality and information management systems.

At a.s.r. asset management, Brexit will mainly impact flexibility with regard to the current portfolios in derivatives positions and new derivative transactions to be concluded in the future. Within a.s.r. asset management, a working group has been set up that is in contact with all relevant counterparties and contract adjustments are implemented.

During 2019, a.s.r. took various actions to further enhance the measurement and reporting of data quality for financial reporting purposes and to mitigate end-user computing risks. Adherence to the ‘a.s.r. Standard for End-User Computing’ is accommodated by the explicit integration of relevant controls into the Risk and control frameworks of the business lines.

a.s.r. will continue to look for opportunities to improve the management of its non-financial risks in 2020, for example by focusing on the use of application controls and data analytics. New developments such as AI and robotics and their effects on risk management will also be further explored.

In 2019, all business units applied the Governance and Risk Compliance (GRC) tool (‘Cerrix’). The functionality and performance of this tool were improved in 2019. a.s.r. will continue to seek opportunities to improve the management of its operational risks in 2020, including the use of data analysis.

In order to enhance controlled (efficient and effective) projects, a.s.r. rolled out the ‘project risk management’ policy. This policy was implemented during 2019. In 2019, the most important projects at a.s.r., including IFRS 9/17, Service Books and a.s.r. Vitality, fell within the risk appetite.

Risk priorities

a.s.r.’s risk priorities and emerging risks are defined annually by the EB, based on strategic (top-down and bottom-up) risk analyses. Risk priorities are regarded as the most important strategic risks which could materially affect the strategic and financial objectives of a.s.r. To determine the degrees of risk, a.s.r. uses a risk scale based on likelihood and impact (Level of Concern). For each risk priority, the degree of risk is determined for the gross risk and net risk. Gross risk is the degree of risk when no (control) measures are in place. Net risk is the degree of risk taking into account mitigating (control) measures. Each of a.s.r.’s risk priorities has a very high degree of gross risk (Level of Concern 4, outside risk appetite boundaries) and a high degree of net risk (Level of Concern 3, outside risk appetite boundaries).
a.s.r.’s risk priorities for 2019 were:
1. Pressure on result and renewal of the cash-generating business model;
2. Low interest rate environment and pressure on investment returns, exacerbated by geopolitical tensions;
3. Juridification of society;
4. Information (cyber) security risks;
5. Impact of supervision, laws and regulations.

The coronavirus will be a priority for 2020, given the rapid development in the coronavirus in the first quarter of 2020.

In addition to these risk priorities, a.s.r. also identified several emerging risks. Emerging risks are defined by a.s.r. as new or existing risks with a potentially significant impact, the level of which is hard to define.

Emerging risks:
• Climate change;
• Energy transition;
• Longevity risk.

The measures for each risk priority are described in below:

**Pressure on result and renewal of the cash-generating business model**
This risk priority concerns the risk of the cash-generating business model coming under pressure due to developments in the insurance market, since a highly competitive insurance market may lead to margin and volume decreases.

The insurance market continues to change, e.g. with new entrants on the insurance market, evolving customer demand and technological developments. Customers buy (insurance) products more frequently through direct, digital distribution channels. It is important to meet customers’ needs, taking into account changing customer demand.

The risk of contraction in the portfolio relates to this risk priority. Since the portfolio is contracting rapidly, the risk exist that the process of lowering costs may not be fast enough. a.s.r. continually monitors and assesses its product portfolio and distribution channels for relevant alterations in order to meet changing customer needs and to achieve planned cost reductions as premiums fall. For example, it actively monitors the market to examine potential acquisitions or mergers.

**Low interest rate environment and pressure on investment returns, exacerbated by geopolitical tensions**
Since interest rates are historically low, it remains a challenge to generate sufficient returns on investments and reinvest on attractive terms. The pressure to generate investment returns (search for yield) creates a considerable tension between risk and return.

Unforeseen political developments and/or macroeconomic trends could weaken a.s.r.’s solvency position. a.s.r. will remain permanently alert to the risk of a scenario developing in Europe with a major impact on capital and solvability. It therefore continuously monitors its interest rate position and reports the findings to the FRC. The consequences of potentially low investment returns and interest rate fluctuations are examined more fully in the annual Strategic Asset Allocation (SAA) study and in the annual Own Risk and Solvency Assessment (ORSA).

**Information (cyber) security risk**
Information (cyber) security risks are continuously evolving and imminent. Nation state actors are (covertly) probing and intruding, pushing the development of more sophisticated attacks and implicitly the progression of new detection measures to improve ‘older’ detection techniques. The trend of cyber-attacks continues where it left off in 2018, i.e. the same type of attacks are visible around the world and at a.s.r. The growth in digital communication is also increasing the risks of cyber-attacks, as is the introduction of technological initiatives.

Increased focus on, and attention for, emerging cyber security risks is a daily requirement for a.s.r. and its supply chain. Investing in detection and prevention skills and techniques and learning from incidents in the financial industry strengthens cyber resilience. Since the battle against malicious intentions is ongoing, cyber security efforts continued to dominate risk reports in 2019.

a.s.r. is aware of the trust invested in it by its customers, and makes conscious choices in the risk exposure it is willing to tolerate. A dedicated cybersecurity team, regular testing, continuous awareness programmes and scrutinised vulnerability programmes ensure that a.s.r. is fully aware of its risks and takes measures where appropriate. All measures are continuously monitored and updated where necessary. a.s.r.’s suppliers are periodically reviewed and assessed for
their cyber resilience. Partnerships with financial institutions and public agents, such as the Dutch National Cyber Security Centre (NCSC) and i-CERT (a cybersecurity partnership between insurance companies), are crucial in mounting an effective defence against cybercrime. a.s.r. is actively involved in these partnerships.

Juridification of society

Risk description
Political, regulatory and public attention has focused on unit-linked life insurance policies for some time now. Elements of a.s.r.’s unit-linked life insurance policies are challenged on multiple legal grounds in current legal proceedings, and may continue to be challenged in the future. There is a risk that one or more of the current and/or future claims and/or allegations will be upheld. To date, a number of rulings relating to unit-linked life insurance products have been issued by the Financial Services Complaints Board (FSCB) and (appeal) courts in the Netherlands against a.s.r. and other insurers in specific cases. In these proceedings, different (legal) approaches have been taken to arrive at a ruling. The outcomes of these rulings are diverse. As the record of (a.s.r.’s) policies dates back many years, it contains a wide variety of products with different features and conditions and, since rulings are so diverse, no reliable estimate can be made of the timings and outcomes of these current and future legal proceedings.

Although the financial consequences of these developments could be substantial, a.s.r.’s exposure cannot be reliably estimated or quantified at this point. If one or more of these legal proceedings succeed, there is a risk that a ruling, though only legally binding for the parties involved in the proceedings, could be applied to, or be relevant for, other unit-linked life insurance policies sold by a.s.r. Consequently, the consequences of any current and/or future legal proceedings brought upon a.s.r. could be substantial for a.s.r.’s life insurance business and may have a materially adverse effect on a.s.r.’s financial position, business, reputation, revenues, operating results, solvency, financial condition and/or prospects.

Compensation scheme for unit-linked products
In 2008, ASR Life concluded an outline agreement with two leading consumer protection organisations to offer compensation to unit-linked policyholders if the cost and/or risk premium exceeded a specified maximum. A full agreement on the implementation of the compensation scheme was reached in 2012. The total recognised cumulative financial costs relating to the compensation scheme for Individual life in a.s.r.’s income statement up to 2019 was €1,031 million. This includes, amongst other things, compensation paid, amortisation of surrender penalties and costs relating to improved product offerings. The remaining provision in the balance sheet as at 31 December 2019 amounted to €50,5 million and is available only to cover potential additional compensation (for distressing cases and costs relating to the compensation scheme). Individual cases have a limited impact on the risk profile.

Legal proceedings
a.s.r. is the subject of a number of legal proceedings initiated by individual unit-linked policyholders, represented in most cases by claims organisations. Future legal proceedings regarding unit-linked life insurance policies could be brought against a.s.r. by consumers individually, by consumer organisations acting on their behalf or in the form of a class action. There is also ongoing lobbying by consumer protection organisations to gain sustained media attention for unit-linked life insurance policies. These organisations argue, amongst other things, that consumers were not paid sufficient compensation under the compensation scheme. a.s.r. is currently subject to three collective actions. The claims are all based on similar grounds and have been rejected by a.s.r. and a.s.r. defends itself in these legal proceedings. The timing and outcome of these collective actions is currently uncertain.

In June 2016, Woekerpolis.nl initiated a collective action, requesting the Midden-Nederland District Court to declare that a.s.r. has sold products in the market which were defective in various respects e.g. lack of transparency regarding cost charges and other product characteristics, and risks against which the insurer had failed to warn, such as substantial stock depreciations, inability to realise the projected final policy value, unrealistic capital projections due to the difference between geometric and arithmetic returns, and general terms and conditions governing costs which Woekerpolis.nl considered unfair.

In March 2017, the Consumentenbond also initiated a collective action against a.s.r. based on similar grounds to that initiated by Woekerpolis.nl. In a decision of 11 March 2020, the district court of Midden Nederland rejected the Consumentenbond claims.

In December 2019, claim organisation ‘Wakkerpolis’ initiated a collective action against a.s.r. Although the claim from ‘Wakkerpolis’ is largely based on similar grounds as the other two collective actions, it primarily concentrates on the lack of transparency of cost charges.
Impact of supervision, laws and regulations

Due to growing political and regulatory pressure, there is a risk that:

• a.s.r.’s reputation will suffer if new requirements are not complied with in time;
• Available resources will largely be utilised to align the organisation with new legislation, leaving fewer resources to spend on core customer processes;
• Processes will become less efficient and pressure on the workforce will increase;
• a.s.r. will have administrative fines or sanctions imposed on it for failure to comply with requirements (on time).

a.s.r. constantly monitors changing laws and regulations and assesses their impact and the corresponding actions required (in conjunction with Compliance and Legal). The availability of capacity is also continuously monitored to ensure that there are sufficient resources to process all regulations in a timely manner. a.s.r. has a multidisciplinary legislation and regulation committee to help the various businesses signal and adopt legislative amendments in good time. The committee reports to the NFRC.

In November 2018, a.s.r. set up an internal centralised CDD optimisation project in order to optimise compliance with the CDD-rules. A fit-gap analysis was conducted and policy guidelines were formulated. These actions have been largely implemented in 2019, with some further actions due in Q1 2020.

In May 2017, the International Accounting Standards Board (IASB) published IFRS 17, the new IFRS standard for insurance contracts which will replace the existing IFRS 4 standard. IFRS 17 is expected to be effective from 1 January 2022, subject to endorsement by the EU, based on the Exposure Draft IFRS 17 published in June 2019. The revised IFRS 17 is expected to be published in mid-2020. European Financial Reporting Advisory Group (EFRAG) is currently preparing the endorsement of IFRS 17 for use in the EU following the IASB publication. a.s.r. is now in the process of preparation and implementation, while acknowledging that the amendments are still pending (including the implementation date).

IFRS 17 is designed to facilitate comparability between insurers and to increase transparency in relation to risks, contingencies, losses and embedded options in insurance contracts. IFRS 9 Financial Instruments was published in July 2014 and has had a major impact on the processing of financial instruments (investments). In order to maintain cohesion between the two standards a.s.r. applies the option in IFRS 4 which allows for the deferral of the implementation of IFRS 9 until the implementation of IFRS 17. Since 2017, a.s.r. has an internal programme in place to prepare for the implementation of IFRS 17 and IFRS 9 throughout the Group. The IFRS 17 and IFRS 9 programme will have a major impact on the Group’s primary financial processing and reporting and could have a significant effect on its capital, financial statements and related KPIs. Finance, Risk, Audit and the business lines have all been given attention in the programmes due to the need to develop an integrated vision.

Emerging risks

In addition to the risk priorities, a.s.r. also identified emerging risks. Emerging risks are defined by a.s.r. as new or existing risks with a potentially major impact, where the level of risk is hard to define.

Climate change

Insurers increasingly need to take climate change risks into account. Claims ratios might increase as a result of climate change. It is currently difficult to estimate the likelihood of extreme weather. In the long term, it is a challenge to estimate the effects of climate change, as a result of which climate change risks may be underestimated.

The Executive Board sees climate change as a driver of both risks and opportunities for its business, customers and society at large. As such, the Board is actively involved in managing climate-related risks and strategies, amongst others by:

• Reviewing and approving our sustainable growth strategy, with its strategic focus on climate change and energy transition;
• Setting and monitoring performance against climate-related goals and targets;
• Reviewing and approving the climate-related content in the annual report.

As of 2019, in addition to these economic environments a.s.r. now validates its investment strategy and strategic asset allocation by analysing the impact on various metrics in its risk appetite statement (RAS) of the expected impact of climate change, based on the chosen scenarios. a.s.r. has used climate scenarios developed by Ortec Finance and has incorporated the impact of the different climate pathways on assets in the annual Strategic Asset Allocation study (SAA).
In the SAA the a.s.r. balance sheet in its entirety is projected forward for 20 years. Each scenario set consists of 2000 scenarios and these have been fed into a stochastic financial model which in turn translates the impacts of these climate-adjusted GDP shocks on a range of more than 600 financial and economic variables. Following this approach, a.s.r. has been able to quantify climate risk-aware economic outlooks per pathway, applied to the neutral economic scenario.

Within the ORSA, various stress scenarios are used with a five year time horizon. This includes ‘storm’ scenarios. In addition, climate impact on the (Non-life) portfolio is regularly reviewed both retrospectively and through various climate scenarios for the future. For short and medium term climate risks (0-5 years) portfolio and actuarial risk analysis are performed. Product managers prepare an annual product forecast, which also focuses on new risks and technologies. Risks are managed through risk assessment and selection processes, exposure limitations, exclusions, deductibles, premiums, coverage limits and reinsurance.

**Energy transition**

The transition to a climate-neutral economy was part of a.s.r.’s risk priorities for 2019. The transition entails uncertainties, changes and risks. The extent and impact of the risks depends on, among other things, the pace of energy transition, government policies, technological developments and changing consumer behaviour. An abrupt energy transition could have a major impact on the economy, business models and financial stability.

**Longevity risk**

Recent mortality tables (2018) issued by the Dutch Association of Actuaries (AG) indicate that the life expectancy of the Dutch population has not significantly improved. Nevertheless, it should not be ruled out that the life expectancy of a.s.r.’s policyholders could improve significantly compared to current mortality tables due to relatively sudden (medical and/or technological) developments in health care. Certain improvements could ultimately result in a lower solvability for a.s.r. Unexpected break-throughs could ultimately lead to a lower solvency position. Mitigating measures such as longevity reinsurance are currently investigated from a risk management perspective.

**Solvency II ratio in 2019**

In 2019, the solvency ratio decreased from 197% (December 31, 2018) to 194% excluding financial institutions (after deduction of the proposed dividend) at year end. This can be explained by the analysis of change as shown in the graph below.

### Eligible Own Funds

<table>
<thead>
<tr>
<th>Year</th>
<th>Tier 1 (unrestricted)</th>
<th>Tier 1 (restricted)</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Eligible funds to meet SCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>5,789</td>
<td>524</td>
<td>1,515</td>
<td>0</td>
<td>7,828</td>
</tr>
<tr>
<td>2018</td>
<td>5,379</td>
<td>501</td>
<td>1,044</td>
<td>0</td>
<td>6,924</td>
</tr>
</tbody>
</table>
The eligible own funds increased to € 7,828 million (2018: € 6,924 million). As a result of organic growth, the issuance of a Tier 2 loan and a Tier 1 loan, the acquisition of Loyalis, the increase in equity markets, lower interest rates and spread tightening on credits the eligible own funds increased. These effects were partially offset by a lower UFR, tightening of the VA, the redemption of Tier 1 loans and the interim and proposed final dividend.

The required capital stood at € 4,035 million (31 December 2018: € 3,523 million). This increase is mainly due to the acquisition of Loyalis, lower interest rates and an increase in equity risk due to rising stock prices.

Solvency II sensitivities
The sensitivities of the solvency ratio as at 31 December 2019, expressed as the impact on the group solvency ratio (in percentage points) are as presented in the table below. The total impact is split between the impact on the solvency ratio related to movement in the available capital and the required capital. The sensitivities are based on the situation per 31-12-2019.

