

# 2018

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## SFCR

ASR Aanvullende  
Ziektekosten-  
verzekeringen  
N.V.

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

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# 2018

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Ziektekosten-  
verzekeringen 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. 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 thousands of euros (€ thousand), being the functional currency of ASR Aanvullende Ziektekostenverzekeringen N.V., unless otherwise stated.

# Summary

The 2018 Solvency and Financial Condition Report provides ASR Aanvullende Ziektekostenverzekeringen N.V.'s stakeholders insight in:

## A Business and performance

The Solvency II ratio stood at 196% as at 31 December 2018, based on the standard formula as a result of € 26,317 thousand Eligible Own Funds and € 13,425 thousand Solvency Capital Requirement (SCR).

Gross written premiums slightly decreased to € 72,498 thousand (2017: € 73,334 thousand). Gross new business was € 6,016 thousand (2017: € 8,302 thousand). Profit before tax 2018 came to € 3,349 thousand (2017 € 3,642 thousand). Operating expenses stood at € 7,602 thousand (2017: € 7,811 thousand).

Full details on the ASR Aanvullende Ziektekostenverzekeringen N.V.'s business and performance are described in chapter *A Business and performance* (page 11).

## B System of governance

This paragraph contains a description of group policy, which is applicable for the solo entity.

### 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 recognized and accepted standards (such as COSO ERM and ISO 31000:2018 risk management principles and guidelines). Using this framework, material risks that a.s.r. is, or can be, exposed to, are identified, measured, managed, monitored and evaluated. The framework is applicable to a.s.r. group, ASR Aanvullende Ziektekostenverzekeringen N.V. and other underlying 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 organization, 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 optimization.

Full details on the Aanvullende Ziektekostenverzekeringen N.V.'s system of governance are described in chapter B System of governance (page 19).

## C Risk profile

ASR Aanvullende Ziektekostenverzekeringen N.V. 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 ASR Aanvullende Ziektekostenverzekeringen N.V. in the identification, measurement and management of risks and monitors to ensure adequate and immediate actions are taken in the event of changes in ASR Aanvullende Ziektekostenverzekeringen N.V.'s risk profile.

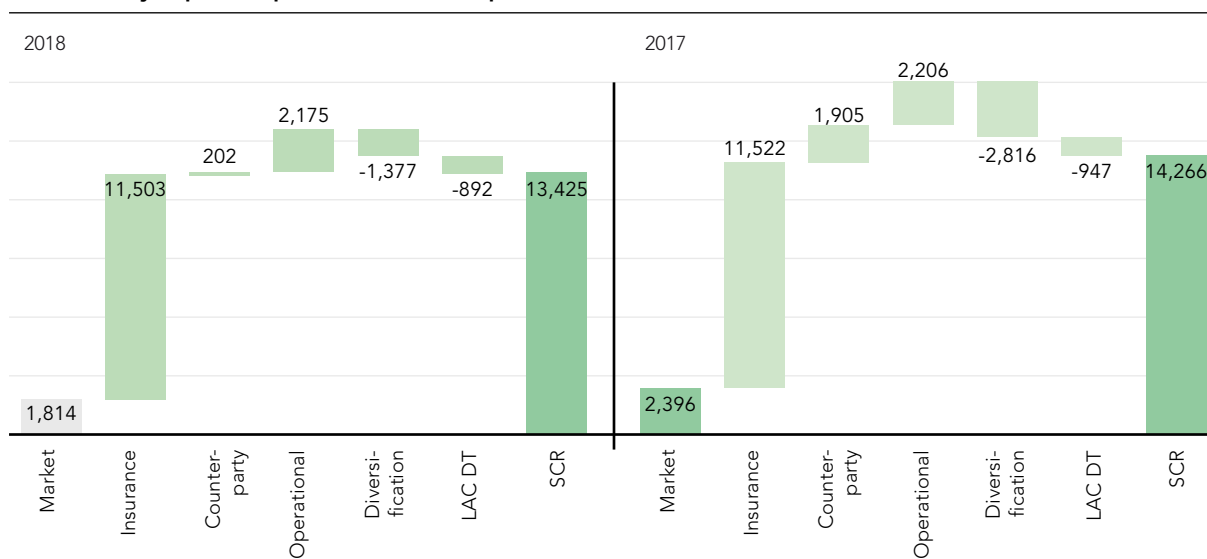
ASR Aanvullende Ziektekostenverzekeringen N.V. is exposed to the following types of risks: market risk, counterparty default risk, insurance risk, strategic risk and operational risk. The risk appetite is formulated at both



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:

**The solvency capital requirement is build up as follows:**



Full details on the ASR Aanvullende Ziektekostenverzekeringen N.V.'s risk profile are described in chapter C Risk profile (page 36).

- Derecognition of items on the Solvency II economic balance sheet which are admissible on the IFRS balance sheet, for instance goodwill, pre-paid commissions and other intangible assets;
- Revaluation differences on mainly insurance liabilities and other assets which are valued other than fair value in the IFRS balance sheet.

## D Valuation for Solvency purposes

ASR Aanvullende Ziektekostenverzekeringen N.V. 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, ASR Aanvullende Ziektekostenverzekeringen N.V. follows IFRS for valuing assets and liabilities other than technical provisions.

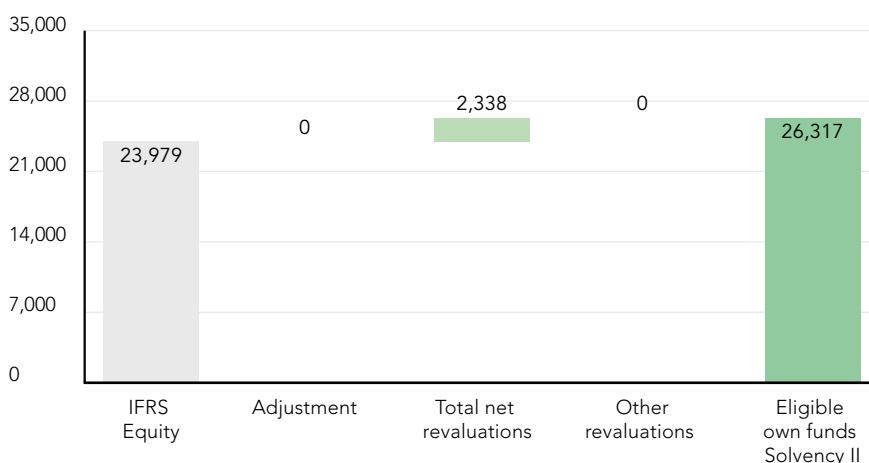
To reconcile from Solvency II equity to EOF, the following movements are taken into consideration:

- *Subordinated liabilities:* As per 2018, the subordinated liabilities are no longer included as part of EOF as directed by the regulator.

The reconciliation of IFRS equity and Excess Assets over Liabilities (Solvency II basis) can be summarized as follows:

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

### Reconciliation total equity IFRS vs EOF Solvency II



Full details on the reconciliation between ASR Aanvullende Ziektekostenverzekeringen N.V.'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 52).

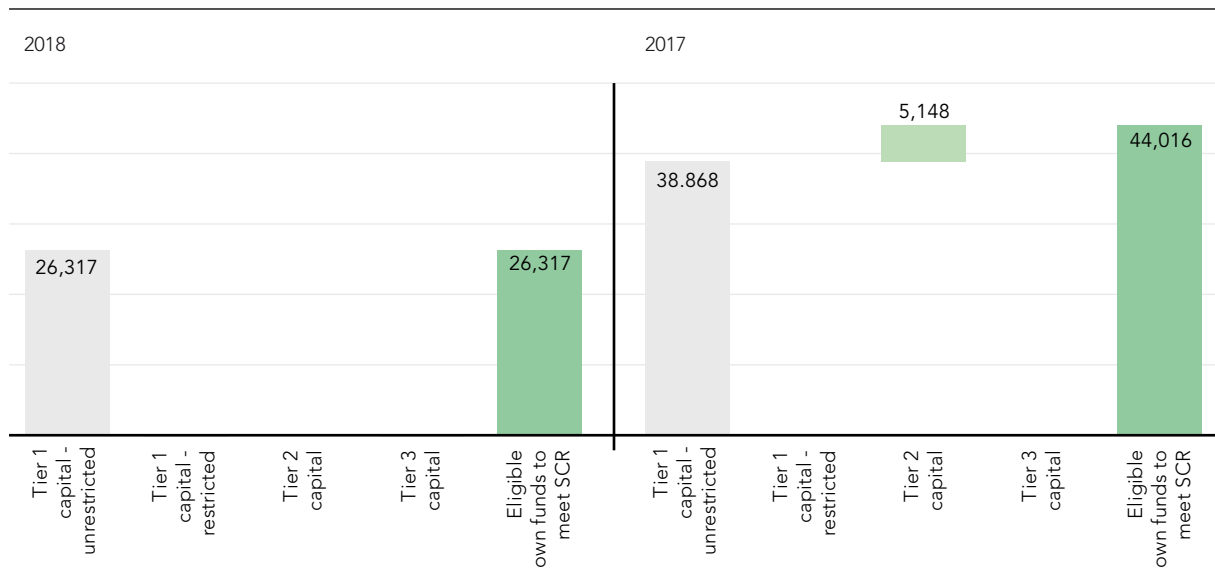
ASR Aanvullende Ziektekostenverzekeringen N.V. has no partial internal model and follows the default method for the determination of the group solvency. ASR Aanvullende Ziektekostenverzekeringen N.V. maintains an internal minimum and management target for the Solvency II ratio. The internal minimum Solvency II ratio for ASR Aanvullende Ziektekostenverzekeringen N.V. as formulated in the risk appetite statement is 110%. The management threshold level for the Solvency II ratio is above 150%. a.s.r. only distributes cash dividends if the interest of the policyholders has been ensured (i.e. a Solvency II ratio above 130%). The Solvency II ratio was 196% at 31 December 2018."

## 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.

The EOF are build up as follows:

### Eligible own fund



ASR Aanvullende Ziektekostenverzekeringen N.V. has formulated its dividend policy in line with its current strategy. ASR Aanvullende Ziektekostenverzekeringen N.V. intends to pay an annual dividend that creates sustainable long-term value for its shareholders. ASR Aanvullende Ziektekostenverzekeringen N.V. aims to operate at a solvency ratio, calculated according to the standard formula, above the management threshold level of 150%.

Full details on the capital management of ASR Aanvullende Ziektekostenverzekeringen N.V. can be found in chapter E Capital Management (page 59).

# A Business and performance

## A.1 Business

### A.1.1 Profile

#### Object of the company

ASR Aanvullende Ziektzekostenverzekeringen N.V. provides supplementary insurance to healthcare insurance under the Dutch Healthcare Insurance Act.

ASR Aanvullende Ziektzekostenverzekeringen N.V. aims to promote the health of its customers and improve healthcare. ASR Aanvullende Ziektzekostenverzekeringen N.V. focuses on client satisfaction and profitable growth of the customer base. We do this by offering quality products, excellent service, a good price and visible and valued brands.

