

2018

SFCR  
ASR Nederland  
N.V.



a.s.r.  
de nederlandse  
verzekerings  
maatschappij  
voor alle  
verzekeringen

ASR Nederland N.V.

Archimedeslaan 10  
P.O. Box 2072  
3500 HB Utrecht  
The Netherlands

**[www.asrnl.com](http://www.asrnl.com)**

# 2018

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SFCR

ASR Nederland N.V.

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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 2016, the NBA alert 40 was published by the NBA. 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 197% (excluding financial institutions) on 31 December 2018, after distribution of the proposed dividend. The ratio is based on the standard formula as a result of € 6,924 Eligible Own Funds and € 3,523 million Solvency Capital Requirement (SCR). Having generated € 4,459 million in Gross Written Premiums (GWP) in 2018, a.s.r. is one of the larger insurance companies in the Netherlands.

Operating result increased 2% to € 742 million (2017: € 728 million), with all business segments contributing to the increase.

Gross written premiums in the Non-life segment increased by 16.9% to € 3,014 million driven by the acquisition of Generali Netherlands, an increase in the number of new customers and premium increases in the existing portfolio. Life segment increased by 7.8% to € 1,566 million mainly due to the acquisition of Generali Netherlands.

a.s.r. intends to distribute a cash dividend of € 245 million (+6.7%) for the full year 2018, the pay-out ratio was raised to 48% of the net operating result (after deduction of the coupons for hybrid instruments).

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 company with limited liability listed on Euronext Amsterdam and governed by Dutch corporate law. a.s.r. has a two-tier board governance structure, consisting of an Executive Board and Supervisory Board. The Executive Board is responsible for the realisation of corporate objectives, the strategy with its associated risks and the development of the results. The Supervisory Board is responsible for advising the Executive Board and supervising the policies of the Executive Board and the general state of affairs at a.s.r. and its group entities. On 19 November 2018 a.s.r. announced that its management

structure will change as of 1 February 2019. From that date the Executive Board consists of the CEO, the CFO and a new member to be appointed and in addition to the Executive Board a Business Executive Committee (BEC) will be established. The BEC will work as a unison with the Executive Board, and is co-responsible 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 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.

### 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 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 the a.s.r.'s system of governance are described in [chapter B System of governance](#) (page 34).

## C Risk profile

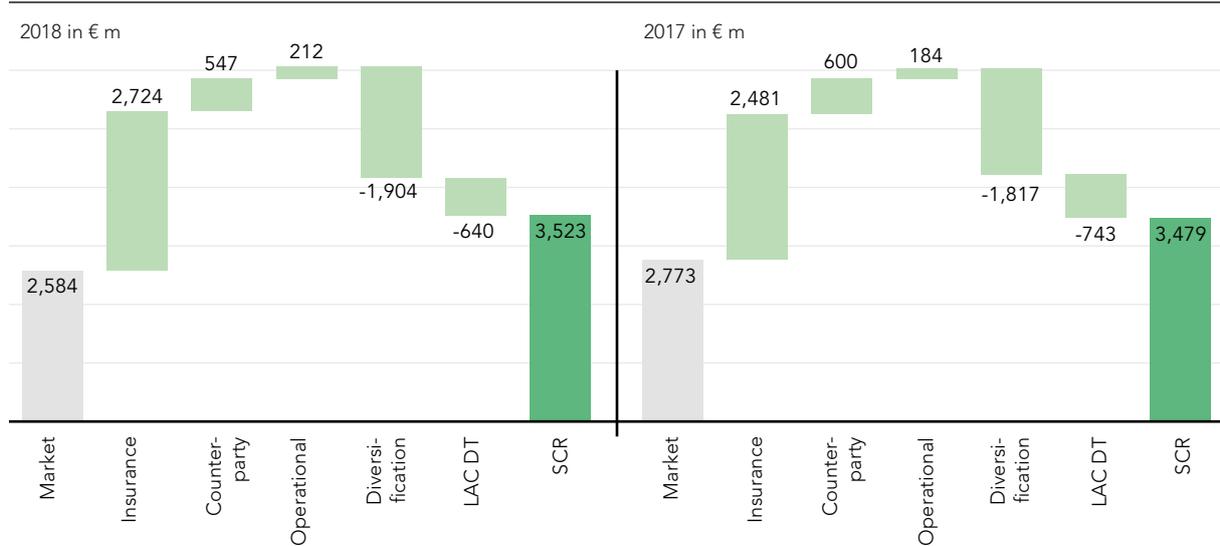
a.s.r. applies an integrated approach in managing risks, ensuring that our strategic goals (customer interests, financial solidity and efficiency of processes) are maintained. This integrated approach ensures that value will be created by identifying the right balance between risk and return, while ensuring 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



The **required capital** stood at € 3,523 million at 31 December 2018 (31 December 2017: € 3,479 million). This increase is mainly due to the acquisition of Generali Nederland and, to a lesser extent, the reduction in the loss-absorbing capacity of deferred taxes as a result of the tax reduction (entire future reduction from 25% to 20.5% is taken). These effects were partially offset as a result of an adjustment to the interest rate hedge programme, the decrease of equity prices and the increase of the VA.

Full details on the a.s.r.'s risk profile are described in chapter C Risk profile (page 68).

## 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:

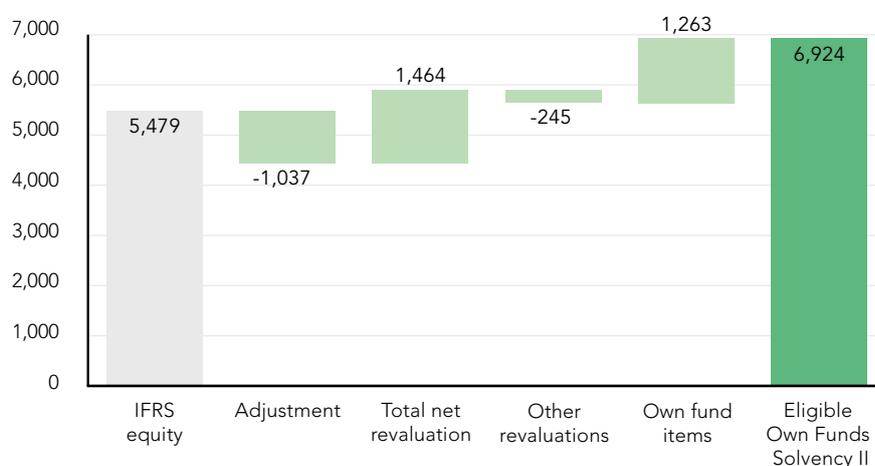
- Adjustments related to hybrid loans;
- Total net revaluation as a result of revaluation

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 95).

## E Capital management

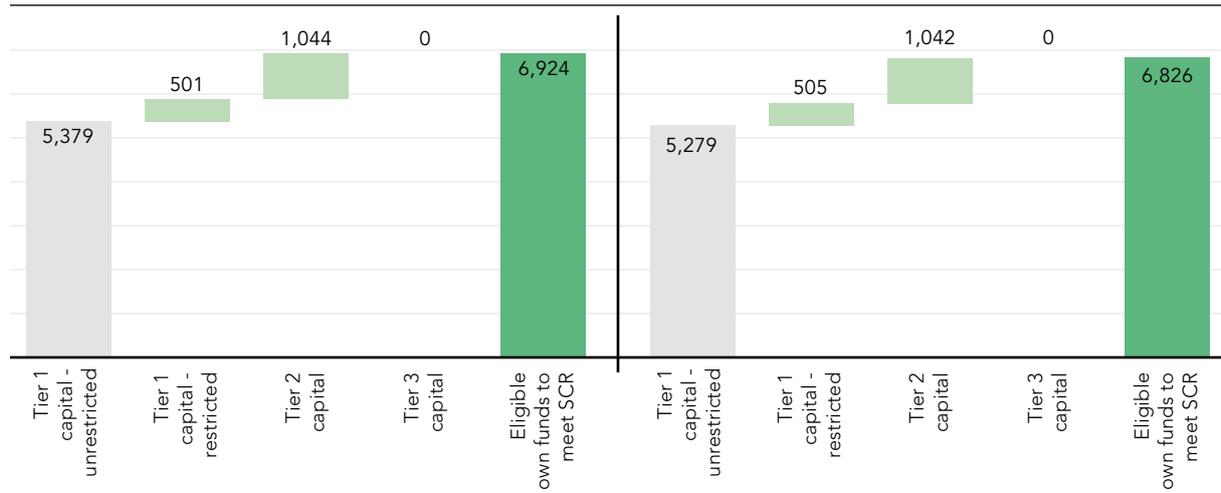
Overall capital management is administered at group level. Capital generated by operating units and future capital releases will be allocated to profitable growth of new business or repatriated to shareholders, beyond the capital that is needed to sustain commercial capital levels at management's targets.

a.s.r. has no partial 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 197% at 31 December 2018.

The EOF are build up as follows:

### Eligible own funds



The eligible own funds increased to € 6,924 million at 31 December 2018 (31 December 2017: € 6,826 million).

As a result of organic growth, the increased VA, the acquisition of Generali Nederland and spread tightening on sovereign bonds the eligible own funds increased. These effects were partially offset by a lower UFR, widening of credit spreads, interim and proposed dividend and business developments (non-economic).

Full details on the Capital management of a.s.r. can be found in [chapter E Capital management \(page 104\)](#).

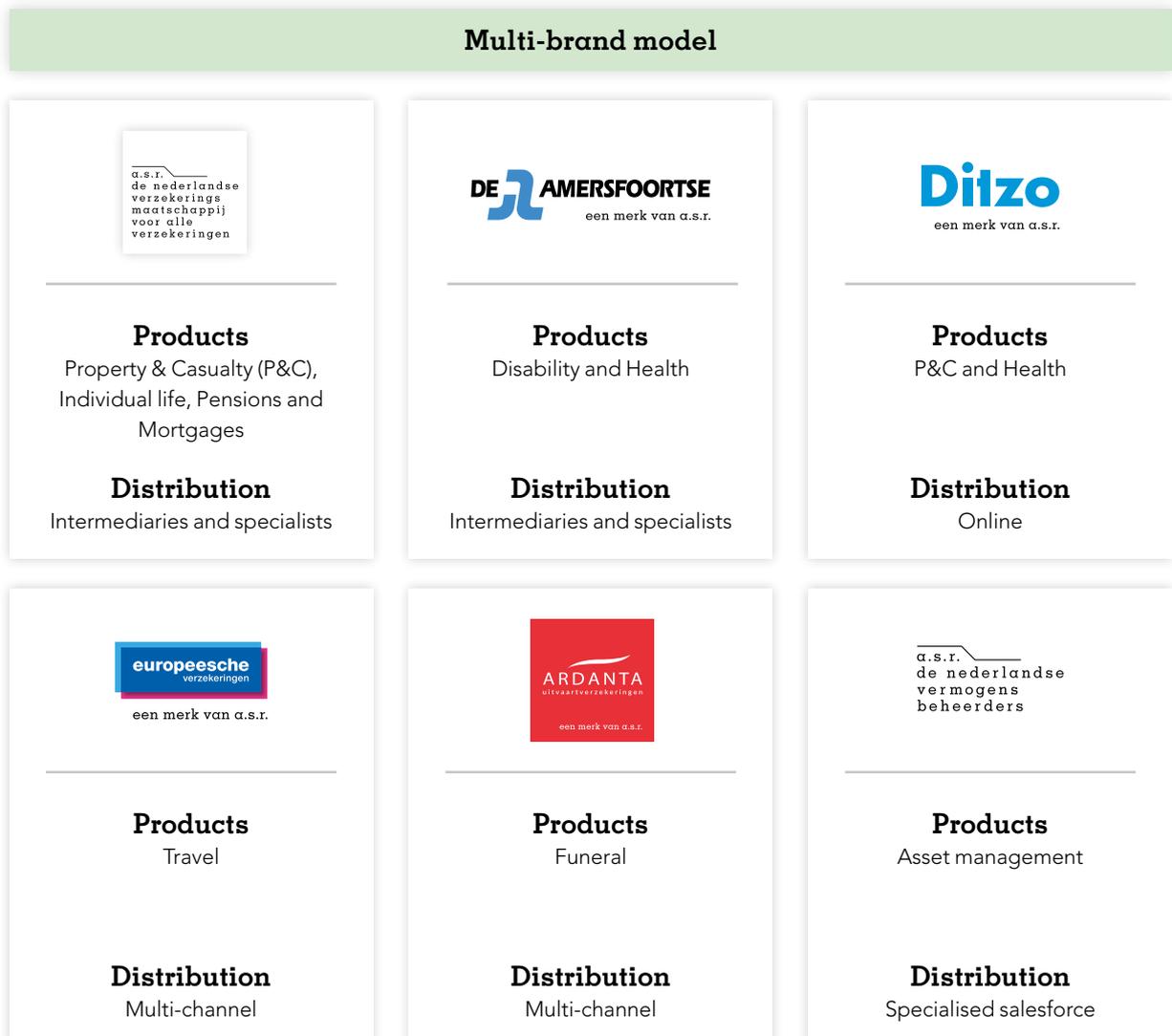
# A Business and performance

## A.1 Business

### A.1.1 Profile

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. a.s.r. offers investment products and mortgages and is also active as an investor and in offering asset management services to institutional clients. Furthermore, a.s.r. is a full-service provider for intermediaries. a.s.r. operates exclusively in the Dutch market.

### Overview of brands

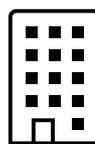




Founded in 1720, deeply rooted in Dutch society



3,683 employees (FTEs)



Head office in Utrecht

#3

Leading market positions and #3 overall in Dutch market based on GWP (excl. Health)

## Important dates in 2018

1 January

Start of first own Collective Labour Agreement (CLA) *De Andere cao*

5 February

Completion of acquisition Generali Nederland

19 March

a.s.r. included in AEX

13 June

Over € 1 billion raised for a.s.r.'s mortgage fund

26 June

a.s.r. signs the Spitsbergen Ambition for Climate Agreement

20 September

a.s.r. becomes supporter of the Task Force on Climate-related Financial Disclosures (TCFD)

10 October

Capital Markets Day a.s.r. presents strategy update and new medium-term targets

19 November

a.s.r. announces changes in management structure

4 December

Announcement of acquisition of Loyalis

### A.1.2 General information

ASR Nederland N.V. (a.s.r.) is one of the top three insurance companies in the Netherlands. a.s.r. offers insurance, pension and mortgages to consumers and SMEs. a.s.r. is also active as a fiduciary asset manager.

a.s.r. is listed on Euronext Amsterdam and is included in the AEX index. a.s.r. has a total of 3,683 internal FTE's (31 December 2017: 3,493).

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: ASR NL).

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 2018 were approved by the Supervisory Board on 26 March 2019 and will be presented to the Annual General Meeting of Shareholders for adoption on 22 May 2019. The Executive Board released the financial statements for publication on 27 March 2019.

#### **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

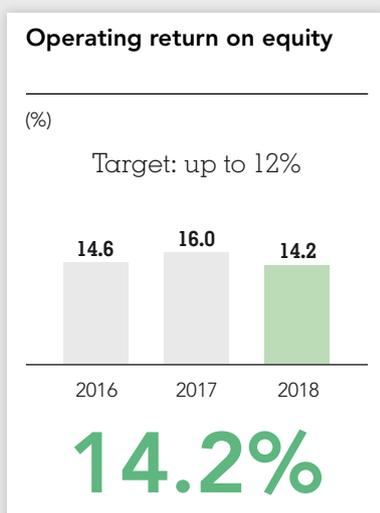
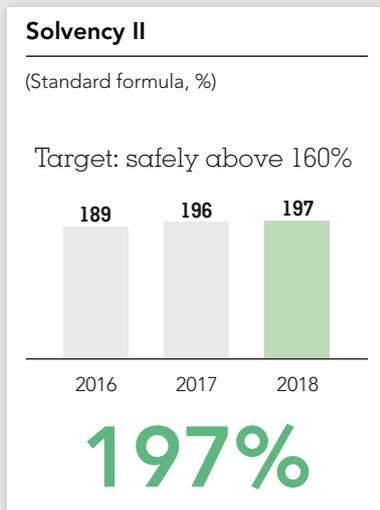
#### **Name and contact details of the external auditor**

Name: EY  
 Visiting address: Cross Towers, Antonio Vivaldistraat 150, 1083 HP Amsterdam  
 Phone number: +31 88 407 1000

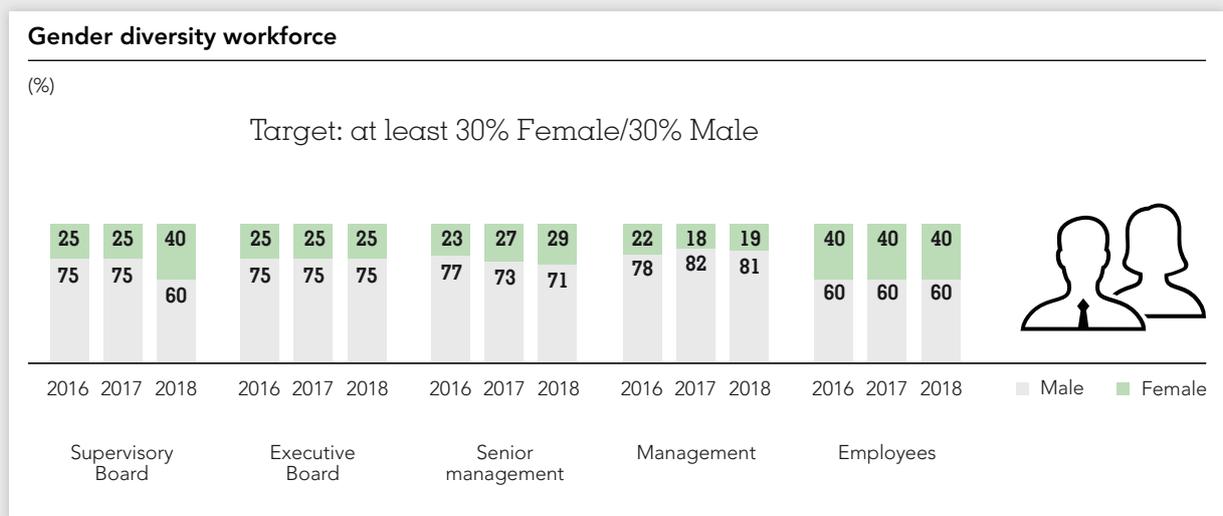
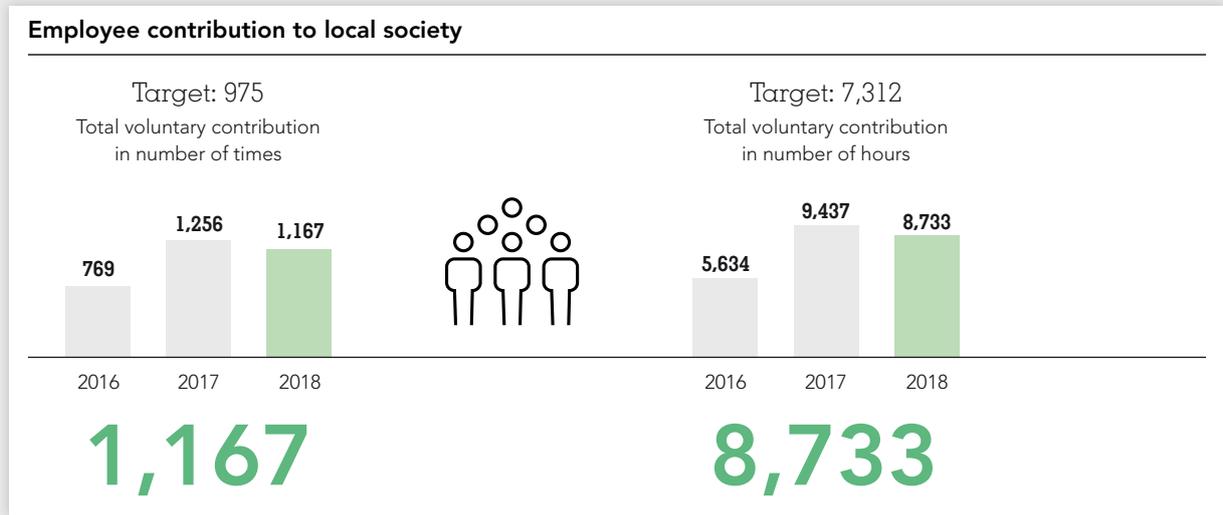
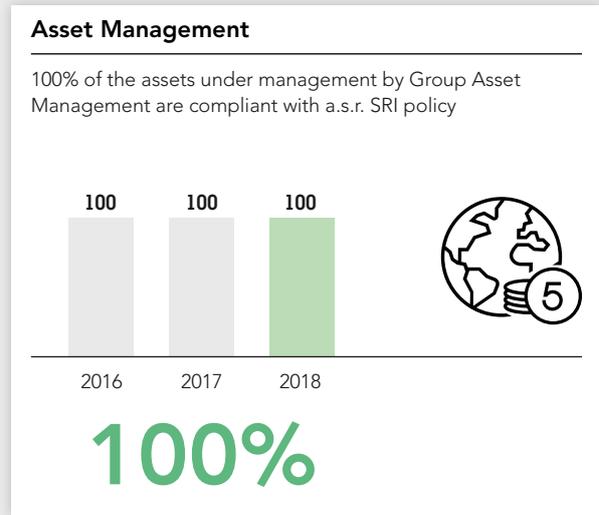
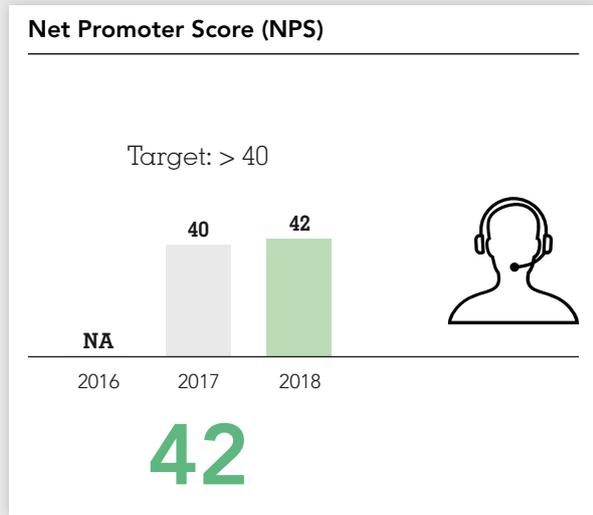
## A.1.3 Structure

### A.1.3.1 Key figures

## Financial key figures



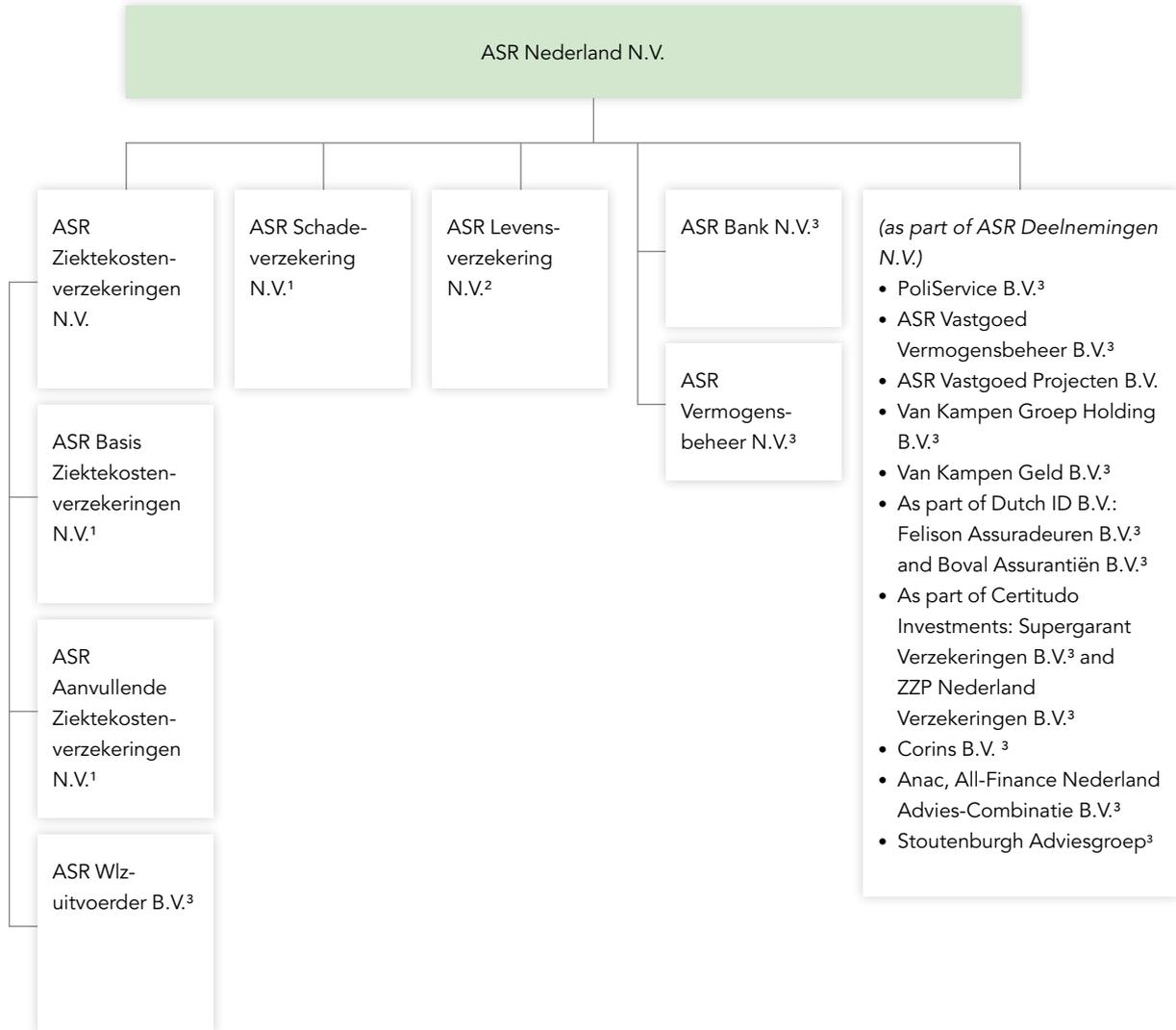
## Non-financial key figures



### 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 2018



1 Registered non-life insurance companies;

2 Registered life insurance companies;

3 Other Wft registered companies (included in the segments Banking and Asset Management and Distribution and Services).

## Segment information

The operations of a.s.r. have been divided into six operating segments. The main segments are the Non-life segment and Life segment in which all insurance activities are presented. The other activities are presented as four separate segments being the Banking and Asset Management, Distribution and Services, Holding and Other and Real Estate Development.