Solvency II sensitivities - market risks

<table>
<thead>
<tr>
<th>Effect on:</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario (%-point)</td>
<td>31 December 2019</td>
<td>31 December 2018</td>
<td>31 December 2019</td>
</tr>
<tr>
<td>UFR 3.2%</td>
<td>-16</td>
<td>-18</td>
<td>-3</td>
</tr>
<tr>
<td>Interest rate +1% (2018 incl. UFR 4.05% / 2019 incl. UFR 3.90%)</td>
<td>-4</td>
<td>-4</td>
<td>+13</td>
</tr>
<tr>
<td>Interest rate -1% (2018 incl. UFR 4.05% / 2019 incl. UFR 3.90%)</td>
<td>+7</td>
<td>+9</td>
<td>-13</td>
</tr>
<tr>
<td>Volatility Adjustment -10bp</td>
<td>-10</td>
<td>-9</td>
<td>-2</td>
</tr>
<tr>
<td>Equity prices -20%</td>
<td>-10</td>
<td>-9</td>
<td>+11</td>
</tr>
<tr>
<td>Property values -10%</td>
<td>-9</td>
<td>-9</td>
<td>+3</td>
</tr>
<tr>
<td>Spread +75bps/(2018: VA +200bps/2019: VA +18bps)</td>
<td>+11</td>
<td>+11</td>
<td>+4</td>
</tr>
</tbody>
</table>
**Solvency II sensitivities - explanation**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate risk – UFR</td>
<td>Measured as the impact of a lower UFR. For the valuation of liabilities, the extrapolation to the UFR of 3.2% after the last liquid point of 20 years remained unchanged.</td>
</tr>
<tr>
<td>Interest rate risk (incl. UFR 4.05%/3.90%)</td>
<td>Measured as the impact of a parallel 1% upward and downward movement of the interest rates. For the liabilities, the extrapolation to the UFR (3.90 for 2019 and 4.05% for 2018) after the last liquid point of 20 years remained unchanged.</td>
</tr>
<tr>
<td>Volatility Adjustment (VA)</td>
<td>Measured as the impact of a 10 bps decrease in the VA.</td>
</tr>
<tr>
<td>Equity risk</td>
<td>Measured as the impact of a 20% downward movement in equity prices.</td>
</tr>
<tr>
<td>Property risk</td>
<td>Measured as the impact of a 10% downward movement in the market value of real estate.</td>
</tr>
<tr>
<td>Spread risk (including impact of spread movement on VA)</td>
<td>Measured as the impact of an increase of spread on loans and corporate bonds of 75 bps. At the same time, it is assumed that the VA will increase by 18 bps (2018 was 20 bps) based on reference portfolio.</td>
</tr>
</tbody>
</table>

The Solvency II sensitivities stayed almost the same as in 2018, except for the credit spread sensitivity. The credit spread sensitivity changed from +21%p to +15%p. In 2018, the increase in the VA resulted in a change in the dominant interest rate risk, from down to up, within the interest rate SCR calculation. This led to a more favorable correlation matrix within the market risk SCR calculation. In the credit spread sensitivity for 2019, there was no change in the correlation matrix.

**Expected development Ultimate Forward Rate**

European Insurance and Occupational Pensions Authority (EIOPA) may reduce the ultimate forward rate used to extrapolate insurers’ discount curves to better reflect expected inflation and real interest rates. There are various scenarios regarding lowering the Ultimate Forward Rate (UFR).

The UFR has decreased, starting in 2018, from 4.2% in 2017 to 3.55% with steps of maximum 15 basis points per year. In 2019 the UFR was 3.9% (2018: 4.05%). After the decline of the UFR by 15 basis points the solvency ratio is still above internal solvency objectives.

Changes in the UFR have an almost linear effect on the solvency ratio. The impact on the solvency ratio of various UFR levels is stated below.
Interest rate sensitivity of Solvency II ratio

The impact of the interest rate on the Solvency II ratio, including the UFR effect, is stated below. The UFR methodology has been applied to the shocked interest rate curve. The figure shows the increased impact of the interest rate sensitivity, mainly caused by a change in the interest rate hedge policy.

Equity risk

In 2019 the equity risk increased mainly due to a bigger equity portfolio as a result of the rise of share prices. Besides the bigger equity portfolio also the average risk charge on balance increased as a result of (i) the upward effect of the equity dampener and (ii) the upward effect of the run-off of the transitional measure of equity risk.

Spread risk

The SCR spread risk on balance increased in 2019. On the one hand SCR spread risk increased due to a larger fixed income portfolio, mainly due to the acquisition of Loyalis and re-risking. On the other hand SCR spread risk decreased due to the shortening duration of the credit portfolio.

The spread sensitivity of the solvency ratio decreased from +21% at 31 December 2018 to +15% at December 2019. This was mainly caused by the fact that the interest rate down becomes dominant at 31 December 2019, whereas the interest rate up was dominant previous year. This led to a smaller diversification in the market risk module and therefore to a lower impact of the SCR on the ratio.

This sensitivity is based on a scenario in which the average spread rises by 75 bps and the Volatility Adjustment (VA) rises by 18 bps. As the VA is used in the calculation of the liabilities and spread movement only has an impact on the credit portfolio, the impact of the VA increase is bigger than the impact of the spread increase. Therefore, the solvency ratio rises in the event of an increase in the average spread.
Loss absorbing capacity of deferred tax

a.s.r. uses the following methodology for the calculation of the Loss Absorbing Capacity Deferred Tax (LAC DT) benefit in euros of a.s.r. group and its separate entities:

For each separate entity an unrounded LAC DT factor is calculated. The LAC DT factor that results is the maximum factor to be used per entity. ASR Levensverzekering N.V. uses an advanced model, taking future fiscal profits into account. For all other entities a basic model is used. Both types of models are reviewed and properly documented. Hence usage of the models is agreed upon with DNB. Since the LAC DT factor of ASR Levensverzekering N.V. has the largest effect on the LAC DT of the group, a.s.r. has chosen to develop the advanced model for this entity.

Relevant regulation and current guidance (Delegated Regulation, Level 3 guidelines, Dutch Central Bank Q&As and IAS12) are taken into account in the development of the LAC DT methodology.

Below, an overview of the specifications of the models for all entities is presented:

In summary, the outcome of both models is an unrounded LAC DT factor for all 4 entities.

1. For the basic model of the entities ASR Basis Ziektekostenverzekeringen N.V. and ASR Aanvullende Ziektekostenverzekeringen N.V.) the unrounded LAC DT factor is determined based on component 1 – 3 only. For the unrounded LAC DT factor of ASR Schadeverzekering N.V. the basic model also includes component 4a. For the advanced model (ASR Levensverzekering N.V.), also future profits and the DTL/DTA positions are projected Fiscal planning is not used.

2. Moreover, an outlook is made of the underpinning of the LAC DT factor in the upcoming quarters, divided over the separate components. This outlook will take into account potential risks not yet included in the model, also called a code of conduct. This code of conduct ensures financial stability in the LAC DT benefit for a.s.r. group and its entities in euros, resulting in financial stability of the solvency position of the group and its entities.

3. The LAC DT factors and outlook are reviewed by the 2nd line.

4. A proposal with the advised LAC DT factors will be presented to the Financial Risk Committee (FRC). The LAC DT factors agreed with the FRC are to be applied.

5. In case all stakeholders agree on the LAC DT factors of the separate entities, the LAC DT benefit of the group in euros can be determined according to the by EIOPA prescribed formula.

Another source of stability can be found in the way the LAC DT factor is adjusted if a change is desired. In case the substantiation of the LAC DT is too low the factor is lowered immediately, taking into account the code of conduct. However, in case an increase is possible, it is only realised in case it is sustainable and significant.
Loss absorbing capacity of technical provisions
Starting from 2018Q4 a.s.r. takes into account this discretionary element in de SCR.

Loss-absorbing capacity of technical provisions (LACTP) is the part of the technical provisions that can be used to absorb some of the SCR shock losses, as the expected future profit sharing to policyholders will be reduced if actual losses would arise. LACTP is applicable to insurance policies with discretionary profit sharing.

C.1 Insurance risk

Insurance risk is the risk that future insurance claims and benefits cannot be covered by premium and/or investment income, or that insurance liabilities are not sufficient, because future expenses, claims and benefits differ from the assumptions used in determining the best estimate liability. Insurance risk manifests itself in both the Non-life and the Life portfolio. The Non-life portfolio covers the property and casualty, disability and healthcare sectors. The Life portfolio consists of funeral, individual Life and group-pension business.

Risk-mitigating measures are used to reduce and contain the volatility of results or to decrease the possible negative impact on value as an alternative for the capital requirement. Proper pricing, underwriting, reinsurance, claims management, and diversification are the main risk mitigating actions for insurance risks. By offering a range of different insurance products, with various product benefits and contract lengths, and across Life, disability and Health and P&C insurance risk, a.s.r. reduces the likelihood that a single risk event will have a material impact on a.s.r.'s financial condition.

The solvency buffer is held by a.s.r. to cover the risk that claims may exceed the available insurance provisions and to ensure its solidity. The solvency position of a.s.r. is determined and continuously monitored in order to assess if a.s.r. meets the regulatory requirements.

As of 1 January 2016, the Solvency II regime is in place. a.s.r. measures its risks based on the standard model as prescribed by the Solvency II regime. The Solvency Capital Requirement (SCR) for each insurance risk is determined as the change in own funds caused by a predetermined shock which is calibrated to a 1-in-200-year event. The basis for these calculations are the Solvency II technical provisions which are calculated as the sum of a best estimate and a risk margin.

The insurance risk arising from the insurance portfolios of a.s.r. is as follows:

<table>
<thead>
<tr>
<th>Insurance risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life insurance risk</td>
<td>1,682</td>
<td>1,457</td>
</tr>
<tr>
<td>Health insurance risk</td>
<td>1,026</td>
<td>777</td>
</tr>
<tr>
<td>Non-life insurance risk</td>
<td>518</td>
<td>491</td>
</tr>
<tr>
<td>Total excluding diversification between insurance risks</td>
<td>3,227</td>
<td>2,724</td>
</tr>
</tbody>
</table>

The insurance risk increased as a result of the acquisition of Loyalis, the decrease of the interest rates, the termination of the mass lapse cover and refinement of the calculation of the Health risk.

Solvency II sensitivities
a.s.r. has assessed the impact of various sensitivities on the solvency ratio. The sensitivities as at 31 December 2018 and 2019, expressed as impact on the group solvency ratio (in percentage points) are as follows:

<table>
<thead>
<tr>
<th>Solvency II sensitivities - insurance risks</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect on:</td>
<td>31 December 2019</td>
<td>31 December 2018</td>
<td>31 December 2019</td>
</tr>
<tr>
<td>Type of risk (%-points)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses -10%</td>
<td>+6</td>
<td>+6</td>
<td>+1</td>
</tr>
<tr>
<td>Mortality rates, all products -5%</td>
<td>-4</td>
<td>-3</td>
<td>-</td>
</tr>
<tr>
<td>Lapse rates -10%</td>
<td>-</td>
<td>+1</td>
<td>-</td>
</tr>
</tbody>
</table>
Solvency II sensitivities - explanation

<table>
<thead>
<tr>
<th>Risk</th>
<th>Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense risk</td>
<td>Measured as the impact of a 10% decrease in expense levels.</td>
</tr>
<tr>
<td>Mortality risk</td>
<td>Measured as the impact of a 5% decrease in all mortality rates.</td>
</tr>
<tr>
<td>Lapse risk</td>
<td>Measured as the risk of a 10% decrease in lapse rates.</td>
</tr>
</tbody>
</table>

The table above shows that the SCR sensitivities in 2019 are (almost) similar to the sensitivities of 2018. The impact on the ratio is the opposite if a reversed scenario is taken into account. These shocks had no impact on the 2019 and 2018 total equity, or on the profit for these years, because a.s.r. still passed the IFRS Liability Adequacy Test (LAT). While the sensitivities result in a decrease of the surplus in the LAT, the outcome is still positive.

C.1.1 Life Insurance risk
The Life portfolio can be divided into funeral, individual Life and group pension. The insurance contracts are sold primarily to retail and wholesale clients through intermediaries.

The products are sold as insurance products in cash or unit-linked contracts. With respect to products in cash, the investment risk is fully borne by the insurer whereas, in the case of unit-linked products, the majority of the investment risk is for the policyholder's account.

The SCR for Life insurance risks is determined on the level of model points. A model point is a group of policies with equal characteristics. A model point is a subset of a homogeneous risk group. In case a netting between positive and negative risks within a model point can exist, special attention is given. In most cases, the model points are sufficiently homogeneous knowing that this netting is not material.

The following Life insurance risks are involved:

**Mortality risk**
Mortality risk is associated with (re)insurance obligations, such as endowment or term assurance policies, where a payment or payments are made in case of the policyholder's death during the contract term. The increase in mortality rates is applied to (re)insurance obligations which are contingent on mortality risk. The required capital for this risk is calculated as the change in own funds of a permanent increase of mortality rates by 15% for all ages and each policy.

**Longevity risk**
Longevity risk is associated with (re)insurance obligations where payments are made until the death of the policyholder and where a decrease in mortality rates results in higher technical provisions. The required capital is calculated as the change in own funds of a permanent decrease of mortality rates by 20%. The decrease in mortality rates is applied to portfolio's where payments are contingent on longevity risk.

**Disability-morbidity risk**
Morbidity or disability risk is associated with all types of insurance compensating or reimbursing losses (e.g. loss of income, adverse changes in the best estimate of the liabilities) caused by changes in the morbidity or disability rates. The scenario analysis consists of a 35% increase in disability rates for the first year, 25% for subsequent years, combined with a decrease in revalidation rates of 20%.

**Expense risk**
A calculation is made of the effect on own funds of a permanent increase in costs used for determining the best estimate. The scenario analysis contains an increase in the costs of 10% and an increase in the cost inflation of 1 percentage point per year. This scenario also includes a similar shock in the investment costs. Both the internally and externally managed investment costs are involved in this scenario.

**Lapse risk**
Lapse risk is the risk of losses (or adverse changes in the best estimate of the liabilities) due to an unanticipated (higher or lower) rate of policy lapses, terminations, changes to paid-up status (cessation of premium payment) and surrenders. The effect of the lapse risk is equal to the highest result of a permanent increase in lapse rates of 50%, a permanent decrease in lapse rates of 50% or a mass lapse event (70% of insurance policies in collective pension funds or 40% of the remaining insurance policies). The lapse shocks are only applied to portfolios where this leads to a higher best estimate.
Especially in the case of funeral policies the netting of positive and negative risks within model points can be considerable for policies that can be surrendered (completely ending the policy, with payment of surrender value) in the case of the mass lapse. In most cases, the shock scenario for determining the SCR for mass lapse for funeral policies consists of an immediate shock of 40% with respect to the continuation of premium payment (mass “pup”-scenario). This is mostly in line with policy conditions. The mass pup treatment in the funeral portfolio for mass lapse risk reduces the netting of positive and negative risks to a level that is not material.

In 2018 the required capital for a mass lapse was reduced by the proceeds that are to be expected from a reinsurance arrangement (Mass Lapse Cover). At the end of 2019 the Mass Lapse Cover was terminated.

**Life catastrophe risk**

Catastrophe risk arises from extreme events which are not captured in the other Life insurance risks, such as pandemics. The capital requirement for this risk is calculated as a 1.5 per mille increase in mortality rates in the first projected year for (re)insurance obligations where the increase in mortality rates leads to an increase in technical provisions.

**Mortgage Loans**

Within the individual Life portfolio there is a group of policies directly linked to a mortgage loan (“Spaarhypotheken”). In case the mortgage loan is not provided by a.s.r., but by another party, which is the case for most of these policies, the interest that a.s.r. reimburses to the policyholder is claimed from the party that has provided the mortgage loan. This cashflow of interests from the provider of the mortgage loan to a.s.r. represents an asset. The cashflow and value of this asset depends on the cashflow of the linked savings policy. Therefore, the change in this asset value due to mortality or lapse is taken into account when determining the SCR for Life insurance risks.

**Employee benefits**

ASR Nederland N.V. has insured the post-employment benefit plans for a.s.r.’s employees with ASR Levensverzekering N.V., an insurance company within the group. Though the liability of this plan is classified as employee benefits on the balance sheet and determined according to IFRS principles, the required capitals for the Life insurance risks are fully taken into account and based on Solvency II principles. The risk margin at a.s.r. group level equals the sum of risk margins of all underlying OTSO’s. No correction is made for the elimination of post-employment benefit plans for a.s.r.’s employees with ASR Levensverzekering N.V.

**Other information**

Within a.s.r. leven the longevity risk is dominant and arises from group pension business and individual annuities. The longevity risk is partly offset by mortality risk that arises from the funeral portfolio and individual policies with mortality risk. The other main risks a.s.r. leven is exposed to are expense risk and lapse risk.

The table below summarises the required capital for abovementioned Life insurance risks based on the standard model.