#### Core activities

The core activity of ASR Aanvullende Ziektzekostenverzekeringen N.V. is the provision of supplementary insurance to basic health insurance under the Dutch Healthcare Insurance Act. The number of insured persons of ASR Aanvullende Ziektzekostenverzekeringen N.V. amounted to 329,868 in 2018.

In 2018, the healthcare market was served by a.s.r. from two labels: De Amersfoortse and Ditzo. De Amersfoortse focuses mainly on smaller entrepreneurs (SMEs), employees and self-employed workers without employees. Distribution takes place via the intermediary channel. Ditzo focuses exclusively via the direct online channel on price-conscious customers who wish to have adequate cover for additional risks.

In addition to its own brands, health insurance is also offered through authorised agent Aevitae B.V. The contract with Aevitae has now been terminated, because a.s.r. health prefers to operate all of its healthcare insurance policies under its own management. This provides better opportunities to improve customer service for the existing labels.

#### Legal structure of the company

ASR Aanvullende Ziektzekostenverzekeringen N.V. is a wholly-owned subsidiary of ASR Ziektzekostenverzekeringen N.V., which in turn is a wholly-owned subsidiary of ASR Nederland N.V. (a.s.r.). a.s.r. is a public limited company under Dutch law having its registered office located at Archimedeslaan 10, 3584 BA in Utrecht, the Netherlands. a.s.r. has chosen the Netherlands as 'country of origin' (land van herkomst) for the issued share capital and corporate bonds which are listed on Euronext Amsterdam and the Irish Stock Exchange. (Ticker: ASRNL)\*

#### Internal organisational structure and staffing

##### Internal organisational structure

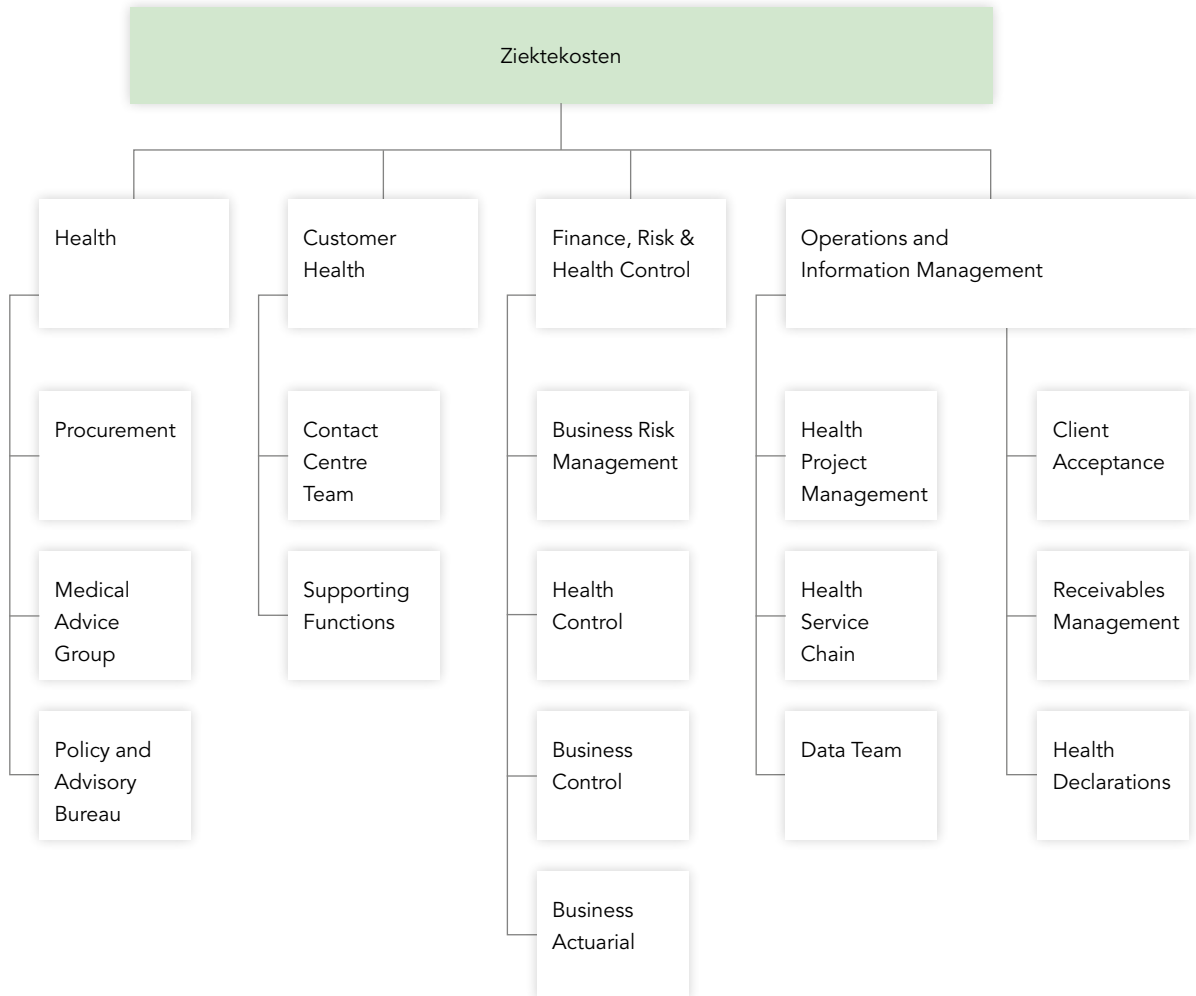
In 2018, the organisation of ASR Aanvullende Ziektzekostenverzekeringen N.V. was divided into the following segments: Operations and Information Management, Health, Customer and Finance & Risk & Control. Operations includes Client Acceptance, Health Declarations and Receivables Management. Information Management includes the Data team, Health Project Management and the Health Service Chain. Health can be subdivided into the Medical Advice Group, Procurement and Policy & Advisory Bureau. Customer Health consists of the Contact Centre team and supporting functions. The departments of Health Control, Business Actuarial, Business Risk Management and Business Control together form Finance, Risk & Health Control.

### Organizational chart

Below, the organizational chart of ASR Aanvullende Ziekttekostenverzekeringen N.V. is presented:

### Organizational chart

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## Headcount

All employees are employed by a.s.r. The a.s.r. employees work for ASR Basis Ziektekostenverzekeringen N.V. as well as ASR Aanvullende Ziektekostenverzekeringen N.V. and ASR Wlz-uitvoerder B.V. In 2018, a.s.r. Health employed an average of 180 (2017: 167) internal employees. In addition, a flexible layer was used, mostly during November/December, when new business was acquired. Specific teams were supported by temporary external employees. The Executive Board consists of J.D. Lansberg and J.M. Hendriks. The composition of the Executive Board remained unchanged in 2018.

The composition of the Supervisory Board of ASR Aanvullende Ziektekostenverzekeringen N.V. is as follows in 2018: C. van der Pol (Chairman), A.P. Aris, J.P.M. Baeten and M.H. Verwoest. The composition of the Supervisory Board remained unchanged in 2018. Michel Verwoest resigned as a member of the Supervisory Board on 1 February 2019.

## Key elements of the policy

In line with the mission of a.s.r. helping by doing is a.s.r.'s strategy for ASR Aanvullende Ziektekostenverzekeringen N.V. to help customers get better and healthier, underpinned by introducing products and services to facilitate this. Furthermore, a.s.r. Health is run as an 'independent' division within a.s.r., and supports other business lines and brands from a.s.r. with opportunities for cross sell and brand appreciation (for example Doorgaan). ASR Aanvullende Ziektekostenverzekeringen N.V. aims for further digitisation and innovation.

## Making an impact on personal health of customers

ASR Aanvullende Ziektekostenverzekeringen N.V. aims to help customers improve their health whenever possible. It therefore provides information, services 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, ASR Aanvullende Ziektekostenverzekeringen N.V. 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, ASR Aanvullende Ziektekostenverzekeringen N.V. ended the outsourcing of health care procurement in 2017 and in 2018 brought the contracting of health care providers in-house. In this way, ASR Aanvullende Ziektekostenverzekeringen N.V. 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.

At the start of the 2018 healthcare procurement year, in 2018, a new partnership was started with DSW as a result

of which ASR Aanvullende Ziektekostenverzekeringen N.V. conducted the healthcare procurement in co-operation with DSW. ASR Aanvullende Ziektekostenverzekeringen N.V. conducted part of the procurement independently and partly on behalf of DSW. In addition, DSW also procured part of the healthcare on behalf of ASR Aanvullende Ziektekostenverzekeringen N.V. An important result of this choice is that the healthcare was procured earlier than previous years. Per 31 december 2017 Procurement had 85% of healthcare institutions contracted, compared with about 50-60% in previous years, around the same time. ASR Aanvullende Ziektekostenverzekeringen N.V. wants independent purchases at 2020.

## Customer satisfaction

Next to introducing products and services to help clients with their health, ASR Aanvullende Ziektekostenverzekeringen N.V. thrives to increase customer satisfaction by organising an efficient and client-focused customer service process. a.s.r. Health puts a lot of effort in streamlining and digitizing the process of paying declarations, customer onboarding and other services, which leads to faster and more accurate payments to customers, lower operating expenses and efficient processes. ASR Aanvullende Ziektekostenverzekeringen N.V. also worked on constantly updating practical information available to employees so that they can continuously improve the quality, accuracy and speed of information provided to customers.

## Market and distribution developments

### Market developments

Health insurance is a highly regulated market. The Dutch healthcare system distinguishes between two types of insurance products: basic health insurance coverage and supplementary coverage. All Dutch residents are obligated to have basic health insurance coverage. Basic coverage is the same across all insurers as coverage is mandated by the government. The number of customers that switches per calendar year has been relatively stable over the past four years, a little under 7%. In 2018 the number of customers that switched amounted to 6.7%.

The general trend of anti-selection also continued in 2018. Consumers increasingly specifically select additional packages for the healthcare they expect to need. As a result, they choose smaller or no additional products.

### Distribution developments

Intermediaries using a comparison site or offering online health insurance via authorised agents, play a dominant role, together with online insurers, in the distribution of health insurance. This picture is comparable to 2016.

### Ditzo

Ditzo distinguishes itself in the market by not setting up traditional marketing campaigns and by pursuing its own efficient course with campaigns via social media, often focused on social themes. At product level, Ditzo meets customers' needs by offering a good premium combined

with a free choice of healthcare provider. Ditzo also adds value for its customers through its customer-focused online concept, high service level and the "Pechvogelhulp" accident insurance. Ditzo sells its insurance policies directly to its consumers, without the intervention of third parties.

### De Amersfoortse

The De Amersfoortse label offers its propositions via the intermediary channel. The focus is on co-operation with those advisors who best suit the different customer groups. The account managers play a key role in this. Advisors of intermediaries increasingly realise that care is a more important part of the advisory model, particularly in the business market, in line with the trend of sustainable employability of employees. With the De Amersfoortse brand, ASR Aanvullende Ziektekostenverzekeringen N.V. serves the market of self-employed persons without employees, SME entrepreneurs, their families and their employees.