### 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 entities 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 Banking and Asset Management segment involves all banking activities and the activities related to asset management including investment property management. These activities include amongst others ASR Bank N.V., ASR Hypotheken B.V., ASR Vastgoed Vermogensbeheer B.V., ASR Vermogensbeheer N.V. and ASR Financieringen B.V. As of October 2018, all activities of ASR Bank N.V. are classified as discontinued;
- 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 as of July 2018 ZZP Nederland Verzekeringen B.V.), Corins B.V., Anac, All-Finance Nederland Advies-Combinatie B.V. and Stoutenburgh Adviesgroep 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 and the activities of ASR Deelnemingen N.V.; and
- The Real Estate Development segment consists of the activities where property development occurs and includes ASR Vastgoed Projecten B.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.

The segments are assessed on their operating result, which is based on the profit before tax adjusted for:

- Investment related income: income for own account of an incidental nature (for example realised capital gains and losses, impairment losses or reversals and (un) realised changes of investments held at fair value;
- Incidentals insurance segments: incidental items relating to changes in methods, changes in accounting policies, accounting/administrative actions or changes not related to the performance of underlying insurance portfolios and revaluation of insurance liabilities;
- Incidentals other segments: incidental items relating to changes in methods, accounting/administrative actions or changes not related to the underlying performance of the other segments; and
- Other incidentals: personnel related items (for example provision for restructuring expenses and a.s.r.'s own pension scheme excluding the current net service cost), costs related to M&A activities and items not related to the core-business or on-going business.

## A.2 Underwriting performance A.2.1 Financial Performance

### Key figures

(in € million, unless stated otherwise)	2018	2017	Delta
Gross written premiums	4,459	3,920	13.7%
Operating expenses	-601	-571	5.4%
Number of internal FTEs (as at 31 December)	3,683	3,493	190
Operating result	742	728	2.0%
Operating return on equity	14.2%	16%	-1.8%-p
Profit/(loss) for the year attributable to holders of equity instruments	655	906	-27.7%
Return on IFRS equity	13.7%	21.2%	-7.5%-p
Solvency II ratio (standard formula)	197%	196%	1.0%-p

**GWP** increased € 538 million to € 4,459 million, including the contribution of Generali Nederland (€ 409 million). GWP in the Non-life segment increased (€ 435 million), which was mainly attributable to Generali Nederland Non-life (€ 314 million) and solid organic growth in each business line. Growth in P&C was driven by sales of 'Vernieuwd Voordeel Pakket' (up 25% from 2017). The increase in GWP in the Life segment (€ 113 million) was mostly due to the inclusion of Generali Nederland Life (€ 95 million). Sales in the Pension DC-product ('WerknemersPensioen') more than offset the decline in Individual life. Funeral remained stable, excluding one-time single premiums.

**Operating expenses** increased € 31 million to € 601 million as a result of the additional operating expenses of Generali Nederland (€ 48 million). Excluding the cost base from Generali Nederland operating expenses reduced by € 17 million. The operating expenses associated with ordinary activities, which are part of the operating result, were € 567 million (2017: € 546 million), when excluding the addition of Generali Nederland (impact € 38 million) a decrease of € 17 million. This reduction is due to the completion of projects, efficiency improvements and rationalisation of IT-processes owing to migrations of

portfolios to a single a.s.r. platform. In Asset Management, operating expenses increased € 1 million due to higher personnel and license fees, which supports the increasing asset base. The operating expenses of a.s.r. bank were excluded as these activities have been classified as discontinued operations.

**Operating return on equity** amounted to 14.2% and was well above the target of up to 12% (2017: 16.0%). The decline reflects the effect of the increase in the average shareholders' equity (+13%) surpassing the increase of operating result (+2%). IFRS return on equity stood at 13.7% (2017: 21.2%).

The **solvency II-ratio** per 2018 is 197% (2017: 196%) and before the (proposed) dividend amounts 204%. Main factors impacting the SII ratio include the acquisition of Generali Nederland (-9%-point), lower interest rates, the decrease of the UFR to 4.05%, widening of credit spreads and the dividend. The forthcoming tax reductions has been fully incorporated (-6%-point). These effects were more than compensated by, amongst others, organic capital creation, widening of the VA and reduction of market risk.

## 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

(in € millions, unless stated otherwise)	2018	2017	Delta
Gross written premiums	3,014	2,579	16.9%
Operating expenses	-222	-201	10.4%
<b>Operating result</b>	<b>145</b>	<b>172</b>	<b>-15.6%</b>
Profit / (loss) for the year attributable to holders of equity instruments	132	190	-30.6%

### Combined ratio, Non-life

	2018	2017	Delta
- Non-life segment	96.5%	95.1%	1.4%-p
- P&C	98.4%	95.5%	2.9%-p
- Disability	90.8%	90.9%	-0.1%-p
- Health	99.2%	99.2%	0.0%-p

**Operating result** decreased € 27 million from € 172 million to € 145 million. This decrease was primarily the result of the January storm (€ -30 million) while the first half year of 2017 was exceptionally strong with a favourable level of claims at P&C with no calamities. Disability showed overall a solid performance. For sickness leave, 2018 was a challenging year as claims rose considerably. Individual disability performed strongly thereby offsetting the impact from sickness leave. Pricing of sickness leave has been raised and will see further adjustments in 2019 in response to recent experience.

**GWP** rose € 435 million to € 3,014 million. This was driven by organic growth in all product lines: P&C up € 77 million, Health up € 24 million and Disability up € 20 million. Generali Non-life amounted to € 314 million (P&C € 277 million and Disability € 37 million). In the P&C business the number of 'Vernieuwd Voordeel Pakket' (a product that combines several insurance coverages) sold continued to increase to over 70,000, up 25% compared

to 2017. The growth in the disability business mainly came through the distribution channel mandated agents, amongst which SuperGarant, for sickness leave and collective occupational disability insurance products. Growth in Health was driven by higher premium income per customer which more than compensated the decline in the number of policyholders in 2018.

**Operating expenses** for Non-life increased € 21 million to € 222 million. This increase was largely related to the addition of Generali Non-life (€ 17 million). The remaining part was caused by higher staffing costs and one-off transition costs for the migration of the Europeesche portfolio into the a.s.r. and Ditzo platforms. The migration will have a favourable impact on the future development of the cost ratio. In 2018 the cost ratio improved 0.3%-point to 7.3%.

## P&C

With a market share of 12.1% in 2017 (10.9% in 2016), a.s.r. was the third largest general provider of P&C insurance products in the Netherlands<sup>1</sup>, 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.

### Products

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

- **Motor:** a.s.r.'s motor policies for retail and commercial customers provide third-party liability coverage for motor vehicles and commercial fleets, including property damage and bodily injury, as well as coverage for theft, fire and collision damage;
- **Fire:** a.s.r.'s fire policies for retail and commercial customers provide coverage for a variety of 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 for loss or damage to dwellings and damage to personal goods;
- **Travel and Leisure:** a.s.r. offers travel insurance policies for retail customers and is a market leader in the travel and leisure market in the Netherlands;
- **Other:** a.s.r. also offers other non-life insurance products such as transport goods in transit only, liability, agricultural and construction motorised vehicles, construction all risk and assistance.

### Market

Many insurers with similar products are active in the non-life market, especially in the retail non-life insurance market. The non-life market in general has been loss-making in recent years. Losses in the market led to premium increases and strict portfolio management by insurers. Consolidation by other insurers has also affected a.s.r.'s position in the Dutch market. Insurers distribute their insurance policies through intermediaries (approximately 80% of the market volume) and directly (approximately 20% of the market volume). In the retail market, online distribution has become more important. This mainly involves simple products such as car insurance. Consumers increasingly use the internet to orientate themselves and to compare and purchase products. Customers who buy insurance online usually switch insurers more frequently. The introduction of social media and WhatsApp have caused customers' service needs to change. In the SME market, intermediaries are maintaining their dominant position, especially due to the more complex products involved.

### Strategy and achievements

On the P&C insurance front, a.s.r. endeavours to leverage its existing strengths and to achieve a COR of > 97%. The P&C business is expected to grow in line with gross domestic product (GDP) development. While leveraging existing

strengths and distinctive profitability, a.s.r. aims to further develop its expertise in pricing, underwriting and claims handling and excellent service, which it believes are its key drivers for sustainable value creation.

The acquisition of Generali P&C and the agreement and right to acquire the Avéro Achmea portfolio into a.s.r. further strengthened a.s.r.'s position. In co-insurance in particular, its market position doubled after the acquisition of Generali Nederland. The Generali Nederland non-life organisation was integrated into the P&C organisation in 2018 and the conversion of the different Generali Nederland non-life portfolios has now started. P&C expects to complete the portfolio conversions in 2019.

### Product development

P&C has added the product specifications of De Europeesche to its retail product proposition, Vernieuwd Voordeel Pakket (VVP). Its customers can now enjoy the best product specifications of a.s.r. and Europeesche through the VVP proposition. P&C will discontinue the stand-alone Europeesche products in the intermediary channel at the beginning of 2019. This is part of P&C's product rationalisation strategy. Various policy terms & conditions are also being rationalised. This makes the product range simple and clear for both customers and distribution partners.

### Digitisation and innovation

Another important part of the a.s.r. strategy is to further simplify and modernise its infrastructure. The new non-life platform will lead to the improvement and digitisation of services to customers and intermediaries. It will also reduce costs, thereby further strengthening a.s.r.'s competitive position. The first retail portfolio has now been successfully converted to this new platform. In 2019, P&C will convert the remaining retail portfolios to the new platform. P&C has also begun to implement its SME products on the new platform.

In 2017, P&C began using Robotic Process Automation (RPA) to perform routine tasks and commercial portfolio migrations more efficiently. It is using RPA in the migration of the Avéro Achmea portfolio and the retail provincial Generali Nederland portfolio.

### Sustainability

P&C has a number of CSR initiatives. These focus on three pillars: prevention, safety and sustainability. P&C's goals in this regard are to:

- Be recognised by customers, intermediaries and employees for its contribution to prevention and sustainability;
- Advise and communicate on how to prevent damage;
- Make the customer's environment more secure;
- Promote sustainable recovery and repair in the event of damage.

All All repair companies engaged by P&C in the event

<sup>1</sup> Source: DNB - The market share figures for 2018 will be published in August 2019.

of fire damage have complied with the Sustainable Repairs quality mark since 2017. These companies work in construction, glass repair, reconditioning, electronics, interior restoration, flooring and painting. Repair companies that are entitled to display the quality mark are

assessed for their sustainability and ability to satisfy strict requirements. P&C is one of the initiators of Sustainable Repairs and fulfils a chairmanship role on the Body of Experts.

**Sustainability targets & results**

Target	Result 2018
1 Organise knowledge sessions for consultants on: <ul style="list-style-type: none"> <li>- Vehicle crime;</li> <li>- Cyber;</li> <li>- Fire, climate &amp; sustainability</li> </ul>	
2 Placing prevention content on social media regarding: <ul style="list-style-type: none"> <li>- Road safety;</li> <li>- Online security;</li> <li>- Worry-free travel;</li> <li>- Safety and sustainability in and around the home and office;</li> <li>- Personal protection</li> </ul> <p>Growing number of followers on social media to &gt; 100,000 by year-end 2020</p> <p>Target for 2018: 40,000 followers</p>	39,227 Subdivided into: Instagram: 777 LinkedIn: 21,750 Facebook: 16,700

**Outlook for 2019**

In 2019, a.s.r. plans to go live with the SME product portfolio on the new platform. a.s.r. will convert the retail portfolios to the new platform, complete the Generali Nederland portfolio conversions and the De Europeesche portfolio conversion. It also plans to complete the integration of the De Europeesche organisation into P&C and Ditzo. This will help improve the service to customers and reduce operating costs.

**Ditzo**

Ditzo is an independent business within the P&C segment. Its aim is to empower consumers to make their own decisions when insuring their goods and lives through the provision of insurance products, services, decision support tools, excellent customer service and direct online distribution.

Key themes in Ditzo’s strategy are:

- A focus on customer satisfaction through Ditzo’s customer service;
- Continuous optimisation of customer acquisition costs through online channels;
- Increasing the share of bundled proposition for existing customers with regard to both health and non-life insurance policies;
- To diversify the portfolio through more non care-related sales.

In 2018 Ditzo successfully implemented a revised product portfolio and migrated the portfolio to the administration platform with a non-automated conversion ratio of almost nil. To increase the share of the portfolio, the Ditzo Voordeelpakket was introduced, which combines a discount with more value-added services. The discount is based on the number of products (health and non-life) per customer.

In 2018, Ditzo also migrated to a single platform. This will result in cost savings at P&C level, simplification and a shorter time-to-market. In early 2019, the Generali Nederland Direct non-life portfolio will be migrated to the Ditzo system using robotics. In 2019, De Europeesche will be migrated to the Ditzo platform and the Ditzo and Europeesche organisations will be merged to form a single organisation.

## Disability

a.s.r. has been a traditional leader in this market, with a market share of 23.9%<sup>1</sup> in 2017<sup>2</sup> (2016: 24.0%), measured by GWP. The total Dutch disability insurance market measured by GWP totalled € 3.65 billion in 2017.

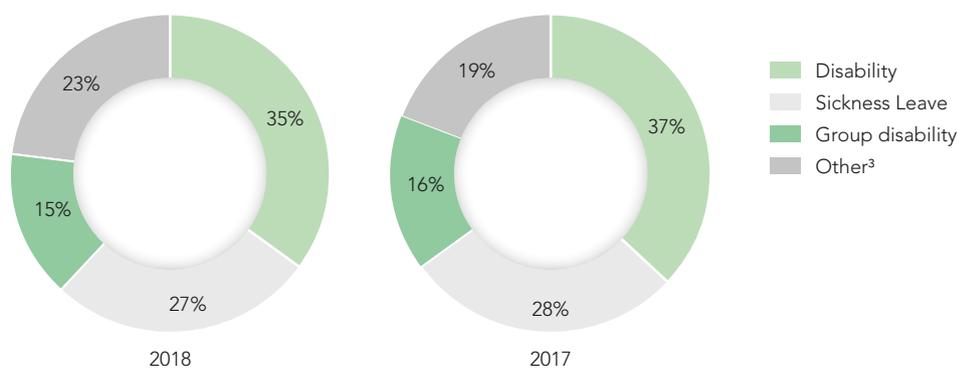
Under the De Amersfoortse brand, a.s.r. offers a broad range of disability insurance products as well as the services of in-house experts and external parties in the context of prevention and reintegration for SMEs (employers and employees) and self-employed persons.

### Products

- Disability self-employed:
  - 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 - Dutch Work and Income (Capacity for Work 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 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



### Market

The disability market is subdivided into:

- Disability self-employed: the entrepreneur 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;
- Group disability (employer and its employees):
  - Sickness leave (short term, 2 years): Employers are - in the event of sickness leave of the employee - responsible for continued payment of salary to the employee for up to two years. The employer can insure this risk on the private market which is done by most SMEs in practice;
  - Disability (long-term, up to retirement age): After two years of sickness, the employee may appeal to the WIA. WIA is a public act covering all employees in the Netherlands and is administered by UWV (the Employee Insurance Agency). The employee can use this to cover a possible significant loss of income.

### Strategy and achievements

a.s.r. has a strong position in the disability insurance market and through its brand De Amersfoortse, is well positioned to capture profitable growth opportunities. In December 2018, it announced that it had concluded an agreement with APG to acquire insurer Loyalis from APG. The acquisition will increase a.s.r.'s market share in disability to over 28%. a.s.r. also has a significant position in the intermediary distribution channel. Through its disability product line, it aims to meet the targeted COR of < 93%. a.s.r. believes that enhancing its offering on pricing and underwriting, and the deployment of dedicated multidisciplinary teams, are key to sustainable value creation.

### Product development

a.s.r. continues to provide high quality products and services to its customers by reducing the complexity of those products and by keeping product offerings up to date.

<sup>1</sup> Including De Europeesche accidents and Generali.

<sup>2</sup> Source: DNB - At the moment of writing, the market share figures for 2018 are unknown.

<sup>3</sup> 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').

Recently planned/introduced products and services include:

- ‘Langer mee AOV’: an affordable product devised for blue collar workers up to retirement age;
- Linking the disability payroll system and insurance administration means that personnel transactions are processed directly in the administration;
- Linking the disability health services administration and insurance administration means that sickness leave transactions are processed directly in the administration.

### Digitisation and innovation

- a.s.r. assists the intermediary channel with e-based underwriting systems and online channels to provide online product offerings;
- Disability has begun a pilot project to enhance visibility and potential relevance, especially for young

customers. The ‘Always On’ project focuses primarily on digital communication via a mobile device;

- a.s.r. claims the domain of sustainable employability by stimulating cooperation of its participations in the sphere of prevention, claims management and reintegration.

### Sustainability

De Amersfoortse’s ‘Doorgaan’ policy is an integrated disability and health insurance scheme whose customer benefits include lower premiums and supplementary services in the form of early preventive care, reducing the chance of (long-term) disability and encouraging sustainable employability. This is carried out by dedicated ‘doorgaanexperts’ through an efficient and effective approach (one stop shop for disability and health) aimed at minimising the length of absence.

### Sustainability target & result

Target	Result 2018	Result 2017
At the end of 2018, 11,000 customers signed a ‘doorgaangarantie’ (continuation guarantee)	almost 14,000	5,053

### Outlook for 2019

a.s.r. is not expecting any major changes in the social system. The emphasis will continue to be on improving accessibility and increasing insurance levels of the self-employed, focusing on young self-employed people and further improving service reintegration. a.s.r. needs to be vigilant on sickness leave levels. The acquisition of Loyalis is expected to take place in the first half of 2019. Loyalis will be an excellent addition to a.s.r.’s portfolio and is expected to strengthen its market position and provide an excellent basis for further growth.

to have basic health insurance coverage. Basic coverage is the same across all insurers, since it is a statutory requirement. The number of customers who switch care providers per calendar year has been relatively stable over the past four years just under 7%. In 2018 the number of customers that switched amounted to 6.7%.

Insurers are obliged to accept all Dutch residents for basic coverage. A government-run system of risk equalisation makes this possible and provides insurers with compensation for excessive costs resulting from their customer base. The government is constantly seeking to improve the system of risk equalisation in order to give every insurer the same starting position.

## Health

With a market share of 2.0% (2017: 2.1%), a.s.r. was the eighth largest provider of health insurance products on the Dutch market in 2018, as measured by customer numbers. a.s.r. offers health insurance products under the Ditzo and De Amersfoortse brands.

Gross written premiums for basic coverage are increasing across the board due to rising health care costs. These expenses account for more than 96% of health insurers’ overall costs. Between 2016 and 2018, the GWP of the market as a whole rose by more than 11%<sup>1</sup>.

### Products

Health markets two product types: basic insurance and supplementary insurance. Basic insurance provides cover in accordance with legal guidelines. Supplementary insurance covers specific risks that are not covered by basic insurance, such as the costs of dentistry, physiotherapy, orthodontics and medical support abroad.

### Strategy and achievements

In line with a.s.r.’s mission statement of ‘helping by doing’, its health strategy to help customers get better and healthier has been underpinned by the introduction of relevant products and services. a.s.r. health is also run as an ‘independent’ division within the Group, and supports other business lines and brands with opportunities for cross-selling and brand appreciation. Health is aiming for further digitisation and innovation.

### Market

The health insurance market is a highly regulated market. The Dutch health care system distinguishes two types of insurance product: basic health insurance coverage and supplementary coverage. All Dutch residents are obliged

### Making an impact on the personal health of customers

a.s.r. aims to help customers improve their health whenever possible. It therefore provides information, services

<sup>1</sup> Source: NZA Monitor Zorgverzekering 2018

and products to customers that may help them improve their health. In 2018, it ran a pilot project consisting of an online platform giving customers insight into their health and supporting their efforts to improve their own health (such as through more exercise, less alcohol, better sleep patterns). Based on the lessons learned, a.s.r. is looking to incorporate this kind of service into its daily customer-servicing business.

Given that it considers the health of its customers as one of its core focus areas, a.s.r. ended the outsourcing of health care procurement in 2017 and in 2018 brought the contracting of health care providers in-house. In this way, a.s.r. health aims to strengthen its relationship with health care providers for the benefit of its customers, while at the same time facilitating declaration processes in order to benefit customers and healthcare providers alike.

**Customer satisfaction**

As well as introducing products and services to help make customers more healthy, a.s.r. health strives to increase customer satisfaction by organising an efficient and client-focused customer service process. a.s.r. 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, customer satisfaction, lower operating costs and efficient processes. a.s.r. health also constantly updated the practical information it provided to

its employees so that they can in turn improve the quality, accuracy and speed of information they give customers.

**Product development and innovation**

a.s.r. continues to provide high quality products and services to its customers. Last year, it further automated its claims payment process, leading to faster payments to customers and less re-working. A knock-on effect is increased efficiency, which in turn enhances the affordability of the products.

Together with Ditzo, a.s.r. introduced ‘Pechvogel Plus’, a product that adds accident insurance to the a.s.r. health product range. a.s.r. can thus now give its customers the full range of health care insurance products. Another product that was introduced was the ‘Ditzo Voordeelpakket’, which gives customers a discount if they buy more than one Ditzo insurance product, such as health care insurance and car insurance. Customers can thus profit from the economies of scale that a.s.r. generates when a customer takes out more than one Ditzo product.

For De Amersfoortse, a.s.r. experimented with a digital health platform. This is an app to help improve customers’ health by providing a single platform for all their health trackers. a.s.r. also added challenges and goals to encourage customers to adopt an active lifestyle. It is now looking to implement this service and the lessons gained from the pilot project in its regular product range.

**Sustainability targets & results**

Target	Result 2018	Result 2017
Offer of expertise to see if and how a.s.r. health can help health care institutions improve their sustainability (e.g. a major challenge to bring the sustainability of buildings into line with government targets).	a.s.r. health devised a plan to help health care institutions reduce their CO <sub>2</sub> emissions by increasing the sustainability of their real estate. To do so, a third party sustainability scan was carried out to provide insight into possible improvements in a multi-year planning schedule. a.s.r. health has been working with a.s.r. asset management as a possible partner to fund the necessary building improvements in a cost-neutral way. This is currently in the pre-pilot phase.	NA

Target	Result 2018	Result 2017
<p>The Green Deals set four goals for the health sector: reduce CO<sub>2</sub> emissions, circular production and labour, clean water, and a healthy environment for employees and patients.</p> <p>a.s.r. health encourages sustainability and CO<sub>2</sub> reduction initiatives from its health care suppliers. a.s.r. health is opening face-to-face discussions with the top 25 health suppliers a.s.r. contracts directly.</p> <p>At the end of 2018, a.s.r. health set a target to host a 'sustainability congress' in mid-2019 for its top 150 health care suppliers. a.s.r. health wants to open up discussions on how it can help and inspire these suppliers to take the next steps. It is now setting up a partnership with advisor CFP green building and investigating possibilities for financing via AVB/Triodos bank.</p>	<p>a.s.r. health recently signed the Green Deal 'op weg naar duurzame zorg' (towards sustainable healthcare).</p> <p>Overall sustainability and CO<sub>2</sub> reduction initiatives are standard subjects on the agenda of a.s.r. health's quarterly meetings with its top 25 suppliers.</p> <p>A sustainability conference is being planned for mid-2019. There are approximately 150 registrations of interest from the real estate managers of health care suppliers.</p>	NA
<p>Further development of the GoedBezig health promotion app (pilot project and beyond).</p>	<p>Phase 3 of the pilot has been successfully completed. Lessons are being implemented in further projects and used to develop a health-based customer organisation.</p>	NA
<p>Provision of support to three health care institutions through approximately 150 colleagues from a.s.r. health (helping by doing).</p>	<p>Successfully assisted three institutions for mentally and/or physically ill or challenged people.</p>	<p>Successfully assisted several institutions for mentally and/or physically ill or challenged people.</p>

## Outlook for 2019

For De Amersfoortse, a.s.r. is looking into possibilities for further improving the unique proposition of Doorgaan (combination of health care insurance and disability insurance). In particular, a.s.r. wants to provide a more attractive proposition for employees when employers contract Doorgaan for them. a.s.r. also wishes to introduce a digital service to improve the health of its customers.