<table>
<thead>
<tr>
<th>Life insurance risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality risk</td>
<td>281</td>
<td>297</td>
</tr>
<tr>
<td>Longevity risk</td>
<td>1,169</td>
<td>928</td>
</tr>
<tr>
<td>Disability-morbidity risk</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Lapse risk</td>
<td>346</td>
<td>313</td>
</tr>
<tr>
<td>Expense risk</td>
<td>666</td>
<td>641</td>
</tr>
<tr>
<td>Revision risk</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Catastrophe risk (subtotal)</td>
<td>89</td>
<td>83</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-875</td>
<td>-811</td>
</tr>
<tr>
<td><strong>Life insurance risk</strong></td>
<td><strong>1,682</strong></td>
<td><strong>1,457</strong></td>
</tr>
</tbody>
</table>
For the Life portfolio, the provision at year-end can be broken down as follows under Solvency II:

<table>
<thead>
<tr>
<th>Segment</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance with profit participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>18,762</td>
<td>19,099</td>
</tr>
<tr>
<td>Risk margin</td>
<td>1,133</td>
<td>1,097</td>
</tr>
<tr>
<td>Technical provision</td>
<td>19,895</td>
<td>20,195</td>
</tr>
<tr>
<td>Other life insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>14,669</td>
<td>9,757</td>
</tr>
<tr>
<td>Risk margin</td>
<td>774</td>
<td>514</td>
</tr>
<tr>
<td>Technical provision</td>
<td>15,443</td>
<td>10,271</td>
</tr>
<tr>
<td>Index-linked and unit-linked insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>9,790</td>
<td>7,908</td>
</tr>
<tr>
<td>Risk margin</td>
<td>84</td>
<td>108</td>
</tr>
<tr>
<td>Technical provision</td>
<td>9,874</td>
<td>8,016</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>43,222</td>
<td>36,764</td>
</tr>
<tr>
<td>Risk margin</td>
<td>1,991</td>
<td>1,718</td>
</tr>
<tr>
<td>Technical provision</td>
<td>45,213</td>
<td>38,482</td>
</tr>
</tbody>
</table>

The technical provisions and the risk margin have increased due to the acquisition of Loyalis (resp. € 1,888 million and € 57 million at valuation date June 30, 2019). This increase was mitigated by the outflow of the individual Life portfolio and (to a lesser extend) the traditional pensions portfolio. A dominant factor in the increase of the technical provisions in 2019 was the decrease of the interest rate, VA and UFR and the increase of stock markets. Furthermore there has been a considerable transfer of technical provision from the category “Insurance with profit participation” to the category “Other Life insurance”, due to improved data concerning profit sharing end dates, which has improved the classification.

C.1.1.1 Managing Life insurance risk

Life insurance risk is mitigated by pricing, underwriting policies and reinsurance.

Pricing is based on profit capacity calculations. A calculation is made of the price required to cover the risks. A calculation is made of the price required to cover the insurance liabilities, expenses and risks.

Underwriting policies describe the types of risks and the extent of risk a.s.r. is willing to accept. Policyholders may be subjected to medical screening for individual Life insurance.

Reinsurance

Reinsurance and other risk-mitigating measures are used to reduce the volatility of results or to decrease the possible negative impact on value as an alternative to the capital requirement. Reinsurance arrangements have been set up to mitigate the effects of catastrophes on earnings.

The level of retention in different reinsurance contracts is aligned with the size and the risk profile of the underlying portfolios. This includes taking account of the cost of reinsurance on the one hand, and the risk that is retained on the other.

In order to optimise its balance sheet risks, a.s.r. entered into a reinsurance agreement with Legal and General Re in 2015. The share of Legal and General Re is on behalf of a specific buy-out portfolio. Also, for the Generali portfolio, a relatively small reinsurance contract is in force. The total share of the reinsurances for a.s.r. amounts to € 190 million per 31 December 2019.
C.1.2 Health insurance risk and Non-life insurance risk

C.1.2.1 Health insurance risk

The Health insurance portfolio of a.s.r. is diverse. The portfolio can be divided into two main product types:

- **SLT Health portfolio (Similar to Life Techniques)** Income Protection, which can be divided into
  - Individual Disability (Zelfstandigen)
  - Group Disability (WIA)
- **NSLT Health portfolio (Similar to Non-life Techniques)**, which can be divided into
  - Income Protection (Sickness, and Individual and Group Accident)
  - Medical Expenses (Basis and Aanvullend)

The insurance contracts are sold primarily to retail and wholesale clients through intermediaries.

The Health insurance portfolio of a.s.r. contains the following insurance risks:

- **SLT Health risk**
  - This risk is applicable to the SLT Health portfolio. The calculation is scenario-based. The scenarios are similar to the scenarios that are used to calculate the Life insurance risk.
- **NSLT Health risk**
  - This risk is applicable to the NSLT Health portfolio. The calculation is factor-based. The risk is calculated similarly to the Non-life insurance risk.
- **Health Catastrophe risk**
  - This risk is applicable to the entire Health portfolio. The calculation is scenario-based.

**SLT Health Risk**

- **Longevity risk**
  
  Longevity risk is associated with (re)insurance obligations where payments are made until the death of the policyholder and where a decrease in mortality rates results in higher technical provisions. The required capital is calculated as the change in own funds of a permanent 20% decrease in mortality rates. The decrease in mortality rates is applied to portfolios where payments are contingent on longevity risk.

- **Disability-morbidity risk**
  
  Morbidity or disability risk is the main risk to the SLT Health portfolio. The scenario analysis consists of a 35% increase in disability rates for the first year, 25% for subsequent years, combined with a decrease in revalidation rates of 20%.

- **Expense risk**
  
  A calculation is made of the effect of a permanent increase in costs, which is used for determining the best estimate. The scenario analysis contains an increase in the costs of 10% and an increase in the cost inflation of 1 percentage point per year.

- **Lapse risk**
  
  Lapse risk is the risk of losses (or adverse changes in the best estimate of the liabilities) due to an unanticipated (higher or lower) rate of policy lapses, terminations, changes to paid-up status (cessation of premium payment) and surrenders. The effect of the lapse risk is equal to the highest result of a permanent 50% increase in lapse rates, a permanent 50% decrease in lapse rates or a mass lapse event (40% mass lapse). For the SLT Health portfolio, the mass lapse event is dominant.

**Future management action**

According to the insurance conditions, a.s.r. has the ability to adjust the premiums and insurance conditions in the future. Therefore, a.s.r. applies a future management action, as noted in Article 23 of the Delegated Regulation, when calculating the SLT Health risk for the portfolios with contract boundaries exceeding three years.

**NSLT Health Risk**

- **Premium and reserve risk**
  
  The premium risk is the risk that the premium is not adequate for the underwritten risk. The premium risk is calculated over the maximum of the expected earned premium of the next year, and the earned premium of the current year. The reserve risk is the risk that the current reserves are insufficient to cover their run-off over a 12 month time horizon.

- **NSLT lapse risk**
  
  The basic and additional health insurance are compulsory insurance contracts for one year without intermediate possibility of termination and therefore lapse risk is negligible for the basic health insurance.
Health catastrophe risk

**Medical Expense**

A health catastrophe for NSLT Health portfolio is an unexpected future event with a duration of one year. The risk is determined ultimo year. The amount of catastrophe risk is apparent from the number of insured and parameters for mass accident scenario and pandemic scenario that have been approved by DNB in consultation with Health Insurers Netherlands. Accident concentration is not applicable for NSLT Health. The catastrophe risk has a projection of one year (T) following from the contract boundary of one year in accordance with the Dutch Health Insurance Act. After year T the risk is ‘zero’. Catastrophe risk for AV equals zero because these contracts have a maximum compensation for claims.

**Income Protection**

This component is calculated for policies for which an increase in mortality rates or morbidity rates or disability rates leads to an increase in the best estimate. There are three scenarios, which are calculated for all SLT Health and portfolios.

**Mass accident scenario**

In this scenario, an accident takes place during a major public event. The risk is that 10% of the attendees are killed, 1.5% are permanently disabled, 5% are disabled for 10 years, 13.5% are disabled for 12 months and 30% need medical attention.

**Accident concentration scenario**

In this scenario, an accident takes place on site, with the most of our insured at the same location. The risk is that 10% of those present are killed, 3.5% are permanently disabled, 16.5% are disabled for 12 months and 30% need medical attention.

**Pandemic scenario**

In this scenario, there is a pandemic, which causes 1% of those affected to be hospitalised and 20% to see a local practitioner.

### Health insurance risk - required capital

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health SLT</td>
<td>837</td>
<td>607</td>
</tr>
<tr>
<td>Health Non-SLT</td>
<td>266</td>
<td>233</td>
</tr>
<tr>
<td>Catastrophe Risk (subtotal)</td>
<td>92</td>
<td>77</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-169</td>
<td>-141</td>
</tr>
<tr>
<td><strong>Health (Total)</strong></td>
<td>1,026</td>
<td>777</td>
</tr>
<tr>
<td>Mortality risk</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Longevity risk</td>
<td>34</td>
<td>22</td>
</tr>
<tr>
<td>Disability-morbidity risk</td>
<td>731</td>
<td>523</td>
</tr>
<tr>
<td>Expense risk</td>
<td>113</td>
<td>84</td>
</tr>
<tr>
<td>Revision risk</td>
<td>120</td>
<td>84</td>
</tr>
<tr>
<td>Lapse risk</td>
<td>142</td>
<td>124</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-302</td>
<td>-231</td>
</tr>
<tr>
<td>Health SLT (subtotal)</td>
<td>837</td>
<td>607</td>
</tr>
<tr>
<td>Medical expenses insurance and proportional reinsurance</td>
<td>89</td>
<td>81</td>
</tr>
<tr>
<td>Income protection insurance and proportional reinsurance</td>
<td>209</td>
<td>182</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-33</td>
<td>-30</td>
</tr>
<tr>
<td>Health Non-SLT (subtotal)</td>
<td>266</td>
<td>233</td>
</tr>
<tr>
<td>Mass accident risk</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Accident concentration risk</td>
<td>87</td>
<td>72</td>
</tr>
<tr>
<td>Pandemic risk</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-39</td>
<td>-34</td>
</tr>
<tr>
<td><strong>Catastrophe risk (subtotal)</strong></td>
<td>92</td>
<td>77</td>
</tr>
</tbody>
</table>

The SCR for the Health Non-SLT risk differs from the sum of the amounts reported in the OTSO QRTs. This difference is caused due to a diversification benefit on group level.

For the SLT Health portfolio, the provision at year-end can be broken down as follows under Solvency II.
SLT Health portfolio - technical provisions per segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate</td>
<td>3,702</td>
<td>2,558</td>
</tr>
<tr>
<td>Risk margin</td>
<td>426</td>
<td>301</td>
</tr>
<tr>
<td>Technical provision</td>
<td>4,127</td>
<td>2,859</td>
</tr>
</tbody>
</table>

For the NSLT Health portfolio, the provision at year-end can be broken down as follows under Solvency II.

NSLT Health portfolio - technical provisions per segment

<table>
<thead>
<tr>
<th>Segment</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate</td>
<td>392</td>
<td>445</td>
</tr>
<tr>
<td>Risk margin</td>
<td>39</td>
<td>30</td>
</tr>
<tr>
<td>Technical provision</td>
<td>431</td>
<td>475</td>
</tr>
</tbody>
</table>

C.1.2.2 Non-life insurance risk

Non-life Insurance risk can be broken down into:
- Premium and reserve risk
- Non-life catastrophe risk
- Lapse risk

Premium- and reserve risk

The premium risk is the risk that the premium is not adequate for the underwritten risk. The premium risk is calculated over the maximum of the expected written premium for the next year, and the written premium for the current year. The Premium and reserve risk is derived at the level of a legal entity based on the Standard Model. For the calculation of the Premium and reserve risk, several input data and parameters are necessary, as described in the Standard Model. The geographical spread, when a (re)insurer underwrites products in different countries, is not relevant for a.s.r. schade as there is no material exposure outside the Netherlands.

Non-life Catastrophe Risk Module

Catastrophe risk is defined as the risk of loss or adverse change in the value of insurance liabilities, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events. The Non-life SCR Catastrophic Risk Module used consists of natural catastrophe risk (Windstorm and Hail), man-made catastrophe risk (Fire, Motor and Liability) and other Non-life catastrophe risk. The Non-life Catastrophe Risk Module is derived at the level of a legal entity based on the Standard Model.

Lapse risk

The lapse risk is the loss of basic own funds, caused by the discontinuance of 40% of the policies for which discontinuation would result in an increase in the basic own funds. The lapse risk is calculated as follows:
- Effect of expired future profits on existing contracts (which are already taken into account in the Best Estimate calculation of premium provision) by:
  - Deriving the level of (Solvency II) Line of Business (LOB) based on the assumption of a 40% lapse;
  - Solvency II LOB contains a group of products with the same risk profile which are modelled together;
  - Taking (Solvency II) LOBs into account in case of lapse with an increase in the provision.
- Effect of continuous fixed costs is not taken into account.
Below table summarises the required capital for abovementioned Non-life insurance risks based on the standard model.

<table>
<thead>
<tr>
<th>Non-life insurance risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium and reserve risk</td>
<td>480</td>
<td>447</td>
</tr>
<tr>
<td>Lapse risk</td>
<td>53</td>
<td>36</td>
</tr>
<tr>
<td>Catastrophe risk</td>
<td>104</td>
<td>117</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-119</td>
<td>-109</td>
</tr>
<tr>
<td><strong>Non-life insurance risk</strong></td>
<td><strong>518</strong></td>
<td><strong>491</strong></td>
</tr>
<tr>
<td>Natural catastrophe risk</td>
<td>80</td>
<td>97</td>
</tr>
<tr>
<td>Man-made catastrophe risk</td>
<td>65</td>
<td>63</td>
</tr>
<tr>
<td>Other non-life catastrophe risk</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-57</td>
<td>-58</td>
</tr>
<tr>
<td><strong>Catastrophe risk (subtotal)</strong></td>
<td><strong>104</strong></td>
<td><strong>117</strong></td>
</tr>
</tbody>
</table>

For the Non-life portfolio, the provision at year-end can be broken down as follows under Solvency II:

<table>
<thead>
<tr>
<th>Non-life portfolio - technical provisions per segment</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate</td>
<td>1,276</td>
<td>1,241</td>
</tr>
<tr>
<td>Risk margin</td>
<td>73</td>
<td>66</td>
</tr>
<tr>
<td><strong>Technical provision</strong></td>
<td><strong>1,349</strong></td>
<td><strong>1,306</strong></td>
</tr>
</tbody>
</table>

**C.1.2.3 Managing Health and Non-life insurance risk**

Health and Non-life insurance risk is managed by monitoring claims frequency, the size of claims, inflation, handling time, benefit and claims handling costs, and biometrical risks (disability, recovery, illness, death). Concentration risk also qualifies as an insurance risk.

In recent years, measures have been taken to improve profitability and reduce risk. Examples are: premium increases, stricter acceptance criteria, shorter claims filing terms and making use of the claims reassessment arrangement between the Dutch Association of insurers and social security institute UWV. Effects are being monitored closely and assessed to be effective. New legislation causes flex-workers to become in scope, in force from 1 January 2017. This will invoke market-wide changes to the product design, pricing and conditions, thereby creating both additional market opportunities and additional risks for a.s.r.

**Claims frequency, size of claim and inflation**

To mitigate the risk of claims, a.s.r. bases its underwriting policy on claims history and risk models. The policy is applied to each client segment and to each type of activity. In order to limit claims and/or ensure that prices are adjusted correctly, the acceptance policy is continually refined using a number of indicators and statistical analyses. The product lines also use knowledge or expectations with respect to future trends to estimate the frequency, size and inflation of claims. The risk of unexpected major damage claims is contained by policy limits, the concentration of risk management and specific risk transfer contracts (e.g. reinsurance).

**Handling time**

The time required for handling and settling claims is an important factor. The settlement of claims that have a long handling time, such as liability claims, can take many years. Analyses are performed regularly and based on a.s.r.’s experience in similar cases, historical trends – such as the pattern of liabilities – increases in risk exposure, payment of damages, the scale of current and not yet settled damage claims, court rulings and economic conditions.

**Benefit and claims handling costs**

Taking estimated future inflation into account, benefit and claims handling costs are managed based on regular reviews and related actions.