### Internal control of processes and procedures

Adequate risk management within a.s.r. Aanvullende Ziektekostenverzekeringen N.V. is essential to control the quality of processes and procedures and keep improving the operational performance. This results in increased customer satisfaction reflected in, among other things, the Net Promotor Score (NPS).

Risk appetite statements are in place to manage the business within the risk profile limits. The Business Risk Committee (BRC) monitors on an ongoing basis and discusses on a quarterly basis whether non-financial risks are adequately managed. If a risk profile exceeds the appetite, the BRC agrees on actions to be taken.

Insight into the size and potential interconnectedness of risks enables a.s.r. Aanvullende Ziektekostenverzekeringen N.V. to accept risks that are responsible and consistent with the associated reward. Comprehensive risk management thus supports the preservation of financial robustness.

In 2018, a.s.r. Aanvullende Ziektekostenverzekeringen N.V. made efforts to further improve the effectiveness of its operational risk control framework by continuing the risk-based approach. The key risks and controls are annually evaluated and defined by management of a.s.r. Aanvullende Ziektekostenverzekeringen N.V.

The effectiveness of the most important control measures is tested periodically. The use of a Comprehensive Risk Management Framework gives a.s.r. Aanvullende Ziektekostenverzekeringen N.V. a grip on its overall risk profile and facilitates responsible risk management.

Additionally, a.s.r. Aanvullende Ziektekostenverzekeringen N.V. continued the implementation of the Governance and Risk Compliance (GRC) tool Cerrix by implementing new modules. Naturally, a.s.r. Aanvullende Ziektekostenverzekeringen N.V. will continue to look for opportunities to improve the management of its operational risks in 2019.

Alongside the periodic testing of key controls by means of a Comprehensive Risk Management Framework, our risk management is also supported by the performance of Strategic Risk Analysis (SRA), Own Risk and Solvency Assessments (ORSA), operational loss monitoring and project risk assessments.

New products and services and accompanying customer brochures undergo an internal 'Product Approval and Review Process (PARP)'.

In 2018, a.s.r. Aanvullende Ziektekostenverzekeringen N.V. 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

### Quality control

ASR Aanvullende Ziektekostenverzekeringen N.V. wants to be the most personal health insurer offering its customers an excellent service. The foundation for this is quality management. Quality management contains policies, guidelines and principles on how ASR Aanvullende Ziektekostenverzekeringen N.V. wants to serve its customers. For ASR Aanvullende Ziektekostenverzekeringen N.V., the standards laid down in the quality policy are the starting point in actively complying with the quality standards for customer-oriented insurance, continuous improvement of processes within all departments and providing training to employees.

In order to actively steer towards the objectives, they have been translated into key performance indicators (KPIs). The progress and results on these KPIs are periodically shared within ASR Aanvullende Ziektekostenverzekeringen N.V.

ASR Aanvullende Ziektekostenverzekeringen N.V. attaches great importance to feedback from its customers. That is why, in 2018, continuous feedback was requested by means of NPS on both customer contact (contact measurement) and the handling of complaints (process measurement). We also measured the customer satisfaction of customers who used social media. This gave ASR Aanvullende Ziektekostenverzekeringen N.V. an even better insight into what customers think of its information provision, services, First Time Right and the quality of its customer contact in general. The feedback was used to improve processes, train employees.

In 2018 ASR Aanvullende Ziektekostenverzekeringen N.V. started using the Customer Effort Score (CES) to get an insight in how much effort the customers must deliver for example when submitting an invoice. The results of this study have given us input for improvements.

The ambition in terms of service provision to customers is reflected in an increase in the NPS from +35.7 (overall score for our Customer Contact Center over 2017) to +39 over 2018.

In 2018, ASR Aanvullende Ziektekostenverzekeringen N.V. continued the roll-out of the new customer contact strategy. This is aimed at enabling customers to contact us efficiently and effectively in the way and at the moment that suits them best. To this end, additional research was carried out by means of a customer panel and an extensive data analysis was carried out that gives us a good insight in how customers use the various channels.

As a result, we have put a new call-me-back application into use. In addition, we now offer customers the most suitable way to information that suits their request. In 2018 we started with the mapping of the total customer journey. This will give us further insights about when and how customers contact us, how they appreciate this and where we can improve our processes. In 2018 we have carried out a major project to improve the intelligibility and content on our website.

ASR Aanvullende Ziektekostenverzekeringen N.V. conducts customer satisfaction surveys on an annual basis. The results and the resulting points for improvement were shared with our customers via the website.

## Finance

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.

ASR Aanvullende Ziektekostenverzekeringen N.V. is capitalised separately. Excess capital over management's targets and not allocated to profitable growth of new business or other strategic goals, can be used for example to repay earlier capital investments to the extent local regulations allow and within the internal risk appetite statement. In 2018, 15 million capital withdrawals have taken place.

## A.1.2 General information

The Solvency and Financial Condition Report is presented in thousands of euros (€), being the functional currency of ASR Aanvullende Ziektekostenverzekeringen N.V. All amounts quoted in the tables contained in the SFCR are in thousands of euros, unless otherwise indicated.

The SFCR has been prepared by and is the sole responsibility of the Company's management. Selected Own Funds and SCR information are also reported in a.s.r. financial statements. EY has examined the 2018 financial statements and issued a report thereon.

### 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.2 Underwriting performance

### Key figures

- The net result amounted to € 2.5 million (2017: € 2.7 million);
- Gross written premiums decreased by 1.2% to € 72 million (2017: € 73 million);
- Operating costs decreased by 2.7% to € 7.6 million (2017: € 7.8 million);
- Combined ratio improved to 94.5% (2017: 95.1%).

### Key figures

(in € thousands, unless stated otherwise)

	2018	2017
Gross premiums written	72,498	73,344
Operating expenses	-7,602	-7,811
Profit before tax	3,349	3,642
Income tax (expense) / gain	-834	-908
Profit for the year	2,515	2,734
New business	6,016	8,302
<b>Combined ratio</b>	<b>94.5%</b>	<b>95.1%</b>
- Claims ratio	78.6%	80.1%
- Commission ratio	5.5%	4.5%
- Expense ratio	10.4%	10.5%

### Gross new business

Gross business shows a decrease of almost € 2 million. Both labels, Ditzo and De Amersfoortse, showed shrinkage in the number of insured persons in 2018. The decline of the portfolio is the result of the offered premium in the basic insurance, which was higher than its competitors.

Gross business in 2018 amounted to € 6 million, a decrease of 27.5% compared to last year.

### Gross written premiums

Gross written premiums saw a slight decline in 2018 compared to 2017. The general trend of anti-selection also continued in 2018. Consumers increasingly select additional packages for the healthcare they expect to need. As a result, they choose smaller or no additional products.

### Operating expenses

Operating expenses amounted to € 7.6 million (2017: € 7.8 million). The decrease is mainly due to a decrease in operational costs following tight cost control. In addition, a reorganisation occurred in the operation due to the decrease of the number insured persons.

### Profit/(loss) for the year

The net result for 2018 was € 2.5 million, a decrease of € 0.2 million compared to 2017. The claims ratio decreased due to the better pricing of the products in 2018. The calculated behavior of the insured persons had been taken into account during the calculation of the premiums. The commission ratio increased due to higher cost per acquisition.

### Combined ratio

The combined ratio decreased compared to last year. The decrease is a consequence of the lower claims ratio described above.

### Solvency and liquidity on balance sheet date

Overall capital management is administered at group level. The legal entities are capitalised separately. For ASR Aanvullende Ziektekostenverzekeringen N.V. no upstreaming of capital or dividend to the group level is currently foreseen. All capital present is used for strengthening of the capital positioning, investments or to maintain a socially responsible pricing level. The solvency ratio stood at 196% at 31 December 2018 (2017: 309%), which was higher than the management target of above 150%.



## A.3 Investment performance

ASR Aanvullende Ziektekostenverzekeringen N.V.'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 Financial assets and derivatives

#### Investments

	31 December 2018	31 December 2017
<b>Investments</b>		
Available for sale	39,351	43,100
<b>Total investments</b>	<b>39,351</b>	<b>43,100</b>

#### Breakdown of investments available for sale

	2018	2017
<b>Fixed income investments</b>		
Government bonds	17,766	18,188
Corporate bonds	17,921	19,729
<b>Equities and similar investments</b>		
Equities	3,663	5,183
<b>Total investments available for sale</b>	<b>39,351</b>	<b>43,100</b>

Based on their contractual maturity, an amount of € 33 million (2017: € 24 million) of fixed income investments is expected to be recovered after twelve months after reporting date.

### Investment income

#### Breakdown of investment income per category

	2018	2017
Interest income from investments	128	154
Other interest income	-188	-233
<b>Interest income</b>	<b>-60</b>	<b>-79</b>
Dividend on equities	151	165
<b>Dividend and other investment income</b>	<b>151</b>	<b>165</b>
<b>Total investment income</b>	<b>91</b>	<b>86</b>

The effective interest method has been applied to an amount of € 128 thousand of the interest income from financial assets not classified at fair value through profit or loss (2017: € 154 thousand).

### A.3.2 Company statement of comprehensive income

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

(in € thousands)	2018	2017
<b>Profit for the year</b>	<b>2,515</b>	<b>2,734</b>
Unrealised change in value of available for sale assets	-869	387
Realised gains/(losses) on available for sale assets reclassified to profit or loss	-110	-204
Income tax on items that may be reclassified subsequently to profit or loss	249	-42
<b>Total items that may be reclassified subsequently to profit or loss</b>	<b>-730</b>	<b>141</b>
<b>Total other comprehensive income for the year, after tax</b>	<b>-730</b>	<b>141</b>
<b>Total comprehensive income</b>	<b>1,785</b>	<b>2,875</b>

### A.3.3 Information about investments in securities

As ASR Aanvullende Ziektekostenverzekeringen N.V. has no investments in securitization, 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

In the case where the text below refers to 'the company', ASR Aanvullende Ziektkostenverzekeringen N.V. is meant.

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

### B.1.1 Corporate governance

#### Executive Board

The Executive Board is responsible for the company's management, meaning that it is responsible for aspects such as achieving corporate objectives, the strategy and the associated risk profile, and the ensuing financial performance of the company and its subsidiaries.

The General Meeting of Shareholders appoints the members of the Executive Board and may suspend or dismiss any member of the Executive Board at any time. The Supervisory Board may also suspend any member of the Executive Board. A suspension by the Supervisory Board may be initiated by the General Meeting of Shareholders at any time. a.s.r. aims to have an adequate and balanced composition of the Executive Board. The Executive Board in 2018 consisted of two members, one woman and one man. 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. One of the objectives is an Executive Board consisting of at least 30% women and at least 30% men. The current composition of the Executive Board does meet both goals regarding the gender balance of the Executive Board."

#### Supervisory Board

The Supervisory Board is responsible for overseeing, checking (also proactively) and advising the Executive Board with regard to achieving the corporate objectives, the strategy and the risks associated with the company's business activities.

The Supervisory Board consists of four members. The General Meeting of Shareholders appoints the members of the Supervisory Board and may suspend or dismiss any member of the Supervisory Board at any time.