## 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 for consumers and business owners.

The operations are conducted by life legal entity ASR Levensverzekering N.V. With a 12% share of the market in 2017<sup>1</sup> (2016: 14.8%), a.s.r. occupies fifth place in the Dutch life market, based on GWP.

### Financial Performance

#### Key figures, Life

(in € millions, unless stated otherwise)	2018	2017	Delta
Gross written premiums, of which:	1,566	1,453	7.8%
Recurring premiums	1,295	1,243	4.2%
Single premiums	271	210	28.8%
Operating expenses	-185	-184	0.8%
<b>Operating result</b>	<b>664</b>	<b>633</b>	<b>4.9%</b>
<b>Profit/(loss) for the year attributable to holders of equity instruments</b>	<b>569</b>	<b>731</b>	<b>-22.0%</b>
Cost/premium ratio (APE)	11.1%	11.0%	0.1%-p
New business (APE)	119	89	33.7%

**Operating result** rose € 31 million to € 664 million (up 4.9%) mostly due to a higher investment margin (€ +37 million) from the acquired Generali Nederland business. Excluding Generali Nederland, direct investment returns remained stable, while required interest decreased (€ 6 million), mostly in the individual life book. This was offset by a decrease of the release from the capital gains reserve (€ -8 million).

**GWP** amounted to € 1,566 million (2017: € 1,453 million). Excluding the Generali Nederland's contribution of € 95 million the Life segment increased by € 18 million. The decrease in individual life premiums (€ 70 million) was more than compensated by new business in Pensions (€ 68 million) and Funeral (€ 19 million). The growth of Pensions is driven by the 'Werknemers-Pensioen', which increased by € 85 million to € 216 million (+65%). There are circa 55,000 active participants (2017: approximately 36,000) with a DC pension product. In addition to new customers, this growth is also due to transfers from the existing DB/DC-portfolio. The share of capital light DC pension products in new pension business remained fairly stable at 73% (2017: 77%). The level of surrenders of nominal policies at Individual life was stable at 0.8% but is still above long-term average. This mainly concerns savings mortgages that are surrendered or transferred because of the persistently low interest rates.

The increase in GWP at Funeral is mainly related to the acquisition of the PC Hooft Uitvaart portfolio, which was transferred to Funeral on 1 October 2018. Underlying the Funeral portfolio decreased slightly due to (un-)natural surrenders.

**Operating expenses** increased € 1 million to € 185 million. Excluding Generali Nederland (€ 15 million) the operating expenses decreased with € 14 million as a result of the continued execution of migration programs and the phasing out of IT-systems ('product- and system-rationalisation'). In addition, project- and integration related costs decreased this year.

The size of operating expenses related to the premiums (measured in APE) remained relatively unchanged resulting in a fairly stable cost-premium ratio of 11.1% (2017: 11.0%). Life operating expenses expressed in basis points of the basic life provision amounted to 56 bps (2017: 58bps).

<sup>1</sup> DNB – at the moment of writing, the market share figures for 2018 are unknown.

## Pensions

a.s.r. is a major provider of pension insurance products in the Netherlands under the brand a.s.r. Pensions has a joint venture with Brand New Day for an IORP (Institution of Occupational Retirement Provision). The current customer base of the pensions business comprises approximately 25,000 companies and 645,000 participants.

### Products

- DC: a.s.r. provides pension products based on defined contributions with recurring premiums where benefits are based on investment returns on specified funds, in some cases with guarantees. The Employee Pension proposition also offers the accumulation and benefits phase as a single product.
- DB: a.s.r.'s DB pension products are traditional insurance products based on lifelong guaranteed pension payments with recurring premiums with or without profit-sharing. These products also provide an option for additional single premiums for indexation and back services.
- Immediate annuities: in addition to the fixed annuities product, a.s.r. planned to offer a new product for post-retirement annuities (De variabele pensioenuitkering) in 2019. This product is based on single premiums and has the option of postponing benefits in response to the low interest rate environment.

### Market

There is a clear shift in the pensions market towards capital-light products, and this is expected to continue. a.s.r. believes it is well positioned to increase market share with its DC and IORP proposition, through high-level service, cost-effectiveness and capacity for execution, while still meeting its pricing policy. a.s.r.'s modern DC proposition ('WerknemersPensioen') has been further developed to strengthen its competitive position and accelerate growth in the DC market. Through this proposition, a.s.r. believes it is well positioned for further individualisation in the future which may result from the current pension debate in the Netherlands.

a.s.r. is also active in the pension market through Het nederlandse pensioenfond (Hnpf), for which it delivers pension administration and asset management. Hnpf was established by a.s.r. in 2016 to offer new and existing customers an alternative DB product. The first customers were welcomed in 2017 and in 2018 Stichting Pensioenfond Arcadis Nederland (Arcadis Netherlands Pension Fund) transferred its pension scheme to Hnpf. Hnpf is one of the four major general pension funds in the Netherlands and currently has € 1.3 billion in committed assets. a.s.r. is the pension administrator for the 14,000 Hnpf customers.

## Strategy and achievements

### Optimise customer satisfaction

a.s.r. focuses on clear, simple, cost-conscious pension products. a.s.r.'s DC proposition (WerknemersPensioen) aims to be competitively priced (top 3), rewarded for its fund selection (SRI funds) by independent intermediaries and digital in its communications to participants. In 2018, a.s.r. strengthened the position of the WerknemersPensioen in the market by improving customer portals and optimising sales & customer service. The results of these efforts are reflected in the progress a.s.r. has made in the IG&H pension survey (climbing from the lowest place in 2016 to 4th place in 2018). The goal is to rank in the top 3.

a.s.r. continued to reduce complexity in the existing portfolio by offering more standardised products. The renewal of DB contracts is considered if customers are intending to shift to DC in the near future and meet strict financial criteria consistent with the year before. a.s.r.'s strategy for its existing DB book is to maintain its value, reduce capital requirements, enhance cost coverage and minimise risks. The DB book will gradually become a service book as more employers opt for other pension solutions.

### Cost control

The programme to migrate and integrate the Generali Nederland book to the existing a.s.r. platform is on track (completion scheduled for 2020) while the same services will be offered to customers and the market position improved. Pensions has already brought these plans forward from Q4 2020 to Q1 2020. The migration of inactive participants from the old legacy system of 'De Amersfoortse' was completed in 2018, contributing to further cost reduction and variabilisation.

### Digitisation and innovation

In 2018, Pensions improved its digital customer service by investing in more user-friendly client portals and a more fully integrated online environment for its existing portfolio and the WerknemersPensioen portfolio and by taking further steps to introduce robotics into its day-to-day operations.

### Sustainability

Social initiatives were introduced to improve financial awareness among consumers through the '[www.lkdenkvooruit.nl](http://www.lkdenkvooruit.nl)' platform. In line with its core values, Pensions involved its employees in interactive sessions in order to enhance levels of engagement. Employees also took part in panels to improve communication with participants.

Pensions implemented the legal uniform calculation method (URM) to make it easier for participants to understand their pensions and the terms of the GDPR.

## Outlook for 2019

The main outlook for 2019 is further growth in the DC proposition and Hnpf, enhancing online and personal customer services and developing client portals. Attention will also continue to be focused on cost variabilisation through planned migrations and by simplifying and automating operational processes.

## Individual life

a.s.r. is one of the largest providers of individual life insurance products in the Netherlands, measured by 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. The number of unit linked policies is declining year on year.

### Market

The premium volume in the individual life market has declined in recent years due to low interest rates and tax reforms. This decline is expected to continue over the coming years. With effect from 1 January 2018, a.s.r. has only offered term life insurance products, all other products having become a closed service book.

a.s.r. is well positioned to become the consolidator in the Dutch service books market. With the acquisition of Generali Nederland, a.s.r. added an 'external block of business' for the first time. The book will be migrated to the Software as a Service (SaaS) platform in the same way as the other individual life service book.

### Strategy and achievements

The strategy of Individual life is to maximise and maintain the current value of the individual life book. To achieve this, a.s.r. focuses on optimising customer satisfaction and on reducing and variabilising costs.

#### *Optimise customer satisfaction*

To increase the value of the individual life book, a.s.r.'s strategy is to optimise customer satisfaction. It believes that maintaining customer satisfaction is crucial for efficiently managing the way in which customers behave and in order to limit unnatural lapses. While focusing on customer satisfaction, a.s.r. is also striving to further digitise and robotise its services and to make these services easier for customers to use.

#### *Lower cost base and shift to variable costs*

In order to preserve the value of the individual life book, a.s.r. aims to simplify its organisation and shift its cost base from fixed costs to more variable costs. In order to reduce costs and introduce variabilisation, a.s.r. is simplifying processes and rationalising and migrating the

service book to a SaaS platform. a.s.r. intends to maintain this strategy, analysing books on an individual basis to find the most appropriate and value-enhancing solution while minimising operational costs and complexity. The migration programme is on track. Six books containing 515,000 policies have now been successfully migrated (three in 2018) and two books are planned for 2019, including the recently acquired Generali Nederland life book which will be migrated to the same cost-efficient SaaS platform.

### Digitisation and innovation

In 2018, processes were improved through automation and partly through robotics. The quality of the processes improved and a small reduction in FTEs was achieved.

### Sustainability

During 2018, Individual life concentrated on digitising its communication. Individual life planted a forest in the Netherlands and Bolivia to mark the fact that many of its customers decided to communicate with us digitally as a way of offsetting CO<sub>2</sub> emissions.

Rationalisation of the individual life book also led to sustainability and to a significant decrease in product features and investment funds.

### Outlook for 2019

The main perspective for maintaining the value of the robust and predictable life book is to complete the planned migrations from the Generali Nederland platform and the remaining a.s.r. legacy platform to the SaaS platform. The focus will also be on further improving and digitising the surrender processes, data management and operational excellence.

## Funeral

As at 31 December 2018, the funeral portfolio consisted of 6.6 million policies and 3.9 million customers. Based on the volume of premiums, Ardanta is the second biggest 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. Ardanta also offers practical guidance to survivors and dependants on overcoming their personal loss and advises policyholders and their relatives on practical matters relating to bereavement. This is done through initiatives such as the '[www.doodgaanendoorgaan.nl](http://www.doodgaanendoorgaan.nl)' portal and the services of a 'funeral coach', who assists relatives in the days immediately following a death.

### Market

The market is characterised by consolidation. Due to the low interest rate environment, funeral insurance premiums have gone up in recent years. The distinctive selling point of Ardanta is its 'free choice' with regard to the delivery

of funeral services, and as a result it has a unique and cherished market position.

### **Strategy and achievements**

Ardanta's strategy is on growth through acquisitions, developing customer-focused initiatives and simultaneously maintaining its low-cost operating platform. In 2018, the portfolios of Generali Nederland and PC Uitvaart were integrated into Ardanta. A total of 360,000 Generali Nederland policies and PC Uitvaart customers were thus transferred to the Ardanta platform.

### **Digitisation and innovation**

Ardanta is committed to increasing digital process support. Thanks to improved customer portals and service & contact pages, customers and intermediaries experience an increasing digital ease of use. Printed output has also significantly reduced.

In 2018, 25% (€ 0.7 million) of new business came from the online channel. The accessibility of the website for users with an audio-visual disability was also improved, and work to further enhance digital ease of use will continue.

### **Outlook for 2019**

With regard to new consolidation opportunities, Ardanta will continue to be alert to new developments that could arise. But always with a clear eye on the risk versus reward trade-off. Developments are also under way to facilitate an increase of approximately 25% of claims to be handled digitally in 2019. Finally, Ardanta launched a new initiative in 2018 to actively try to contact relatives of deceased policyholders who had not yet filed a claim: it will continue to make endeavours with this project. In 2018, Ardanta approached approximately 5,500 individuals in this context.

## A.3 Investment performance

a.s.r.'s investment policy is aimed at striking a balance between generating returns and preventing risks. Protecting the solvency position is an important factor in this context.

### A.3.1 Revenues and costs of all assets

#### Investments

	31 December 2018	31 December 2017
Available for sale	25,328	23,975
At fair value through profit or loss	2,332	1,706
	<b>27,660</b>	<b>25,681</b>

The investments at fair value through profit or loss increased in 2018 by € 626 million primarily due to

additional investments in the mortgage equity funds and a.s.r. real estate funds.

#### Breakdown of investments

	31 December 2018			31 December 2017		
	Available for sale	Fair value through profit or loss	Total	Available for sale	Fair value through profit or loss	Total
<b>Fixed income investments</b>						
Government bonds	11,773	-	11,773	10,409	-	10,409
Corporate bonds	10,708	-	10,708	10,290	-	10,290
Asset-backed securities	127	-	127	154	-	154
<b>Equities and similar investments</b>						
Equities	2,716	107	2,822	3,102	121	3,223
Real estate equity funds	-	1,928	1,928	-	1,585	1,585
Mortgage equity funds	-	298	298	-	-	-
Other participating interests	4	-	4	12	-	12
Other investments	-	-	-	7	-	7
<b>Total investments</b>	<b>25,328</b>	<b>2,332</b>	<b>27,660</b>	<b>23,975</b>	<b>1,706</b>	<b>25,681</b>

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

In 2018, government bonds increased to € 11,773 million (2017: € 10,409 million) primarily due to the acquisition of Generali Nederland. Equities declined to the amount of € 2,822 million (2017: € 3,223 million) due to de-risking and the development of the stock-market. The increase in real estate equity funds is primarily related to positive revaluations. 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 € 21,774 million (2017: € 20,090 million) of fixed income investments, mortgage equity funds and other investments is expected to be recovered after twelve months after reporting date. For all assets without a contractual maturity date, it is assumed that they will be expected to be recovered after twelve months after the reporting date.

## Breakdown of investment income per category

	2018	2017
Interest income from receivables due from credit institutions	149	151
Interest income from investments	394	399
Interest income from amounts due from customers	253	252
Interest income from trade receivables and derivatives	256	216
Other interest income	22	22
<b>Interest income</b>	<b>1,075</b>	<b>1,039</b>
Dividend on equities	78	69
Dividend on real estate equity funds	65	57
Rentals from investment property	50	54
Other investment income	13	12
Dividend income mortgage funds Unlisted - HAF - Total	2	-
<b>Dividend and other investment income</b>	<b>208</b>	<b>192</b>
<b>Total Investment income</b>	<b>1,283</b>	<b>1,231</b>

The effective interest method has been applied to an amount of € 794 million of the interest income from financial assets not classified at fair value through profit or loss (2017: € 836 million). Interest income includes € 7 million (2017: € 9 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

(in € millions)	2018	2017
<b>Profit for the year</b>	<b>657</b>	<b>908</b>
Remeasurements of post-employment benefit obligation	53	108
Unrealised change in value of property for own use	8	3
Income tax on items that will not be reclassified to profit or loss	-15	-28
<b>Total items that will not be reclassified to profit or loss</b>	<b>46</b>	<b>83</b>
Unrealised change in value of available for sale assets	-429	126
Realised gains/(losses) on available for sale assets reclassified to profit or loss	-235	-395
Shadow accounting	248	443
Segregated investment pools	65	-15
Income tax on items that may be reclassified subsequently to profit or loss	61	-18
<b>Total items that may be reclassified subsequently to profit or loss</b>	<b>-290</b>	<b>141</b>
<b>Total other comprehensive income for the year, after tax</b>	<b>-244</b>	<b>224</b>
<b>Total comprehensive income</b>	<b>413</b>	<b>1,132</b>
<b>Attributable to:</b>		
- Attributable to non-controlling interests	2	2
<b>- Shareholders of the parent</b>	<b>367</b>	<b>1,096</b>
- Holders of other equity instruments	59	45
- Tax on interest of other equity instruments	-15	-11
<b>Total comprehensive income attributable to holders of equity instruments</b>	<b>411</b>	<b>1,130</b>

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**

No other information is applicable.

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

The three committees are:

- The Audit & Risk Committee;
- The Remuneration Committee;
- The Selection & Appointment Committee.

#### Audit & Risk Committee

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

The Audit & Risk Committee comprises three Supervisory Board 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. Sonja Barendregt succeeded Annet Aris, who stepped down as a member of the Audit & Risk Committee. The Audit & Risk Committee is grateful for the many valuable contributions made by Ms Aris to the committee's discussions.

The Committee held six regular meetings in 2018. In accordance with the Audit & Risk Committee Rules, committee meetings are also attended by the CFO, the Director of Group Risk Management, the Director of Group Accounting, Reporting & Control, the Director of Finance & Risk, the Director 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 Committee Chairman also had two one-to-one meetings with each of the directors of Audit, Compliance and Group Risk Management, 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 2018 reporting year was discussed in the first quarter of 2019 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. The Committee issued positive opinions on the Annual Report and on the financial statements to the Supervisory Board.

The Committee discussed and adopted the external auditor's letter of engagement and the audit plan for 2018. 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 external auditors audit results report was discussed. Special attention was given to the reported key audit matters: fair value measurement of non-listed investments, valuation and adequacy of insurance contract liabilities including shadow accounting, unit-linked exposure, Solvency II, the Generali Nederland acquisition, classification of a.s.r. bank as held for sale and discontinued operation, and reliability and continuity of electronic data processing. In addition, the Committee discussed with the external auditor their assessment report regarding the Solvency II and IFRS LAT key non-economic assumptions. Following the creation of the BEC in early 2019, the Audit & Risk Committee approved the updated charters of the Actuarial and Risk Management Function and the Compliance Function. It advised the Supervisory Board to approve the updated charter of the internal Audit Function; this advice was followed. The 2019 annual plans for the countervailing powers were also discussed and approved. Following positive advice from the Committee, the Supervisory Board approved the 2019 annual plan of the Audit department.

Following the completion of the acquisition in early 2018, the progress of the integration of Generali Nederland, its contribution to the financial results and its (limited) impact on a.s.r.'s risk profile was discussed. The effect of the acquisition on the audit plan was also discussed and the audit plan was amended accordingly.

Specific topics discussed in the Committee included cyber risks and IT security. a.s.r. researched the risk of business discontinuity and concluded that cyber threats and requests for continuous improvements were increasing but that at this point the organisation was relatively

well-protected against external cyber risks. At the same time, cyber risk is a business opportunity for the non-life insurance business, and the potential for this was also discussed. a.s.r. adopts a prudent stance in this emerging market. Fraud issues (both from external clients – e.g. inappropriate claims behaviour - or from employees) are investigated and appropriate actions are undertaken by the Compliance department. Part of the quarterly Compliance report is an overview of all known fraud issues. When deemed necessary, the fraud is reported to the police for further action.

New business in the Dutch life insurance market is very limited. Cost control and the future development of costs are therefore key for future profitability. The Committee discussed cost developments, not just at its regular quarterly meetings, but also in the context of a.s.r.'s long-term costs. In the last couple of years, a.s.r. has been successful in managing its costs in line with the lower cost coverage from the life business.

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 and to a.s.r.'s view on a more economic UFR scenario. The Audit & Risk Committee discussed the risk scenarios and the outcomes of the ORSA.

In all risk scenarios, 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 Supervisory Board approved the updated policy.

The Audit & Risk Committee periodically 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. The Committee was informed of the outlines of the reinsurance programme.

At the end of 2018, the multi-year budget for 2019-2021, the investment plan for 2019 and the balance sheet plan for 2018 and subsequent years were discussed. The multi-year budget was subsequently approved by the Supervisory Board. Finally, the Audit & Risk Committee prepared a rotation of the external auditor, in order to safeguard stability during the transition phase of the implementation of IFRS 9 and 17. It is expected that a proposal for this will be made at the upcoming AGM on 22 May 2019.

## Remuneration Committee

In 2018, the composition of the Remuneration Committee was as follows:

- Annet Aris (Chair)
- Kick van der Pol

The Remuneration Committee advises the Supervisory Board on, among other things, remuneration policy for the Executive Board and the terms and conditions of employment of the Executive Board, and reviews the remuneration of senior management.

The Remuneration Committee met eight times in 2018. Its meetings were also attended by the CEO (except when issues relating to the Executive Board were discussed) and the Human Resources Director, who also acts as Secretary. The Committee solicits support and advice from departments such as Group Risk Management, Compliance, Audit and Human Resources. Where needed, it calls in the expertise of independent legal and pay & benefit experts.

In line with policy, the Committee advised the Supervisory Board on target-setting, performance appraisals and the ex-post assessments of variable payments awarded to identified staff. At the beginning of 2018, the remuneration policy was updated in line with new regulations and the Remuneration Committee discussed the implementation of the remuneration policy for a.s.r.'s subsidiaries and participations. The results of the internal audit report on the application of a.s.r.'s remuneration policy were discussed.

In 2018, the Remuneration Committee devoted considerable time and attention to the evaluation of the remuneration policy for the Executive Board. The Committee was assisted by an internal committee and a pay & benefits expert. In its evaluation of the remuneration policy, the Committee carefully took into account the opinions of all stakeholders, since there was a risk of in order not damaging trust in a.s.r. and to put its market position as a socially responsible insurer at risk. This produced an integrated approach for the evaluation, based on four perspectives:

1. Organisational perspective;
2. Internal perspective: consistency with and fairness with regard to the internal wage;
3. External perspective: competitiveness with the external market;
4. Stakeholder perspective: taking into account the views of various stakeholder groups with regard to remuneration (level and structure): customers, employees, society and shareholders.

The remuneration policy aims to strike a fair balance between the views and interests of these various stakeholder groups.

Extensive analyses have been made and all stakeholder groups have been consulted on possible amendments

of the remuneration policy for the Executive Board. In evaluating the remuneration policy, the Committee carefully took into account the opinions of all stakeholders, confidence in and the market position of a.s.r., and a.s.r.'s ability to attract and retain high-performing employees. The Committee proposed a revised remuneration policy to the Supervisory Board. The Supervisory Board will ask the shareholders to vote on the proposed remuneration policy as from 1 January 2020 for the Executive Board at the AGM in May 2019. The Supervisory Board is aware of the different opinions of the various stakeholders on remuneration. The Supervisory Board believes that the proposal strongly supports the long-term interest of a.s.r. and strikes a good balance between the different interests of stakeholders and offers an effective remuneration to the Executive Board.

The fees for Supervisory Board members were also evaluated. These fees have remained unchanged since 2009. The Dutch Corporate Governance Code states that the remuneration of the Supervisory Board should reflect the time spent on and the responsibility of each function. In recent years, the responsibilities of the Supervisory Board have increased due to changes in governance and legislation and regulations. A benchmark study was conducted as part of the periodical evaluation. The peer group is the same as the one used for the remuneration of Executive Board members. The benchmark showed that the remuneration paid was well below the benchmark median. Based on this, the Supervisory Board will propose an adjustment of the remuneration of the Supervisory Board to the shareholders at the AGM in May 2019, given that it does not currently accurately reflect the time spent on, and the increased responsibility of, their duties.

### **Selection & Appointment Committee**

In 2018, the composition of the Selection & Appointment Committee was as follows:

- Annet Aris (Chair)
- Kick van der Pol

The Selection & Appointment Committee advises the Supervisory Board on selection and appointment procedures and the composition of the Boards; it also prepares the (re)appointment of members. The Selection & Appointment Committee met six times in 2018. Its meetings are also attended by the CEO and the Human Resources Director, who also acts as Secretary.

At the 2018 AGM, Sonja Barendregt was appointed to the Supervisory Board. A selection process for the appointment of a new chairperson was begun in 2018 with the help of an external agency. The Works Council also began their search for a candidate under the terms of Article 2:268 of the Dutch Civil Code. An announcement will be made as soon as there is clarity about the outcome.

The Committee was heavily involved in the discussion and preparation of the new management structure. As described earlier, as a result of these discussions the Supervisory Board decided on the recommendation of the Selection & Appointment Committee to change the composition and size of the Executive Board from four to three members and to appoint a BEC. The COO positions superfluous and Karin Bergstein and Michel Verwoest agreed to step down as Executive Board members as from 1 February 2019. A search was begun for a new Executive Board member and an announcement will be made once this search has produced a candidate and the DNB procedure is finished.

Lastly, the Committee discussed the annual appraisals of senior management. 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.

### **Financial statements and dividend**

The Executive Board prepared the 2018 Annual Report and discussed it with the Supervisory Board in the presence of the external auditor. The 2018 financial statements will be submitted for adoption by the AGM on 22 May 2019. a.s.r. will propose a dividend of € 1.74 per ordinary share, or € 245 million in total, including the interim dividend paid.

### **Appreciation**

The Supervisory Board wishes to thank 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 Supervisory Board also wishes to express its gratitude to the members of the Executive Board 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 Supervisory Board greatly appreciated the ongoing and constructive open dialogue and cooperation with the Executive Board.