**Disability risk**

Disability risk is controlled by means of regular evaluation of historical claims patterns, expected future developments and price adjustments. Disability risk is mitigated by a.s.r. through underwriting criteria and a proactive reintegration policy. a.s.r. also mitigates its disability risk through suitable reinsurance.
Concentration risk
Geographically, the risk exposure of a.s.r. on its health and Non-life portfolio is almost entirely concentrated in the Netherlands. Concentration of insurance risks is particularly prevalent in the fire risk portfolio (i.e. home and content, with storm risk forming the most important factor). Storm risk is managed by means of suitable reinsurance (see also ‘Reinsurance’).

There is also a concentration of risk in group disability schemes. Group disability contracts are underwritten within the scope of disability cover for employees in the Netherlands (WIA).

Reinsurance
When deemed effective in terms of capital relief versus costs incurred, a.s.r. enters into reinsurance agreements to mitigate Non-life insurance risks. Reinsurance can be taken out for each separate claim (per risk), for the accumulation of claims due to natural disasters or to human actions (per event), or for both these risks.

The level of retention in the various reinsurance contracts is aligned with the size and the risk profile of the underlying portfolios, taking into account of the cost of reinsurance on the one hand, and the risk that is retained on the other.

C.2 Market risk

Market risk is the risk of potential losses due to adverse movements in financial market variables. Exposure to market risk is measured by the impact of movements in financial variables such as equity prices, interest rates and property prices. The various types of market risk which are discussed in this section, are:

- interest rate risk
- equity risk
- property risk
- currency risk
- spread risk
- concentration risk

Market risk reports are submitted to the FRC at least once a month. Key reports on market risk include the Solvency II and economic capital report, the interest rate risk report and the report on risk budgets related to the strategic asset mix.

A summary of sensitivities to market risks for the regulatory solvency, total equity and profit for the year is presented in the tables below. The first table summarises the required capital for market risks based on the standard model:

<table>
<thead>
<tr>
<th>Market risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate</td>
<td>386</td>
<td>238</td>
</tr>
<tr>
<td>Equity</td>
<td>855</td>
<td>597</td>
</tr>
<tr>
<td>Property</td>
<td>1,090</td>
<td>1,014</td>
</tr>
<tr>
<td>Currency</td>
<td>263</td>
<td>230</td>
</tr>
<tr>
<td>Spread</td>
<td>1,169</td>
<td>1,091</td>
</tr>
<tr>
<td>Concentration</td>
<td>46</td>
<td>122</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-753</td>
<td>-709</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,055</strong></td>
<td><strong>2,584</strong></td>
</tr>
</tbody>
</table>

The main market risks of a.s.r. are spread, property and equity risk. This is in line with the risk budgets based on the strategic asset allocation study. Market risk increased mainly driven by re-risking of the investment portfolio (including scaling back the interest rate hedge).

The value of investment funds at year-end 2019 was € 4,427 million (2018 € 3,650 million). a.s.r. applies the look through approach for investment funds to assess the market risk.

The interest rate risk is the maximum loss of (i) an upward shock or (ii) a downward shock of the yield curve. For a.s.r. the downward shock is dominant.
a.s.r. applies the transitional measure for equity risk for shares in portfolio at 31 December 2015. The SCR equity shock was 22% at 31 December 2015 and linear, increasing to (i) 39% + equity dampener for type I shares and (ii) 49% + equity dampener for type II shares. The equity dampener has a value between -10% and 10%. In the event of increasing equity prices, the equity dampener will have a smaller dampening effect.

The diversification effect shows the effect of having a well-diversified investment portfolio.

### C.2.1 Interest rate risk

Interest rate risk is the risk that the value of assets, liabilities or financial instruments will change due to fluctuations in interest rates. Many insurance products are exposed to interest rate risk; the value of the products is closely related to the applicable interest rate curve. The interest rate risk of insurance products depends on the term to maturity, interest rate guarantees and profit-sharing features. Life insurance contracts are particularly sensitive to interest rate risk. The required capital for interest rate risk is determined by calculating the impact on the available capital due to changes in the yield curve. Both assets and liabilities are taken into account. The interest rate risk is the maximum loss of (i) an upward shock or (ii) a downward shock of the yield curve according to the prescribed methodology. a.s.r. applies a look through approach for investment funds to assess the interest rate risk.

The interest rate risk is calculated by a relative shock up- and downward shock of the risk-free (basis) yield curve. All adjustments (credit spread, volatility adjustment) on this yield curve are considered constant. The yield curve is extrapolated to the UFR. The yield curve after shock is not extrapolated again to the UFR.

The used shocks vary by maturity and the absolute shocks are higher for shorter maturities (descending: 75% to 20% and ascending: -70% to -20%):

- the yield curve up shock contains a minimum shock of 100bps;
- the yield curve after the downward shock is limited to zero (no negative interest rates);
- the yield curves of all currencies are shocked simultaneously.

#### Interest rate risk - required capital

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR interest rate risk up</td>
<td>-30</td>
<td>-97</td>
</tr>
<tr>
<td>SCR interest rate risk down</td>
<td>-386</td>
<td>-238</td>
</tr>
<tr>
<td>SCR interest rate risk</td>
<td>386</td>
<td>238</td>
</tr>
</tbody>
</table>

a.s.r. has assessed various scenarios to determine the sensitivity to interest rate risk. The impact on the solvency ratio is calculated by determining the difference in the change in available and required capital.

#### Solvency II sensitivities - interest rate

<table>
<thead>
<tr>
<th>Effect on:</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31 December 2019</td>
<td>31 December 2018</td>
<td></td>
</tr>
<tr>
<td>UFR 3.2%</td>
<td>-16</td>
<td>-18</td>
<td>-3</td>
</tr>
<tr>
<td>Interest rate +1% (2018 incl. UFR 4.2% / 2019 incl. UFR 4.05%)</td>
<td>-4</td>
<td>-4</td>
<td>+13</td>
</tr>
<tr>
<td>Interest rate -1% (2018 incl. UFR 4.2% / 2019 incl. UFR 4.05%)</td>
<td>+7</td>
<td>+9</td>
<td>-13</td>
</tr>
<tr>
<td>Volatility Adjustment -10bp</td>
<td>-10</td>
<td>-9</td>
<td>-2</td>
</tr>
</tbody>
</table>

Interest rate risk is managed by aligning fixed-income investments to the profile of the liabilities. Among other instruments, swaptions and interest rate swaps are used for hedging the specific interest rate risk arising from interest rate guarantees and profit-sharing features in life insurance products.

An interest rate risk policy is in place for the Group as well as for the registered insurance companies. All interest rate-sensitive balance sheet items are in scope, including the employee benefit obligations of the Group. In principle, the sensitivity of the solvency ratio to interest rates is minimised. In addition, the exposure to interest rate risk or various term buckets is subject to maximum amounts.
C.2.2 Equity risk
The equity risk depends on the total exposure to equities. In order to maintain a good understanding of the actual equity risk, a.s.r. applies the look through approach for investment funds to assess the equity risk.

The required capital for equity risk is determined by calculating the impact on the available capital due to an immediate drop in share prices. Both assets and liabilities are taken into account. Stocks listed in regulated markets in countries in the EEA or OECD are shocked by 39% together with the symmetric adjustment of the equity capital charge (type I). Stocks in countries that are not members of the EEA or OECD, unlisted equities, alternative investments, or investment funds in which the look-through principle is not possible, are shocked by 49% together with the symmetric adjustment of the equity capital charge (type II).

a.s.r. applies the transitional measure for equity risk for shares in portfolio at 31 December 2015. The SCR equity shock was 22% at 31 December 2015 and linear increasing in 7 years to (i) 39% + equity dampener for type I shares and (ii) 49% + equity dampener for type II shares. This resulted in a reduction of the average risk charge of equity risk of about 3.4% per 31 December 2019.

### Equity risk - required capital

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR equity risk - required capital</td>
<td>855</td>
<td>597</td>
</tr>
</tbody>
</table>

The 2019 the equity risk increased mainly due to the positive returns on the equity markets. Besides an increase of the equity portfolio, this also resulted in (i) an higher risk charge due to the equity dampener and (ii) a decrease in the risk mitigating effect of the option portfolio. Besides the impact of the positive equity returns there was also the upward effect due to the run-off of the transitional measure of equity risk.

In case the transitional measure would not be used, SCR equity risk would increase to € 924 million.

### Solvency II sensitivities - equity prices

<table>
<thead>
<tr>
<th>Scenario (%-point)</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity prices -20%</td>
<td>-10</td>
<td>+11</td>
<td>+1</td>
</tr>
</tbody>
</table>

### Composition of equity portfolio

The fair value of equities and similar investments at year-end 2019 was € 2,421 million (2018: € 2,191 million). The increase in 2019 mainly due to the positive returns on the equity markets.

The equities are diversified across the Netherlands (including participating interests), other European countries and the United States. A limited part of the portfolio consists of investments in emerging markets and alternatives. A portfolio of put options with a value of € 5 million is in place to mitigate the equity risk.

The table below shows the exposure of the equity portfolio to different categories. The total value is including the equities in externally managed funds.
Composition equity portfolio

C.2.3 Property risk

The property risk depends on the total exposure to real estate. In order to maintain a good understanding of the actual property risk, a.s.r. applies the look-through approach for investment funds to assess the property risk.

The required capital for property risk is determined by calculating the impact on the available capital due to an immediate drop in property prices by 25%. Both assets and liabilities are taken into account.

Property risk - required capital

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR property risk - required capital</td>
<td>1,090</td>
<td>1,014</td>
</tr>
</tbody>
</table>

Since 2019Q3 EIOPA allows to apply the Look Through approach for participations. a.s.r. applies Look through approach for participations which activities are primarily real estate investments.

Besides this methodology change, the real estate exposure also increased due to both transactions and increases in property prices. As a result the required capital for property risk increased.

The sensitivity of the solvency ratio to changes in property value is monitored on a monthly basis. Sensitivity of regulatory solvency (Solvency II) to changes in property prices is shown in the following table.

Solvency II sensitivities - property values

<table>
<thead>
<tr>
<th>Effect on:</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
</table>

The property risk depends on the total exposure to property, which includes both property investments and property held for own use. The fair value of property was €4,524 million at year-end 2019 (2018: €4,111 million). The increase in 2019 was a result of both transactions and increases in property prices.

Besides this, the real estate exposure also increased due to a change in EIOPA regulation, which made it possible to allow look through for participations which activities are primarily real estate investments. The property investments are diversified across the Netherlands.
C.2.4 Currency risk

Currency risk measures the impact of losses related to changes in currency exchange rates. The table below provides an overview of all currencies with the largest exposures. a.s.r. has currency risk to insurance products in American dollars (USD), Australian dollars (AUD) and South African Rands (ZAR). The policy of a.s.r. is in principle to hedge the currency risk excluding investments in equities and investments that are externally managed. However, certain currency exposures are permitted from a tactical perspective within a specific risk budget.

The required capital for currency risk is determined by calculating the impact on the available capital due to a change in exchange rates. Both assets and liabilities are taken into account and a look-through approach is applied for investment funds. For each currency the maximum loss due to an upward and a downward shock of 25% is determined except for a small number of currencies where lower shocks are applied (Danish crown; Bulgarian lev).

<table>
<thead>
<tr>
<th>Currency risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR currency risk - required capital</td>
<td>263</td>
<td>230</td>
</tr>
</tbody>
</table>

Specification currencies with largest exposure

Foreign stocks have substantially increased in the following currencies: USD, AUD, CHF. The liabilities have substantially decreased in USD and AUD.

Composition currency portfolio
C.2.5 Spread risk

Spread risk arises from the sensitivity of the value of assets and liabilities to changes in the level of credit spreads on the relevant risk-free interest rates. a.s.r. has a policy of maintaining a well-diversified high-quality investment grade portfolio while avoiding large risk concentrations. Going forward, the volatility in spreads will continue to have possible short-term effects on the market value of the fixed income portfolio. In the long run, the credit spreads are expected to be realised and to contribute to the growth of the own funds. The required capital for spread risk is determined by calculating the impact on the available capital due to the volatility of credit spreads over the term structure of the risk-free rate.

The required capital for spread risk is equal to the sum of the capital requirements for bonds, structured products and credit derivatives. The capital requirement depends on (i) the market value, (ii) the modified duration and (iii) the credit quality category.

**Spread risk - required capital**

<table>
<thead>
<tr>
<th>SCR spread risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,169</td>
<td>1,091</td>
</tr>
</tbody>
</table>

The SCR spread risk increased in 2019. The SCR spread risk increased due to a larger fixed income portfolio, mainly due to the acquisition of Loyalis and the decrease in interest rates. On the other hand SCR spread risk decreased due to the shortening duration of the credit portfolio.

The sensitivity to spread risk is measured as the impact of an increase of spread on loans and corporate bonds of 75 bps. The VA is based on a reference portfolio. An increase of 75 bps of the spreads on loans and corporate bonds within the reference portfolio leads to an increase of the VA with 18 bps in 2019 (2018: 20 bps). The decrease of the credit spread sensitivity from +21 to +15 is mainly caused by the fact that the interest rate down becomes dominant in this scenario, whereas the interest rate up was dominant previous year. This led to a smaller diversification in the market risk module and therefore to a lower impact of the SCR on the ratio.

**Solvency II sensitivities - spread risk**

<table>
<thead>
<tr>
<th>Effect on:</th>
<th>Available capital</th>
<th>Required capital</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario (%-point)</td>
<td>31 December 2019</td>
<td>31 December 2018</td>
<td>31 December 2019</td>
</tr>
<tr>
<td>Spread +75bps/(2018: VA +20bps/2019: VA + 18bps)</td>
<td>+11</td>
<td>+11</td>
<td>+4</td>
</tr>
</tbody>
</table>

**Composition of fixed income portfolio**

Spread risk is managed on a portfolio basis within limits and risk budgets established by the relevant risk committees. Where relevant, credit ratings provided by the external rating agencies are used to determine risk budgets and monitor limits. A limited number of fixed-income investments do not have an external rating. These investments are generally assigned an internal rating. Internal ratings are based on methodologies and rating classifications similar to those used by external agencies. The following tables provide a detailed breakdown of the fixed-income exposure by (i) rating class and (ii) sector. Assets in scope of spread risk are, by definition, not in scope of counterparty default risk.

The total exposure of assets in scope of spread risk is € 31,297 million (2018: € 25,236 million). The increase of the portfolio is mainly due to the acquisition of Loyalis and transactions. The portfolio decomposition is similar to 2018, except:

- the relatively amount of non-core government bonds increased and the relatively amount of Corporates decreased;
- the relatively amount of A decreased and the relatively amount of AA and BBB increased.
Composition fixed income portfolio by sector

![Composition fixed income portfolio by sector 2019 and 2018](image)

Composition fixed income portfolio by rating

![Composition fixed income portfolio by rating 2019 and 2018](image)

C.2.6 Market risk concentrations

Concentrations of market risk constitute an additional risk to an insurer. Concentration risk is the concentration of exposures to the same counterparty. Other possible concentrations (region, country, etc.) are not in scope. The capital requirement for concentration risk is determined in three steps:

1. Determine the exposure above threshold. The threshold depends on the credit quality of the counterparty;
2. Calculation of the capital requirement for each counterparty, based on a specified factor depending on the credit quality;
3. Aggregation of individual capital requirements for the various counterparties.

According to the spread risk module, bonds and loans guaranteed by a certain government or international organization are not in scope of concentration risk. Bank deposits can be excluded from concentration risk if they fulfill certain conditions.

### Concentration risk - required capital

<table>
<thead>
<tr>
<th>SCR concentration risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR concentration risk - required capital</td>
<td>46</td>
<td>122</td>
</tr>
</tbody>
</table>

The decrease in 2019 is mainly caused by the acquisition of Loyalis which led to an increase of the threshold. In order to avoid concentrations in a single obligor, a.s.r. applies a limit on maximum exposure of €700 million for issuers with a single A rating and higher and €350 million for issuers with a BBB rating. The limits apply to the total investment portfolio, where government bonds are not included, which is consistent with Solvency II. Beside the limits on single obligors, a.s.r. applies also limits on the total level of the required capital for market risk concentrations.

The required capital for market risk concentrations is due to short term deposits received as collateral for the interest rate derivatives.
C.3 Counterparty default risk

Counterparty default risk reflects possible losses due to unexpected default or deterioration in the credit standing of counterparties and debtors. Counterparty default risk affects several types of assets:

- mortgages
- savings-linked mortgage loans (“Spaarlossen”)
- derivatives
- reinsurance
- receivables
- cash and deposits

Assets that are in scope of spread risk are, by definition, not in scope of counterparty default risk and vice versa. The Solvency II regime makes a distinction between two types of exposures:

- Type 1: These counterparties generally have a rating (reinsurance, derivatives, current account balances, deposits with ceding companies and issued guarantee (letter of credit). The exposures are not diversified.
- Type 2: These counterparties are normally unrated (receivables from intermediaries and policyholders, mortgages with private individuals or SMEs). The exposures are generally diversified.