#### B.1.1.1 Supervisory Board Committees

##### Audit and Risk Committee

The Supervisory Board did not institute an Audit and Risk Committee.

Audit and risk issues are discussed during a separate part of every meeting of the Supervisory Board *in the presence of the senior management of the Audit, Risk and Compliance departments.*

##### Remuneration Committee

The Supervisory Board did not institute a Remuneration Committee.

##### Selection & Appointment Committee

The Supervisory Board did not institute a Selection, Appointment and Remuneration Committee..

#### B.1.1.2 Corporate Governance

ASR Aanvullende Ziektkostenverzekeringen N.V. is a limited liability company. The company has a two-tier board; a Supervisory Board and an Executive Board. The General Meeting of Shareholders is authorized to appoint and dismiss members of the Executive Board and the Supervisory Board.

#### B.1.1.3 Executive Board

The Executive Board is responsible for the day-to-day conduct of business of ASR Aanvullende Ziektkostenverzekeringen N.V. and for the strategy, structure and performance. In performing their duties the Executive Board is guided by ASR Aanvullende Ziektkostenverzekeringen N.V.'s interests, which include the interests of the business connected with ASR Aanvullende Ziektkostenverzekeringen N.V., which, in turn, include the interests of customers, insurers, employees and, in general, the society in which ASR Aanvullende Ziektkostenverzekeringen N.V.'s business is carried out. The Executive Board is accountable for the performance of its duties to the Supervisory Board and to the General Meeting.

##### Composition

The Executive Board will consist of a minimum of two members. The General Meeting of Shareholders appoints the Executive Board members and may at any time suspend or dismiss any member of the Executive Board. Only candidates found to meet the fit and proper test under the Dutch Financial Markets Supervision Act are eligible for appointment. The Executive Board consists of J.M. Hendriks and J.D. Lansberg. The composition of the Executive Board remained unchanged in 2018.

### Education and evaluation Executive Board of the group

The members of the Executive Board followed individual programs in 2018 as part of their continuing education (CE). In addition, much attention was devoted to knowledge-development in the areas of risk, capital management and strategic challenges, including the impact of political decisions on the potential business models of health care insurers in The Netherlands.

The decision making process of the Executive Board was self-evaluated in 2018 and discussed with the deputy directors. Goal of the evaluation and discussion was to find useful elements and ways to further enhance the effective decision-making and information gathering. In addition to the self-evaluation, the performance of the members of the Executive Board was also assessed by the Supervisory Board.

#### B.1.1.4 Supervisory Board

The Supervisory Board supervises the policy pursued by the Executive Board and the general course of affairs at ASR Aanvullende Ziektekostenverzekeringen N.V. and advises the Executive Board. Specific powers are vested in the Supervisory Board, including the approval of certain decisions taken by the Executive Board.

#### Composition

The Supervisory Board of ASR Aanvullende Ziektekostenverzekeringen N.V. consists of four members: C. van der Pol (chairman), A.P. Aris, J.P.M. Baeten and M.H. Verwoest. The Supervisory Board has drawn up a profile for its size and composition, taking into account the nature of ASR Aanvullende Ziektekostenverzekeringen N.V.'s business, its activities and the desired expertise and background of the Supervisory Board members.

The composition of the Supervisory Board is such that each supervisory director should have the skills to assess the main aspects of the overall policy and that the Supervisory Board as a whole meets the profile thanks to a combination of the experience, expertise and independence of the individual supervisory directors. The Supervisory Board is diverse in terms of the gender and professional background of its members. The diversity of its members ensures the complementary profile of the Supervisory Board.

### Education and evaluation Supervisory Board of the group

The Supervisory Board performs an annual self-assessment. A self-assessment with external guidance is carried out every three years. The assessment was based on a dedicated meeting of the supervisory board. The following aspects were assessed:

- Composition of the Supervisory Board;
- Communication, information-gathering and decision-making;
- Their role as advisor of the Executive Board;
- Their role as employer of the Executive Board.

The outcome of the assessment was discussed in a formal meeting of the Supervisory with the Executive Board. The overall impression that emerged from this self-assessment was positive. The Supervisory Board is seen as a properly operating group in terms of content, with a balanced and high-quality composition. The atmosphere is open and the relationship with the Executive Board is good. One recommendation made was to improve an open dialogue on relevant strategic issues at an early stage to strengthen the role as advisor of the board.

In 2018, two continuing education (CE) sessions were organised for the members of the Supervisory Board together with the members of the Executive Board and senior managers. The first session concerned 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 the future. The implementation of IFRS 17 within a.s.r. is a major project. The second session focused on an increasing digitisation in the insurance industry. Thirdly, a knowledge session led by an external expert on governance and board leadership took place. During this session, the Supervisory and the Executive Board received an update on long-term value creation according to the Dutch Corporate Governance Code and elaborated on this topic in relation to a.s.r. Furthermore, the individual members of the Supervisory Board received updates and presentations on various topics due to their supervisory directorships at several Dutch and foreign enterprises and institutions.

#### B.1.1.5 Corporate Governance Codes and regulations

##### Dutch Health Insurers Code Code

ASR Aanvullende Ziektekostenverzekeringen is subject to the Dutch Health Insurers Code (2012). This code contains principles for governance. Specifically, it defines guidelines for the fulfillment of the public responsibility regarding the execution of the compulsory Dutch Health Insurance Act. Every year, ASR Aanvullende Ziektekostenverzekeringen N.V. accounts its performance to the Dutch Healthcare Authority.

##### 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 respect to insurance companies, apart from the Executive and Supervisory Board members, persons with a management position directly below the Executive Board who are responsible for persons that 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 persons that may (independently) significantly influence the risk profile of the undertaking as well as those persons that are or may be involved in the provision of financial services.

Regardless of the above, a.s.r. has decided that all employees and other persons performing activities under

its responsibility must take the oath. New employees take the oath within three months of joining the company.

### B.1.2 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 ASR Aanvullende Ziektzekostenverzekeringen N.V. include ASR Nederland N.V. and its subsidiaries, NLF1 and the Dutch State for the period until 13 September 2017, 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.

ASR Aanvullende Ziektzekostenverzekeringen N.V. regularly enters into transactions with related parties during the conduct of its business. These transactions mainly involve loans and receivables, subordinated liabilities and allocated expenses, and are conducted on terms equivalent to those that prevail in arm's length transactions.

- The remuneration of the Executive Board and Supervisory Board of ASR Aanvullende Ziektzekostenverzekeringen N.V. are described in chapter B.1.3;
- The operating expenses, are predominantly intercompany, consisting of allocated expenses from head office, support functions and expenses related to personnel;
- Transactions with ASR Nederland N.V. concern the payment of taxes as ASR Nederland N.V. heads the fiscal unity.

### Positions and transactions between ASR Aanvullende Ziektzekostenverzekeringen N.V. and the related parties

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

	2018	2017
<b>Balance sheet items with related parties as at 31 December</b>		
Subordinated liabilities	4.992	4.992
Other liabilities	4.826	15.649
<b>Transactions in the income statement for the financial year</b>		
Interest income	51	17
Interest expense	236	268

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

2017. No loans were provided by ASR Aanvullende Ziektzekostenverzekeringen N.V. to the Executive Board.

### B.1.3 Remuneration of Supervisory Board and Executive Board

No provisions for impairments have been recognised on the loans and receivables for the years 2018 and 2017.

No loans were provided by ASR Aanvullende

Ziektzekostenverzekeringen N.V. to the Executive Board.

#### B.1.3.1 Remuneration of Supervisory Board members

#### Annual remuneration for members of the Supervisory Board

(amounts in € thousand)	2018	2017
<b>Supervisory Board member</b>		
C. van der Pol	1	-
A.P. Aris	1	-
J.P.M. Baeten	-	-
M.H. Verwoest	-	-
<b>Total</b>	<b>2</b>	<b>-</b>

The annual remuneration for the members of the Supervisory Board are accounted for in the remuneration paragraph of the annual report of ASR Nederland N.V. In 2018 only the amount of compensation paid for the services provided by the Supervisory Board members C. van der Pol and A.P. Aris were charged to ASR Aanvullende Ziektzekostenverzekeringen N.V., and is subsequently

not accounted for in the result of ASR Aanvullende Ziektzekostenverzekeringen N.V.

#### B.1.3.2 Remuneration of current and former Executive Board members

The remuneration of current and former members is in accordance with the 2018 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 disbursed to the Executive Board members for the period as from the 2014 ASR Aanvullende Ziektekostenverzekeringen N.V. financial year until the current 2018 ASR Aanvullende Ziektekostenverzekeringen N.V. financial year.

### The Executive Board of ASR Basis

The Executive Board of ASR Basis Ziektekostenverzekeringen N.V. is also the Executive Board of ASR Aanvullende Ziektekostenverzekeringen N.V. In the table below the total costs of the Executive Board are presented of which 72,14% (2016: 72,14%) is allocated to ASR Basis Ziektekostenverzekeringen N.V. and 27,86% (2016: 27,86%) to ASR Aanvullende Ziektekostenverzekering respectively.

#### Annual remuneration for members of the a.s.r. Executive Board

Amounts in € thousand		2018		
Executive Board member <sup>1</sup>		Fixed employee benefits	Pension benefits	Total
drs. J.M. Hendriks RA *		49	10	59
drs. J.D. Lansberg **		69	10	79
<b>Total</b>		<b>118</b>	<b>20</b>	<b>138</b>

Amounts in € thousand		2017		
Executive Board member <sup>1</sup>		Fixed employee benefits	Pension benefits	Total
drs. J.M. Hendriks RA *		47	11	58
drs. J.D. Lansberg **		66	12	78
<b>Total</b>		<b>113</b>	<b>23</b>	<b>136</b>

The executive board are employed by ASR Nederland N.V. The remuneration recognised amounts to the costs charged from ASR Nederland N.V. to ASR Aanvullende Ziektekostenverzekeringen N.V. for the fulfilment of the function of executive board member at ASR Aanvullende Ziektekostenverzekeringen N.V. The costs charged consist of wage costs including employer's social security costs and any lease car costs.

## 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

This paragraph contains a description of group policy, which is applicable for the solo entity. 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 recognized 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.

<sup>1</sup> ISO 31000:2018 risk management principles and guidelines

\* Joined on 1 April 2015.

\*\* Joined on 1 September 2016.

### 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>1</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 organization 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 are identified, measured and controlled within a.s.r. (see chapter B.3.1.4 Risk policies and procedures).

### Risk culture

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

Within a.s.r. risk culture is an important element that emphasizes the human side of risk management. The 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

This paragraph discusses the risk appetite of ASR Aanvullende Ziektkostenverzekeringen N.V. and is derived from the policy document Capital and Dividend Policy of ASR Basis Ziektkostenverzekeringen N.V. and ASR Aanvullende Ziektkostenverzekeringen N.V.