Utrecht, the Netherlands, 26 March 2019

Kick van der Pol (Chairman)  
Annet Aris  
Sonja Barendregt  
Cor van den Bos  
Herman Hintzen

### B.1.1.2 Corporate Governance

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 and a Supervisory Board. The Executive Board is responsible for the realisation of corporate objectives, the strategy with its associated risks and the delivery of the results. The Supervisory Board is responsible for advising the Executive Board, supervising its policies and the general state of affairs relating to a.s.r. and its group entities. On 19 November 2018, a.s.r. announced that its management structure would change as of 1 February 2019. From then on, the Executive Board would consist of the CEO, CFO and a new member to be appointed, plus the establishment of a Business Executive Committee (BEC) alongside the Executive Board. The BEC will work in unison with the Executive Board and will share responsibility for the implementation of the business strategy.

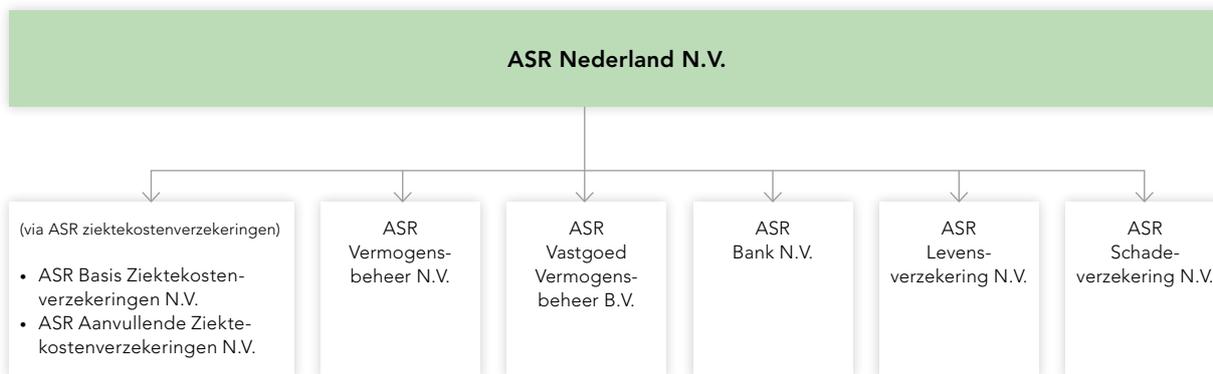
#### Legal structure

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 5 February 2018, ASR Nederland N.V. completed the acquisition of Generali Nederland N.V. by acquiring all issued and outstanding shares. Generali Nederland N.V. was legally merged into ASR Nederland N.V. on 7 May 2018. The operating companies Generali levensverzekering maatschappij N.V. and Generali schadeverzekering maatschappij N.V. legally merged with ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. on 29 June 2018.

A personal union exists between ASR Nederland N.V., ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. through cross-membership of the Executive Board and the Supervisory Board. ASR Basis Ziektekostenverzekeringen N.V., ASR Aanvullende Ziektekostenverzekeringen N.V. and ASR Bank N.V. have their own Executive Boards. The Supervisory Boards of these entities consist of a combination of members of the Executive Board and members of the Supervisory Board of ASR Nederland N.V. ASR Vermogensbeheer N.V. and ASR Vastgoed Vermogensbeheer B.V. are two AIFMD-licensed AIFMs. These entities have their own Executive Boards.

#### Group structure



#### General Meeting of Shareholders and consultation with Shareholders

At least one general meeting of shareholders is held per annum (the AGM), 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](http://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 2018 was held on Thursday 31 May. A total of 70,78% 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 adoption of the annual financial statements, the approval of the proposed dividend payments for the financial year 2017, the discharge of the Executive and Supervisory Board members holding office in the 2017 financial year, the reappointment of Chris Figee (CFO) as a member of the Executive Board, the appointment of Sonja Barendregt as a new member of the Supervisory Board, and the approval of the proposed extended authority of the Executive Board and the cancellation of shares held by a.s.r. All agenda items were approved by the AGM. The next AGM will be held on Wednesday 22 May 2019.

Contacts with shareholders are currently conducted entirely in line with the Policy on fair disclosure and on the basis of bilateral dialogue with shareholders (with the exception of the Relationship Agreement). The Policy on fair disclosure and bilateral dialogue with shareholders is published on [www.asrnl.com](http://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.

### **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 in line with five CSR-related themes: 'Sustainable insurer', Sustainable investor, 'Sustainable employer', 'Sustainable management' and the '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, 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 Executive Board, the CEO is ultimately responsible for a.s.r.'s CSR themes. Each year, the Supervisory Board discusses and approves the CSR objectives and the progress made in these specific areas. The Director of Corporate Communications coordinates the implementation together with the CSR Task Force. The Task Force consists of a secretary, the directors of the Services, Human Resources, Asset Management, Real Estate, Integrity, Group Risk Management, Non-life, Pensions and Bank & Mortgages departments, and the Company Secretary. The Task Force meets regularly to formulate an integrated CSR vision and to set objectives. All Task Force members subsequently promote this vision and objectives within their own focus areas. The Task Force also sets CSR Key Performance Indicators (KPIs).

A CSR Work Force operates under the Task Force, with delegates from the directors mentioned above. It reports quarterly on the set CSR KPIs to the Task Force, which evaluates the results achieved or takes action where necessary. Each focus has a CSR Work Force for substantive discussions and to work out (subsidiary) activities. Five sessions on specific CSR themes were organised for the Task Force throughout the year.

### B.1.1.3 Executive Board

The Executive Board 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 Executive Board 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 Executive Board is accountable to the Supervisory Board and the AGM with regard to the performance of its duties.

Certain resolutions of the Executive Board require the approval of the Supervisory Board and/or the AGM. These resolutions are outlined in the a.s.r. articles of association and the Rules of Procedure of the Executive Board. Both can be viewed at [www.asrnl.com](http://www.asrnl.com).

#### Composition of the Executive Board

The articles of association specify that the Executive Board 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. The Supervisory Board appoints the members of the Executive Board and may suspend or dismiss any Executive Board member at any time. The Supervisory Board notifies the AGM of proposed

appointments. At the AGM in 2018, the Supervisory Board discussed the reappointment of Chris Figee as CFO; the Supervisory Board subsequently reappointed Chris Figee for an additional four-year term. During 2018, the composition of the Executive Board remained unchanged, consisting of four members under the chairmanship of Jos Baeten. Following the change in the management structure, Karin Bergstein and Michel Verwoest resigned as Executive Board members with effect from 1 February 2019. The selection procedure for a new member of the Executive Board has begun and the nomination of the candidate will be notified as soon as possible. In anticipation of this candidate, the portfolio is temporarily divided between Jos Baeten and Chris Figee.

#### Executive Board

Name	Current term of office	Appointed until
Jos Baeten	26 January 2017	General Meeting 2020
Chris Figee	31 May 2018	General Meeting 2022
Karin Bergstein	1 September 2015	1 February 2019
Michel Verwoest	1 December 2016	1 February 2019

#### Appointment of the members of the Executive Board

Karin Bergstein and Michel Verwoest stood down from the Executive Board on 1 February 2019.

#### Diversity

a.s.r. is committed to an inclusive culture. In 2017, the Supervisory Board 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 2018, the Executive Board consisted of one woman and three men. The current composition of the Executive Board does not meet the gender target of having at least 30% women amongst the members of the Executive Board. a.s.r. will continue to strive for an adequate and balanced composition of the Executive Board 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. A female candidate is being sought to fill the vacancy within the Executive Board.

#### Permanent education and evaluation

A self-evaluation session was held after the results of a 360° feedback questionnaire had been received. This gave the Executive Board feedback from members of the Supervisory Board, senior management, members of the Works Council and each other. The questionnaire specifically focused on leadership themes from 'the story of a.s.r.': dilemmas, dialogue, clear frameworks and actions. The outcome of the questionnaire was discussed within the Executive Board under the guidance of an expert/consultant representing the supplier of the 360° tooling, to further interpret the results. The overall impression that emerged from this self-assessment was positive. Positive points included the open and interested attitude of the Executive Board, its complementarity on tactical and strategic level and its decisiveness/execution power. Recommendations include openly discussing dilemmas with senior management and providing more feedback on attitudes and behaviour.

The performance of the members of the Executive Board was also assessed by the Supervisory Board 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 Executive Board (by two Supervisory Board members each time) in which the results of the aforementioned 360-feedback were included.

In 2018, specific sessions were also organised jointly with the Supervisory Board 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 Group Accounting, Reporting & Control. The new regulations will impact the external reporting on insurance contracts in future. The implementation of IFRS 17 within a.s.r. is a major project. The second session focused on increasing digitisation in the insurance industry. A knowledge session was also led by an external expert on governance and board leadership took place at the beginning of the year. During this session, the Supervisory and Executive Boards were given an update on long-term value creation based on the Dutch Corporate Governance Code and discussed this in relation to a.s.r.

Individual Executive Board members attended knowledge sessions on various topics in their capacity as board members and supervisory directorships in other organisations.

### **Remuneration**

Information on the remuneration policy for Executive Board members and their individual remunerations can be found in the Remuneration report, [see chapter B.1.2.](#)

### **The Business Executive Committee**

In 2018, a new management structure was created in close consultation between the CEO and the Supervisory Board in order to deliver on the next steps in implementing the recently announced strategy and objectives.

On 19 November 2018, a.s.r. announced that as of 1 February 2019, it would change its management structure. Effective from this date, a.s.r.'s Executive Board will consist of three members: the CEO, the CFO, and a member to be appointed. A Business Executive

Committee (BEC) will also be established. The BEC consists of the members of the Executive Board, the Chief Risk Officer (CRO) and senior managers representing certain business areas. The following business areas are represented in the BEC: Service Books (Individual life & Funeral), Disability, Health, P&C, Mortgages, Pensions, Asset Management and Innovation & Digital. Through the creation of the BEC, a.s.r. wishes to increase direct involvement of the senior managers of the product lines in further strengthening a.s.r.'s innovative power. It will also enable a.s.r. to act decisively with respect to potential inorganic opportunities.

The BEC will work as a unison with the Executive Board, and is co-responsible for the implementation of the business strategy. Only the members of the Executive Board have voting rights in the meeting of the BEC. The new 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 industry in motion, it is vital that a.s.r. can respond quickly to opportunities that arise and efficiently anticipate constantly changing customer needs.

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

## Biographies of Executive Board members

### Current members



**J.P.M. (Jos) Baeten**  
(Dutch, 1958)

Chairman of the Executive Board and Chief Executive Officer (CEO)

In 2018, Jos Baeten was responsible for Human Resources, Corporate Communications, Strategy, Risk management of the investment funds managed by ASR Vermogensbeheer N.V., Corporate Social Responsibility, Audit, Legal Affairs & Integrity.

On 1 February 2019, he became responsible for Human Resources, Corporate Communications, Legal Affairs & Integrity, Group Risk Management, Audit and Innovation & Digital.

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. In 2005, Jos Baeten was appointed Chairman of the Board of Directors of Fortis ASR Verzekeringsgroep N.V.

#### Additional positions

Jos Baeten is currently a member of the Executive Board of the Dutch Association of Insurers (Verbond van Verzekeraars). During 2018 Jos Baeten was the Chairman of the Supervisory Board of Stichting Theater Rotterdam until March 2019. He is member of the Supervisory Board of De Efteling B.V. And he is also a member of the General Administrative Board of VNO-NCW and a Board Member of Stichting Grote Ogen and Stichting Fietshelm is Hoofdzaak.



**H.C. (Chris) Figeet**  
(Dutch, 1972)

Chief Financial Officer (CFO)

In 2018, Chris Figeet was responsible for Group Accounting, Reporting & Control, Business Finance & Risk, Group Asset Management, Real Estate Investment Management, Real Estate Projects, Group Balance Sheet Management and Group Risk Management.

As of 1 February 2019, Chris Figeet is responsible for Finance, Group Accounting, Reporting & Control, Group Balance Sheet Management, Group Asset Management and a.s.r. real estate.

Chris Figeet 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 Figeet began his career at Aegon N.V., where he held various positions, including that of Senior Portfolio Manager Fixed Income Aegon Life Insurance. Chris Figeet's last position at Achmea Holding B.V. was Director of Group Finance.

#### Additional positions

Chris Figeet is a member of the Board of Stichting DSI and a member of the Supervisory Board of Stichting Nederland Comité UNICEF. As of 31 January 2019, he is also a member of the Supervisory Board of Human Total Care.

**Former members (resigned per 1 February 2019)**

**K.T.V. (Karin) Bergstein**  
(Dutch, 1967)

Chief Operating Officer (COO)

Karin Bergstein has been responsible for Innovation & Digital, Information Technology and Change, and the product lines Pensions, Individual life, Banking and Mortgages and Funeral.



**M.H. (Michel) Verwoest**  
(Dutch, 1968)

Chief Operating Officer (COO)

Michel Verwoest has been responsible for the product lines P&C, Disability, Health and Services and for a.s.r.'s distribution companies.

### B.1.1.4 Supervisory Board

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

#### Composition of the Supervisory Board

In line with a.s.r.'s articles of association, the Supervisory Board should consist of at least three members. In 2018, there was one change in the composition of the Supervisory Board. The proposed Board member Sonja Barendregt was appointed as a new member of the Supervisory Board at the General Meeting of Shareholders on 31 May 2018. The Supervisory Board currently consists of five members: Kick van der Pol (Chairman), Annet Aris, Cor van den Bos, Herman Hintzen and Sonja Barendregt. The composition of the Supervisory Board of ASR Levensverzekering N.V. and ASR Schadeverzekering N.V. is the same as that of ASR Nederland N.V.

#### Diversity

The Supervisory Board 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 Supervisory Board

profile can be viewed on the a.s.r. website: [www.asrnl.com](http://www.asrnl.com). In 2017, the Supervisory Board adopted a formal diversity policy. One of the objectives of the policy is to achieve a Supervisory Board consisting of at least 30% women and at least 30% men. In 2018, the composition of the Supervisory Board met this gender balance, with 40% women and 60% men.

The composition of the Supervisory Board is such that each member has the skills to assess the main aspects of overall policy and that the Board as a whole matches the desired profile due to a combination of experience, expertise and the independence of the individual members. The diversity of its members ensures the complementary profile of the Supervisory Board. a.s.r. will continue to strive for an adequate and balanced composition of the Board 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.

#### Supervisory Board

Name	Date of initial appointment	Date of reappointment	End of current term of appointment <sup>1</sup>	End of the term of appointment at AGM <sup>2</sup>
Kick van der Pol	15 December 2008	15 June 2014	15 June 2018	2019
Annet Aris	7 December 2010	7 December 2014	7 December 2018	2023
Cor van den Bos	15 December 2008	15 June 2015	15 June 2019	2020
Herman Hintzen	1 January 2016	-	1 January 2020	2028
Sonja Barendregt	31 May 2018	-	AGM2022	2030

In line with the Dutch Corporate Governance Code, Supervisory Board members are appointed by shareholders for a four-year term. Supervisory Board members can be reappointed for one additional four-year term and then subsequently reappointed for a period of two years. Reappointments following an eight-year period must be justified in the Supervisory Board report. Supervisory Board members retire no later than by the AGM of Shareholders immediately following the end of their term of appointment.

The Supervisory Board is looking for a suitable successor for Kick van der Pol. Someone with the right expertise and experience, who fits well with the culture of the company and who embraces the strategy of a.s.r. The right candidate has not yet been found.

Annet Aris will step down from the Supervisory Board at the forthcoming AGM in 2019.

In accordance with Section 2:158 of the Dutch Civil Code, the Works Council started their search for a candidate in 2018. An announcement will be made once there is clarity about the outcome.

#### Independence and conflicts of interest

All the Supervisory Board members passed the 'fit and proper test' required under the Dutch Financial Supervision Act. In 2018, there were no reports of potential conflicts of interest relating to members of the Supervisory Board. The Supervisory Board 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.

1. Supervisory Board 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

Name	Date of initial appointment	Years in Board	Year of birth	Gender	General business management Strategy	Finance (balance, solvency & reporting)	Financial markets/disclosure, communication	Audit, risk, compliance, legal & governance	Insurance (life, non-life, asset management & banking)	M&A	IT/Digital & innovation	Social/employment	Sustainability/politics
Kick van der Pol	12-2008	9	1949	M	•	•			•			•	•
Annet Aris	12-2010	7	1958	F	•			•			•	•	•
Cor van den Bos	12-2008	9	1952	M	•	•	•	•	•	•			
Herman Hintzen	01-2016	2	1955	M	•	•	•	•	•	•			
Sonja Barendregt	05-2018	1	1957	F	•	•	•	•	•			•	

### Permanent education and evaluation

The Supervisory Board 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 2018 was carried out with internal guidance. The assessment was based on written and oral input from the Supervisory Board, the Executive Board, the Company Secretary and several senior managers. The following aspects were assessed:

- Composition and functioning of the Supervisory Board (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 Supervisory Board and the Company Secretary. They concluded that interrelationships were good, interaction was sufficient and there was an open dialogue (including in difficult cases). The quality of the Supervisory Board was also seen as good, and must, it was felt, continue to be safeguarded following the forthcoming changes in the composition of the Supervisory Board. Time must then be taken to get to know each other well on a

personal level. Attention must also be paid to the design of the relationship with the BEC. It was recommended that certain reports be linked and that more time be devoted to succession management and planning.

In 2018, two continuing education (CE) sessions were organised for Supervisory Board members, members of the Executive Board and senior managers. The first session was a follow-up to the explanation of IFRS 17, the new accounting standard for insurance contracts, led by Group Accounting, Reporting & Control. The new regulations will impact the external reporting on insurance contracts in the future. The implementation of IFRS 17 within a.s.r. is a major project. The second session focused on increasing digitisation in the insurance industry. Furthermore, a knowledge session led by an external expert on governance and board leadership was held. At this session, the Supervisory and Executive Boards were given an update on long-term value creation in line with the Dutch Corporate Governance Code and discussed this in relation to a.s.r. The Supervisory Board of ASR Bank N.V. took part in various sessions on cyber risks and IFRS 9. 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 serves as Chairman of the Board of Directors of Ortec Finance. He is also a member of the Supervisory Board of the Holding Nationale Goede Doelen Loterijen N.V. In the past, he served as Chairman of the Board of the Federation of Dutch Pension Funds, as Vice-Chairman of the Executive Board of Eureka/Achmea and as Chairman of the Executive Board of Interpolis.



**A.P. (Annet) Aris**  
(Dutch, 1958)

Chair of the Selection & Appointment Committee and the Remuneration Committee

Annet Aris had a 17-year career at McKinsey as a management consultant, including 9 years as a partner in the firm. She currently holds supervisory directorships at several Dutch and foreign enterprises and institutions. She is a member of the Supervisory Board of ASML N.V., Randstad Holding N.V. and Coöperatieve Rabobank U.A. (from 12 December 2018) in the Netherlands, She is also a member of the Supervisory Board of Jungheinrich AG in Germany and Thomas Cook PLC in London (until 2 February 2019). Annet Aris is Senior Affiliate of (digital) strategy at INSEAD international business school (Fontainebleau, France). Annet Aris is a Supervisory Board member recommended by the Works Council.



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

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

Cor van den Bos served on the Executive Board of SNS REAAL N.V. until August 2008, where he was responsible for all insurance operations. He is Vice-Chairman and a non-executive member of the Board at the investment firm Kardan N.V.



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

Member of the Audit & Risk Committee

Herman Hintzen was Chairman Insurance EMEA at UBS Investment Bank, until January 2016. In the past, Herman Hintzen also acted as an adviser to the Executive Board at APG Asset Management and served as Managing Director in the Financial Institutions investment banking groups of Morgan Stanley, Credit Suisse and JP Morgan. Until 31 December 2018, he served as Chairman of the Board of Amlin International SE. Herman Hintzen is currently a non-executive Board member of VCM Holdings Ltd. and a non-executive Board member of TSC Power Ltd.



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

Member of the Audit & Risk Committee

Sonja Barendregt was a 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. Sonja Barendregt has been a member of the Supervisory Board of Volksbank since 2017 and chair of the Audit Committee. She is also an accountancy examinations expert at the Erasmus School of Accounting & Assurance. In April 2018, Sonja Barendregt was appointed as a member of the Supervisory Board and chairperson of the Audit & Risk Committee of Robeco Institutional Asset Management B.V.

### 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](http://www.asrnl.com). The Supervisory and Executive Board rules are also available on a.s.r.'s 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, apart from 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 states 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 on 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](http://www.asrnl.com).

#### Professional oath

On 1 January 2013, the Dutch financial sector introduced a mandatory oath for Executive and Supervisory Board members of financial institutions licensed in the Netherlands. With regard to insurance companies, in addition to the Executive and Supervisory Board members, individuals holding a management position immediately

below the Executive Board 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 persons 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 persons working under the responsibility of the bank are required to take a similar bankers' oath with effect from 2015. Individuals who have taken the bankers' oath are subject to disciplinary rules.

Regardless of 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 on disclosure of non-financial information and Decision on disclosure of diversity policy

a.s.r. also wants to be transparent about non-financial information in its Management Report. Since the reporting year 2017, the relevant legal requirements have been tightened up 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 Executive and Supervisory Boards. Annex G states where the information requirements specified by the new legislation can be found in the annual report.

## B.1.2 Remuneration report

### Introduction

a.s.r. was nationalised in 2008 and from then on, the Dutch State was 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 Executive Board. This was formalised in 2011 by a special act governing state-owned financial institutions which prohibited variable payments and increased fixed payments (Articles 1:128 and 1:129 of the Dutch Financial Supervision Act (Wft) and the corresponding transitional provisions). a.s.r.'s remuneration policy was therefore effectively put on hold and the remuneration of the Executive Board was fixed for many years. In 2016, a.s.r. was re-listed on the stock exchange and on 14 September 2017 became fully independent from the Dutch State. As a result, the freeze of the Executive Board's remuneration by act no longer applied. The Supervisory Board has responded by deciding to reinstate and apply the existing remuneration policy, which includes a periodic benchmark comparison.

Every three years, an independent consultant performs a market comparison (remuneration benchmark). The 2017 benchmark analysis showed that the salaries of the Executive Board were substantially below the median of the relevant benchmarks. In line with the remuneration policy, which takes into account the principles of the Dutch Corporate Governance Code, a.s.r.'s Supervisory Board

decided to gradually increase the individual remuneration of the members of the Executive Board and reduce the gap with the peer group. Since this decision falls within the scope of the current remuneration policy, it was decided to act and implement the first level of the increase as of 1 January 2018. The increase will be effected in multiple stages over time, but no later than by 1 January 2020. The resulting level for 2020 is still significantly below the benchmark median.

The Executive Board has additionally committed itself to taking a percentage of its remuneration in the form of a.s.r. shares. Each member has signed an individual agreement committing themselves to purchase these shares. The cumulative investment in a.s.r. shares will reach a minimum of 50% of the annual gross salary for the CEO and a minimum of 25% of the annual gross salary for the CFO.

Prioritising caution over speed, the Supervisory Board announced at the beginning of 2018 that it would assess and evaluate the remuneration policy for the Executive Board during the course of the year. This included holding extensive consultations with various stakeholders including shareholders, clients and staff. These consultations took place in 2018, as mentioned in the report of from the Remuneration Committee. The Supervisory Board will submit the revised remuneration policy for the Executive Board to the 2019 AGM for a shareholder vote.

### B.1.2.1 Executive Board

#### Principles and governance of remuneration policy

The a.s.r. Group remuneration policy applies to all a.s.r. employees, including the Executive Board. 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 full remuneration policy can be consulted at [www.asrnl.com](http://www.asrnl.com).

#### Remuneration in 2018

In line with a.s.r.'s remuneration policy, the remuneration of the Executive Board structurally consists of a fixed remuneration and does not include a variable component. This comprises a fixed monthly amount, including holiday allowance. Pay is indexed in accordance with the a.s.r. CLA.

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. In accordance with the policy, a comparison with a peer group is periodically made and was last conducted in 2017 to gauge the competitiveness of the total remuneration. The relevant peer group for the Executive Board 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. Every three years, an independent consultant makes a market comparison (remuneration benchmark).

The performance of each Executive Board member is reviewed annually, based on a set of financial and non-financial targets determined by the Supervisory Board. The targets for 2018 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 CO<sub>2</sub> neutral a.s.r. and distinctive capacity for socially responsible investment) 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 Generali Nederland, preparations for the implementation of IFRS 17 and a sustainable strategy for the distribution companies.

#### Severance pay

The following conditions apply to severance pay for policymakers (including members of the Executive Board).

- 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 of current and former Executive Board members

The remuneration of Executive Board members is in line with the remuneration policy. In accordance with the remuneration law 'Wet aansprakelijkheidsbeperking DNB en AFM en bonusverbod staatsgesteunde ondernemingen', issued by the Dutch government, no variable remuneration has been paid to the Executive Board members for the period from the 2011 a.s.r. financial year to the 2016 a.s.r. financial year. In 2017, the rise in short-term variable employee benefits was due to the one-off variable payment in December to all employees. In 2017, the fixed employee benefits of board members only increased with the annual CLA index. In 2018, the fixed employee benefits of board members increased as a result of the first step towards the target salaries announced at the beginning of 2018.

#### Highest pay ratio and the median salary

a.s.r. is transparent about the remuneration of the Executive Board. Not only in terms of actual amounts, but in accordance with the Corporate Governance Code also in comparison with the median of the remuneration of all staff.