The total capital requirement for counterparty risk is an aggregation of the capital requirement for type 1 exposure and the capital requirement for type 2 exposure by taking 75% correlation.

<table>
<thead>
<tr>
<th>Counterparty default risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>144</td>
<td>231</td>
</tr>
<tr>
<td>Type 2</td>
<td>338</td>
<td>352</td>
</tr>
<tr>
<td>Diversification (negative)</td>
<td>-26</td>
<td>-36</td>
</tr>
<tr>
<td>Total</td>
<td>456</td>
<td>547</td>
</tr>
</tbody>
</table>

The Counterparty risk type 1 has decreased a) due to decrease of cash position and b) due to new regulation for derivatives exposure. The counterparty risk type 2 has decreased a) due to the lower volume of the receivables from

C.3.1 Mortgages

Mortgages are granted for the account and risk of third parties and for a.s.r.’s own account. The a.s.r. portfolio consists only of Dutch mortgages with a limited counterparty default risk. The fair value of a.s.r.’s mortgage portfolio was €8,401 million at year-end 2019 (2018: €7,546 million).

Composition mortgage portfolio

The Loan-to-Value ratio is based on the value of the mortgage according SII principals with respect to the a.s.r. calculated collateral.
The default percentage (i.e. the percentage of mortgages which is in arrears for over three months) has decreased from 0.10% in December 2018 to 0.05% in December 2019. This drop is a consequence of the improved economic circumstances and of the organisation of preventive management, whereby the flow of short-term arrears to longer delays could be reduced.

### C.3.2 Savings-linked mortgage loans

The counterparty default risk of the savings-linked mortgage loans (“Spaarlossen”) depends on the counterparty. For 38% of the portfolio, the counterparties are Special Purpose Vehicles (SPVs). The risk is limited due to the robust quality of the mortgages in the SPVs in combination with the tranching. a.s.r. has a cession-retrocession agreement with the counterparty for 59% of the portfolio, for which the risk is limited. Effectively, a.s.r. receives the underlying mortgage loans as collateral, mitigating the counterparty default risk of the savings-linked mortgage loans.

#### Composition savings-linked mortgage loans portfolio

<table>
<thead>
<tr>
<th>Counterparty SPV</th>
<th>Agreement cession-retrocession</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>38%</td>
<td>45%</td>
<td>5%</td>
</tr>
</tbody>
</table>

### C.3.3 Derivatives

Over the Counter (OTC) derivatives are primarily used by a.s.r. to manage the interest-rate risks incorporated into the insurance liabilities. Interest-rate derivatives are traded with a well-diversified and qualitative dealer panel with whom there is an established International Swaps and Derivatives Association (ISDA) contract and a Credit Support Annex (CSA) in place. These CSAs include specific agreements on the exchange of collateral limiting market and counterparty risk. The outstanding value of the interest rate derivative positions is matched by collateral received from eligible counterparties, minimising the net counterparty default risk.

### C.3.4 Reinsurance

a.s.r. collaborates with reinsurers for fire and catastrophe risk. When entering into reinsurance contracts for fire and catastrophe, a.s.r. requires the counterparty to be rated at least single A. With respect to long-tail business and other sectors, the minimum permitted rating is single A.

The table below shows the exposure to reinsurers per rating. The total exposure to reinsurers at year-end 2019 was € 539 million (2018: € 549 million).

#### Composition reinsurance counterparties by rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>AA</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>A</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>NR</td>
<td>3%</td>
<td>6%</td>
</tr>
</tbody>
</table>
C.3.5 Receivables

Composition receivables

<table>
<thead>
<tr>
<th></th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policyholders</td>
<td>144</td>
<td>158</td>
</tr>
<tr>
<td>Intermediaries</td>
<td>93</td>
<td>89</td>
</tr>
<tr>
<td>Reinsurance operations</td>
<td>188</td>
<td>111</td>
</tr>
<tr>
<td>Health insurance fund</td>
<td>106</td>
<td>102</td>
</tr>
<tr>
<td>Other</td>
<td>278</td>
<td>292</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>808</strong></td>
<td><strong>752</strong></td>
</tr>
</tbody>
</table>

C.3.6 Cash and cash equivalents

The current accounts on the balance sheet amounted €1,782 million in 2019 (2018: €2,625 million).

Composition cash accounts by rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A</td>
<td>1,756</td>
<td>2,611</td>
</tr>
<tr>
<td>Lower than A</td>
<td>26</td>
<td>14</td>
</tr>
</tbody>
</table>

Composition deposits by rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secured deposits</td>
<td>420</td>
<td>320</td>
</tr>
<tr>
<td>AAA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AA</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>420</strong></td>
<td><strong>320</strong></td>
</tr>
</tbody>
</table>

C.4 Liquidity risk

Liquidity risk is the risk that a.s.r. is not able to meet its financial obligations to policyholders and other creditors when they become due and payable, at a reasonable cost and in a timely manner. Liquidity risk is not quantified in the SCR of a.s.r, and is therefore separately discussed here.

a.s.r. recognises different levels of liquidity management. Short-term liquidity, or daily cash management, covers the day-to-day cash requirements and targets funding liquidity risk. Long-term liquidity management considers business conditions in which market liquidity risk materialises. Stress liquidity management is related to the ability to respond to a potential crisis situation as a result of a market event and an a.s.r.-specific event. Unexpected cash outflows could for example occur as result of lapses in the insurance portfolio, catastrophe risk or cash variation margin payments related to the ISDA/CSA agreements of derivatives. a.s.r. monitors its liquidity risk via different risk reporting and monitoring processes including daily cash management reports, cash flow forecasts and stress scenario liquidity reports.

a.s.r.'s liquidity management principle consists of three components. First, a well-diversified funding base which is necessary in order to provide liquidity for cash management purposes. A portion of assets must be invested in unencumbered marketable securities that can be used for collateralised borrowing or asset sales. Second, the strategic asset allocation should reflect the expected and contingent liquidity needs of liabilities. Finally, an adequate and up-to-date liquidity policy and contingency liquidity plan are in place to enable management to act effectively and efficiently in times of crisis.

In managing the liquidity risk from financial liabilities, a.s.r. holds liquid assets comprising cash and cash equivalents and investment grade securities for which there is an active and liquid market. These assets can be readily sold to meet liquidity requirements. As at 31 December 2019, a.s.r. had cash (€1,599 million), short-term deposits (€1,566 million) and liquid government bonds (€16,314 million). Furthermore a.s.r. has access to committed cash facilities and an unsecured revolving credit facility in order to meet its liquidity needs in times of stress.
The following table shows the contractual undiscounted cash flows of the insurance and financial liabilities. The insurance liabilities are excluding insurance contracts on behalf of policyholders and include the impact of expected lapses and mortality risk. Profit-sharing cash flows of insurance liabilities are not taken into account, nor are equities, property and swaptions.

### Contractual cashflows

<table>
<thead>
<tr>
<th></th>
<th>Payable on demand</th>
<th>&lt; 1 years</th>
<th>1-5 years</th>
<th>5-10 years</th>
<th>&gt; 10 years</th>
<th>Total carrying value</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance liabilities</td>
<td>-</td>
<td>2,897</td>
<td>7,971</td>
<td>7,323</td>
<td>25,193</td>
<td>51,032</td>
</tr>
<tr>
<td>Derivatives liabilities</td>
<td>-</td>
<td>130</td>
<td>288</td>
<td>131</td>
<td>188</td>
<td>676</td>
</tr>
<tr>
<td>Financial liabilities</td>
<td>5,995</td>
<td>501</td>
<td>113</td>
<td>115</td>
<td>1,007</td>
<td>7,721</td>
</tr>
<tr>
<td>Future interest payments</td>
<td>43</td>
<td>170</td>
<td>213</td>
<td>748</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,995</td>
<td>3,571</td>
<td>8,541</td>
<td>7,781</td>
<td>27,135</td>
<td>59,429</td>
</tr>
<tr>
<td>31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance liabilities</td>
<td>-</td>
<td>1,779</td>
<td>6,017</td>
<td>6,655</td>
<td>26,412</td>
<td>43,466</td>
</tr>
<tr>
<td>Derivatives liabilities</td>
<td>-</td>
<td>215</td>
<td>220</td>
<td>-41</td>
<td>108</td>
<td>435</td>
</tr>
<tr>
<td>Financial liabilities</td>
<td>3,054</td>
<td>645</td>
<td>26</td>
<td>85</td>
<td>506</td>
<td>4,313</td>
</tr>
<tr>
<td>Future interest payments</td>
<td>-</td>
<td>27</td>
<td>103</td>
<td>128</td>
<td>427</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,054</td>
<td>2,667</td>
<td>6,366</td>
<td>6,827</td>
<td>27,453</td>
<td>48,214</td>
</tr>
</tbody>
</table>

When the amount payable is not fixed the amount reported is determined by reference to the conditions existing at the reporting date.

Financial liabilities payable on demand include the liability recognised for cash collateral received under ISDAs, concluded with counterparties. The related cash collateral received is recognised as cash and cash equivalents, and not part of the liquidity risk exposure table.

### Expected profit included in future premiums

The expected profit included in future premiums (EPIFP) means the expected present value of future cash flows which result from the inclusion in technical provisions of premiums relating to existing insurance and reinsurance contracts that are expected to be received in the future, but that may not be received for any reason, other than because the insured event has occurred, regardless of the legal or contractual rights of the policyholder to discontinue the policy.

<table>
<thead>
<tr>
<th>EPIFP</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPIFP</td>
<td>1,073</td>
<td>1,267</td>
</tr>
</tbody>
</table>

### C.5 Operational risk

Operational risk is the risk of losses resulting from inadequate or failing internal processes, persons and systems, or from external events (including legal risk). The main areas where operational risks are incurred are operations, IT, outsourcing, integrity and legal issues.

<table>
<thead>
<tr>
<th>Operational risk - required capital</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR operational risk - required capital</td>
<td>237</td>
<td>212</td>
</tr>
</tbody>
</table>

The SCR for operational risk amounts to €237 million at the end of 2019 (2018: €212 million) and is determined with the standard formula under Solvency II. The operational risk is based on the basic SCR, the volumes of premiums and technical provisions, and the amount of expenses.

Operational risk increased mainly due to the decreased interest rates in 2019.
C.6 Other material risks

As part of the regular ORSA process, the overall risk profile and associated solvency capital needs are assessed against a.s.r.’s actual solvency capital position. The most important risks to which a.s.r. is exposed, including risks that are not incorporated into the standard formula, are identified through a combined top-down (strategic risk assessment) and bottom-up (control risk self-assessments) approach. After assessment of the effectiveness of the mitigating measures, the risks with the highest ‘Level of Concern’ (LoC) are translated to the a.s.r. risk priorities and relevant risk scenarios for the ORSA. The following risks, outside the scope of the standard formula, are recognised by a.s.r. as being potentially material:

- Inflation risk;
- Reputation risk;
- Liquidity risk;
- Contagion risk;
- Legal environment risk;
- Model risk;
- Risks arising from non-insurance activities (non-OTSOs);
- Strategic risk;
- Emerging risk.

As part of the appropriateness assessment of the standard formula mitigating measures regarding these risks are identified and evaluated.

C.7 Any other information

C.7.1 Description of off-balance sheet positions

Off balance sheet positions different from the financial statements do not exist.

C.7.2 Reinsurance policy and risk budgeting

C.7.2.1 Reinsurance policy

When deemed effective in terms of capital relief versus costs incurred, a.s.r. enters into reinsurance agreements to mitigate Non-life insurance risks. Reinsurance can be taken out for each separate claim (per risk), for the accumulation of claims due to natural disasters or to human actions (per event), or for both these risks.

The level of retention in the various reinsurance contracts is aligned with the size and the risk profile of the underlying portfolios, taking account of the cost of reinsurance on the one hand, and of the risk that is retained on the other. By determining the retention, the impact on the statement of financial position is taken into account as well.

To limit risk concentration, reinsurance contracts are placed with various reinsurance companies. a.s.r. requires the counterparties to be rated at least single A-. The reinsurance programme has remained largely the same as in previous years in terms of cover and limits. In 2018, a.s.r. purchased excess of loss reinsurance for accident year 2019 for Windstorm in excess of €35 million with a limit of €535 million.

C.7.2.2 Risk budgeting

The FRC assesses the solvency position and the financial risk profile on a monthly basis. Action is taken where appropriate to ensure the predefined levels in the risk appetite statement will not be violated.

C.7.3 Monitoring of new and existing products

Group Risk Management, Compliance, and Legal Affairs participate in the Product Approval Committee (PARP). All these departments evaluate whether risks in newly developed products are sufficiently addressed. New products need to be developed in a way that they are cost efficient, reliable, useful and secure. New products must also be strategically aligned with a.s.r.’s mission to be a solid and trustworthy insurer. In addition, the risks of existing products are evaluated, as requested by the PARP, as a result of product reviews.

C.7.4 Prudent Person Principle

a.s.r. complies with the prudent person principles as set out in Directive 2009/138/EC/article 132: Prudent person principle. The prudent person principle ensures that assets are managed on behalf of its subsidiaries, policyholders or other stakeholders in a prudent manner, and covers aspects that relate to market, credit, liquidity and operational risk. a.s.r. has mandated ASR Vermogensbeheer NV as their asset manager.
a.s.r. ensures that assets of policyholders or other stakeholders are managed in a prudent manner. a.s.r. complies with the “Prudent Person Principle” by investing only in assets and instruments which a.s.r. can adequately assess, measure, monitor, control, maintain and report the risks. All assets will be assessed against solvency criteria according to article 45 (1a).

Derivatives are only used when these contribute to a lower risk or when it can be used to manage/hedge the portfolio more efficient. Mortgages, real estate and illiquid assets, which are not traded on regulated financial markets, are limited to a prudent level.

**Governance of Investments**

Within the Three Lines-of-Defence model, investments are managed in the first line by ASR Vermogensbeheer NV, reporting to the CFO of a.s.r.

ASR Vermogensbeheer NV manages its investments within the boundaries of a.s.r.’s Risk Appetite Framework, Strategic Asset Allocation and its Market-Risk Budget. The Market-Risk Budget is calculated on a monthly basis by Group Balance Sheet Management (GBSM), taking into account the Risk Appetite Framework. Group Risk Management, acting as the second line of defence, is responsible for the review. Internal Audit acts as the third-line of defence.

a.s.r. has established a structure of risk committees with the objective to monitor the risk profile for a.s.r. group, its legal entities and its business lines in order to ensure that it remains within the risk appetite and the underlying risk tolerances and risk limits. When triggers are hit or likely to be hit, risk committees make decisions regarding measures to be taken, being risk-mitigating measures or measures regarding governance, such as the frequency of their meetings.

All investment related activities are performed according to mandates as set by a.s.r., clients or policyholders. Mandates for investments for own account, clients and for account of policyholders are set out in internal guidelines, in order to ensure that prudent person principles are satisfied. This should always be in line with internal policies and internal constraints (such as a.s.r.’s ESG policy) and external constraints (such as regulatory limits).
This chapter contains information regarding the valuation of the balance sheet items. For each material asset class, the bases, methods, and main assumptions used for valuation for Solvency II purposes are described. Separately for each material class of assets a quantitative and qualitative explanation of any material difference between the valuation for Solvency II purposes and valuation in the financial statements. When accounting principles are equal or when line items are not material, line items are clustered together.

Valuation of assets is based on fair value measurement as described below. Each material asset class is described in paragraph D.1. Valuation of technical provisions is calculated as the sum of the best estimate and the risk margin. This is described in paragraph D.2. Other liabilities are described in paragraph D.3.

Information for each material line item is based on the balance sheet below. For each line item is described:

- Methods and assumptions for valuation
- Difference between Solvency II valuation and valuation in the financial statements

The numbering of the line items refers to the comments below.

Based on the differences in this template a reconciliation is made between IFRS equity and Solvency II equity.