ASR Aanvullende Ziektkostenverzekeringen N.V. belongs to the insurance group a.s.r. Nederland. a.s.r. Nederland has a capital and dividend policy that enables the group to steer towards the financial stability of the group in a structured and balanced manner. Under the articles of association, ASR Aanvullende Ziektkostenverzekeringen N.V. has its own responsibility for the capital position. A (limited) transition is therefore necessary in order to make the capital policy of the umbrella group applicable to ASR Aanvullende Ziektkostenverzekeringen N.V. As far as possible, these choices are made in line with the policy of a.s.r. Nederland.

The aim of this policy is to establish a stable, consistent and predictable policy for the management of capital within ASR Aanvullende Ziektkostenverzekeringen N.V. in order to promote the company's stability and continuity so as to meet the obligations towards policyholders at all times.

Each year, specific objectives (management target) and risk limits (risk appetite) for the capital position of ASR Aanvullende Ziektkostenverzekeringen N.V. are set by the Executive Board, with the approval of the Supervisory

Board. A solvency objective (management target) reflects the level of solvency sought and contains a reasonable buffer above the internal limits of the risk appetite statement. The difference between the limits of the risk appetite statement and the objectives (management target) is that a limit is very strict and that breaking a limit will have to be remedied immediately, whereas an objective is a long-term target value.

#### B.3.1.1.1 Substantiation and structure of limits and objectives for the solvency of a.s.r.

The objectives and limits are set annually by the Executive Board of ASR Aanvullende Ziektkostenverzekeringen N.V. based on the principles for capital management as laid down in the capital policy. Under certain circumstances, and with the approval of the Supervisory Board of ASR Aanvullende Ziektkostenverzekeringen N.V., substantiated deviations from these principles may be made.

The objectives and limits are agreed with the Executive Board and the Supervisory Board of a.s.r. Nederland in order to ensure the consistency of the capital policy within the group. Of course, this working method does not affect the personal responsibility of the ASR Aanvullende Ziektkostenverzekeringen N.V. Executive Board members under the articles of association.

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

##### Three lines of defence

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



**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 organization 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>• Group Risk Management                             <ul style="list-style-type: none"> <li>- Compliance function</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Internal Audit department                             <ul style="list-style-type: none"> <li>- 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 organized 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 organization 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 optimize these processes. In addition, senior management can engage Audit for specific advisory projects.

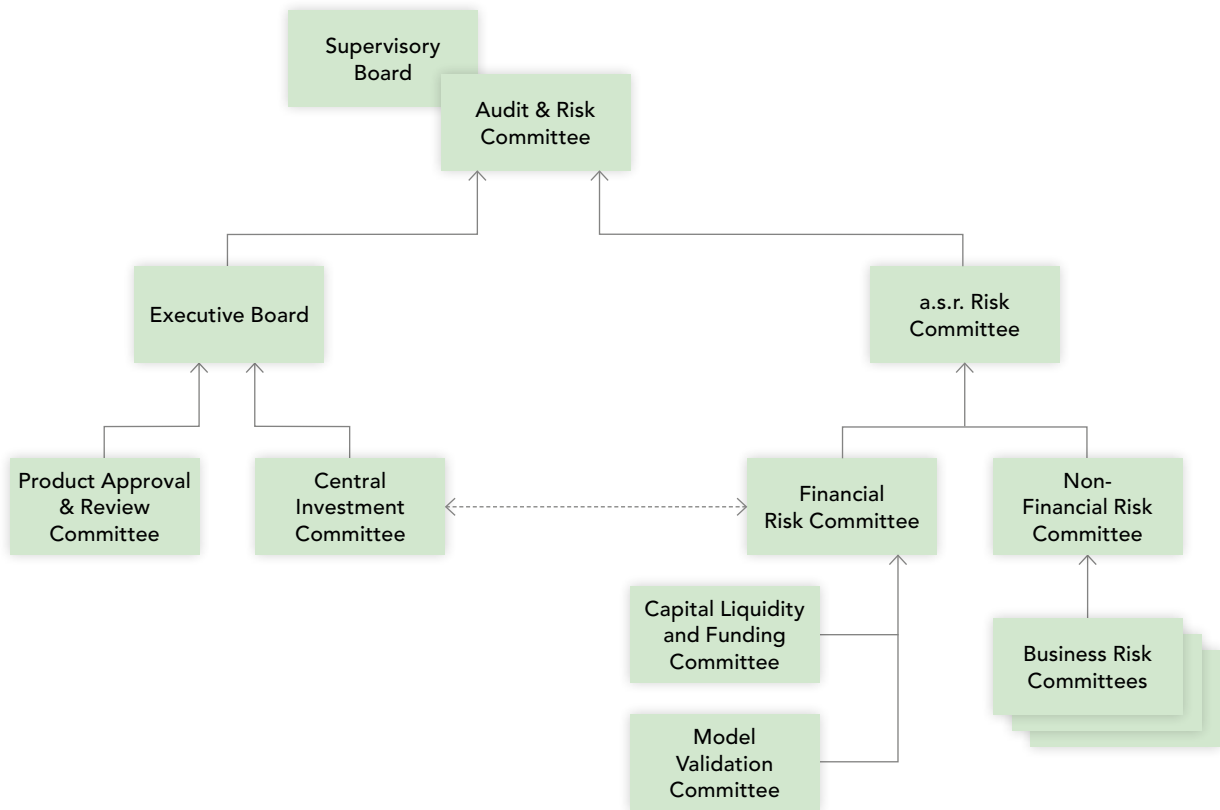
### **Risk committee structure**

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

ASR Aanvullende Ziektekostenverzekeringen N.V. uses the risk infrastructure of the Group (see below), and in addition

has its own business risk committee. Both operational and financial risk are in scope of this committee.

### 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 organization. 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.

**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 unauthorized 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 organization 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 authorized persons only and the extent to which it is not available to unauthorized persons.

There are technical solutions for accomplishing this, by enforcing a layered approach (defence-in-depth) of technical measures to avoid unauthorized 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 unauthorized 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. recognizes 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 emphasizes the human aspect in the management of risks. In addition to gaining sufficient knowledge, skills, capabilities and experience in risk management, it is essential that an organization enables objective and transparent risk reporting in order to manage them more effectively.

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

It is very important that this risk awareness trickles down to all parts of the organization, and therefore management actively encourages personnel to be aware of risks during their tasks and projects, in order to avoid risks or mitigate them when required. The execution of risk analyses is embedded in daily business in, for example, projects, product design and outsourcing.

In doing so, a.s.r. aims to create a solid risk culture in which ethical values, desired behaviours and understanding of risk in the entity are fully embedded. Integrity is of the utmost importance at a.s.r.: this is translated into a code of conduct and strict application policies for new and existing personnel, such as taking an oath or promise when entering the company, and the 'fit and proper' aspect of the Solvency II regulation, ensuring that a.s.r. is overseen and managed in a professional manner.

Furthermore, a.s.r. believes it is important that a culture is created in which risks can be discussed openly and where risks are not merely perceived to be negative and highlight that risks can also present a.s.r. with opportunities. Risk Management (both centralized and decentralized) 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<sup>1</sup>. 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.

<sup>1</sup> Based on COSO ERM and ISO 31000:2018.

**Measuring**

After risks have been identified, quantitative or qualitative assessments of these risks take place to estimate the likelihood and impact associated with them. Methods applicable to the assessment of risks are:

- Sensitivity analysis;
- Stress testing;
- Scenario analysis;
- Expert judgments (regarding likelihood and impact); and
- Portfolio analysis.

**Managing**

Typically, there are five strategies to managing risk:

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

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

**Monitoring and reporting**

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

**Evaluating**

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

**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. recognizes, 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. ASR Aanvullende Ziektekostenverzekeringen N.V. recognizes the following insurance risk:

- Health 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.

**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 organization, implemented to obtain a reasonable level of certainty with regard to achieving the following objectives:

- High-level goals, aligned with and supporting the organization'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 organization, 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 organized 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<sup>1</sup> 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, prioritization and management of these risks in line with the risk appetite. The policy on ORM is drafted and periodically evaluated under the coordination of Enterprise Risk Management. The policy is implemented in the decentralized 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.

<sup>1</sup> For example, the SAA-study, analyses in the context of reinsurance renewals, ad hoc sensitivity analyses and/or stress tests.

### Identifying

With the operational targets as a starting point, each business entity performs risk assessments to identify events that could influence these targets. In each business entity the business risk manager facilitates the periodic identification of the key operational risks. All business processes are taken into account to identify the risks. All identified risks are prioritized 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 stabilize the crisis, and to be able to react timely, efficiently and effectively, a.s.r. has assigned a crisis organization.

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

This paragraph contains a description of group policy, which is applicable for ASR Aanvullende Ziektkostenverzekeringen N.V. The Audit Department provides a professional and independent assessment of the governance, risk management and internal control processes with the aim of aiding management in achieving the company's objectives. 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 managing board of ASR Aanvullende Ziektkostenverzekeringen N.V. and, by means of the

quarterly management report, to the Supervisory Board of ASR Aanvullende Ziektkostenverzekeringen N.V. The Audit Department has an independent position within a.s.r., as set down in the Audit Charter. The Supervisory Board of ASR Nederland N.V. 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 of ASR Nederland N.V. and has a reporting line to the chairman of the Supervisory Board of ASR Aanvullende Ziektkostenverzekeringen N.V. and to the chairman of the a.s.r. Audit and Risk Committee. The Chief Audit Executive is appointed by the Supervisory Board of ASR Nederland N.V. In order to maintain the independence and impartiality of the internal audit function, the audit function is not influenced by the Executive Board of ASR Nederland N.V. and the managing board of ASR Aanvullende Ziektkostenverzekeringen N.V. in the execution of an audit and the evaluation of and reporting on audit outcomes. The audit function is not subjected to any inappropriate influence from any other function, including the key functions.

The persons carrying out the internal audit function do not assume any responsibility for any other (key) function. The Audit Department has periodic consultations with DNB to discuss the risk assessment, findings and audit plan. The department also takes the initiative to organize a 'tripartite consultation' with DNB and the independent external auditor at least once a year. In 2018, one tripartite consultation was held for ASR Aanvullende Ziektkostenverzekeringen N.V.

The Audit Department sets up a multi-year audit plan based upon an extensive risk assessment. The Audit Department's risk assessment is performed in close consultation with the independent external auditor. The audit plan is approved by the Supervisory Board of ASR Aanvullende Ziektkostenverzekeringen N.V. and the a.s.r. Audit and Risk Committee. At least once a year, the audit plan is evaluated and any changes to the plan must be approved by the a.s.r. Audit and Risk Committee.

All Audit officers took the oath for the financial sector and are subject to disciplinary proceedings. All Audit officers 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 a.s.r. 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

This paragraph contains a description of group policy, which is applicable for ASR Aanvullende Ziektkostenverzekeringen N.V. 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

This paragraph contains a description of group policy, which is applicable for the solo entity ASR Aanvullende Ziekttekostenverzekeringen N.V. as well. 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. 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 closely scrutinized prior to selection and during the services. Compliance with agreed obligations 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.