When the remuneration of the Executive Board is compared to the remuneration of all executive directors of all AEX-listed companies, two conclusions can be drawn:

1. The remuneration of a.s.r.'s CEO is among the lowest compared with the CEO remuneration of all AEX companies.
2. The pay ratio at a.s.r. is among the lowest compared with the pay ratio of all AEX companies.

**Pay ratio**

	2018	2017	2016
Annual total compensation for the highest-paid individual	652,000	543,000	540,000
Median annual total compensation for all employees	61,000	60,000	59,000
Pay ratio	10.69	9.05	9.15

**Annual remuneration for members of the Executive Board**

Amounts for 2018 in € thousands

Executive Board member	Fixed employee benefits <sup>1</sup>	Short-term variable employee benefits <sup>2</sup>	Pension benefits <sup>3</sup>	Expense allowance	Termination benefits	Long-term variable remuneration	Total
Jos Baeten	652	-	301	3	-	-	956
Chris Figee	529	-	95	3	-	-	627
Karin Bergstein	509	-	148	3	-	-	660
Michel Verwoest	512	-	126	3	-	-	641
<b>Total</b>	<b>2,202</b>	<b>-</b>	<b>670</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>2,884</b>

**Annual remuneration for members of the Executive Board**

Amounts for 2017 in € thousands

Executive Board member	Fixed employee benefits <sup>1</sup>	Short-term variable employee benefits <sup>2</sup>	Pension benefits <sup>3</sup>	Expense allowance	Termination benefits	Long-term variable remuneration	Total
Jos Baeten	543	23	307	3	-	-	876
Chris Figee	428	15	82	3	-	-	528
Karin Bergstein	424	15	134	3	-	-	576
Michel Verwoest	430	15	123	3	-	-	571
<b>Total</b>	<b>1,825</b>	<b>68</b>	<b>646</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>2,551</b>

**Pensions**

The calculation of annual pension expenses is based on the total pension rights granted during a term of service at a.s.r. pension costs include:

- Pensions based on a maximum pensionable salary cap (€ 105,075 - 2018, 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 Executive Board are included in the base used for calculating the pension benefits.

**Participation in a.s.r. shares**

In addition to the remuneration policy, Executive Board members have committed themselves to taking a percentage of their remuneration in a.s.r. shares, at their discretion. 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. At year-end 2018, the (former) members of the Executive Board hold the following number of shares:

- Jos Baeten 1,037
- Chris Figee 253
- Karin Bergstein 1,037
- Michel Verwoest 338

- 1 The fixed employee salary of the two ordinary board members is similar and amounts to € 498,000 in 2018. Variations arise as a result of the fiscal treatment of lease cars depending on the price and private use of the car and personnel interest rate discount related to mortgages. The fixed employee salary for the CEO amount to € 642,000 and for the CFO amount to € 505,000 in 2018.
- 2 The increase in 2017 was due to the aforementioned one-off payment in December 2017, which was equal to a monthly salary granted by the Supervisory Board. This payment concerned 60% of the gross monthly salary of December 2017. The remaining 40% will be paid in 2020. It has been agreed with DNB to qualify this payment as a one-off variable payment.
- 3 The commitment on pensions did not change in 2018. 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 € 259,000 (2017: € 206,000) in total, and VPL. The pension benefits, excluding compensation for the maximum pensionable salary cap, represent post-employment benefits.

## Supervisory Board

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

The members of the Supervisory Board are entitled to:

- A base fee for membership of the Supervisory Board;
- A committee fee for members on each of the Supervisory Board's Committees.

The annual fee paid to each member of the Supervisory Board is € 30,000; that paid to the Chairman of the Supervisory Board is € 45,000. In addition, the annual fee paid to each member of the Audit & Risk Committee is

€ 10,000; that paid to each member of the Selection & Appointment Committee is € 2,500; and that paid to each member of the Remuneration Committee is also € 2,500. Supervisory Board members who also serve on the Supervisory Board of ASR Bank N.V. receive € 4,000 per annum and those on the Supervisory Board of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V. also receive € 4,000 per annum. Annual fees are not paid to members of the Executive Board who are also members of the Supervisory Board of one of the Group entities, such as ASR Bank N.V.

## Remuneration of the Supervisory Board

The annual remuneration for members of the Supervisory Board has been calculated as follows:

### Annual remuneration for members of the Supervisory Board

Amounts in € thousands	2018			2017		
	As a Supervisory Board member	As a committee member	Total	As a Supervisory Board member	As a committee member	Total
Supervisory Board member						
Kick van der Pol <sup>1</sup>	45	9	54	45	5	50
Annet Aris <sup>2</sup>	30	14	44	30	15	45
Cor van den Bos <sup>3</sup>	30	14	44	30	14	44
Herman Hintzen <sup>3</sup>	30	14	44	30	14	44
Sonja Barendregt <sup>4</sup>	23	8	30	0	0	0
<b>Total</b>	<b>158</b>	<b>59</b>	<b>216</b>	<b>135</b>	<b>48</b>	<b>183</b>

- 1 The amount received as a committee member of the Selection & Appointment Committee and the Remuneration Committee and as a member of the Supervisory Board of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V.
- 2 The amount received as a committee member of the Selection & Appointment Committee and the Remuneration Committee and as a member of the Supervisory Board of ASR Basis/Aanvullende Ziektekostenverzekeringen N.V. During 2018 Annet Aris stepped down as a member of the Audit & Risk Committee.
- 3 The amount received as a committee member of the Audit & Risk Committee and as a member of the Supervisory Board of ASR Bank N.V.
- 4 The amount received as a member of the Audit & Risk Committee since May 2018.

### 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 Executive Board, members of the Supervisory Board, 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. Executive Board and Supervisory Board are described in [chapter B.1.2](#) (Remuneration of the a.s.r. Executive Board and Supervisory Board).

### 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

	Associates	Joint ventures	Other related parties	Total
<b>2018</b>				
<b>Balance sheet items with related parties as at 31 December</b>				
Loans and receivables	24	1	-	25
Other liabilities	74	-	-	74
<b>Transactions in the income statement for the financial year</b>				
Fee and commission income	28	-	-	28
<b>2017</b>				
<b>Balance sheet items with related parties as at 31 December</b>				
Loans and receivables	24	1	-	25
Other liabilities	1	1	-	2
<b>Transactions in the income statement for the financial year</b>				
Fee and commission income	15	-	-	15

### 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

Entity	IFRS classification	Type of entity	Treatment SII
Insurance subsidiary	Subsidiary	Insurer	Full consolidation
ASR Bank	Subsidiary	Credit institution	Adjusted net equity
ASR Vermogensbeheer N.V.	Subsidiary	Credit institution	Adjusted net equity
Ancillary service entities <sup>1</sup>	Subsidiary	Ancillary services	Full consolidation
Ancillary service entities	Participation	Ancillary services	Adjusted net equity
Other entities	Participation	Ancillary services	Adjusted net equity
Various entities	Investment	n/a	Financial instrument

During 2018 the classification of ASR Vermogensbeheer N.V. (AVB) and Brand New Day PPI (BND PPI) have been re-evaluated based on the Solvency II guidelines

(Directive 2000/12/EG). Given the increased materiality AVB (consisting of former entities: ASR Nederland Beleggingsbeheer, ASR Vermogensbeheer N.V., ASR

<sup>1</sup> All other subsidiaries, other than insurance subsidiaries or financial institutions.

Group Asset Management and First Investments) is processed as financial institution. Since both equity and required capital of BND PPI are not material, this entity is processed on the basis of full consolidation in accordance with IFRS principles.

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. a.s.r. believes that regardless of the processing method, the a.s.r. Solvency II balance sheet gives a true picture.

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 as the entities linked to ASR real estate (the principal activity consist of owning or managing real estate) and the entities acquired in the distribution channel as part of integration of insurance chain (Dutch ID, Van Kampen Groep).

## B.2 Fit and proper requirements

The policy pursued by a.s.r. concerning fit and proper requirements for persons who effectively run the undertaking and other key functions contributes to a controlled and sound business operations and promotes the stability and integrity of a.s.r. as well as customer confidence.

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 requires training to perform its duties. In addition, a.s.r. has a program for the continuing education of persons who effectively run the undertaking and other key functions. a.s.r. assesses all prospective employees for their reliability and integrity prior to their appointment.

## 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. has 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. The framework is based on the Enterprise Risk Management (ERM) model by COSO<sup>2</sup>.

## Risk Management Framework



### 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 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 and the Supervisory Board (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. Strategic decisions

are based on the management information provided. a.s.r. finds it very important to have qualitatively adequate data 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 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<sup>3</sup>:

- 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

<sup>2</sup> ISO 31000:2009 risk management principles and guidelines.

<sup>3</sup> EIOPA-BoS-253-Guidelines\_on\_System\_of\_Governance\_EN.pdf

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 emphasises the human side of risk management. The Executive Board 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 allow for 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 Executive Board and the Supervisory Board.

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 our strategy. The statements and limits are defined at both group level and at legal entity level and are determined by the Executive Board and approved by the Supervisory Board. The statements are evaluated regularly to maintain alignment with the strategy.

#### Risk appetite statement ASR Nederland N.V. 2018

1	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.	NFR
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.	NFR
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.	NFR
4	ASR Nederland N.V. has a minimum SCR ratio of 120%.	FR
5	ASR Nederland N.V. remains within the bandwidth of periodically reassessed market risk budgets.	FR
6	ASR Nederland N.V. has at least a single A rating and hereto it adheres to the AA level criteria under 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.	FR
7	ASR Nederland N.V. has a maximum financial leverage ratio of 40% Financial leverage ratio = Debt / (Debt + Equity).	FR

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).	FR
9	ASR Nederland N.V. has a minimum interest coverage ratio of between 4 and 8. Interest coverage ratio = EBIT operational / interest expense.	FR
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.	FR
11	ASR Nederland N.V. generates a robust and high-quality operational ROE, i.e. pursues an overall ROE > 10% and seeks an ROE > 8% for individual investment decisions.	FR
12	ASR Nederland N.V. has a maximum combined ratio of 99%.	FR

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. The SRA (Strategic Risk Analysis) is a method for identifying, assessing and managing strategic risks. Through a combined top-down and bottom-up SRA (Strategic Risk Analysis) approach, the most important strategic risks are identified. For each of the strategic risks an estimation of the likelihood and impact is made to prioritise 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 a.s.r. Risk Committee. Output from the strategic risk analysis, combined with the risk appetite statements, provides insight into the risk profile of a.s.r. and underlying legal entities. The 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 strategic decision making.

#### *Risk ownership*

The Executive Board has the final responsibility for risk exposures and management within the organisation. 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

Three lines of defence		
First line of defence	Second line of defence	Third line of defence
<ul style="list-style-type: none"> <li>Executive Board</li> <li>Management teams of the business lines and their employees</li> <li>Finance &amp; risk decentral</li> </ul>	<ul style="list-style-type: none"> <li>Group Risk Management department               <ul style="list-style-type: none"> <li>Risk management function</li> <li>Actuarial function</li> </ul> </li> <li>Integrity department               <ul style="list-style-type: none"> <li>Compliance function</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Audit department               <ul style="list-style-type: none"> <li>Internal audit function</li> </ul> </li> </ul>
Ownership and implementation	Policies and monitoring implementation by 1st line	Independent assessment of 1st and 2nd lines
<ul style="list-style-type: none"> <li>Responsible for the identification and the risks in the daily business</li> <li>Has the day-to-day responsibility for operations (sales, pricing, underwriting, claims handling, etc.) and is responsible for implementing risk frameworks and policies.</li> </ul>	<ul style="list-style-type: none"> <li>Challenges the 1st line and supports the 1st line to achieve their business objectives in accordance with the risk appetite</li> <li>Has sufficient countervailing power to prevent risk concentrations and other forms of excessive risk taking</li> <li>Responsible for developing risk policies and monitoring the compliance with these policies</li> </ul>	<ul style="list-style-type: none"> <li>Responsible for providing dedicated assurance services and oversees and assesses the functioning and the effectiveness of the first two lines of defence</li> </ul>

#### Positioning of key functions

Within the risk governance, the key functions (compliance, risk, actuarial and audit) are organised in accordance with Solvency II regulation and 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 Executive Board and can escalate to the chairman of the Audit & Risk Committee of the Supervisory Board. Furthermore, the key functions have regular meetings with the supervisors of the Dutch Central Bank and/or The Dutch Authority for the Financial Markets (AFM).

#### Group Risk Management

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

- Enterprise Risk Management;
- Financial Risk Management (including Actuarial Function).

#### Enterprise Risk Management

Enterprise Risk Management 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 with regards to enterprise risk management 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 strategic 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 operational risk profile. The quality of the framework is continuously enhanced by the analysis of operational incidents, periodic assessments and monitoring by the RMF. Enterprise Risk Management 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 Actuarial Function and Risk Management Function. An important task of FRM is to be the countervailing power to the Executive Board 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 actuarial function, 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 Actuarial Function 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 actuarial function 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 Executive Board and management in managing compliance risks for a.s.r. and its subsidiaries. The mission of the compliance function is to enhance and ensure a controlled and sound business operations where impeccable, professional conduct is self-evident.

As second line of defence, Compliance encourages the organisation to comply with relevant rules and regulations, ethical standards and the internal standards derived from them ('rules') by providing advice and devising policy. 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.

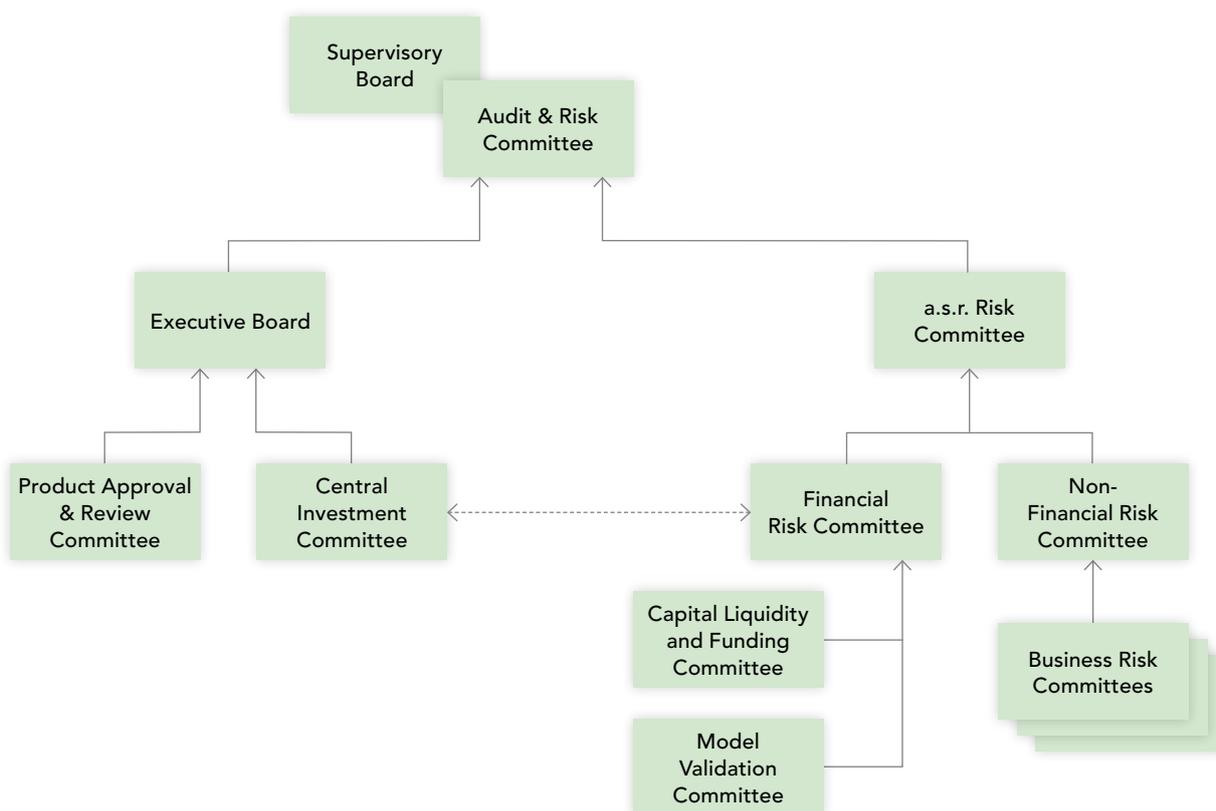
**Audit**

The Audit department, the third line of defence, provides an independent opinion on governance, risk and management processes, with the goal of supporting the Executive Board 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 optimise 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 (model 2018) 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 in the following matters:

- Assessment of the risk appetite proposal based on the financial and non-financial risk reports, among other documents;
- 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 qualities and independence of the independent external auditor and the proposal by the Supervisory Board 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 RvC, one of whom acts as the chairman.

**a.s.r. Risk Committee**

The a.s.r. Risk Committee (a.s.r. RC) monitors a.s.r.'s overall risk profile on a quarterly basis. At least annually, the a.s.r. RC 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 Supervisory Board on the approval of the risk appetite. The a.s.r. RC also monitors the progress made in managing risks included in the Risk Priorities of the Executive Board.

All members of the Executive Board participate in the a.s.r. RC, which is chaired by the CEO. The involvement of the Executive Board ensures that risk decisions are being addressed at the appropriate level within the organisation. In addition to the Executive Board, the CRO, Director of Audit and Director of Integrity are members of the Committee.

**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 a.s.r. RC. 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 a.s.r. RC. The NFRC is chaired by the COO Non-Life (member of the Executive Board).

**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 a.s.r. RC. 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 a.s.r. Risk Committee. 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 Executive Board. 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 COO Life (member of the Executive Board).

**Product Approval & 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 managing Director of the business line Health is appointed as chairman. 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 product approval and review process as a result of product reviews.

### 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 of 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. End 2018 a.s.r. finished the project to further enhance the measurement and reporting on data quality for the purposes of financial reporting.

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 emphasises 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 organisation enables objective and transparent risk reporting in order to manage them more effectively.

The Executive Board clearly recognises 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 finalizing decisions.

It is very important that this risk awareness trickles down to all parts of the organisation, 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) evaluating. 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 maximisation 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.

### 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
- Information technology
- Outsourcing
- Financial reporting

*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. 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 use of controls helps to mitigate or even completely eliminate identified risks. This increases the business line's chances of achieving its objectives and demonstrates that it is in control. Business lines report on the effectiveness of their controls on a quarterly basis. The effectivity of controls is important input for the sign off that each business line provides on the financial figures.

Through a combined top-down and bottom-up SRA (Strategic Risk Analysis) approach, the most important strategic risks are identified. After the analysis a list of risk priorities is established and risk management actions are assigned. The progress of these actions is monitored in the a.s.r. Risk Committee.

**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 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 a.s.r. Risk Committee. At the level of the product lines, risks are discussed in the Business Risk Committees.

**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, prioritisation and management of these risks in line with the risk appetite. The policy on ORM is drafted and periodically evaluated under the coordination of Enterprise Risk Management. 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, underwriting etc.

**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, SPRINT (Simplified Process for Risk Identification) analyses 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). 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. For each control 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 a.s.r. RC.

**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**

Large operational incidents are reported to Group Risk Management, 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 business lines.

### **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 uninterrupted 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 stabilise the crisis, and to be able to react timely, efficiently and effectively, a.s.r. has assigned a crisis organisation.

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.

### **Recovery Planning**

a.s.r.'s Recovery Plan helps to be prepared and have the capacity to act in various forms of extreme financial stress. The Recovery 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 and operational effects are also assessed. The main purpose of the Recovery 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 unpleasant surprises 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 in which 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 Officer for both a.s.r. and the supervised entities. The compliance function, the second line of defence, 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 Officer has direct access to him. The a.s.r. Compliance Officer also has an escalation line to the Chairman of the a.s.r. Audit & Risk Committee and/or the Chairman of the Supervisory Board in order to safeguard the independent position of the compliance function and enables it to operate autonomously. The a.s.r. Compliance Officer is entitled to upscale critical compliance matters to the highest organisational level or to the Supervisory Board.

### Responsibilities and duties

The compliance function, as part of the second line of defence, 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 developing adequate compliance risk management, including monitoring and, where necessary, making arrangements relating to proposed management actions;
- Creating awareness of the need to comply with rules and of social and ethical issues, in which context ethical behaviour 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 the impact and corresponding actions to be taken. In 2018, a.s.r. paid specific attention to:

- General Data Protection Regulation (GDPR): The Privacy Officer falls under Compliance and was a member of the GDPR central project group. Compliance advises on privacy issues and monitors compliance with relevant legislation and regulations as a second line of defence;
- Insurance Distribution Directive (IDD): Compliance was part of both centralised and decentralised projects to implement IDD as from 1 October 2018.

Based on the annual plan, Compliance monitors every year the compliancy of rules. In 2018, Compliance conducted a.s.r.-wide monitoring surveys on compliance with the sanction regulations and CDD policy, privacy and the quality of customer contacts and underlying procedures. The findings have been reported to and discussed with responsible management, the a.s.r. Risk Committee and the Audit & Risk Committee. Actions have been taken with regard to unify processes and training of employees.

### Reporting

The compliance function reports on compliance matters and progress made on the relevant actions at Group level, supervised entity level and division level on a quarterly basis. 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 a.s.r. Risk Committee and submitted to the Audit & Risk Committee. The report is shared and discussed with the DNB, the AFM and the 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 optimisation. 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 Executive Board of ASR Nederland N.V., to the managing boards of the legal entities and, by means of the quarterly audit management report, to the Audit & 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 Supervisory Board 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 Executive Board and has a direct reporting line to the chairman of the Audit & Risk Committee. The Chief Audit Executive is appointed by the Supervisory Board. In order to maintain the independence and impartiality of the internal audit function, the audit function is not influenced by the Executive Board 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 Dutch Central Bank 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 organise a 'tripartite consultation' with Dutch Central Bank and the independent external auditor at least once a year. In 2018, 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 & Risk Committee. At least once a year, the audit plan is evaluated and any changes to the plan must be approved by the Audit & 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 a.s.r. Risk Committee (or Executive Board) and the a.s.r. Audit & Risk Committee.

Independence of the AF is secured through several measures:

- The Actuarial function 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 Supervisory Board for approval;
- The Actuarial function holders have unrestricted access to all relevant information necessary for the exercise of their function;
- The Actuarial function holders have a direct reporting line to the a.s.r. Risk Committee or Executive Board 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 CFO and/or 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 Actuarial function;
- Target Setting and assessment of the function holders is done by the CFO and must be approved by the Chairman of the Audit & Risk Committee.

## B.7 Outsourcing

a.s.r. has outsourced some of its operational activities. Despite this, a.s.r. remains fully responsible and accountable for these activities and the power of influence remains with a.s.r. To manage the risks related to outsourcing, a.s.r. has drafted a policy to safeguard a controlled and sound business operations. Solid risk management, governance, and monitoring 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 has been updated in 2018.

To define the respective rights and obligations, a.s.r. drafts a written outsourcing contract with the service provider. Confidentiality, quality of service, and continuity are key for a.s.r. in carrying out its activities. In addition, customer centricity and compliance with law and regulations are essential, regardless of who performs the activities. To safeguard the quality of outsourced activities, service providers are scrutinised prior to selection and during the services. Being compliant with the terms of the contract is monitored. The findings of the monitoring activities serve as input for the periodic 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 are also outsourced.

## B.8 Any other information

Other material information about the system of governance does not apply.

# C Risk profile

Risk management is an integral part of a.s.r.'s daily 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 and return and capital, whilst ensuring that obligations to stakeholders are met. The Risk Management Function (RMF) supports and advises a.s.r. in identifying, measuring and managing risks, and ensures that adequate and immediate action is taken in the event of developments in the risk profile.

a.s.r. is exposed to a number of risks, such as strategic risks, market risks, counterparty default risks, liquidity risks, underwriting risks. The RMF monitors the risk profile of a.s.r. and its legal entities in order to ensure that it stays within the risk appetite.

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 and therefore the risk management framework and this chapter are fully aligned with Solvency II. The Solvency Capital Requirement (SCR) 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.

## Management of financial risks in 2018

a.s.r. strives for an optimal trade-off between capital, risk and return. Steering on capital, risk and return is applied in decision-making throughout the entire product cycle: from PARP (Product Approval Review Process) 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 (financial RAS) and are monitored by the FRC. The FRC evaluates financial risk positions against the RAS on a monthly basis. Where appropriate, a.s.r. takes additional mitigating measures.

In 2018 the Actuarial Function performed its regulatory tasks in assessing the adequacy of the Solvency II technical provisions, giving an opinion on reinsurance and underwriting and contributing to the Risk Management Function. The actuarial function report relating to these areas was discussed by the Executive Board and by the Audit & Risk Committee.

## Management of non-financial risks in 2018

Non-financial risk appetite statements are in place to manage the risk profile within the limits determined by the

Executive Board and approved by the Supervisory Board. 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 actions to be taken. The financial and non-financial risk profiles are integrated on behalf of the a.s.r. Risk Committee. In the event of breaches, the a.s.r. Risk Committee is authorised to decide on corrective actions. The risk profile and internal control performance of each business is discussed on a quarterly basis with senior management in the business risk committees and the NFRC.

In 2018, a.s.r. took steps to further improve the effectiveness of the Risk Management Function. The Operational Risk Management (ORM) policy including underlying procedures is updated towards a more risk based approach. Tasks and responsibilities of the first and second line (including the role of assessor by the RMF) of defense are tightened in the ORM policy and underlying procedures.