### Reconciliation IFRS balance sheet and Solvency II balance sheet

<table>
<thead>
<tr>
<th>Balance sheet</th>
<th>31 December 2019 IFRS</th>
<th>Revaluation</th>
<th>Deconsolidation Financial Institutions</th>
<th>31 December 2019 Solvency II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Deferred acquisition costs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Intangible assets</td>
<td>466</td>
<td>-466</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Deferred tax assets</td>
<td>197</td>
<td>-197</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Property, plant, and equipment held for own use</td>
<td>189</td>
<td>-</td>
<td>-189</td>
<td>189</td>
</tr>
<tr>
<td>5. Investments - Property (other than for own use)</td>
<td>2,028</td>
<td>-</td>
<td>-2,028</td>
<td>2,028</td>
</tr>
<tr>
<td>6. Investments - Equity</td>
<td>6,513</td>
<td>9</td>
<td>100</td>
<td>6,622</td>
</tr>
<tr>
<td>7. Investments - Bonds</td>
<td>29,195</td>
<td>-</td>
<td>-29,195</td>
<td>29,195</td>
</tr>
<tr>
<td>8. Investments - Derivatives</td>
<td>6,152</td>
<td>-</td>
<td>-6,152</td>
<td>-</td>
</tr>
<tr>
<td>9. Unit-linked investments</td>
<td>9,564</td>
<td>-</td>
<td>-9,564</td>
<td>9,564</td>
</tr>
<tr>
<td>10. Loans and mortgages</td>
<td>10,565</td>
<td>1,933</td>
<td>-12,498</td>
<td>12,498</td>
</tr>
<tr>
<td>11. Reinsurance recoveries</td>
<td>759</td>
<td>42</td>
<td>800</td>
<td>-</td>
</tr>
<tr>
<td>12. Cash and cash equivalents</td>
<td>3,202</td>
<td>-</td>
<td>-85</td>
<td>3,118</td>
</tr>
<tr>
<td>13. Any other assets, not elsewhere shown</td>
<td>882</td>
<td>-66</td>
<td>-78</td>
<td>738</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>69,712</strong></td>
<td><strong>1,255</strong></td>
<td><strong>-62</strong></td>
<td><strong>70,904</strong></td>
</tr>
</tbody>
</table>

| 14. Technical provisions (best estimates)    | 38,555                 | 246         | -38,801                                | -                           |
| 15. Technical provisions (risk margin)       | -                      | 2,445       | -2,445                                 | -                           |
| 16. Unit-linked best estimate                | 12,477                 | -2,687      | -9,790                                 | -                           |
| 17. Unit-linked risk margin                  | -                      | 84          | -84                                    | -                           |
| 18. Pension benefit obligations              | 3,835                  | -           | -3,835                                 | -                           |
| 19. Deferred tax liabilities                 | -                      | 144         | -144                                   | -                           |
| 20. Subordinated liabilities                 | 1,994                  | 45          | -2,039                                 | -                           |
| 21. Other liabilities                       | 7,753                  | 1           | -57                                    | 7,697                       |
| **Total liabilities**                        | **64,613**             | **278**     | **-57**                                | **64,835**                  |

**Excess of assets over liabilities**

| Excess of assets over liabilities            | 5,099                  | 976         | -6                                     | 6,069                       |
This chapter contains also the reconciliation between the excess of assets over liabilities to eligible own fund.

### Reconciliation excess of assets over liabilities to Eligible Own Funds

<table>
<thead>
<tr>
<th>Gross of tax</th>
<th>31 December 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IFRS equity</strong></td>
<td></td>
</tr>
<tr>
<td>i. Hybrid loans</td>
<td>-1,004</td>
</tr>
<tr>
<td>ii. Share buy back</td>
<td>9</td>
</tr>
<tr>
<td><strong>IFRS equity adjusted</strong></td>
<td>5,099</td>
</tr>
<tr>
<td><strong>Revaluation assets</strong></td>
<td></td>
</tr>
<tr>
<td>i. Intangible assets</td>
<td>-213</td>
</tr>
<tr>
<td>ii. Loans and mortgages</td>
<td>1,942</td>
</tr>
<tr>
<td>iii. Reinsurance</td>
<td>42</td>
</tr>
<tr>
<td>iv. Cash and cash equivalents</td>
<td>-</td>
</tr>
<tr>
<td>v. Any other assets, not elsewhere shown</td>
<td>-65</td>
</tr>
<tr>
<td><strong>Total revaluation assets</strong></td>
<td>1,705</td>
</tr>
<tr>
<td><strong>Revaluation liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>i. Technical provisions (best estimates)</td>
<td>-2,445</td>
</tr>
<tr>
<td>ii. Technical provisions (risk margin)</td>
<td>2,687</td>
</tr>
<tr>
<td>iii. Unit-linked best estimate</td>
<td>-84</td>
</tr>
<tr>
<td>iv. Unit-linked risk margin</td>
<td>-45</td>
</tr>
<tr>
<td>v. Subordinated liabilities</td>
<td>-1</td>
</tr>
<tr>
<td>vi. Other liabilities</td>
<td>-135</td>
</tr>
<tr>
<td><strong>Total revaluation liabilities</strong></td>
<td>-246</td>
</tr>
<tr>
<td><strong>Total gross revaluations</strong></td>
<td>1,571</td>
</tr>
<tr>
<td><strong>Tax percentage</strong></td>
<td>21.7%</td>
</tr>
<tr>
<td><strong>Total net revaluations</strong></td>
<td>1,230</td>
</tr>
<tr>
<td><strong>Other Revaluations</strong></td>
<td></td>
</tr>
<tr>
<td>i. Goodwill</td>
<td>-</td>
</tr>
<tr>
<td>ii. Participations</td>
<td>-6</td>
</tr>
<tr>
<td>iii. Valuation difference Financial Institutions</td>
<td>-1</td>
</tr>
<tr>
<td>iv. Valuation difference Own shares</td>
<td>-259</td>
</tr>
<tr>
<td><strong>Solvency II equity</strong></td>
<td>6,069</td>
</tr>
<tr>
<td><strong>Own fund items</strong></td>
<td></td>
</tr>
<tr>
<td>i. Subordinated liabilities</td>
<td>2,039</td>
</tr>
<tr>
<td>ii. Deduction Participations Financial Institutions</td>
<td>-103</td>
</tr>
<tr>
<td>iii. Foreseeable dividend</td>
<td>-169</td>
</tr>
<tr>
<td>iv. Own shares</td>
<td>-8</td>
</tr>
<tr>
<td>v. Non-available minority interests</td>
<td>-</td>
</tr>
<tr>
<td><strong>Eligible Own Funds Solvency II excl Financial Institutions</strong></td>
<td>7,828</td>
</tr>
</tbody>
</table>
D.1 Assets

Valuation of most financial assets is based on fair value. In the paragraph below, this valuation methodology is described. For different line items, there will be a reference to this method. In this paragraph, line items 1–13 from the simplified balance sheet above are described.

D.1.1 Fair value measurement

In accordance with the Delegated Regulation, Solvency II figures are based on fair value. In line with the valuation methodology described in article 75 and further of the Delegated Regulation and articles 9 and 10, the following three hierarchical levels are used to determine the fair value of financial instruments and non-financial instruments when accounting for assets and liabilities at fair value:

**Level 1: Fair value based on quoted prices in an active market**

Level 1 includes assets and liabilities whose value is determined by quoted (unadjusted) prices in the primary active market for identical assets or liabilities.

A financial instrument is quoted in an active market if:
- Quoted prices are readily and regularly available (from an exchange, dealer, broker, sector organisation, third party pricing service, or a regulatory body); and
- These prices represent actual and regularly occurring transactions on an arm’s length basis.

Financial instruments in this category primarily consist of bonds and equities listed in active markets. Cash and cash equivalents are also included as level 1.

**Level 2: Fair value based on observable market data**

Determining fair value on the basis of Level 2 involves the use of valuation techniques that use inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is derived from prices of identical or similar assets and liabilities). These observable inputs are obtained from a broker or third party pricing service and include:
- Quoted prices in active markets for similar (not identical) assets or liabilities;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Input variables other than quoted prices observable for the asset or liability. These include interest rates and yield curves observable at commonly quoted intervals, volatility, loss ratio, credit risks and default percentages.

This category primarily includes:
- Financial instruments: unlisted fixed-interest preference shares and interest rate contracts;
- Financial instruments: loans and receivables (excluding mortgage loans)\(^1\);
- Other financial assets and liabilities.

**Level 3: Fair value not based on observable market data**

The fair value of the level 3 assets and liabilities are determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument and for which any significant inputs are not based on available observable market data. The financial assets and liabilities in this category are assessed individually.

Valuation techniques are used to the extent that observable inputs are not available. The basic principle of fair value measurement is still to determine a fair, arm’s length price. Unobservable inputs therefore reflect management’s own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). These inputs are generally based on the available observable data (adjusted for factors that contribute towards the value of the asset) and own source information.

This category primarily includes:
- Financial instruments: private equity investments (or private equity partners) and real estate equity funds third parties;
- Financial instruments: loans and receivables – mortgage loans, and mortgage equity funds;
- Investment property, real estate equity funds associates and buildings for own use;
- Financial instruments: asset-backed securities.

---

\(^1\) Not measured at fair value on the balance sheet and for which the fair value is disclosed.
D.1.2 Assets per asset category

The balance sheet reports specify different asset categories. In this section, we describe the valuation of each material asset category. The figures correspond to the extended balance sheet which has been reported as QRT S.02.01.

1. Deferred acquisition costs

a.s.r.’s accounting policy is that all costs incurred to acquire insurance contracts (acquisition costs) are charged directly to the income statement, generally within one year.

2. Intangible assets

The intangible assets related to goodwill and other intangible assets are not recognised in the Solvency II framework and are set to nil.

3. Deferred tax assets

The basis for the deferred tax assets (DTA)/deferred tax liabilities (DTL) position in the IFRS balance sheet is temporary differences between fiscal and commercial valuation. This DTA / DTL position is the base for this line item on the Solvency II balance sheet, adjusted for Solvency II revaluations:

- The largest DTL mutation is mainly caused by the higher (valuation) mortgages and change of savings linked mortgages.

In accordance with the Delegated Regulation the DTA / DTL position is netted in the balance sheet. The balance sheet of a.s.r. contains a DTL.

The deferred tax effects involve a correction related to the fact that (most of) the revaluations as described in this chapter are gross of tax. In 2019, Dutch government decided the tax rate will gradually decrease from 25% to 21.7% in 2021. Because most revaluations will materialise after 2021, the tax effect is calculated at 21.7%.

4. Property plant, and equipment held for own use

a.s.r. recognises property at market value, equal to Solvency II measurement.

5. Investments - Property (other than for own use)

a.s.r. recognises the following categories of investment property; the method for calculating their fair value has been added:

- Residential – based on reference transaction and discounted cash flow method (DCF method);
- Retail – based on reference transaction and income capitalisation method;
- Rural – based on reference transaction and DCF method;
- Offices – based on reference transaction and DCF method;
- Other – based on reference transaction and DCF method;
- Under construction - based on both DCF and income capitalisation method.

6. Investments – Equity

Valuation of listed equities is based on the level 1 method of the fair value hierarchy. Unlisted fixed-interest preference shares are valued based on the level 2 method of the fair value hierarchy. The valuation techniques for financial instruments start from present value calculations; derivatives are valued based on forward-pricing and swap models. The observable market data contains yield curves based on company ratings and characteristics of unlisted fixed-interest preference shares. The main non-observable market input for private equity investments is the net asset value of the investment as published by the private equity company (or partner).

Valuation of private equity investments is based on the level 3 method of the fair value hierarchy. The main non-observable market input for private equity investments is the net asset value of the investment as published by the private equity company (or partner).

The revaluation from IFRS to Solvency II can be explained mainly by the deconsolidation of financial institutions. The deconsolidation amounted to € 100 million.

7. Investments – Bonds

The valuation of these assets is consistent with the IFRS fair value hierarchy as described in paragraph D.1.1.

8. Investments – Derivatives

The valuation of these assets is consistent with the fair value hierarchy as described in paragraph D.1.1. The valuation of listed derivatives is based on the level 1 method of the fair value hierarchy. The valuation of unlisted interest rate contracts...
is based on the level 2 method of the fair value hierarchy. The valuation techniques for financial instruments start from present value calculations; derivatives are valued based on forward-pricing and swap models. The observable market data contains yield curves based on company ratings and characteristics of unlisted fixed-interest preference shares.

9. Unit-Linked investments
The valuation of these assets is consistent with the IFRS fair value hierarchy described in paragraph D.1.1.

10. Loans and mortgages
The valuation of loans is based on the level 2 and level 3 (mortgages) method of the fair value hierarchy. The fair value of the loans is based on the discounted cash flow method. It is obtained by calculating the present value based on expected future cash flows and assuming an interest rate curve used in the market that includes an additional spread based on the risk profile of the counterparty. This asset category includes savings linked mortgages.

Many of the savings-linked mortgages that a.s.r. has sold in the past were combined with a mortgage loan from an external bank. This bank has undertaken to pay mortgage interest on the savings accrued in the insurance policy. To this end, the insurer transfers the premiums to a special deposit account with the bank. According to IFRS, both the insurance policy and the loan are measured at amortised cost. For the purpose of Solvency II, they are both measured at fair value, allowing for any securities the insurer receives on the funds deposited with the bank. The liability is measured separately (in accordance with the Delegated Regulation and the guidance provided by DNB).

The valuation method used to determine the fair value of a.s.r.’s mortgage portfolio bases the spread on the interest rate curve for discounting the mortgage portfolio cash flows on consumer rates. The valuation according to IFRS is based on amortised cost.

11. Reinsurance recoverables
Contracts that transfer a significant insurance risk from a.s.r. to third parties are accounted for as reinsurance contracts, and are classified as outgoing reinsurance.

The amounts that can be collected from reinsurers are estimated using a method that is in line with the reinsurance contract and the fair-value method for determining liabilities arising from reinsurance contracts described in Section D.2.

Assets arising from reinsurance contracts are recognised under reinsurance contracts, including receivables from reinsurers. At each reporting date, a.s.r. assesses whether objective evidence of impairment exists. If a reinsurance asset is impaired, its carrying amount is reduced to its recoverable amount. Therefore, current receivables from reinsurers are valued comparable with IFRS.

12. Cash and cash equivalents
The valuation of cash and cash equivalents is based on the level 1 method of the fair value hierarchy. Cash and cash equivalents include cash in hand, deposits held at call with banks, cash collateral and other short-term highly liquid investments with original maturities of three months or less.

13. Any other assets, not elsewhere shown
The valuation of these assets is based on the Solvency II valuation method. Other assets include different investments and interest income, property developments, tax assets and accrued assets.

D.2 Technical provisions

D.2.1 Introduction
In this section, the policies regarding methodology and assumptions for the technical provisions are described. These liabilities arise from insurance contracts issued by a.s.r. that transfer significant insurance risks from the policyholder to a.s.r. The following lines of business are distinguished:

- Life insurance
- Health insurance
- Non-life insurance

In this paragraph line items 14 – 17 from the simplified balance-sheet above (from paragraph D) are described.

The table below provides an overview of the legal entities within a.s.r. and the lines of business involved.
The table below provides an overview of the legal entities within a.s.r. and the lines of business involved.

<table>
<thead>
<tr>
<th>Legal entity</th>
<th>Life insurance</th>
<th>Non-life</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional Life</td>
<td>Unit-linked and Index-linked</td>
<td>Property and Casualty</td>
</tr>
<tr>
<td>ASR Levensverzekering N.V.</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>ASR Schadeverzekering N.V.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASR Basis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ziektekostenverzekeringen N.V.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASR Aanvullende</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ziektekostenverzekeringen N.V.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D.2.2 Technical provisions methods
This section describes the general methodology for calculating the technical provisions.

The technical provision is the sum of the best estimate and the risk margin. The best estimate includes the intrinsic value and the time value of options and guarantees (TVOG).

14 and 16. Technical Provisions and Unit-linked (best estimates)
The intrinsic value is the net present value of projected cash flows from insurance contracts, i.e. benefits and claims, profit-sharing liabilities and costs less premiums. These cash flows are estimated using best estimate assumptions with respect to mortality, morbidity, disability, recovery, claims experience, lapse, expense and inflation. Where applicable, the participating features of the insurance contracts, such as profit-sharing, are taken into account in the future cash flows. The cash flows are discounted using the term structure of risk-free interest rates (including volatility adjustment) as prescribed under Solvency II for the valuation of underwriting liabilities. The TVOG is calculated using stochastic techniques with respect to interest scenarios.

15 and 17. Technical Provisions and Unit-linked (risk margin)
The risk margin is determined using the Cost of Capital (CoC) method, using a Cost-of-Capital rate of 6%, in line with the Delegated Regulation. The risk margin is based on the Solvency Capital Requirement (SCR) of all insurance risks, operational risk, unavoidable market risk (excluding interest rate risk) and counterparty default risk for reinsurance arrangements, SPVs and other material exposures which are closely related to insurance liabilities.

The SCR’s involved are determined at the valuation date under the assumption that no VA is applicable. They are projected separately into the future using suitable risk drivers per risk group. These SCRs are aggregated in each future year, making allowance for the correlations between risks using correlation factors as defined in the standard model.