## B.8 Any other information

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

# C Risk profile

This paragraph contains a description of group policy, which is applicable for the solo entity. 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 Board based on the Strategic Risk Analysis. The most recent status of the risk priorities and progress on the defined actions are reported to the a.s.r. Non-Financial Risk Committee quarterly.

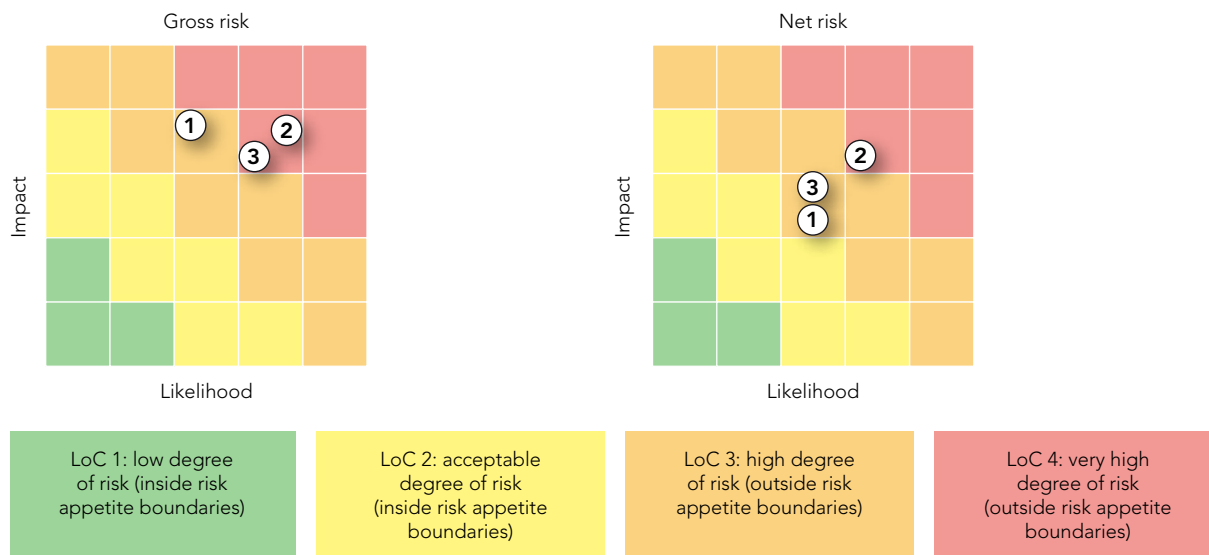
The risk priorities are:

1. Higher than market average risk of incurred losses (LoC 3)
2. Non-competitive premium as a result of (direct and recharged costs) organization costs (LoC 3)

3. Information (cyber) security risk (LoC 3)

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 2018Q4.

**Degree of risk per 2018Q4**



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

**Higher than market average risk of incurred losses**

There is a trend that risks are increasingly placed with health insurers, leading to volatility of incurred losses that cannot be accounted for in (competitive) premiums and which therefore have to be retrieved from the company's own equity. This can result in solvability decline and other financial consequences.

**Non-competitive premium as a result of organization costs**

A smaller portfolio in an increasingly price sensitive market can prompt diseconomies of scale when spreading operational costs, resulting in a non-competitive premium.

**Information (cyber) security risk**

By virtue of cyber threats (loss of confidential information, CEO-fraud, phishing, social engineering, ransomware and DDoS-attacks); misuse of vulnerabilities (security flaws in software); user mistakes; IT disruptions; and power- and internet outs, there is the possibility of information theft or manipulation and damaged integrity of information processing and systems, leading to financial and reputation damage.

a.s.r. takes measures to mitigate risks outside the risk appetite boundaries.

**Solvency II sensitivities**

The sensitivities of the solvency ratio as at 31 December 2018, expressed as the impact on the ASR Aanvullende Ziektekostenverzekeringen N.V. 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%	-	-	-	-	-	-
Interest rate +1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	-2	-1	-	-	-2	-1
Interest rate -1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	+2	+1	-	-	+2	+1
Volatility Adjustment -10bp	-	-	-	-	-	-
Equity prices -20%	-4	-5	+2	+5	-3	-
Spread +75bps/VA +20bps	-2	-2	-	-	-1	-2

### 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.
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 in 2018 are almost similar to 2017. Furthermore, the magnitude of the Solvency II sensitivities is small, as the insurances are short-cycle.

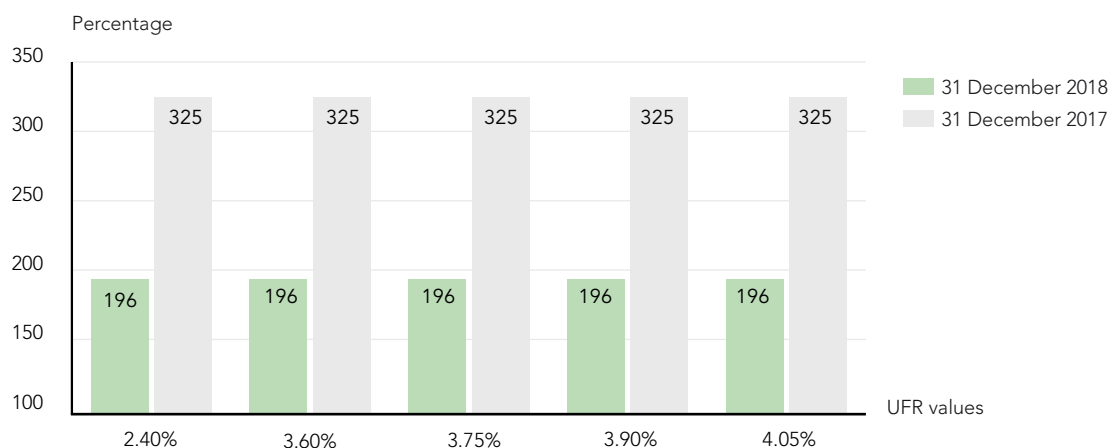
#### Expected development UFR

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

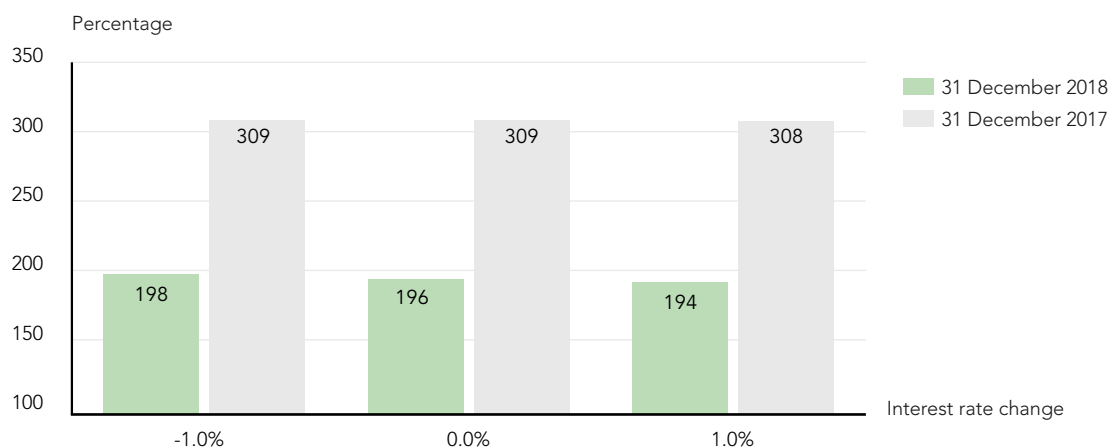


### Interest rate sensitivity of Solvency II ratio

The impact of the interest rate on the Solvency II ratio, including the UFR effect, is stated below (the impact is

marginal). The UFR methodology has been applied to the shocked interest rate curve.

### Sensitivity Solvency II ratio to interest rate change



### Equity risk

The 2018 the equity risk increased due to a larger equity portfolio and a smaller risk mitigating effect of put options and because of the diminishing effect of the transitional measure due to (i) higher risk charges and (ii) less equities qualifying for the transitional measure.

### Spread risk

In 2018 ASR Aanvullende Ziektkostenverzekeringen N.V. the required capital for spread risk slightly increased, because of higher exposure to corporates and financials.

In case of a scenario in which the average spread rises by 75 bps and the Volatility Adjustment (VA) rises by 21 bps, the solvency ratio decreases -2%. 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 ASR Aanvullende Ziektkostenverzekeringen N.V.

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.

## LAC DT Components

Model sort	ASR Aanvullende Ziektekostenverzekeringen N.V.	
	Available for substantiation	Utilized in applied LAC DT factor
	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	✓	✗

The outcome is an unrounded LAC DT factor.

1. The unrounded LAC DT factor is determined based on component 1 – 3 only.
2. Moreover, an outlook is made of the underpinning of the LAC DT factor in the upcoming quarters, divided over the separate components. This outlook will take into account potential risks not yet included in the model, also called a code of conduct. This code of conduct ensures financial stability in the LAC DT benefit ASR Aanvullende Ziektekostenverzekeringen N.V. in euros, resulting in financial stability of the solvency position of ASR Aanvullende Ziektekostenverzekeringen N.V.
3. The LAC DT factors and outlook are reviewed by the 2nd line.
4. A proposal with the advised LAC DT factors will be presented to the Financial Risk Committee (FRC). The LAC DT factors to be used result.

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 realized in case it is sustainable and significant.



## 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. The healthcare sector is part of the non-life portfolio.

The solvency buffer is held by ASR Aanvullende Ziektkostenverzekeringen N.V. to cover the risk that claims may exceed the available insurance provisions and to ensure its solidity. The solvency position of ASR Aanvullende Ziektkostenverzekeringen N.V. is determined and continuously monitored in order to assess

if ASR Aanvullende Ziektkostenverzekeringen N.V. meets the regulatory requirements.

As of 1 January 2016, the Solvency II regime is in place. ASR Aanvullende Ziektkostenverzekeringen N.V. measures its risks based on the standard model as prescribed by the Solvency II regime. The Solvency Capital Requirement 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
Health insurance risk	11,503	11,522

### C.1.1 Health insurance risk

The Health insurance portfolio of ASR Aanvullende Ziektkostenverzekeringen N.V. contains the following insurance risk:

- NSLT Health insurance risk
  - This risk is applicable to the NSLT Health portfolio. The calculation is factor-based. The risk is calculated similar to the Non-Life insurance risk Solvency II standard model.

#### 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.

Reserve risk is the risk that the current reserves are insufficient to cover the claims over a 12-month time horizon.

**Insurance risk - required capital**

in € thousand	31 December 2018	31 December 2017
Health SLT	-	-
Health Non-SLT	11,503	11,522
Catastrophe Risk (subtotal)	-	-
Diversification (negative)	-	-
<b>Health (Total)</b>	<b>11,503</b>	<b>11,522</b>
Medical expenses insurance and proportional reinsurance	11,503	11,522
Income protection insurance and proportional reinsurance	-	-
Diversification (negative)	-	-
<b>Health SLT (subtotal)</b>	<b>11,503</b>	<b>11,522</b>
Mass accident risk	-	-
Accident concentration risk	-	-
Pandemic risk	-	-
Diversification (negative)	-	-
<b>Catastrophe risk (subtotal)</b>	<b>-</b>	<b>-</b>

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

**Insurance with profit participation**

in € thousand	31 December 2018	31 December 2017
Best estimate	1,288	3,745
Risk margin	891	903
<b>Technical provision</b>	<b>2,179</b>	<b>4,648</b>

**C.1.2 Managing health insurance risk**

Health insurance risk is managed by monitoring claims frequency, the size of claims, inflation, handling time, benefit and claims handling costs. Concentration risk also qualifies as an insurance risk.