In order to enhance the uniformity, efficiency and effectiveness of the risk- and control cycle, a.s.r. additionally purchased and rolled-out the Governance and Risk Compliance (GRC) tool ('Cerrix'). In 2019, a.s.r. will improve the functionality of the tool continuously with new modules to strengthen the alignment with the operational risk management policies. a.s.r. will continue to look for opportunities to improve the management of its operational risks in 2019.

In 2018, a.s.r. took various actions to enhance the measurement and reporting of data quality for financial reporting purposes and to mitigate the end-user computing risks. A project to address these items has started in the beginning of 2018 and is expected to be completed in the beginning of 2019.

## Risk priorities 2018

The risk priorities and emerging risks of a.s.r. are annually defined by the Executive Board based on the Strategic Risk Analysis (top-down and bottom-up approach). The most recent status of the risk priorities and progress on the defined actions are reported to the a.s.r. Risk Committee quarterly.

The risk priorities are:

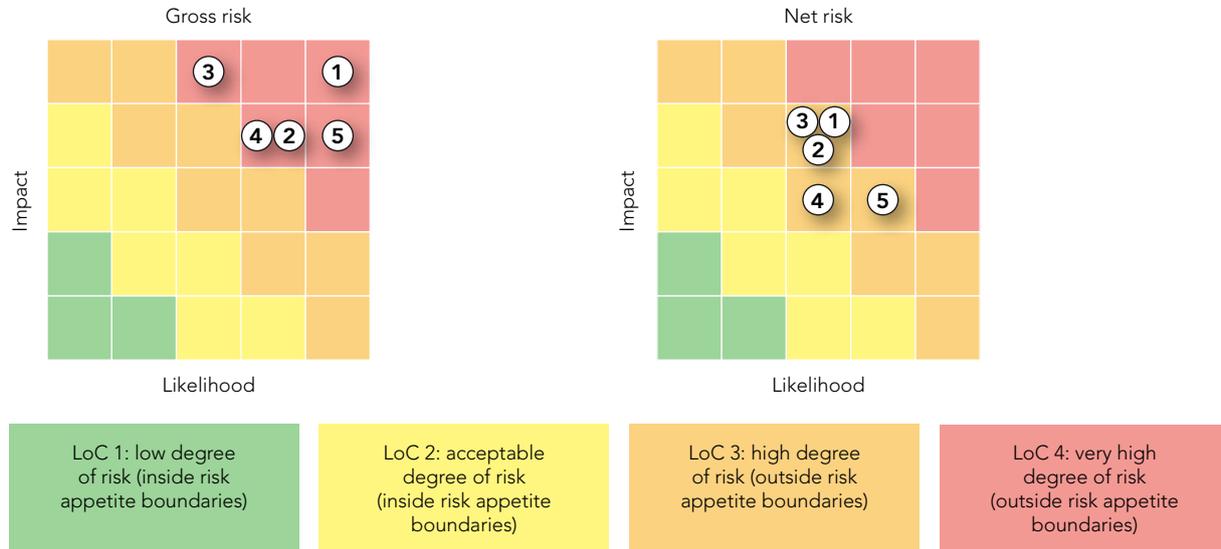
1. Pressure on cash-generating business model;
2. Juridification of society;
3. Pressure on investment returns;
4. Impact of supervision, laws and regulations;
5. Information (cyber) security risk.

Emerging risk

- Climate change
- Climate transition (2019)
- Longevity risk

To determine the degree of risk, a.s.r. uses a risk scale based on likelihood and impact (Level of Concern). For the risk priorities, the degree of risk is determined by the a.s.r. Risk Committee quarterly. The following table shows the degree of risk per 2018Q3.

Degree of risk per 2018Q4



Gross risk: the risk that exists if there are no control measures in place.  
 Net risk: risk when taking into account a.s.r.'s mitigating measures.

a.s.r. takes measures to mitigate the risks which are outside the risk appetite boundaries. For each risk priority the measures are described in the text below.

**Pressure on result and renewal of cash-generating business model**

The insurance market is changing and the (current) cash-generating business model is under pressure due to the scale and speed of (technological) developments in the insurance market. These developments are changing customer demand, new entrants to the insurance market, growing competition, cybercrime and technological developments.

It is important to meet customers' needs, taking into account changing customer demand. New generations buy (insurance) products more via digital, direct distribution channels. The role a company plays in society is becoming increasingly important. CSR is increasingly a criterium customers take into account when buying a service or product.

a.s.r. continually monitors and assesses its product portfolio and distribution channels for relevant alterations in order to meet the changing needs of customers and to achieve planned cost reductions as premiums fall. It is, for example, actively monitoring the market to study potential acquisitions and mergers. Other mitigating measures include the (further) roll-out of capital-light initiatives (such as third party asset management and focus on pension DC).

**Juridification of society**  
**Risk description**

Political, regulatory and public attention has been focused on unit-linked life insurance policies for some time now. Elements of a.s.r.'s unit-linked life insurance policies are being challenged on multiple legal grounds in current legal proceedings, and may continue to be 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. Because 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 concerning the timing and outcome 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, although only legally binding on 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 financial 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 material adverse effect on a.s.r.'s financial position, business, reputation, revenues, results of operations, solvency, financial condition and/or prospects

### **Compensation scheme Unit-linked products (compensatie beleggingsverzekeringen)**

In 2008, a.s.r. 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 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 until 2018 was € 1,030 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 2018 amounted to € 44 million and is available only to cover potential additional compensation (for distressing cases and costs relating to the compensation scheme. Individual cases have 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 the subject of two class actions. In June 2016, Woekerpolis.nl initiated a class action, asking the Midden-Nederland District Court to declare that a.s.r. sold products that were defective in various respects (e.g. lack of transparency regarding cost charges and other product characteristics, and the inclusion of risks which the insurer failed to warn against, such as substantial stock depreciations, failure to realise the projected final policy value, unrealistic capital projections due to differences in geometric versus arithmetic returns and general terms and conditions governing costs which Woekerpolis.nl considered to be unfair). In March 2017, the Dutch Consumers' Association 'Consumentenbond' also brought a class action against a.s.r. The grounds of the class action were similar to those of Woekerpolis.nl. The class action brought by the Consumentenbond is currently pending before the Midden-Nederland District Court. a.s.r. rejected all claims in both cases. The timings and outcomes of both class actions are as yet unclear.

### **Pressure on investment returns**

It is becoming an increasing challenge to generate

sufficient returns on investment and to be able to reinvest against attractive terms. The pressure to generate investment returns (search for yield) creates much 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 Financial Risk Committee. The Interest Rate Risk Committee then holds preparatory discussions to decide whether or not to adjust the interest rate hedge. The consequences of possible low investment returns and interest rate fluctuations are also examined more fully in the Strategic Asset Allocation (SAA), an annual ALM study which a.s.r. conducts at its own expense, and also to some extent in the ORSA.

Impact of supervision, laws and regulations

As a result of increasing political and regulatory pressure, there is the risk that:

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

- a.s.r.'s reputation will come under pressure if new requirements are not met in time;
- Available resources will largely be utilised to align the organisation with new legislation, meaning there are 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 assess their impact and the corresponding actions required (in cooperation with Compliance and Legal). Also the availability of capacity is monitored continuously to have 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 2018 a.s.r. had as also set up an internal centralised project group to implement the IDD (Insurance Distribution Directive, applicable with effect from 01-10-2018) This project group managed and supported processes, policy guidelines and the interpretation this directive throughout a.s.r. In addition, in 2018 knowledge sessions were again organised for the decentralised project organisations, a fit-gap analysis was conducted and policy guidelines were formulated. The same approach has been used for the implementation of legislation on data protection, Algemene Verordening Gegevensbescherming (AVG) to be compliant by 25 May 2018.

In May 2017, the International Accounting Standards Board (IASB) published IFRS 17, the new IFRS standard for insurance contracts. IFRS 17 will take effect on 1 January 2022, at which time it will replace the existing IFRS 4

standard. IFRS 17 is designed to facilitate comparability between insurers and 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 the financial instruments (investments). IFRS 9 will, like IFRS 17, be applied by a.s.r. group from 1 January 2022 in order to maintain cohesion between these two standards and guard against IFRS 9 being implemented twice. This postponement is not available to ASR Bank N.V., which therefore began applying IFRS 9 from 1 January 2018. In 2017, a.s.r. launched an internal programme 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 have all been given responsibility in the programme due to the need to develop an integrated vision.

### Information (cyber) security risk

Information (cyber) security risks still increased due to digitalisation. In order to prevent cyber attacks and information security breaches, a.s.r. is sufficiently aware of the potential threats posed to the organisation. a.s.r. runs the risk of new technological developments requiring different and increased expertise and other mitigating measures. The potential of confidential information becoming available to third parties, intentionally or unintentionally, is a risk facing both a.s.r. and its customers, and one which could ultimately lead to significant reputational harm. All our employees are therefore expected to be fully aware of the risks associated with the handling of confidential information regarding our customers, employees, financial information and strategy, and are asked to do their utmost to protect our assets.

The use of, and dependence on, IT is significant for both a.s.r. and its customers. Cybercrime could therefore have a major impact on a.s.r.'s security and continuity. The attempted cybercrime attacks a.s.r. experienced in 2018, which included phishing, malware and ransomware attacks, have become a well-known phenomenon.

a.s.r. made ongoing investments throughout 2018 to further strengthen its defences against cybercrime and to enhance the expertise of its teams. a.s.r.'s cybercrime experts closely monitor and evaluate developments in cybercrime, and take suitable measures where necessary. a.s.r. regularly tests the organisation's ability to detect and respond to cyber incidents (red team test). An awareness programme to improve the ability of employees and management to recognise phishing and other cyber threats was conducted throughout 2018, and due to the importance of the different outsourcing initiatives, a.s.r. also screened the cyber controls of its own suppliers. As a result, a.s.r. has succeeded in keeping obstacles to a minimum. Partnerships with other financial institutions and public agents, such as the Dutch National Cyber Security

Center (NCSC) and i-CERT (cybersecurity partnership between insurance companies), are crucial to mounting an effective defence against cybercrime, and a.s.r. is actively involved in this.

### Climate change (emerging risk)

Insurers need to increasingly take climate change risks into account. Due to climate change, claim ratios might increase. Currently, it is a challenge to estimate the likelihood of extreme weather. In the long term, it is a challenge to estimate the effects of climate change whereby climate change risks may be underestimated.

### Climate transition (emerging risk 2019)

The transition to a climate-neutral economy is part of the a.s.r. risk priorities 2019. This transition entails uncertainties, changes and risks. The extent and impact of these risks depend on, among others, the pace of the climate transition, government policy, technological developments and changing consumer behavior. An abrupt climate transition may have a large impact on the economy, business models and financial stability.

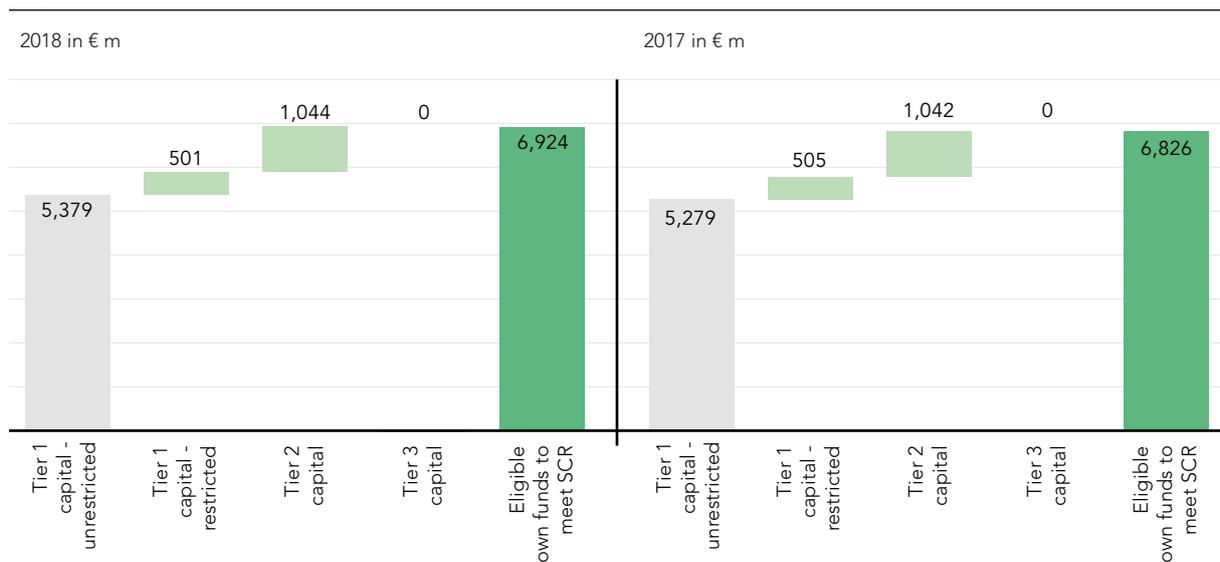
### Longevity risk (emerging risk)

Recent mortality tables (2018) of the Dutch Association of Actuaries (AG) indicate that life expectancy of the Dutch population has not significantly improved. Nevertheless, it should not be ruled out that 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 lower solvability for a.s.r.

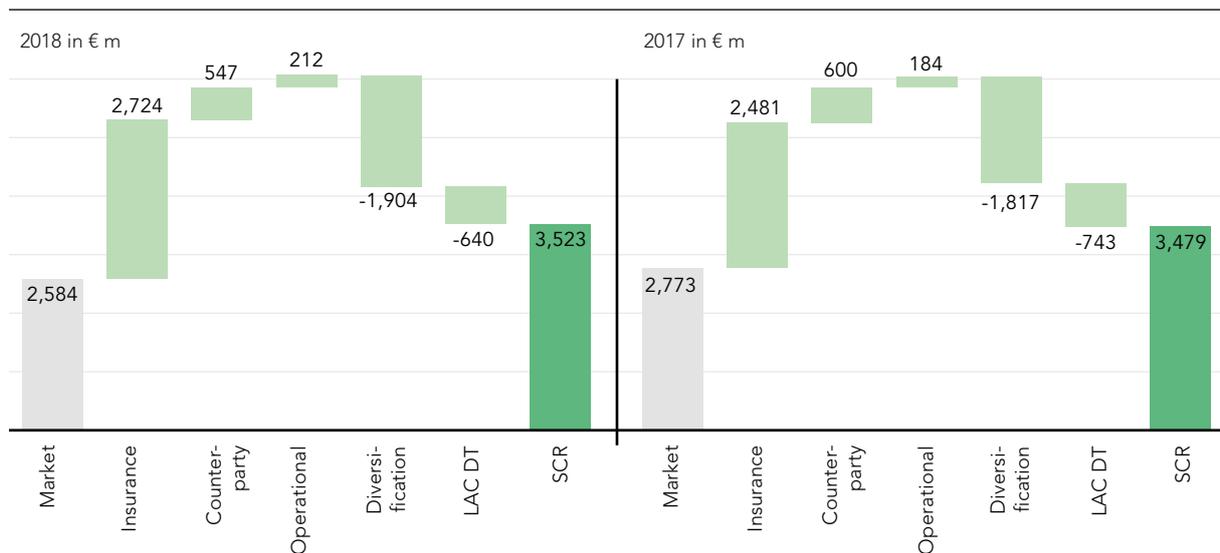
### Solvency II ratio in 2018

In 2018, the solvency ratio increased from 196% (December 31, 2017) to 197% 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



## Required Capital



The **eligible own funds** increased to € 6,924 million at 31 December 2018 (31 December 2017: € 6,826 million). As a result of organic growth, the increased VA, the acquisition of Generali Nederland and spread tightening on sovereign bonds the eligible own funds increased. These effects were partially offset by a lower UFR, widening of credit spreads, interim and proposed dividend and business developments (non-economic).

The **required capital** stood at € 3,523 million at 31 December 2018 (31 December 2017: € 3,479 million). This increase is mainly due to the acquisition of Generali Nederland and, to a lesser extent, the reduction in the loss-absorbing capacity of deferred taxes as a result of the tax reduction (entire future reduction from 25% to 20.5% is taken). These effects were partially offset as a result of an adjustment to the interest rate hedge programme, the decrease of equity prices and the increase of the VA.

## Solvency II sensitivities

The sensitivities of the solvency ratio as at 31 December 2018, 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.

## Solvency II sensitivities - market risks

Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
UFR 3.2%	-18	-19	-3	-3	-21	-23
Interest rate +1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	-4	-1	+12	+12	+7	+11
Interest rate -1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	+9	+3	-14	-13	-5	-10
Volatility Adjustment -10bp	-9	-9	-2	-2	-11	-11
Equity prices -20%	-9	-11	+7	+10	-3	-1
Property values -10%	-9	-8	+4	+3	-6	-5
Spread +75bps/VA +20/21bps	+11	+12	+9	+2	+21	+14

## Solvency II sensitivities - explanation

Risk	Scenario
Interest rate risk – UFR	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.
Interest rate risk (incl. UFR 4.2%/4.05%)	Measured as the impact of a parallel 1% upward and downward movement of the interest rates. For the liabilities, the extrapolation to the UFR (4.05% for 2018 and 4.2% for 2017) after the last liquid point of 20 years remained unchanged.
Volatility Adjustment	Measured as the impact of a 10 bps decrease in the Volatility Adjustment.
Equity risk	Measured as the impact of a 20% downward movement in equity prices.
Property risk	Measured as the impact of a 10% downward movement in the market value of real estate.
Spread risk (including impact of spread movement on VA)	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 Volatility Adjustment will increase by 20bps (2017 was 21 bps) based on reference portfolio.

The Solvency II sensitivities stayed almost the same in the past year, except for the interest rate sensitivity and credit spread sensitivity. The decrease of the interest rate sensitivity from +11 to +7 in the upward scenario (and from -10 to -5 in the downward scenario) is mainly caused by a change in the interest rate hedge policy. The increase of the credit spread sensitivity from +14 to +21 is caused due to the fact that the interest rate up becomes dominant in this scenario. This led to a bigger diversification in the market risk module and therefore to a bigger impact of the SCR on the ratio.

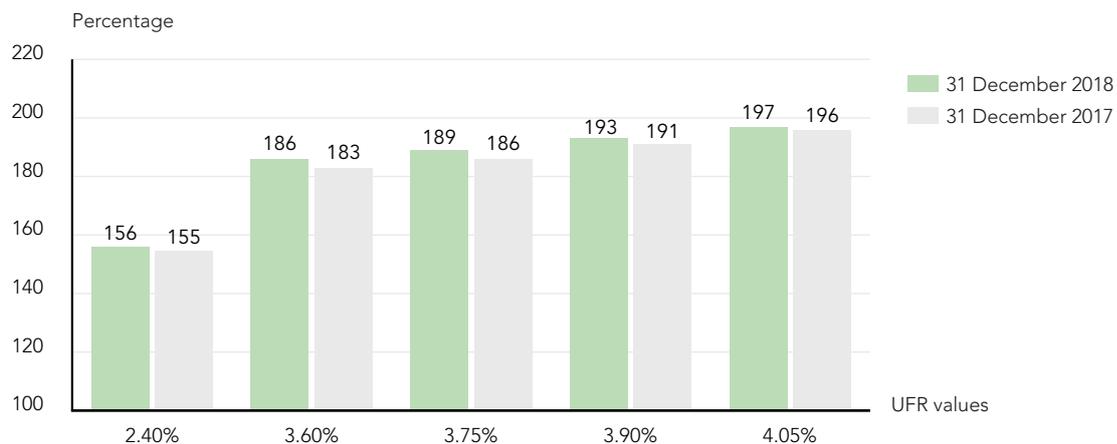
## Expected development Ultimate Forward Rate

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 will decrease, starting 2018, from 4.2% to 3.6% with steps of 15 basis points per year. In 2018 the UFR was 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.

### Sensitivity Solvency II ratio to UFR

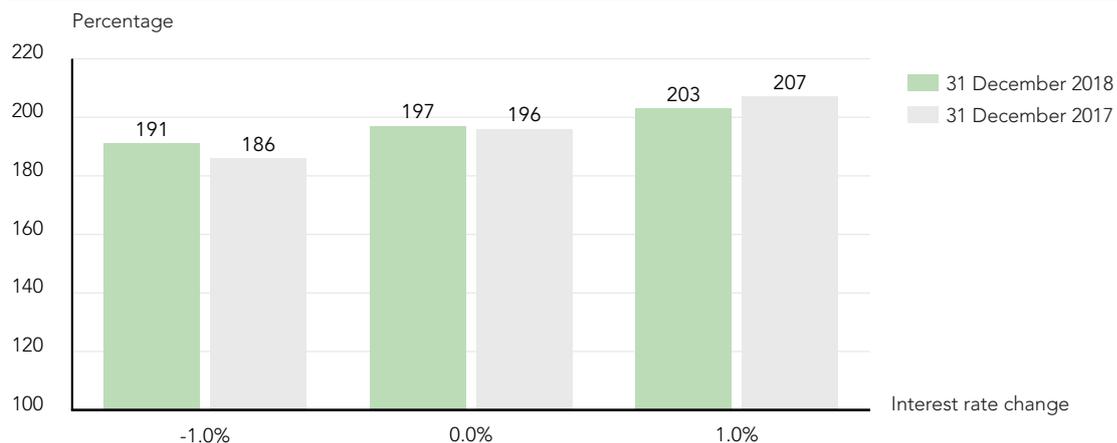


### Interest rate sensitivity of Solvency II ratio

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. Sensitivity Solvency II ratio to interest rate

### Sensitivity Solvency II ratio to interest rate



### Equity risk

The 2018 the equity risk decreased mainly due to a smaller equity portfolio as a result of the drop of share prices. Besides the smaller equity portfolio also the average risk charge on balance decreased as a result of (i) the downward 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 pread risk on balance decreased in 2018. On the one hand SCR spread risk increased due to a larger fixed income portfolio, mainly due to the acquisition of GNL. On the other hand SCR spread risk decreased due to the shortening duration of the credit portfolio.

The spread sensitivity of the solvency ratio increased from +14% to +21. This sensitivity is based on a scenario in which the average spread rises by 75 bps and the Volatility Adjustment (VA) rises by 21 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&A's 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:

LAC DT Components										
Model sort	ASR Nederland N.V.		ASR Levensverzekering N.V.		ASR Schadeverzekering N.V.		ASR Aanvullende Ziekte-kostenverzekeringen N.V.		ASR Basis Ziektekosten-verzekeringen N.V.	
	Available for substantiation	Utilised in applied LAC DT factor	Available for substantiation	Utilised in applied LAC DT factor	Available for substantiation	Utilised in applied LAC DT factor	Available for substantiation	Utilised in applied LAC DT factor	Available for substantiation	Utilised in applied LAC DT factor
	Advanced	Advanced	Advanced	Advanced	Base	Base	Base	Base	Base	Base
Component 1 – Taxable profit (t)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Component 2 – Taxable profit (t-1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Component 3 – Net DTA position	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Component 4a – Risk Margin	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗
Component 4b – Future taxable profit <sup>1</sup>	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗

The outcome of both models is an unrounded LAC DT factor for all 4 entities.

- 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 (component 4b) are projected;
- 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;
- The LAC DT factors and outlook are reviewed by the 2nd line;
- A proposal with the advised LAC DT factors will be presented to the Financial Risk Committee (FRC). The LAC DT factors to be used result;
- 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 (LAC TP)

Loss-absorbing capacity of technical provisions ("LAC TP") is the part of the technical provisions that can be used to absorb some of the SCR shock losses, as the expected future profit sharing to policyholders will be reduced if actual losses would arise. LAC TP is applicable to insurance policies with discretionary profit sharing. Starting from 2018Q4 a.s.r. will start taking into account this discretionary element in the SCR.

## 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.

<sup>1</sup> Only part of component 4b is utilised for ASR NL and asr leven.

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:

### Insurance risk - required capital

	31 December 2018	31 December 2017
Life insurance risk	1,457	1,427
Health insurance risk	777	677
Non-life insurance risk	491	377
<b>Total excluding diversification between insurance risks</b>	<b>2,724</b>	<b>2,481</b>

The insurance risk increased as a result of the lowering of the mass lapse cover, refinement of the calculation of the Health risk, the uniformation of the Generali Nederland assumptions and the portfolio development at Non-life.

### Solvency II sensitivities

a.s.r. has assessed the impact of various sensitivities on the solvency ratio. The sensitivities as at 31 December 2017 and 2018, expressed as impact on the group solvency ratio (in percentage points) are as follows:

### Solvency II sensitivities - insurance risks

Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Type of risk (%-points)						
Expenses -10%	+6	+6	+1	+1	+8	+7
Mortality rates, all products -5%	-3	-4	-	-	-3	-4
Lapse rates -10%	+1	+1	-	-	-	+1

### Solvency II sensitivities - explanation

Risk	Scenario
Expense risk	Measured as the impact of a 10% decrease in expense levels.
Mortality risk	Measured as the impact of a 5% decrease in all mortality rates. A mitigating effect will occur between mortality and longevity rates.
Lapse risk	Measured as the risk of a 10% decrease in lapse rates.

The table above shows that the SCR sensitivities in 2018 are (almost) similar to the sensitivities of 2017. The impact on the ratio is the opposite if a reversed scenario is taken into account. These shocks had no impact on the 2018 and 2017 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 Liability Adequacy Test, 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%-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.