In determining the risk margin, allowance is also made for diversification benefits between risk groups within a legal entity.

The risks that are factored into the risk margin are mortality risk, longevity risk, disability-morbidity risk, lapse risk, catastrophe risk, expense risk and operational risk.

Risk-free yield curve
The basis for the reference rate of the best estimate is the swap rate at the date of valuation (31 December 2019). The following adjustments have been made to the swap curve:
• Reduction by ten basis points to account for counterparty default risk (31 December 2018: 10 bps);
• Extrapolation from year 20 to the ultimate forward rate of 3.90% in year 60 using the Smith-Wilson extrapolation method.

Inclusion of a volatility adjustment of 7 basis points, as provided by EIOPA, to the zero rates for the first 20 years (31 December 2018: volatility adjustment 24 bps).

Impact volatility adjustment
a.s.r. applies the volatility adjustment for discounting cash flows to determine the best estimate and in determining the capital requirement under the SCR. The following table shows the impact of this volatility adjustment on the financial position and own funds of a.s.r. including other financial institutions (a.s.r. Bank, ASR Vermogensbeheer ASR Vastgoed Vermogensbeheer and PPI Brand New Day).
Valuation for Solvency purposes

**D.2.3 Level of uncertainty**

a.s.r. distinguishes between two sources of uncertainty with regard to the level of the technical provisions. These sources are model risk and process risk. The uncertainty associated with these risks has been mitigated as described below.

**Process risk**
The process risk is mitigated using the Management in Control framework (MIC), which creates a reasonable degree of assurance as to the reliability of financial reports. Key controls have been identified and to a larger extend implemented for the calculation process. In addition, the effectiveness of the MIC framework is verified by an independent party and supplementary checks are performed where needed. As part of MIC or the additional checks, the four-eye principle has demonstrably been applied to the calculation of the technical provision.

**Model risk**
The second risk that a.s.r. has identified in relation to the technical provisions is model risk. Regular procedures have provided adequate certainty with regard to this risk. To illustrate, the CFRO in charge signs off documents to demonstrate that the reported figures do not contain any material mistakes or that no key facts have been omitted. In addition, FRM, in its role as the second line of defence, performs an independent internal review of the technical provisions as described in the previous phase.

**D.2.4 Reinsurance and special purpose vehicles**

Contracts that transfer a significant insurance risk from a.s.r. to third parties are accounted for as reinsurance contracts, and are classified as outgoing reinsurance.

Assets arising from reinsurance contracts are recognised under reinsurance contracts, except for current receivables from reinsurers, which are included under reinsurance receivables. At each reporting date a.s.r. assesses whether objective evidence of impairment exists. If a reinsurance asset is impaired, its carrying amount is reduced to its recoverable amount. Therefore, current receivables from reinsurers are valued comparable with IFRS.

ASR Levensverzekering N.V. has reinsured a substantial part of all underwriting risk of a certain group pension contract on a proportional basis. In 2019 the reinsurance of the Mass Lapse Cover is terminated.

ASR Schadeverzekering N.V. can be split in:

**P&C**

For reinsurance-contracts the premiums and claims are administered. When applicable, reinstatement premiums are taken into account. For (new) catastrophes external models (for example from brokers and/or Verbond voor Verzekeraars) are used for a first estimation of the (gross) impact and the reinsurance part can be derived. The actuarial department will estimate the claims incurred, inclusive IBNR. If applicable, in this calculation the reinsurance limit is also taken into account.

For the Best Estimates technical provisions the ratio of the total net and gross provision is used and is projected on the total gross Best Estimate provision to derive the net Best Estimate provision.
Health
The Individual Health SLT portfolio and a small part of the Group Health SLT portfolio is reinsured by a proportion reinsurance contract. This reinsurance contract is not active since January 1, 2017. The reinsuring cash flows concern existing claims and are calculated separately in the cash flows models. The reinsured best estimate is € 340 million. The Health NSLT portfolio is not reinsured.

A.s.r. does not make use of special purpose vehicles (SPVs).

D.2.5 Technical provisions
In this table a reconciliation is made between the Solvency II and the IFRS valuation of provisions. Solvency figures are part of the balance sheet S.02.01. The next paragraph describes a brief explanation of these differences.

<table>
<thead>
<tr>
<th>31 December 2019</th>
<th>IFRS</th>
<th>Revaluation</th>
<th>Solvency II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>1,276</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>1,468</td>
<td>-119</td>
<td>1,349</td>
</tr>
<tr>
<td><strong>Similar to non-life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>392</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>467</td>
<td>-37</td>
<td>431</td>
</tr>
<tr>
<td><strong>Similar to life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>3,702</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>426</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>4,401</td>
<td>-274</td>
<td>4,127</td>
</tr>
<tr>
<td><strong>Life</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>33,432</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>1,907</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>32,218</td>
<td>3,120</td>
<td>35,339</td>
</tr>
<tr>
<td><strong>Index-linked and unit-linked</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>9,790</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>12,477</td>
<td>-2,603</td>
<td>9,874</td>
</tr>
<tr>
<td><strong>a.s.r. total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best estimate</td>
<td>-</td>
<td>48,591</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>-</td>
<td>2,529</td>
<td></td>
</tr>
<tr>
<td>Technical provision</td>
<td>51,032</td>
<td>88</td>
<td>51,121</td>
</tr>
</tbody>
</table>

D.2.6 Reconciliation between IFRS and Solvency II
Under Solvency II, the technical provisions are calculated using a different method compared to IFRS. In this section the reconciliation between IFRS and Solvency II is described per business line. More details can be found in the SFCR of the underlying entity.

Non-life
The revaluation for non-life is mainly caused by:
- The applied yield curve for the Best Estimate
- Different methods for the Risk Margin
- In IFRS is no expected profit taken into account
- Different methods for determine Best Estimate premium liabilities
- Investment costs are taken into account under Solvency II
Similar to Non-life
The revaluation for similar to Non-life (medical expense) is caused by:
- Ex post
- The IFRS LAT margin

The revaluation for Similar to Non-life (income protection) is caused by:
- The main difference between IFRS and Solvency II best estimate and risk margin is different assumptions with respect to disability and recovery.

Similar to Life
For Similar to Life the main difference between the IFRS technical provisions and Best estimate and risk margin (Solvency II) is different assumptions with respect to disability and recovery.

Life
The IFRS technical provisions are determined with assumptions that are equal to the assumptions underlying the premium. For longevity risk additional provisions are set up. Also under IFRS provisions are set up for realised capital gains, interest rate swaptions and shadow accounting (unrealised gains on bonds). In case that the policy-duration exceeds the length of the premium-paying period, a provision for administrative expenses is set up for the period where no premiums are due.

The Solvency II provision consists of a best estimate and a risk margin. The best estimate includes a time value of option and guarantees with respect to profit sharing. The best estimate is determined on best estimate assumptions and covers future benefits and future expenses to the extent that they are not covered by future premiums.

Index-linked and unit-linked
The technical provision for unit-linked policies under IFRS equals the fund value of the underlying assets of the units. Extra provisions are set up in case of minimum guarantees on the maturity-value provided by ASR Life and for the transparency issue.

The Solvency II technical provision consist of the fund value less the net present value of the best estimate value of the future profits. For policies where a guarantee with respect to the maturity-value is given, the value of the guarantee is determined on a market consistent basis. Also for the transparency issue a provision is set up.

Technical provisions Pension scheme a.s.r.-employees
For a.s.r. leven the pension scheme of a.s.r.-employees is involved on the balance sheet under technical provision life. On a.s.r. group level this scheme is eliminated from the figures and is presented as an employee benefit obligation based on IAS19 valuation.

D.3 Other liabilities

D.3.1 Valuation of other liabilities
In line with the valuation of assets, the accounting principles for other liabilities used in the Pillar III reports are generally also based on the IFRS as adopted by the EU. Any differences between the methods for IFRS and Solvency II purposes are addressed in detail per liability category. In this paragraph line items 18-21 from the simplified balance sheet above are described.

18. Pension benefit obligations
a.s.r. has a number of defined benefit plans for own staff in place. These are schemes, under which staff are awarded pension benefits upon retirement, usually dependent on one or more factors such as years of service and salary. The defined benefit obligation is calculated by independent actuaries at each reporting date.

Pension obligations are calculated using the projected unit credit method. Inherent to this method is the application of actuarial assumptions to discount rates, future salary increases and bonuses, mortality rates and consumer price indices. The assumptions are reviewed and updated at each reporting date based on available market data.

Actuarial assumptions may differ considerably from actual results due to changes in market conditions, economic developments, mortality trends and other assumptions. Any change in these assumptions can have a significant impact on the defined benefit obligation and future pension costs. Changes in the expected actuarial assumptions and differences with the actual actuarial outcomes are recognised in actuarial gains and losses included in other comprehensive income (component of total equity).
When employee benefit plans are modified and no further obligations exist, any gains or losses resulting from changes are recognised directly through profit or loss.

The financing cost related to employee benefits are included in interest expense. Current service costs are included in operating expenses.

In 2018, the discount rate methodology changed. a.s.r. developed an internal curve for high quality corporate bonds for determination of the discount rate. The discount rate (31 December 2019: 1.04%) is based on the return (zero coupon rate) of high-quality corporate bonds (AA rating) and the cash flow pattern of the pension obligation. All other methods used for determining the post-employment benefit defined obligation and assumptions are consistent with those applied in 2018. For SCR purposes, the IFRS value of the own pension contract is based on the IAS19R valuation methodology. The explanatory guidelines explain that the IAS19 valuation is consistent with Solvency II.

A risk margin with respect to the employee benefits is recognised based on the risk margin of the internal insurance contract.

19. Deferred tax liabilities
See 3. Deferred tax assets.

20. Subordinated liabilities
In IFRS the perpetual hybrid loans are classified as equity as there is no requirement to settle the obligation in cash or another financial asset or to exchange financial assets or financial liabilities under conditions that are potentially unfavourable for a.s.r.

According to IFRS, the perpetual hybrid loans are measured at amortised cost. For the purpose of Solvency II, they are both measured at fair value. Directed by the regulator, in Solvency II reporting the perpetual hybrid loans are classified as subordinated liabilities.

21. Other liabilities
Other liabilities contains different line items:

Other long-term employee benefits
Plans that offer benefits for long-service leave but do not qualify as post-employment benefit plans, such as jubilee benefits, are measured at present value using the projected unit credit method and changes are recognised directly through profit or loss.

Other post-retirement obligations
offers post-retirement benefit plans, such an arrangement for mortgage loans at favourable interest rates. The entitlement to these benefits is usually conditional on the employee remaining in service up to their retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using an accounting methodology that is similar to that for defined benefit plans.

Vacation entitlements
A liability is formed for leave days not taken at year-end.

The regulatory curve is used to determine the discount rate under Pillar 3. For IFRS purposes, the discount rate is determined based on the return (zero coupon rate) on high-quality corporate bonds (AA rating). All assumptions and the projected unit credit calculation method are consistent with those applied in the accounting policies used in the IFRS financial statements.

Debts owed to credit institutions
The valuation of these liabilities follows the Solvency II fair value hierarchy as described in paragraph D.1.1.

Financial liabilities other than debts owed to credit institutions
The valuation of these liabilities follows the IFRS fair value hierarchy as described in paragraph D.1.1.

The valuation has to be consistent with the requirements of Article 75 of the Solvency II directive. Therefore, no adjustments to take account of the change in own credit standing shall take place. However, adjustments for changes in the risk-free rate must be accounted for. This means that the subordinated loans are discounted using the risk-free rate plus a credit spread at inception of the liability.
Insurance and Intermediaries payables
The valuation of these liabilities follows the Solvency II fair value hierarchy as described in paragraph D.1.1 This category is subject to the same valuation as the asset category Cash and Cash equivalents.

Trade payables (non-insurance)
The valuation of these liabilities follows the Solvency II fair value hierarchy as described in paragraph D.1.1 This category is subject to the same valuation as the asset category receivables.

Any other liabilities not disclosed elsewhere
The valuation of these liabilities follows the Solvency II fair value hierarchy as described in paragraph D.1.1. This item consists primarily of tax payables.

Contingent liabilities
Contingent liabilities are defined as:
• a possible obligation depending on whether some uncertain future event occurs, or
• a present obligation but payment is not probable or the amount cannot be measured reliably.

Contingent liabilities are recognised on the IFRS balance sheet if there is a probability of >50% that the contingent liability leads to an ‘outflow of resources’. These liabilities are also recognised on the Solvency II balance sheet.

Solvency II prescribes that all contingent liabilities be recognised on the Solvency II balance sheet. This covers cases where the amount cannot be measured reliably or when the probability is <50%. For these cases, a regular process is in place to determine whether contingent liabilities should be recognised on the Solvency II balance sheet.

Using a calculation based on ‘opportunity’ and ‘impact’, an amount contingent liabilities is determined. This amount has no material impact on SII balance sheet. As a result the a.s.r. Solvency II capital ratio does not include contingent liabilities.

D.3.2 Reconciliation from Solvency II equity to EOF
The differences described in the sections above are the basis for the reconciliation of IFRS equity to Solvency II equity. To reconcile from Solvency II equity to EOF, the following adjustments are taken into consideration:

Subordinated liabilities
In accordance with the Delegated Regulation, the subordinated liabilities are part of the EOF. Further information of this liabilities is described in section E.1.4.

Foreseeable dividends and distributions
Dividends for 2019 that are approved after the reporting date are deducted from the available capital position as foreseeable dividends and distributions.

Deductions for participations in financial and credit institutions
Participations in financial and credit institutions are not supervised by the Solvency II framework and are therefore excluded from the eligible own fund items in this overview.

Own shares
In accordance with the Delegated Regulation, the amount of own shares held by the insurance and reinsurance undertaking should be eliminated.

Tier 3 limitations
In accordance with the Delegated Regulation, the EOF is divided in tiering components. However, these components have to meet boundary conditions and an exceedance of these limits results in a capping of the EOF. For a.s.r., capping does not apply per year-end 2019.

D.4 Alternative methods for valuation
a.s.r. does not apply alternative methods for valuation.

D.5 Any other information
Other material information about valuation does not apply.
**Key figures**

**Eligible own funds**

<table>
<thead>
<tr>
<th>Tier 1 capital - unrestricted</th>
<th>Tier 1 capital - restricted</th>
<th>Tier 2 capital</th>
<th>Tier 3 capital</th>
<th>Eligible own funds to meet SCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 in € m</td>
<td>5,789</td>
<td>524</td>
<td>1,515</td>
<td>0</td>
</tr>
<tr>
<td>2018 in € m</td>
<td>5,379</td>
<td>501</td>
<td>1,044</td>
<td>0</td>
</tr>
</tbody>
</table>

**SCR**

<table>
<thead>
<tr>
<th>Market</th>
<th>Insurance</th>
<th>Counterparty</th>
<th>Operational</th>
<th>LAC DT</th>
<th>SCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 in € m</td>
<td>3,055</td>
<td>3,227</td>
<td>456</td>
<td>237</td>
<td>-2,152</td>
</tr>
<tr>
<td>2018 in € m</td>
<td>2,584</td>
<td>2,724</td>
<td>547</td>
<td>212</td>
<td>-1,904</td>
</tr>
</tbody>
</table>

The solvency ratio stood at 194% as at 31 December 2019 after distribution of the proposed dividend and is based on the standard formula as a result of € 7,828 million eligible own funds and € 4,035 million SCR.

As a result of organic growth, the issuance of a Tier 2 loan and a Tier 1 loan, the acquisition of Loyalis, the increase in equity markets, lower interest rates and spread tightening on credits the eligible own funds increased. These effects were partially offset by a lower UFR, tightening of the VA, the redemption of Tier 1 loans and the interim and proposed final dividend.

This increase in SCR is mainly due to the acquisition of Loyalis, lower interest rates and an increase in equity risk due to rising stock prices.
An extensive explanation of the reconciliation from IFRS equity to Solvency II eligible own funds is presented in section D.3.2.

**E.1 Own funds**

**E.1.1 Capital management objectives**

**Management**

Overall capital management is administered at group level. a.s.r. currently intends to consider investing capital above the management target Solvency II ratio (calculated based on the standard formula) of 160% with the objective of creating value for its shareholders. If and when a.s.r. operates at a certain level (which may change over time) that is considerably above the management target, and it assesses that it cannot invest this capital in value-creating opportunities for a prolonged period of time, a.s.r. may decide, but is not obliged, to return (part of this) capital to its shareholders.