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

To mitigate the risk of claims, ASR Aanvullende Ziektekostenverzekeringen N.V. 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 product line health NSLT also uses 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.

**Handling time**

The handling time for health care claims is mainly very short and the settlement is quick. Normally, within five days a claim is settled.

**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.

**Concentration risk**

Geographically, the risk exposure of ASR Aanvullende

Ziektekostenverzekeringen N.V. on its health portfolio is almost entirely concentrated in the Netherlands.

**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 summarizes the required capital for market risks based on the standard model:

**Market risk - required capital**

	31 December 2018	31 December 2017
Interest rate	481	219
Equity	1,065	1,670
Property	-	-
Currency	7	21
Spread	798	854
Concentration	75	61
Diversification (negative)	-612	-429
<b>Total</b>	<b>1,814</b>	<b>2,396</b>

The main market risks of ASR Aanvullende Ziektkostenverzekeringen N.V. are spread and equity risk. This is in line with the risk budgets based on the strategic asset allocation study.

The interest rate risk is the maximum loss of (i) an upward shock or (ii) a downward shock of the yield curve. ASR Aanvullende Ziektkostenverzekeringen N.V. the upward shock is dominant.

ASR Aanvullende Ziektkostenverzekeringen N.V. applies the transitional measure for equity risk for shares in portfolio at 31 December 2015. The SCR equity shock was 22% at 31 December 2015 and linear, increasing to (i) 39% + equity dampener for type I shares and (ii) 49% + equity dampener for type II shares. The equity dampener has a value between -10% and 10%. In the event of increasing equity prices, the equity dampener will have a smaller dampening effect.

**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	-481	-219
SCR interest rate risk down	43	30
<b>SCR interest rate risk</b>	<b>481</b>	<b>219</b>

ASR Aanvullende Ziektekostenverzekeringen N.V. 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%	-	-	-	-	-	-
Interest rate +1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	-2	-1	-	-	-2	-1
Interest rate -1% (2017 incl. UFR 4.2% / 2018 incl. UFR 4.05%)	+2	+1	-	-	+2	+1
Volatility Adjustment -10bp	-	-	-	-	-	-

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 profitsharing 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 minimized. 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. Aanvullende Ziektekostenverzekeringen N.V. applies the transitional measure for equity risk for shares in portfolio at 31 December 2015. The SCR equity shock was 22% at 31 December 2015 and linear increasing in 7 years to (i) 39% + equity dampener for type I shares and (ii) 49% + equity dampener for type II shares. This resulted in a reduction of the average risk charge of equity risk of about 3,6% per 31 December 2018.

### Equity risk - required capital

	31 December 2018	31 December 2017
SCR equity risk - required capital	1,065	1,670

In 2018 the equity risk decreased mainly due to a smaller equity portfolio as a result of both de-risking and 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.

In case the transitional measure would not be used, SCR equity risk would increase to € 1,197 thousand.

### Solvency II sensitivities - equity prices

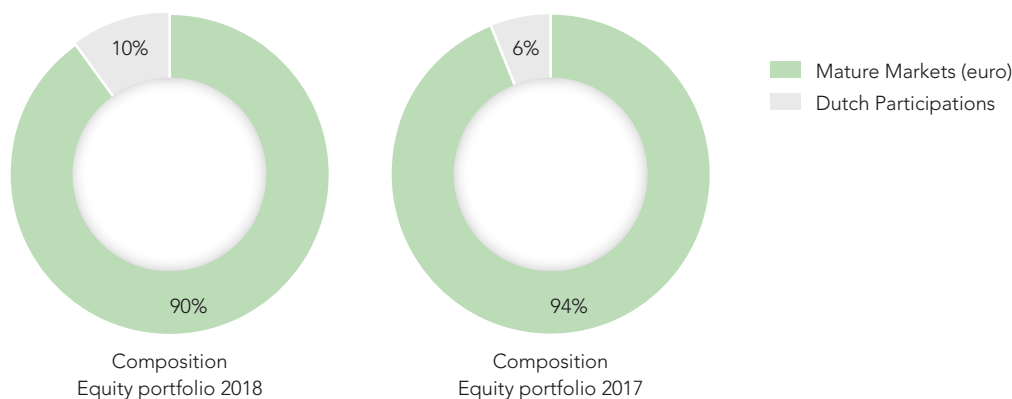
Effect on:	Available capital		Required capital		Ratio	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
Scenario (%-point)						
Equity prices -20%	-4	-5	+2	+5	-3	-

### Composition of equity portfolio

The fair value of equities and similar investments at year-end 2018 was € 3,7 million (2017: € 5,2 million). The

decrease in 2018 is a result of both de-risking and the drop of share prices. The table below shows the exposure of the equity portfolio to sectors.

### Composition of Equity portfolio



### C.2.3 Property risk

Property risk is not applicable for ASR Aanvullende Ziektekostenverzekeringen N.V.

externally managed. However, certain currency exposures are permitted from a tactical perspective within a specific risk budget.

### 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. The policy of a.s.r. is in principle to hedge the currency risk excluding investments in equities and investments that are

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).

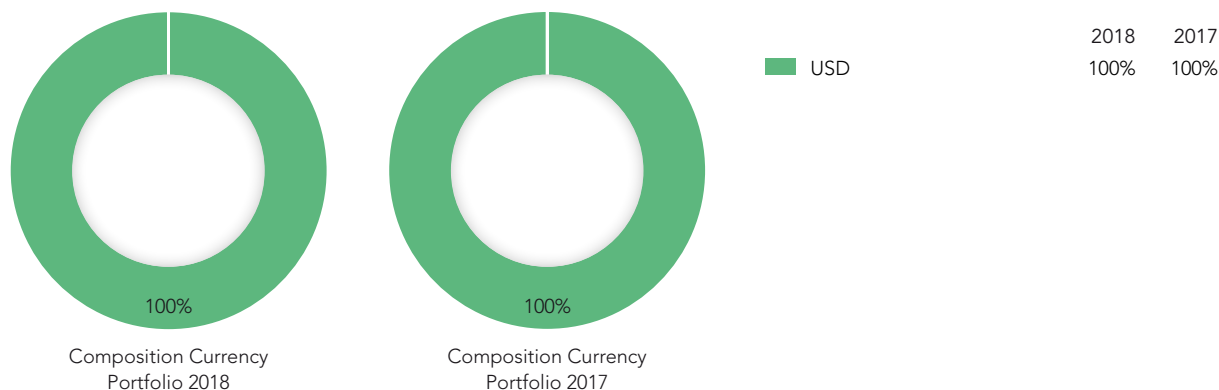
#### Currency risk - required capital

	31 December 2018	31 December 2017
SCR currency risk - required capital	7	21

Currency risk has decreased 14 thousand. This is caused by a decrease in foreign bonds.

**Specification currencies with largest exposure**  
Foreign bonds have substantially decreased in USD currency.

### 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 realized 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	798	854

SCR Spread risk has an decrease of 0,1 mln due to the shortening duration of the credit portfolio.

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 sensitivity to spread risk is measured as the impact of an increase of spread on loans and corporate bonds of

#### 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	-2	-2	-	-	-1	-2

#### Composition of fixed income portfolio

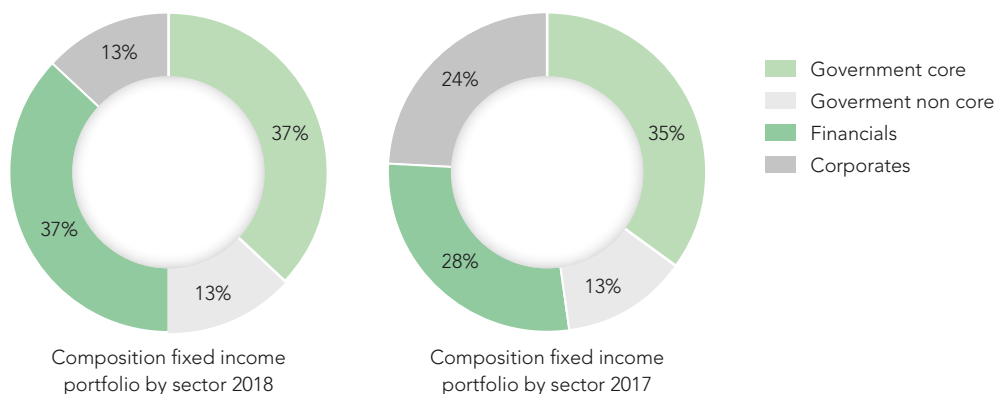
Spread risk is managed on a portfolio basis within limits and risk budgets established by the relevant risk committees. Where relevant, credit ratings provided by the external rating agencies are used to determine risk budgets and monitor limits. A limited number of fixed-income investments do not have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

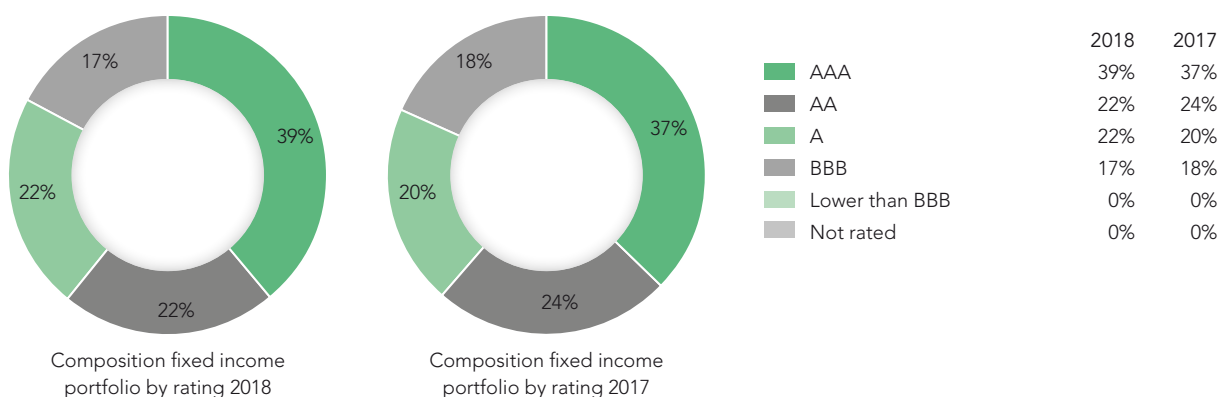
The total exposure of assets in scope of spread risk is €36 million (2017: €38 million). The decrease of the portfolio is mainly due to transactions. These transactions leads to changes in the portfolio decomposition:

- The amount of financials increased and the amount of corporates decreased;
- The amount of AA rated bonds decreased and the amount of AAA and A rated bonds increased.