The required capital for a mass lapse event is reduced by the proceeds that are to be expected from a reinsurance arrangement (Mass Lapse Cover). This arrangement covers the risks of a mass lapse event of parts of the portfolio to the extent that the mass lapse is more than 20% and less than 40%.

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.

### **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 ('Sparhypotheken'). 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. life 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. life is exposed to are expense risk and lapse risk, though lapse risk is reduced due to the aforementioned Mass Lapse reinsurance arrangement.

Below table summarises the required capital for abovementioned life insurance risks based on the standard model.

### Life insurance risk - required capital

	31 December 2018	31 December 2017
Mortality risk	297	268
Longevity risk	928	848
Disability-morbidity risk	6	6
Lapse risk	313	398
Expense risk	641	623
Revision risk	-	-
Catastrophe risk (subtotal)	83	62
Diversification (negative)	-811	-778
<b>Life insurance risk</b>	<b>1,457</b>	<b>1,427</b>

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

### Life portfolio - technical provisions per segment

Segment	31 December 2018	31 December 2017
<b>Insurance with profit participation</b>		
Best estimate	19,099	18,833
Risk margin	1,097	1,088
<b>Technical provision</b>	<b>20,195</b>	<b>19,921</b>
<b>Other life insurance</b>		
Best estimate	9,757	8,531
Risk margin	514	475
<b>Technical provision</b>	<b>10,271</b>	<b>9,006</b>
<b>Index-linked and unit-linked insurance</b>		
Best estimate	7,908	7,743
Risk margin	108	92
<b>Technical provision</b>	<b>8,016</b>	<b>7,835</b>
<b>Total</b>		
<b>Best estimate</b>	<b>36,764</b>	<b>35,107</b>
<b>Risk margin</b>	<b>1,718</b>	<b>1,656</b>
<b>Technical provision</b>	<b>38,482</b>	<b>36,762</b>

The technical provisions and the risk margin have increased due to the acquisition of Generali Nederland (resp. 3.1 bln and 0.2 bln). This increase was mitigated by the outflow of the individual life portfolio and (to a lesser extend) the traditional pensions portfolio.

#### 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 and contain 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.

### Buy out reinsurance

The group enters into reinsurance contracts to minimise insurance risks. Reinsurance may be in place for a separate contract or for all or part of the portfolio. In order to optimise its balance sheet risks, ASR Levensverzekering N.V. entered into a reinsurance agreement with Legal and General Re (via Hannover Re as fronting reinsurer) in 2015. The agreement entailed the transfer of € 209 million in pension obligations to Legal and General Re.

### Mass lapse cover

The required capital (SCR) for a mass lapse event is reduced by the proceeds that are to be expected from a reinsurance arrangement (Mass Lapse Cover) with RGA, Munich Re and some other reinsurers. This arrangement covers the risks of a mass lapse event of parts of the portfolio to the extent that the mass lapse is more than 20% and less than 40%. The mass lapse cover will be gradually terminated in 2 years starting from Q4 2018.

## 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%-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.

#### 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 Dutch Central Bank 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, 1.5% are permanently disabled, 5% are disabled for ten years, 13.5% 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**

	31 December 2018	31 December 2017
Health SLT	607	518
Health Non-SLT	233	214
Catastrophe Risk (subtotal)	77	76
Diversification (negative)	-141	-131
<b>Health (Total)</b>	<b>777</b>	<b>677</b>
Mortality risk	-	-
Longevity risk	22	19
Disability-morbidity risk	523	441
Expense risk	84	70
Revision risk	84	59
Lapse risk	124	134
Diversification (negative)	-231	-205
<b>Health SLT (subtotal)</b>	<b>607</b>	<b>518</b>
Medical expenses insurance and proportional reinsurance	81	74
Income protection insurance and proportional reinsurance	182	150
Diversification (negative)	-30	-9
<b>Health Non-SLT (subtotal)</b>	<b>233</b>	<b>214</b>
Mass accident risk	17	16
Accident concentration risk	72	72
Pandemic risk	22	19
Diversification (negative)	-34	-31
<b>Catastrophe risk (subtotal)</b>	<b>77</b>	<b>76</b>

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 2018 can be broken down as follows under Solvency II.

**SLT Health portfolio - technical provisions per segment**

Segment	31 December 2018	31 December 2017
Best estimate	2,558	2,492
Risk margin	301	248
<b>Technical provision</b>	<b>2,859</b>	<b>2,740</b>

For the NSLT Health portfolio, the provision at year-end 2018 can be broken down as follows under Solvency II.

**NSLT Health portfolio - technical provisions per segment**

Segment	31 December 2018	31 December 2017
Best estimate	445	416
Risk margin	30	29
<b>Technical provision</b>	<b>475</b>	<b>445</b>

**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. non-life 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.

**Non-life insurance risk - required capital**

	31 December 2018	31 December 2017
Premium and reserve risk	447	336
Lapse risk	36	31
Catastrophe risk	117	104
Diversification (negative)	-109	-94
<b>Non-life insurance risk</b>	<b>491</b>	<b>377</b>

For the non-life portfolio, the provision at year-end 2018 can be broken down as follows under Solvency II:

**Non-life portfolio - technical provisions per segment**

	31 December 2018	31 December 2017
Best estimate	1,241	836
Risk margin	66	49
<b>Technical provision</b>	<b>1,306</b>	<b>885</b>

### 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. By determining the retention, the impact on the statement of financial position is taken into account as well. The difference in the retention of disability depends on the structure of the contract (basic coverage or indexed).

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 program has remained largely the same as in previous years in terms of cover and limits. The most significant reinsured risk is windstorm. In 2017, a.s.r. purchased excess of loss reinsurance for accident year 2018 for windstorm in excess of € 35 million with a limit of € 535 million.

## 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:

### Market risk - required capital

	31 December 2018	31 December 2017
Interest rate	238	428
Equity	597	738
Property	1,014	883
Currency	230	267
Spread	1,091	1,130
Concentration	122	67
Diversification (negative)	-709	-740
<b>Total</b>	<b>2,584</b>	<b>2,773</b>

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 decreased mainly driven by an adjustment of the interest rate hedge within current hedging policy bandwidth and lower equity risk due to fallen stock prices.

The value of investment funds at year-end 2018 was € 3,650 million (2017 € 3,250 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 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 in 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

	31 December 2018	31 December 2017
SCR interest rate risk up	-97	21
SCR interest rate risk down	-238	-428
<b>SCR interest rate risk</b>	<b>238</b>	<b>428</b>

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

Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
UFR 3.2%	-18	-19	-3	-3	-21	-23
Interest rate +1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	-4	-1	+12	+12	+7	+11
Interest rate -1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	+9	+3	-14	-13	-5	-10
Volatility Adjustment -10bp	-9	-9	-2	-2	-11	-11

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 4.4% per 31 December 2018.

### Equity risk - required capital

	31 December 2018	31 December 2017
SCR equity risk - required capital	597	738

The 2018 the equity risk decreased mainly due to a smaller equity portfolio as a result of the drop of share prices. Besides the smaller equity portfolio also the average risk charge on balance decreased as a result of the downward effect of the equity dampener.

In case the transitional measure would not be used, SCR equity risk would increase to € 674 million.

### Solvency II sensitivities - equity prices

Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
Equity prices -20%	-9	-11	+7	+10	-3	-1

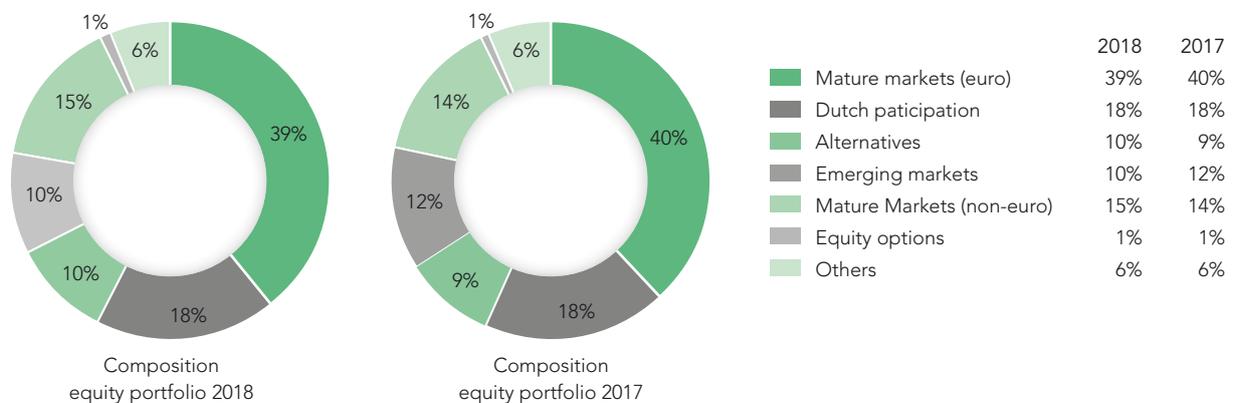
### Composition of equity portfolio

The fair value of equities and similar investments at year-end 2018 was € 2,191 million (2017: € 2,524 million). The decrease in 2018 is a result of the drop of share prices.

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 an value of € 26 million is in place to mitigate the equity risk.

The table below shows the exposure of the equity portfolio to sectors. 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

	31 December 2018	31 December 2017
SCR property risk - required capital	1,014	883

In 2018 the real estate investments 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

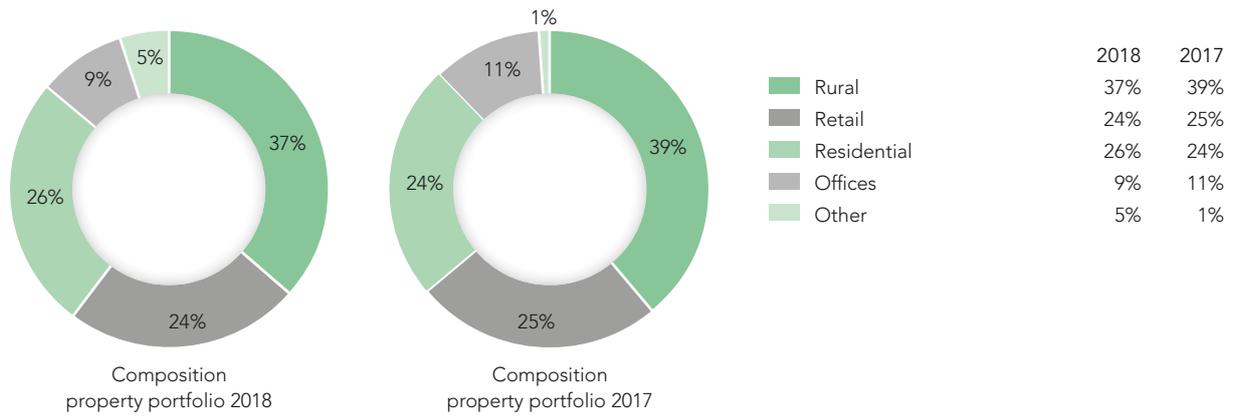
Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
Property values -10%	-9	-8	+4	+3	-6	-5

#### Composition of property portfolio

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 € 4,111 million at year-end 2018 (2017: € 3,524 million). The increase in 2018 was a result of both transactions and increases in property prices.

The property investments are diversified across the Netherlands. In 2018 a.s.r. reduced the exposure to offices and increased the exposure to the other categories.

**Composition property portfolio**



**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 exposure on liabilities and the 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).

**Currency risk - required capital**

	31 December 2018	31 December 2017
SCR currency risk - required capital	230	267

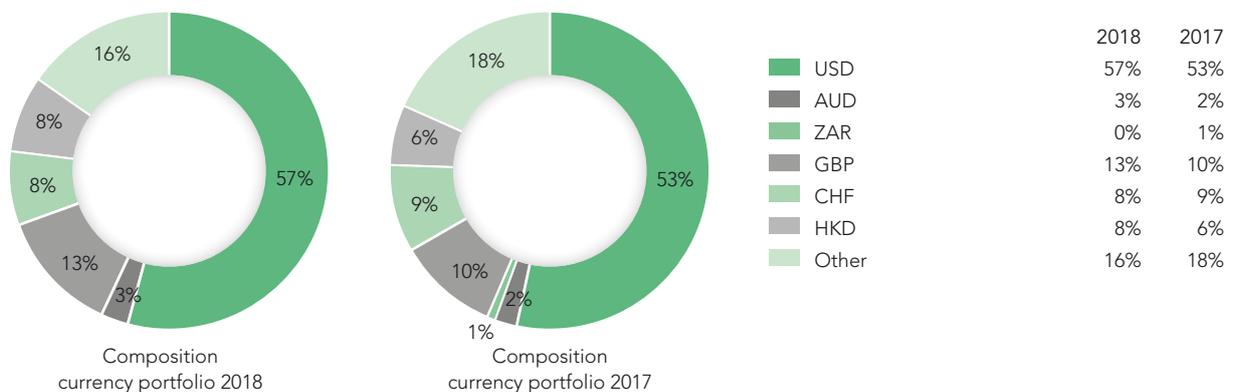
Currency risk has decreased 37.5 million. This is mainly caused by a decrease in foreign stocks and bonds in externally managed funds.

have substantially decreased in the following currencies: USD, AUD, ZAR, GBP. The AUD liabilities have substantially increased, which results in a negative AUD net exposure as per 31 december 2018. This is against the hedge policy of a.s.r. and therefore this is resolved as per january 2019 by increasing the asset exposure of a.s.r.

**Specification currencies with largest exposure**

Foreign stocks and bonds in externally managed funds

**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

	31 December 2018	31 December 2017
SCR spread risk - required capital	1,091	1,130

The SCR spread risk on balance decreased in 2018. On the one hand SCR spread risk increased due to a larger fixed income portfolio, mainly due to the acquisition of Generali Nederland. 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 volatility adjustment 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 20 bps in 2018 (2017: 21 bps). The impact of the required capital on the solvency ratio increased due to the fact that in this scenario interest rate up becomes dominant in the determination of interest rate risk, resulting in a lower SCR requirement.

### Solvency II sensitivities - spread risk

Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
Spread +75bps/VA +20/21bps	+11	+12	+9	+2	+21	+14

### Composition of fixed income portfolio

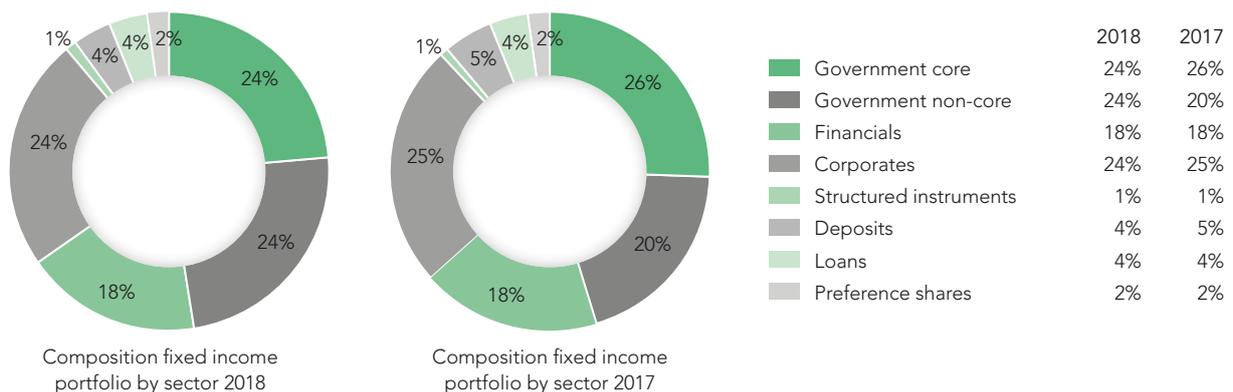
Spread risk is managed on a portfolio basis within limits and risk budgets established by the relevant risk committees. Where relevant, credit ratings provided by the external rating agencies are used to determine risk budgets and monitor limits. A limited number of fixed-income investments do not have 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.

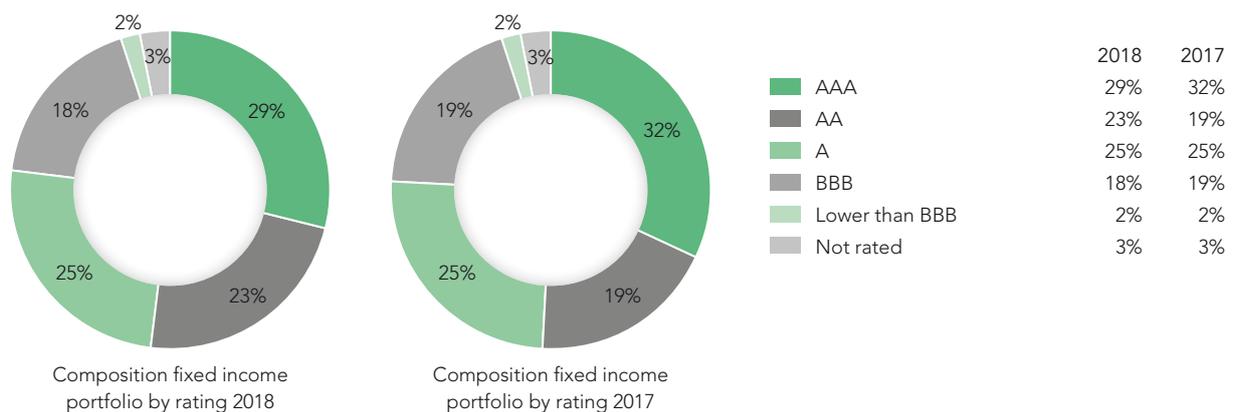
The total exposure of assets in scope of spread risk is €25,236 million (2017: €23,431 million). The increase of the portfolio is mainly due to the acquisition of Generali Nederland. The portfolio decomposition is similar to 2017, except:

- The amount of core government bonds decreased and the amount of non-core government bonds decreased;
- The amount of AAA decreased and the amount of AA increased.

### Composition fixed income portfolio by sector



### Composition fixed income portfolio by rating



### 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 organisation are not in scope of concentration risk. Bank deposits can be excluded from concentration risk if they fulfil certain conditions.

#### Concentration risk - required capital

	31 December 2018	31 December 2017
SCR concentration risk - required capital	122	67

The increase in 2018 is caused by changes in the credit quality step of Secured Deposits. 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;
- 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.

### Counterparty default risk - required capital

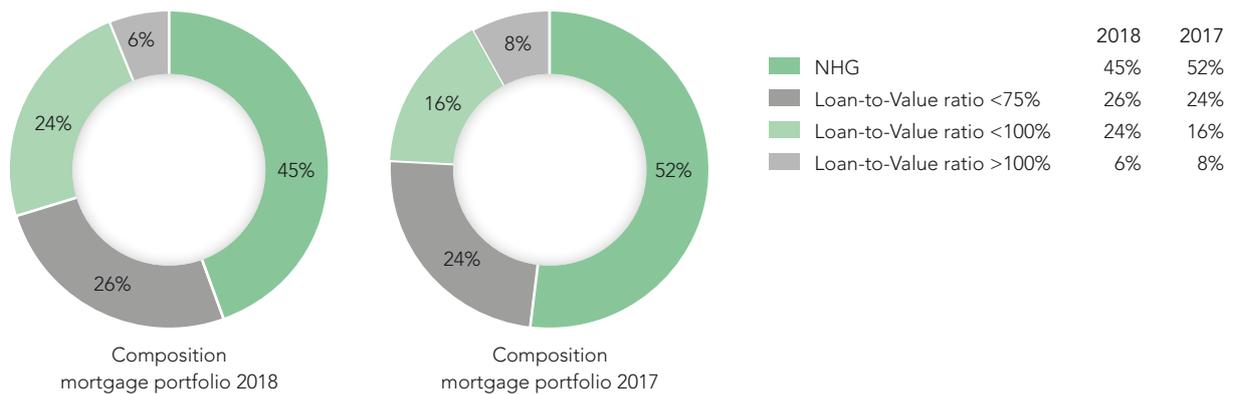
	31 December 2018	31 December 2017
Type 1	231	219
Type 2	352	418
Diversification (negative)	-36	-37
<b>Total</b>	<b>547</b>	<b>600</b>

The increase of the portfolio is due to the acquisition of Generali Nederland. This led to an increase of SCR Counterparty risk equal to 35 million. This was compensated by a decrease of exposure to reinsurance and cash. The counterparty risk type 2 has decreased a) due to the lower volume of the receivables from intermediaries that have been due for more than three months; b) due to the overall decrease of exposures to Mortgage loans, Intermediaries and policyholders. The total counterparty risk has decreased by 53 million.

### 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 € 7,546 million at year-end 2018 (2017: € 6,990 million).

### Composition mortgage portfolio



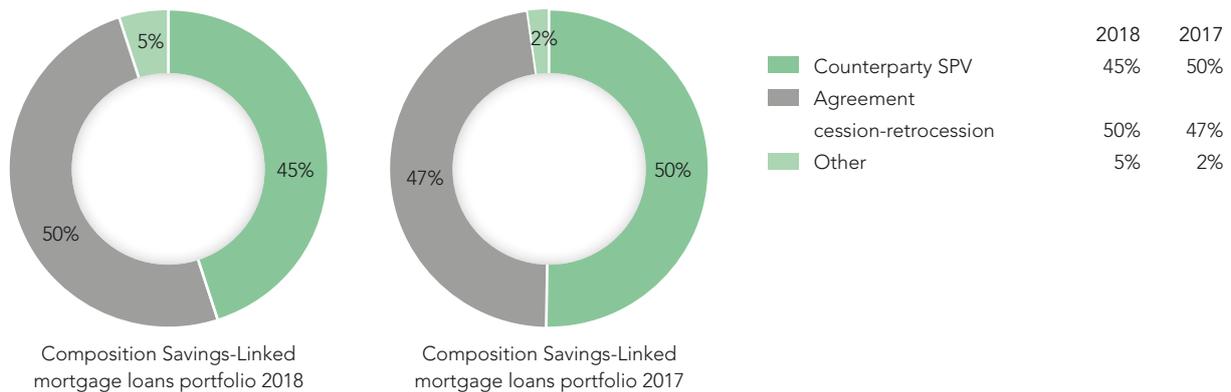
The Loan-to-Value ratio is based on the value of the mortgage according SII principals with respect to the a.s.r. calculated collateral.

The default percentage (i.e. the percentage of mortgages which is in arrears for over three months) has decreased from 0,21% in December 2017 to 0,10% in December 2018. 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 ('Sparlossen') depends on the counterparty. For 45% of the portfolio, the counterparties are Special Purpose Vehicles. The risk is limited due to the robust quality of the mortgages in the Special Purpose Vehicles in combination with the tranching. a.s.r. has a cession-retrocession agreement with the counterparty for 50% 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. 2017 has been restated.

### Composition savings-linked mortgage loans portfolio



### 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. The table below shows the exposure to reinsurers per rating. The total exposure to reinsurers at year-end 2018 was € 583 million (2017: € 549 million).

#### Composition reinsurance counterparties by rating

	31 December 2018	31 December 2017
AAA	0%	0%
AA	88%	97%
A	6%	3%
NR	6%	0%

### C.3.5 Receivables

#### Composition receivables

	31 December 2018	31 December 2017
Policyholders	158	133
Intermediaries	89	82
Reinsurance operations	111	101
Health insurance fund	102	99
Other	292	313
<b>Total</b>	<b>752</b>	<b>728</b>

### C.3.6 Cash and cash equivalents

The current accounts amounted € 2,625 million in 2018 (2017: € 2,523 million).

#### Composition cash accounts by rating

	31 December 2018	31 December 2017
AAA	0%	0%
AA	0%	0%
A	99%	96%
Lower than A	1%	4%

### Composition deposits by rating

	31 December 2018	31 December 2017
Secured deposits	320	345
AAA	-	-
AA	-	-
A	-	-
<b>Total</b>	<b>320</b>	<b>345</b>

## 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 Solvency Capital Requirement 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 under normal business conditions and targets funding liquidity risk. Long-term liquidity management considers business conditions in which market liquidity risk materialises. Stress liquidity management looks at 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 occur as result of lapses in the insurance portfolio, savings withdrawals or cash variation margin payments related to the ISDA/CSA agreements of derivatives. a.s.r. monitors its liquidity risk scenarios 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 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 contingency liquidity plan is 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 2018, a.s.r. had cash (€ 2,525 million), short-term deposits (€ 1,469 million), liquid government bonds (€ 11,929 million) and other bonds and shares. Furthermore a.s.r. has access to multiple committed cash facilities in order to meet its liquidity needs in times of stress.

The following table shows the contractual cash flows of liabilities (excluding insurance contracts on behalf of policyholders) broken down in four categories. For liabilities arising from insurance contracts, expected lapses and mortality risk are taken into account. Profit-sharing cash flow of insurance contracts is not taken into account, nor are equities, property and swaptions.

In 2018 the liquidity risk table has been updated for better understanding of the future cash flows. Additional time buckets were added to increase granularity. The comparative figures have been adjusted accordingly.