If a.s.r. chooses to return capital, it plans to do so in a form that is efficient for shareholders at that time. a.s.r. actively manages its in-force business, which is expected to result in free capital generation over time. Additionally, business improvement and balance sheet restructuring should improve the capital generation capacity while advancing the risk profile of the company. The legal entities are individually capitalised and excess capital over management’s targets for the legal entities is intended to be up-streamed to the holding company as far as is needed for amongst others covering external dividend, coupon payments on hybrids/senior financing instruments and holding costs and in so far the local regulations and the internal risk appetite statement allow.

**Objectives**

The group is committed to maintain a strong capital position in order to be a robust and sustainable insurer for its policyholders and other stakeholders. The objective is to maintain a solvency ratio well above the minimum levels as defined in the risk appetite statements and above the relevant management threshold levels. Sensitivities are periodically performed for principal risks and annual stress tests are performed to test a.s.r.’s robustness to withstand moderate to severe scenarios. An additional objective is to achieve a combination of a capital position and a risk profile that is at least in line with a “single A” rating by Standard & Poor’s.

The SCR is reported on a quarterly basis and proxies are made on both a monthly and weekly basis. The internal minimum solvency ratio for a.s.r. as formulated in the risk appetite statement is 120%. The lower limit solvency target is 140%. The management threshold level for the solvency ratio is above 160%. The solvency ratio stood at 194% at 31 December 2019, which was comfortably above the internal requirement of 120% and the management threshold level of 160%.

In accordance with a.s.r.’s dividend policy, the liquidity of the underlying entities is not taken into account for the liquidity position of the group. However, the capital is recognised in the capital position of the group, since a.s.r. has the ability to realize the capital of this OTSO, for example by selling the entity. Specifically regarding ASR Basis Ziektekostenverzekeringen N.V. in 2019, no dividend or capital withdrawals have taken place.
The table below shows how the eligible own funds of a.s.r. relate to the different capital targets.

**Market value own funds under SCR**

<table>
<thead>
<tr>
<th>Market value own funds</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR</td>
<td>6,924</td>
<td>7,828</td>
</tr>
<tr>
<td>Total EOF</td>
<td>7,628</td>
<td>6,924</td>
</tr>
</tbody>
</table>

**E.1.2 Tiering own funds**

The table below details the capital position of a.s.r. as at the dates indicated. With respect to the capital position, Solvency II requires the insurers to categorise own funds into the following three tiers with differing qualifications as eligible available regulatory capital:

- Tier 1 capital consists of Ordinary Share Capital, Reconciliation reserve and restricted capital as described below;
- Tier 2 capital consists of ancillary own funds and basic Tier 2. Ancillary own funds consist of items other than basic own funds which can be called up to absorb losses. Ancillary own fund items require the prior approval of the supervisory authority. a.s.r. has no ancillary own fund items;
- Tier 3 of a.s.r. capital consists of Deferred tax assets.

The rules impose limits on the amount of each tier that can be held to cover capital requirements with the aim of ensuring that the items will be available if needed to absorb any losses that might arise.

**Eligible Own Funds to meet the SCR**

<table>
<thead>
<tr>
<th>Eligible own funds to meet SCR</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 capital - unrestricted</td>
<td>5,789</td>
<td>5,379</td>
</tr>
<tr>
<td>Tier 1 capital - restricted</td>
<td>524</td>
<td>501</td>
</tr>
<tr>
<td>Tier 2 capital</td>
<td>1,515</td>
<td>1,044</td>
</tr>
<tr>
<td>Tier 3 capital</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Eligible own funds to meet SCR</td>
<td>7,828</td>
<td>6,924</td>
</tr>
</tbody>
</table>

The perpetual hybrid loans are classified as equity, as there is no requirement to settle the obligation in cash or another financial asset or to exchange financial assets or financial liabilities under conditions that are potentially unfavourable for a.s.r. To be sure that the perpetual hybrids may be classified under Own Funds, terms and notes are proposed with DNB.

Together with the consultation regarding the perpetual hybrids, also the tiering is part of this consultation.
E.1.3 Own funds versus MCR

The minimum capital requirement (MCR) calculation is based on the standard formula.

<table>
<thead>
<tr>
<th>Eligible Own Funds to meet the MCR</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 capital - unrestricted</td>
<td>5,789</td>
<td>5,379</td>
</tr>
<tr>
<td>Tier 1 capital - restricted</td>
<td>524</td>
<td>502</td>
</tr>
<tr>
<td>Tier 2 capital</td>
<td>365</td>
<td>317</td>
</tr>
<tr>
<td>Tier 3 capital</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Eligible own funds to meet MCR</td>
<td>6,678</td>
<td>6,197</td>
</tr>
</tbody>
</table>

According to (Directive 2009/138 EU article 230 Sub 2a) the consolidated group SCR shall have as a minimum the sum of the following:

a) the MCR as referred to in Article 129 of the participating insurance or reinsurance undertaking;

b) the proportional share of the MCR of the related insurance and reinsurance undertakings.

According to Delegated Regulation article 248 to 251 the MCR of the related insurance and reinsurance undertakings is calculated as a linear function of premiums, technical provisions and capital at risk. The MCR (€ 1,826 million) of a.s.r. equals the sum of the MCR of the related insurance undertakings.

E.1.4 Description of grandfathering

a.s.r. has issued hybrid loans. The details of these loans are shown in the following table

<table>
<thead>
<tr>
<th>Hybrid loans</th>
<th>Description</th>
<th>Nominal amount</th>
<th>Issue date</th>
<th>Tiering</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASR NEDERLAND_4.625%, 19/04/2199</td>
<td>500,000,000</td>
<td>19-10-2017</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>ASR NEDERLAND_5%, 30/09/2099</td>
<td>500,000,000</td>
<td>30-09-2014</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>ASR NEDERLAND_5.125%, 29/09/2045</td>
<td>500,000,000</td>
<td>29-09-2015</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>ASR_30NC10_3.375%, 02/05/2049</td>
<td>500,000,000</td>
<td>02-05-2019</td>
<td>2</td>
</tr>
</tbody>
</table>

Tiering of the loans is based on self-assessments. These self-assessments have been reviewed by DNB. In 2019 loans qualifying for grandfathering are redeemed at call date; loan 1 is expanded with a similar amount.

E.1.5 Additional information

1. Mergers and Acquisitions

In 4 December 2018, a.s.r. announced the intended acquisition of Loyalis to strengthen its disability proposition for a total consideration of € 435 million. This transaction was closed on 1 May 2019. The impact of the transaction on solvency ratio of a.s.r. was -7%pts upon closing.

On 19 July 2019, a.s.r. announced the intended acquisition of the Life insurance portfolio of VvAA to bolster its Life insurance portfolio. This transaction was closed after the reporting date of this annual report, on 1 January 2020, and has a limited impact on the solvency ratio of a.s.r.

On 23 August 2019, a.s.r. announced the intended acquisition of Veherex to strengthen its disability proposition. This transaction was closed after the reporting date of this annual report, on 1 January 2020, and has a limited impact on the solvency ratio of a.s.r.

2. Capital Market transactions

On 25 April 2019, a.s.r. issued a € 500 million subordinated Tier 2 capital instrument. The bond has a fixed rate coupon of 3.375% and has a scheduled maturity date at 2049 and is first callable on the date falling 3 months prior to the first reset date of 2 May 2029.

On 16 September 2019, a.s.r. announced the issue of € 200 million Restricted Tier 1. The announced issue is an extension to the existing Restricted Tier 1 position, which stood at € 300 million, bring the combined position to € 500 million. The new Restricted Tier 1 issue has the same terms and conditions as the already existing Restricted Tier 1 and is fully fungible with the already existing Restricted Tier 1, with a notional coupon of 4.625%.
a.s.r. redeemed €17 million Fixed Rate Perpetual Capital Securities on 30 September 2019 and a further €192 million on 26 October 2019. The two redemptions were the remaining parts of two grandfathered Restricted Tier 1 instruments, with a notional coupon of 7.25% and 10.0%, respectively.

3. Share buyback programme
In the second half of 2019 a.s.r.’s capital policy was reviewed and adjusted, in particular with regard to the possibility of additional capital distributions. a.s.r. takes into account the level of solvency, organic capital creation (OCC) and potential opportunities for allocating capital for acquisitions or re-risking.

a.s.r. has the intention for the medium term to make an additional capital distribution of €75 million per year, on top of the progressive regular dividend. Any additional capital distribution shall be conditional upon our Solvency II ratio (based on the standard formula) to remain above 180%, as a.s.r. aims to maintain a robust balance sheet. The additional distribution will be financed from the available OCC, taking into account the regular dividend, room for potential bolt-on acquisitions and re-risking. If there are opportunities for larger acquisitions, this may have implications for the annual additional capital distribution a.s.r. is aiming for. a.s.r. will assess the possibility of an additional distribution on an annual basis. The new policy will be implemented with immediate effect and a.s.r. has decided to buy back €75 million of own shares, starting on 20 February 2020 and to be completed on 21 May 2020.

4. Dividend
a.s.r. intends to pay €267 million total dividends over full year 2019 (2018: €245 million) of which €99 million has already been paid as interim dividend (2018: €91,65 million), leaving a final dividend of €169 million.

E.2 Solvency Capital Requirement

E.2.1 Method for determining the group solvency capital

Group supervision
a.s.r. is subject to group supervision in accordance with article 212 of the Solvency II directive.
No entities have been excluded from group supervision in accordance with article 214 of the Solvency II directive.

Group solvency
The Solvency II directive prescribes two methods for the calculation of the group solvency:
• method 1 - Standard method based on consolidation of financial statements (Solvency II Directive - article 230, Delegated Regulation - articles 336-340);
• method 2 - Alternative method based on deduction and aggregation (Solvency II Directive - article 233, Delegated Regulation - article 336-342).

a.s.r. applies Method 1 (Default method) for the determination of the group solvency. The basis for this is the consolidation structure used for the IFRS financial statements, with exemption of financial institutions.

The consolidated data are calculated based on the consolidated financial statements, which is valued in accordance with the Solvency II regulations concerning the determination and valuation of the balance sheet, as well as the inclusion and treatment of the associated companies.

Group solvency is calculated as the difference between:
- the own funds eligible to cover the SCR, calculated based on consolidated data;
- the SCR at group level calculated based on consolidated data.

The determination of the group Solvency II requirement and Eligible Own Funds is discussed below.

Group capital add-on
If the consolidated group Solvency Capital Requirement does not appropriately reflect the risk profile of the group, a capital add-on to the Solvency Capital Requirement may be imposed.

The group capital add-on consists of the following components:
- risk profile capital add-on;
- governance capital add-on.

a.s.r. applies no group capital add-on.
Calculation of the group consolidated Solvency Capital Requirement

The starting point in determining the consolidated SCR of the group is the consolidated Solvency II balance sheet as described above. The risk calculations are performed on the following basis:

- market risks are based on the consolidated balance sheet;
- insurance risks are based on the sum of the underlying insurance risks for each insurance undertaking;
- counterparty default risk is based on the consolidated balance sheet;
- operational risk is based on the consolidated balance sheet.

Differences may arise between the results of the risk calculations of the group and the sum of the underlying entities:

- diversification benefits within the market risk as a result of using consolidated data. a.s.r. calculates the market risk for the insurance entities and for the group. At group level all subsidiaries are consolidated, which results in additional market risk (equity risk) for these entities;
- intercompany relationships between entities, and between entities and the holding company are eliminated at group level.

For the calculation of the required capital that should be held for the participations, it is of interest if the look-through approach is applicable or not. The underlying investments should be shocked by the relevant SCR modules (interest rates, real estate, counterparty concentration) if the look through approach is applicable.

a.s.r. applies Method 1 for consolidation; this means that, amongst others, the ancillary service entities are to be consolidated on line-by-line basis. The individual SCRs are calculated on this basis. The look through approach has to be applied.

Finally, at group level the SCR of financial institutions are added. Financial institutions are not consolidated. All other entities within the group are consolidated.

E.2.2 Solvency ratio and a.s.r. ratings

Capital requirement


a.s.r. (including financial institutions) complied during 2019 with the applicable externally imposed capital requirement. The table below presents the solvency ratio at group level as at the date indicated.

<table>
<thead>
<tr>
<th>Eligible own funds to meet the SCR</th>
<th>31 December 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Own Funds Solvency II</td>
<td>7,828</td>
<td>6,924</td>
</tr>
<tr>
<td>Required capital</td>
<td>4,035</td>
<td>3,523</td>
</tr>
<tr>
<td>Solvency II ratio excluding financial institutions</td>
<td>194%</td>
<td>197%</td>
</tr>
<tr>
<td>Eligible Own Funds Solvency II</td>
<td>7,931</td>
<td>7,053</td>
</tr>
<tr>
<td>Required capital</td>
<td>4,102</td>
<td>3,615</td>
</tr>
<tr>
<td>Solvency II ratio including financial institutions</td>
<td>193%</td>
<td>195%</td>
</tr>
</tbody>
</table>

The Solvency II ratio stood at 194% (excluding financial institutions) as at 31 December 2019 (2018: 197%). The Solvency II ratio including financial institutions stood at 193% as at 31 December 2019 (2018: 195%).

Under Solvency II it is permitted to reduce the required capital with the mitigating tax effects resulting from a 1-in-200-year loss (Shock loss). There is a mitigating tax effect to the extent that the Shock loss (BSCR + Operational risk) is deductible for tax purposes and can be compensated with taxable profits. This positive tax effect can only be taken into account when sufficiently substantiated (‘more likely than not’). a.s.r. included a beneficial effect on its solvency ratio(s) due to the application of the LAC DT. The LAC DT benefit was € 789 million at year-end 2019.

Relevant regulation and current guidance (Delegated Regulation, Level 3 guidelines, Dutch Central Bank Q&As and IAS12) is taken into account in the development of the LAC DT methodology.
Since 2016 a.s.r. uses an advanced model for the LAC DT of ASR Levensverzekering N.V. and a ‘basic’ model for the other OTSOs. In the advanced model also future fiscal profits are used to underpin the LAC DT, while in the basic model no future profits are used. Both models are and will be updated in case constrained by additional guidance or legislation provided.

The a.s.r. solvency ratio does not include any contingent liability potentially arising from any of the current and/or future legal proceedings in relation to unit-linked insurance contracts or for other products sold, issued or advised on by a.s.r.’s insurance subsidiaries in the past, the reason being that it is impossible at this time to make reliable estimates because the book of policies of a.s.r. dates back many years, contains a variety of products with different features and conditions and because of the fact that rulings are diverse.

Standard & Poor’s confirmed the single A rating of a.s.r., ASR Levensverzekering N.V., and ASR Schadeverzekering N.V. on July 18, 2019.

### Ratings per legal entity

<table>
<thead>
<tr>
<th>Ratings Standard &amp; Poor’s</th>
<th>Type</th>
<th>Rating</th>
<th>Outlook</th>
<th>Rating and outlook since</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASR Nederland N.V.</td>
<td>CCR</td>
<td>BBB+</td>
<td>Stable</td>
<td>15 May 2014</td>
</tr>
<tr>
<td>ASR Levensverzekering N.V.</td>
<td>CCR</td>
<td>A</td>
<td>Stable</td>
<td>23 August 2012</td>
</tr>
<tr>
<td>ASR Levensverzekering N.V.</td>
<td>IFSR</td>
<td>A</td>
<td>Stable</td>
<td>23 August 2012</td>
</tr>
<tr>
<td>ASR Schadeverzekering N.V.</td>
<td>CCR</td>
<td>A</td>
<td>Stable</td>
<td>23 August 2012</td>
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<tr>
<td>ASR Schadeverzekering N.V.</td>
<td>IFSR</td>
<td>A</td>
<td>Stable</td>
<td>23 August 2012</td>
</tr>
</tbody>
</table>

CCR: counterparty credit rating  
IFSR: insurer financial strength rating

Rating reports can be found on the corporate website: http://asrnl.com/investor-relations/ratings.

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

Transitional measure for equity risk applies for shares in portfolio at 01-01-2016. The SCR equity shock is 22% at 01-01-2016, and linear increasing to (i) 39% + symmetric adjustment for type I shares and (ii) 49% + symmetric adjustment for type II shares.

### E.4 Differences between Standard Formula and internal models

a.s.r. solvency is governed by a standard formula, rather than the self-developed internal model. The Executive Board believes that this should enhance transparency and consistent interpretation.

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

As a.s.r. has not faced any form of non-compliance with the MCR or significant non-compliance with the SCR during the reporting period or at the reporting date, no further information is included here.
Contact details

Contact

The 2019 Solvency and Financial Condition Report is published in the English language only. The report can be downloaded as PDF. We welcome feedback or questions on our report. Please contact us as follows:

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