**Contractual cashflows**

	Payable on demand	< 1 years	1-5 years	5-10 years	> 10 years	Carrying value
<b>31 December 2018</b>						
Financial Liabilities <sup>1</sup>	3,054	645	26	85	506	4,313
Derivatives	-	316	763	672	205	435
Insurance Liabilities	-	1,779	6,017	6,655	26,412	43,466
Future interest payments	-	27	102	128	427	-
<b>Total</b>	<b>3,054</b>	<b>2,767</b>	<b>6,908</b>	<b>7,541</b>	<b>27,550</b>	<b>48,214</b>
<b>31 December 2017</b>						
Financial Liabilities <sup>1</sup>	3,721	482	259	267	602	5,328
Derivatives	-	33	69	159	295	403
Insurance Liabilities	-	1,854	6,325	6,525	31,994	40,862
Future interest payments	-	26	102	128	453	-
<b>Total</b>	<b>3,721</b>	<b>2,395</b>	<b>6,756</b>	<b>7,080</b>	<b>33,344</b>	<b>46,593</b>

- (1) Subordinated liabilities based on maturity 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. See Chapter C.3.6 Cash and cash equivalents.
- Expected cash flows based on assumptions made at year end 2018.

The change in derivatives can be explained by the large amount of transactions in the past year and the fact that only a small part of the total derivatives portfolio is in scope here.

**EPIFP**

'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.'

**EPIFP**

	31 December 2018	31 December 2017
EPIFP	1,267	1,170

**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.

**Operational risk - required capital**

	31 December 2018	31 December 2017
SCR operational risk - required capital	212	184

The SCR for operational risk amounts to € 212 million at the end of 2018 (2017: € 184 million) and is determined with the standard formula under Solvency II. The operational risk is based on the basic solvency capital requirement, the volumes of premiums and technical provisions, and the amount of expenses. Operational risk increased mainly due to the acquisition of Generali Netherlands.

## 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' or '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. The most significant reinsured risk is windstorm. For accident year

2018 a.s.r. purchased reinsurance coverage for windstorm in excess of € 35 million with a limit of € 500 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 N.V. 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 N.V., reporting to the CFO of a.s.r.

ASR Vermogensbeheer N.V. 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).

# D Valuation for Solvency Purposes

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, some 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

Balance sheet	31 December 2018	Revaluation	Deconsolidation	31 December 2018
	IFRS		Financial Institutions	Solvency II
1. Deferred acquisition costs	-	-	-	-
2. Intangible assets	366	-366	-	-
3. Deferred tax assets	275	-275	-	-
4. Property, plant, and equipment held for own use	172	-	-	172
5. Investments - Property (other than for own use)	1,931	-	-	1,931
6. Investments - Equity	5,566	4	127	5,697
7. Investments - Bonds	22,540	-	-	22,540
8. Investments - Derivatives	3,026	-	-	3,026
9. Unit-linked investments	7,772	2	-	7,774
10. Loans and mortgages	10,079	1,698	-	11,777
11. Reinsurance recoverables	700	20	-	720
12. Cash and cash equivalents	3,982	-	-38	3,944
13. Any other assets, not elsewhere shown	2,595	-58	-1,853	683
<b>Total assets</b>	<b>59,004</b>	<b>1,025</b>	<b>-1,764</b>	<b>58,265</b>
14. Technical provisions (best estimates)	33,244	-145	-	33,099
15. Technical provisions (risk margin)	-	2,007	-	2,007
16. Unit-linked best estimate	10,222	-2,314	-	7,908
17. Unit-linked risk margin	-	108	-	108
18. Pension benefit obligations	3,303	-	-	3,303
19. Deferred tax liabilities	-	103	-	103
20. Subordinated liabilities	1,498	48	-	1,546
21. Other liabilities	6,295	1	-1,766	4,530
<b>Total liabilities</b>	<b>54,562</b>	<b>-192</b>	<b>-1,766</b>	<b>52,604</b>
<b>Excess of assets over liabilities</b>	<b>4,442</b>	<b>1,217</b>	<b>2</b>	<b>5,661</b>

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

	Gross of tax 31 December 2018
<b>IFRS equity</b>	5,479
i. Hybrid loans	-1,001
ii. Share buy back	-36
<b>IFRS equity adjusted</b>	<b>4,442</b>
<b>Revaluation assets</b>	
i. Intangible assets	-118
ii. Loans and mortgages	1,702
iii. Reinsurance	20
iv. Cash and cash equivalents	-
v. Any other assets, not elsewhere shown	-57
	<b>1,547</b>
<b>Revaluation liabilities</b>	
i. Technical provisions (best estimates)	145
ii. Technical provisions (risk margin)	-2,007
iii. Unit-linked best estimate	2,314
iv. Unit-linked risk margin	-108
v. Subordinated liabilities	-48
vi. Other liabilities	-1
	<b>295</b>
Total gross revaluations	1,842
Tax percentage	20.5%
Total net revaluations	<b>1,464</b>
<b>Revaluation tax exemptions</b>	
i. Goodwill	-247
ii. Participations	-
iii. Valuation difference Financial Institutions	2
	<b>-245</b>
<b>Solvency II equity</b>	<b>5,661</b>
<b>Own fund items</b>	
i. Subordinated liabilities	1,546
ii. Deduction Participations Financial Institutions	-129
iii. Foreseeable dividend	-154
<b>Eligible Own Funds Solvency II excl Financial Institutions</b>	<b>6,924</b>

## 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 will be referred 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.

### 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.

### 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.

## 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

Deferred acquisition costs is not applicable.

### 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 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 2018 Dutch government decided the tax rate will gradually decrease from 25% to 20,5% within 3 years. Because most revaluations will materialise after 2021, the tax effect is calculated at 20,5%.

### 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 by the deconsolidation of financial institutions. The deconsolidation accounts for € 129 million of the revaluation.

### 7. Investments – Bonds

The valuation of these assets is consistent with the IFRS fair value hierarchy as described in [paragraph D.1.1.1](#).

### 8. Investments – Derivatives

The valuation of these assets is consistent with the fair value hierarchy as described in [paragraph D.1.1.1](#). 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.1.1.1](#).

### 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 Dutch Central Bank).

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. group 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 – 18 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.

Legal entities within a.s.r. and the lines of business involved						
Legal entity	Life insurance		Non-life			Health
	Traditional Life	Unit-linked and Index-linked	Property and Casualty	Health SLT Income Protection	Health NSLT Income Protection	Health NSLT Medical Expenses
ASR Levensverzekering N.V.	✓	✓				
ASR Schadeverzekering N.V.			✓	✓	✓	
ASR Basis						
Ziektekostenverzekeringen N.V.						✓
ASR Aanvullende Ziektekostenverzekeringen N.V.						✓

## 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 SCR's are aggregated in each future year, making allowance for the correlations between risks using correlation factors as define 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 2018). The following adjustments have been made to the swap curve:

- Reduction by ten basis points to account for counterparty default risk (31 December 2017: 10 bps);
- Extrapolation from year 20 to the ultimate forward rate of 4.05% in year 60 using the Smith-Wilson extrapolation method.

Inclusion of a volatility adjustment of 24 basis points, as provided by EIOPA, to the zero rates for the first 20 years (31 December 2017: volatility adjustment 4 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 and ASR Vermogensbeheer N.V.).

**Impact of applying VA = 0 bps**

	VA = 24 bps		VA = 4 bps		VA = 0 bps		Impact	
	31 December 2018	31 December 2017						
TP	43,122	40,833	44,131	40,991	1,009	158		
SCR	3,615	3,550	3,710	3,565	95	15		
MCR	1,585	1,453	1,621	1,458	36	5		
Basic own funds (total)	6,924	6,826	6,122	6,708	-802	-118		
Eligible own funds	7,053	6,914	6,251	6,756	-802	-158		

The EOF and the SCR of a.s.r. excluding other financial institutions is equal to € 6,924 million and € 3,523 million respectively.

**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 extent 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 (SPVs)**

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 addition, a reinsurance on a stop-loss basis is applicable to the risk of a mass lapse event for a selected part of the portfolio with considerable lapse risk. A claim is paid out by the reinsurer if the one-year mass is more than 20% and less than 40%. The mass laspe cover will be gradually terminated in 2 years, starting from Q4 2018.

ASR Schadeverzekering N.V. has reinsured a substantial part of the Individual Health SLT portfolio on a proportional basis. More details on reinsurance can be found in the appendix.

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.

### Technical provisions: IFRS versus Solvency II

31 December 2018	IFRS	Revaluation	Solvency II
<b>Non-life</b>			
Best estimate	-		1,241
Risk margin	-		65
<b>Technical provision</b>	<b>1,408</b>	<b>-102</b>	<b>1,306</b>
<b>Similar to non-life</b>			
Best estimate	-		445
Risk margin	-		30
<b>Technical provision</b>	<b>509</b>	<b>-34</b>	<b>475</b>
<b>Similar to life</b>			
Best estimate	-		2,558
Risk margin	-		301
<b>Technical provision</b>	<b>3,110</b>	<b>-251</b>	<b>2,859</b>
<b>Life</b>			
Best estimate	-		28,855
Risk margin	-		1,611
<b>Technical provision</b>	<b>28,217</b>	<b>2,249</b>	<b>30,466</b>
<b>Index-linked and unit-linked</b>			
Best estimate	-		7,908
Risk margin	-		108
<b>Technical provision</b>	<b>10,222</b>	<b>-2,206</b>	<b>8,016</b>
<b>a.s.r. total</b>			
<b>Best estimate</b>	<b>-</b>		<b>41,007</b>
<b>Risk margin</b>	<b>-</b>		<b>2,115</b>
<b>Technical provision</b>	<b>43,466</b>	<b>-344</b>	<b>43,122</b>

## 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;
- Different assumptions and methods underlying the technical provisions.

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 some provision is set up.

Technical provisions Pension scheme a.s.r. leven  
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 mentioned as an employee benefit obligation.

## **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 21-24 from the simplified balance sheet above are described

#### **18. Pension benefit obligations**

a.s.r. has in place a number of defined benefit plans for own staff. 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 of 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 2018: 1.85%) 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 2017. 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 2018 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.

#### **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 Q4 2018.

## **D.4 Alternative methods for valuation**

a.s.r. does not apply alternative methods for valuation.

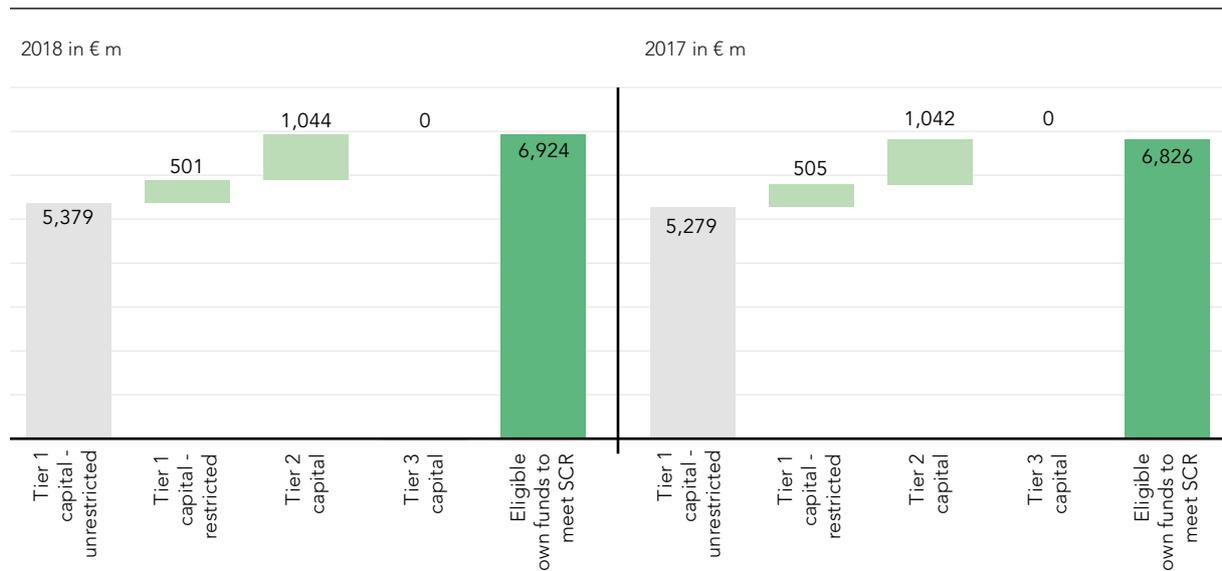
## **D.5 Any other information**

Other material information about valuation does not apply.

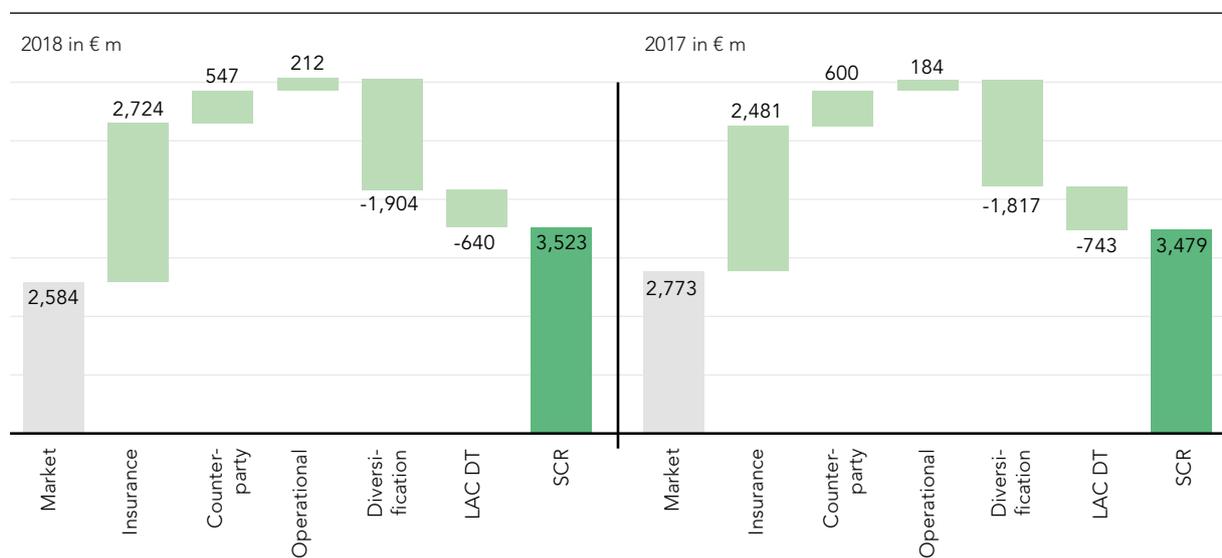
# E Capital management

## Key figures

### Eligible own funds

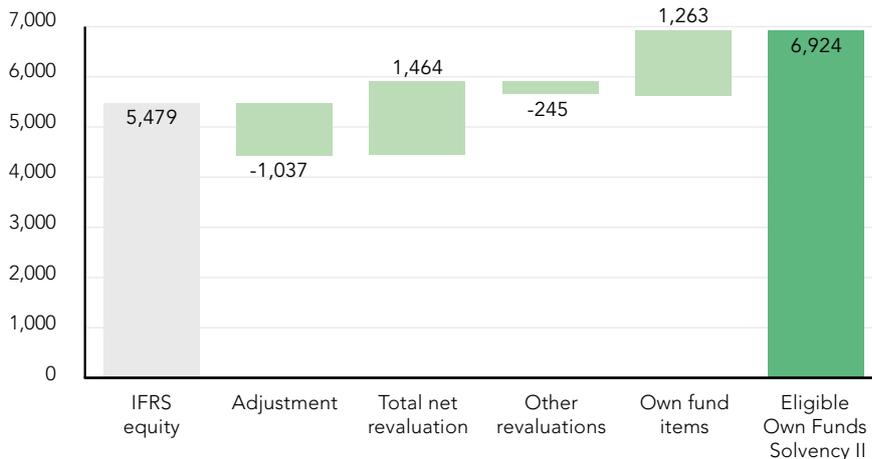


### SCR



The solvency ratio stood at 197% as at 31 December 2018 after distribution of the proposed dividend and is based on the standard formula as a result of € 6,924 eligible own funds and € 3,523 million SCR.

## Reconciliation total equity IFRS vs EOF Solvency II



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 plans to consider investing capital above the Solvency II ratio (calculated based on the standard formula) of 160% (management threshold level) with the objective of creating value for its shareholders. If and when a.s.r. operates at a level considerably above the management threshold level and it believes that it cannot invest this capital in value-creating opportunities for a prolonged period of time, it may decide to return (part of this) capital to 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

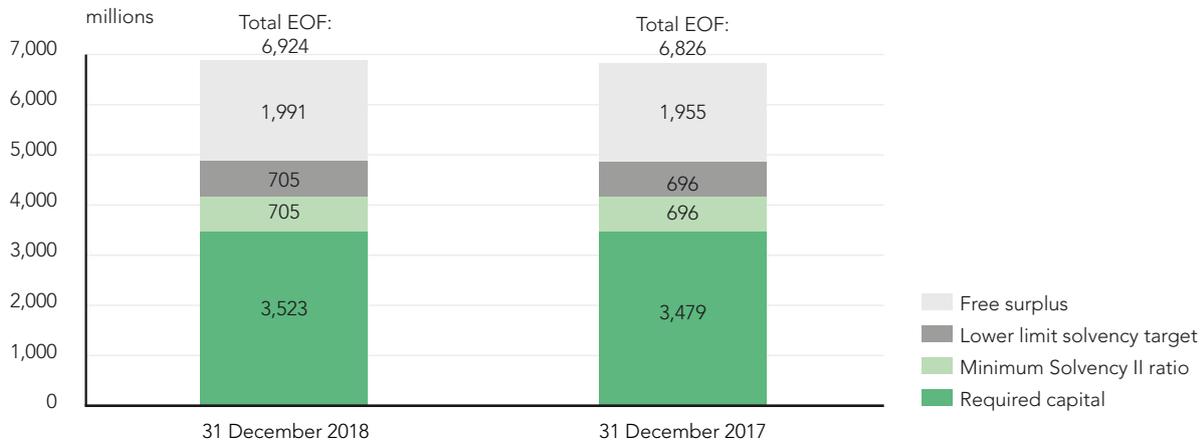
The group is committed to maintain a strong capital position in order to be a robust and sustainable insurer for its policyholders and other stakeholders. The objective is to maintain a solvency ratio well above the minimum levels as defined in the risk appetite statements and above the relevant management 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 197% at 31 December 2018, 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 realise the capital of this OTSO, for example by selling the entity. Specifically regarding ASR Basis Ziekttekostenverzekeringen N.V. in 2018, 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



### 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

	31 December 2018	31 December 2017
Tier 1 capital - unrestricted	5,379	5,279
Tier 1 capital - restricted	501	505
Tier 2 capital	1,044	1,042
Tier 3 capital	-	-
<b>Eligible own funds to meet SCR</b>	<b>6,924</b>	<b>6,826</b>

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 Dutch Central Bank.

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.

#### Eligible Own Funds to meet the MCR

	31 December 2018	31 December 2017
Tier 1 capital - unrestricted	5,379	5,279
Tier 1 capital - restricted	501	505
Tier 2 capital	317	291
Tier 3 capital	-	-
<b>Eligible own funds to meet MCR</b>	<b>6,197</b>	<b>6,075</b>

According to (Directive 2009/138 EU article 230 Sub 2a) the consolidated group Solvency Capital Requirement shall have as a minimum the sum of the following:

- a) The Minimum Capital Requirement as referred to in Article 129 of the participating insurance or reinsurance undertaking;
- b) The proportional share of the Minimum Capital Requirement 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 (€ 1,585 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.

#### Hybrid loans

Nr	Description	Amount	Issue date	IFRS classification	Solvency II classification	Tiering
				Subordinated liability	Subordinated liability	
1	ASR NEDERLAND_5.125%_29/09/2045	-512	29-09-2015	liability	liability	Tier 2
2	ASR NEDERLAND_7.25%_30/09/2099	-17	30-09-2009	Equity	Equity	Restricted Tier 1
	ASR NEDERLAND_10%_26/10/2099					
3	NL0009213545	-199	26-10-2009	Equity	Equity	Restricted Tier 1
4	ASR NEDERLAND_5%_30/09/2099	-519	30-09-2014	Equity	Equity	Tier 2
	XS1115800655					
5	ASR NEDERLAND_4.625%_19/10/2099	-303	12-10-2017	Equity	Equity	Restricted Tier 1

a.s.r. has based the tiering of the first three loans on self-assessments. These self-assessments have been reviewed by DNB.

Loans 2 and 3 are step-up fixed floating perpetuals. Dutch Central Bank has ascertained that:

- The loans were issued before 17 January 2015;
- The loans currently qualify as higher additional capital under Solvency I; and
- The loans do not qualify directly as Tier 1 or Tier 2 under Solvency II.

The Dutch Central Bank concludes that loans 2 and 3 qualify for grandfathering to Tier 1 under Solvency II for a maximum period of ten years. However, a.s.r. shall redeem both loans at the first call date in 2019, with permission of the Dutch Central Bank.

## 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:

- a) The own funds eligible to cover the Solvency Capital Requirement, calculated based on consolidated data;
- b) The Solvency Capital Requirement 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 Solvency Capital Requirement 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 Solvency Capital Requirement 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

The required capital stood at € 3,523 million per 31 December 2018 (2017: € 3,479 million). The required capital (before diversification) consists for 2018 € 2,584 million out of market risk and the insurance risk amounted to € 2,724 million as per 31 December 2018.

a.s.r. (including financial institutions) complied during 2018 with the applicable externally imposed capital requirement. The table below presents the solvency ratio at group level as at the date indicated.

#### Eligible own funds to meet the SCR

	31 December 2018	31 December 2017
Eligible Own Funds Solvency II	6,924	6,826
Required capital	3,523	3,479
<b>Solvency II ratio excluding financial institutions</b>	<b>197%</b>	<b>196%</b>

The Solvency II ratio stood at 197% (excluding financial institutions) as at 31 December 2018 (2017: 196%). The Solvency II ratio including financial institutions stood at 195% as at 31 December 2018 (2017: 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 is € 640 million.

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 of 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 August 20, 2018.

### Ratings per legal entity

Ratings Standard & Poor's	Type	Rating	Outlook	Rating and outlook since
ASR Nederland N.V.	CCR	BBB+	Stable	15 May 2014
ASR Levensverzekering N.V.	CCR	A	Stable	23 August 2012
ASR Levensverzekering N.V.	IFRS	A	Stable	23 August 2012
ASR Schadeverzekering N.V.	CCR	A	Stable	23 August 2012
ASR Schadeverzekering N.V.	IFRS	A	Stable	23 August 2012

CCR: counterparty credit rating

IFRS: insurer financial strength rating

Rating reports can be found on the corporate website:  
[www.asrnl.com](http://www.asrnl.com).

## 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 Minimum Capital Requirement or significant non-compliance with the Solvency Capital Requirement

during the reporting period or at the reporting date, no further information is included here.

## E.6 Any other information

### E.6.1 Dividend and capital management actions

The group has formulated its dividend policy in line with its current strategy. a.s.r. group intends to pay an annual dividend that creates sustainable long-term value for its shareholders. a.s.r. group aims to operate at a solvency ratio, calculated according to the standard formula, above a management threshold level. This management threshold level is currently defined as above 160% of the Solvency Capital Requirement ('SCR'). In general, it expects to not pay cash dividends if the group level solvency ratio (calculated according to the standard formula) falls below 140%. a.s.r. group currently intends to consider investing capital above the solvency ratio (calculated according to the standard formula) of 160% with the objective of creating value for its shareholders. If and when a.s.r. group operates at a certain level safely above the 160% (not driven by non-economic developments), and a.s.r. group assesses that it cannot invest this capital in value creating opportunities for a prolonged period of time, a.s.r. group may decide to return (part of this) capital to shareholders. If a.s.r. group elects to return capital, it intends to do so in

the form that is efficient for shareholders at that time. a.s.r. intends to pay € 245 million dividends over full year 2018 (including interim dividend). As from 2018, a.s.r. pays an interim dividend.

In June 2018, a.s.r. group paid € 229,7 million in cash dividend over the financial year 2017, representing a payout ratio of 45% in line with our dividend policy. Furthermore, a.s.r. paid € 91,65 million in interim dividend in September 2018. This interim dividend relates to the financial year 2018 and is determined as 40% of the total dividend over the previous financial year (in casu 2017). Dividends paid out by a.s.r. group is financed by the underlying entities with exception of ASR Basis Ziekttekostenverzekeringen N.V.

In December 4th 2018, a.s.r. announced the intended acquisition of Loyalis for a total consideration of € 450 million. This transaction will be financed with short-term debt, which leaves ample headroom in all capital tiers. The acquisition of Loyalis is expected to be completed in the first half of 2019.

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# Contact details

## Contact

The 2018 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:

### ASR Nederland N.V.

Archimedeslaan 10  
P.O. Box 2072  
3500 HB Utrecht  
The Netherlands  
[www.asrnl.com](http://www.asrnl.com)

### Investor Relations

+31 (0)30 257 86 00  
[ir@asr.nl](mailto:ir@asr.nl)  
[www.asrnl.com/investor-relations](http://www.asrnl.com/investor-relations)

### Corporate Communications

Press Officer  
+31 (0)6 22 790 974  
[rosanne.de.boer@asr.nl](mailto:rosanne.de.boer@asr.nl)

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[www.asrnl.com](http://www.asrnl.com)

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verzekerings  
maatschappij  
voor alle  
verzekeringen