#### Composition of fixed income by sector portfolio



### Composition of 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

3. aggregation of individual capital requirements for the various counterparties.

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

#### Concentration risk - required capital

	31 December 2018	31 December 2017
SCR concentration risk - required capital	75	61

In order to avoid concentrations in a single obligor, a.s.r. applies a limit on maximum exposure for (i) issuers with a single A rating and higher and (ii) for issuers with a BBB rating on group level. 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 for ASR Ziektekosten Aanvullend.

Due to a well diversified investment portfolio, no material market risk concentrations occur.

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.

### 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.

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	125	1,841
Type 2	91	85
Diversification (negative)	-14	-21
<b>Total</b>	<b>202</b>	<b>1,905</b>

The decrease of Type 1 risk is the result of the decrease of cash position. This resulted in the total counterparty risk to be close to zero.

**C.3.1 Mortgages**

ASR Aanvullende Ziektkostenverzekeringen N.V. has no mortgages on the balance sheet.

**C.3.2 Savings-linked mortgage loans**

ASR Aanvullende Ziektkostenverzekeringen N.V. has no saving loans on the balance sheet.

**C.3.3 Derivatives**

ASR Aanvullende Ziektkostenverzekeringen N.V. has no material derivatives on the balance sheet.

**C.3.4 Reinsurance**

ASR Aanvullende Ziektkostenverzekeringen N.V. has no reinsurance contracts on the balance sheet.

**C.3.5 Receivables****Composition receivables**

	31 December 2018	31 December 2017
Policyholders	1,169	991
Intermediaries	153	-
Reinsurance operations	-	-
Health insurance fund	-	-
Other	-544	-799
<b>Total</b>	<b>778</b>	<b>192</b>

**C.3.6 Cash and cash equivalents**

The current accounts amounted € 1,481 thousand in 2017 (2017: € 27,657 thousand).

**Composition cash accounts by rating**

	31 December 2018	31 December 2017
AAA	0%	0%
AA	0%	0%
A	100%	97%
Lower than A	0%	3%

**C.4 Liquidity risk**

Liquidity risk is the risk that ASR Aanvullende Ziektkostenverzekeringen N.V. 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 ASR Aanvullende Ziektkostenverzekeringen N.V. and is therefore separately discussed here.

ASR Aanvullende Ziektkostenverzekeringen N.V. recognizes 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 ASR Aanvullende Ziektkostenverzekeringen N.V.-specific event. Unexpected cash outflows could occur as result of lapses in the insurance portfolio. ASR Aanvullende Ziektkostenverzekeringen N.V. 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.

ASR Aanvullende Ziektkostenverzekeringen N.V.'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 collateralized 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, ASR Aanvullende Ziektekostenverzekeringen N.V. 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, ASR Aanvullende Ziektekostenverzekeringen N.V. had cash

(€ 1,481 thousand), liquid government bonds (€ 17,935 thousand) 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>	416	6,206	-	-	4,992	11,613
Derivatives	-	-	-	-	-	5
Insurance Liabilities	-	-4,348	5,636	-	-	5,451
Future interest payments	-	200	799	998	4,176	-
<b>Total</b>	<b>416</b>	<b>2,058</b>	<b>6,435</b>	<b>998</b>	<b>9,168</b>	<b>17,070</b>
<b>31 December 2017</b>						
Financial Liabilities <sup>1</sup>	1,373	17,718	-	-	4,992	24,083
Derivatives	-	-	-	-	-	-
Insurance Liabilities	-	-2,599	6,329	1	-	7,078
Future interest payments	-	200	799	998	4,376	-
<b>Total</b>	<b>1,373</b>	<b>15,318</b>	<b>7,127</b>	<b>999</b>	<b>9,368</b>	<b>31,161</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.

### EPIFP

With regard to liquidity risk, '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	3,477	2,424

## 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	2,175	2,206

The SCR for operational risk amounts to € 2,175 thousand at the end of 2018 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.

## 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 recognized 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

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### C.7.2 Reinsurance policy and risk budgeting

#### C.7.2.1 Reinsurance policy

ASR Aanvullende Ziektkostenverzekeringen N.V. does not reinsure any specific underwriting risk at this moment.

#### 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 & Review Process Board (PARP Board). All these departments evaluate whether risks in newly developed products are sufficiently addressed. New products need to be developed in a way that they are cost efficient, reliable, useful and secure. New products must also be strategically aligned with a.s.r.'s mission to be a solid and trustworthy insurer. In addition, the risks of existing products are evaluated, as requested by the PARP, as a result of product reviews.

### C.7.4 Prudent person principle

a.s.r. complies with the prudent person principles as set out in Directive 2009/138/EC/article 132: Prudent person principle. The prudent person principle ensures that assets are managed on behalf of its subsidiaries, policyholders or other stakeholders in a prudent manner, and covers aspects that relate to market, credit, liquidity and operational risk. a.s.r. has mandated asr vermogensbeheer NV as their asset manager.

a.s.r. ensures that assets of policyholders or other stakeholders are managed in a prudent manner. a.s.r. complies with the "Prudent Person Principle" by investing only in assets and instruments which a.s.r. can adequately assess, measure, monitor, control, maintain and report the risks. All assets will be assessed against solvency criteria according to article 45 (1a).

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

### Governance of Investments

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

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

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

All investment related activities are performed according to mandates as set by a.s.r., clients or policyholders. Mandates for investments for own account, clients and for account of policyholders are set out in internal guidelines, in order to ensure that prudent person principles are satisfied. This should always be in line with internal policies and internal constraints (such as a.s.r.'s ESG policy) and external constraints (such as regulatory limits).

# 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 purposes are described. Separately for each material class of assets a quantitative and qualitative explanation of any material difference between the valuation for solvency 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 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 equity for 2018.

## Reconciliation IFRS balance sheet and Solvency II balance sheet

Balance sheet	31 December 2018		31 December 2018
	IFRS	Revaluation	Solvency II
1. Deferred acquisition costs	-	-	-
2. Intangible assets	-	-	-
3. Deferred tax assets	-	-	-
4. Property, plant, and equipment held for own use	-	-	-
5. Investments - Property (other than for own use)	-	-	-
6. Investments - Equity	3,663	-	3,663
7. Investments - Bonds	35,920	-	35,920
8. Investments - Derivatives	1	-	1
9. Unit-linked investments	-	-	-
10. Loans and mortgages	-	-	-
11. Reinsurance	-	-	-
12. Cash and cash equivalents	1,481	-	1,481
13. Any other assets, not elsewhere shown	782	-	782
<b>Total assets</b>	<b>41,847</b>	<b>-</b>	<b>41,847</b>
14. Technical provisions (best estimates)	5,451	-4,163	1,288
15. Technical provisions (risk margin)	-	891	891
16. Unit-linked best estimate	-	-	-
17. Unit-linked risk margin	-	-	-
18. Pension benefit obligations	-	-	-
19. Deferred tax liabilities	75	779	854
20. Subordinated liabilities	4,992	155	5,147
21. Other liabilities	7,350	-	7,350
<b>Total liabilities</b>	<b>17,868</b>	<b>-2,338</b>	<b>15,530</b>
<b>Excess of assets over liabilities</b>	<b>23,979</b>	<b>2,338</b>	<b>26,317</b>

This chapter contains also the reconciliation between the excess of assets over liabilities to EOF.

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

	Gross of tax 31 December 2018
<b>IFRS equity</b>	23,979
<b>Revaluation assets</b>	
i. Intangible assets	-
ii. Loans and mortgages	-
iii. Reinsurance	-
iv. Cash and cash equivalents	-
v. Any other assets, not elsewhere shown	-
	-
<b>Revaluation liabilities</b>	
i. Technical provisions (best estimates)	4,163
ii. Technical provisions (risk margin)	-891
iii. Unit-linked best estimate	-
iv. Unit-linked risk margin	-
v. Subordinated liabilities	-155
vi. Other liabilities	-
	<b>3,117</b>
Total gross revaluations	3,117
Tax percentage	25%
Total net revaluations	<b>2,338</b>
<b>Other Revaluations</b>	
i. Goodwill	-
	-
<b>Solvency II equity</b>	<b>26,317</b>
<b>Own fund items</b>	
i. Subordinated liabilities	-
ii. Foreseeable dividends	-
	-
<b>Eligible Own Funds Solvency II</b>	<b>26,317</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 Solvency II directive 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**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **2. Goodwill and Intangible assets**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **3. Deferred tax**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **4. Property plant, and equipment held for own use**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

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

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **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).

### **7. Investments – Bonds**

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

### **8. Investments – Derivatives**

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

### **9. Unit-linked investments**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **10. Loans and mortgages**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **11. Reinsurance recoverables**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

### **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**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

## 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 ASR Aanvullende Ziektkostenverzekeringen N.V.

### D.2.2 Technical provisions methods

#### D.2.2.1 Medical expense insurance

What follows is a description of the policies, methods and principal assumptions that were decisive in determining the value of the technical provisions and the risk margin.

#### Composition of homogeneous risk group ASR Aanvullende Ziektkostenverzekeringen N.V.

A homogeneous risk group (HRG) encompasses a collection of policies with similar risk characteristics as stipulated by Solvency II, which are generally recorded separately. In ASR Aanvullende Ziektkostenverzekeringen N.V. coverages are similar over labels and distribution channels. Also, the policies in ASR Aanvullende Ziektkostenverzekeringen N.V. are sold in combination with policies of ASR Basis Ziektkostenverzekeringen N.V. Therefore, also one HRG is defined in ASR Aanvullende Ziektkostenverzekeringen N.V.

#### Contract boundary

The government decides on the basic health insurance package every year and this package is mandatory for all inhabitants of The Netherlands. The composition of this package may be different from year to year. In addition, the contract boundary of an insurance contract is just one calendar year which is laid down in law. The additional health insurance has also a contract boundary of one year because it is a combination with the basic health insurance. Insured persons are free to accept or reject a new offer from their health insurer after one year. The composition of the portfolio changes mainly because of insured persons switching health insurers. Claims incurred during the period of cover continue to be insurance liabilities for the covering health insurer. The insurance portfolio and hence the risk profile stays stable during one year, because of the breakdown by claim year.

#### Risk equalization model

The Dutch Health Insurance is laid down in law (Zvw<sup>6</sup>) and is supplemented by a risk equalization model which is performed by the National Health Care Institute (ZINL) for ASR Basis Ziektkostenverzekeringen N.V. This is not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

<sup>6</sup> Zvw: Zorgverzekeringswet

<sup>7</sup> For example a health type is: General Practitioner, Pharmacy, Oral Care, Obstetrics, Specialist Medical Care, Paramedical Care, Medical Aids, Patient Transport

### D.2.2.2 Bases and methods

#### Best estimate claim provision

The inflation method is used for the first months of the new year because little is known about the use of health care and its declaration pattern of the new year. The inflation rate is based on the existing contracts from the previous year which are under negotiation for new year and market rates for health care consumption.

The outstanding claims provisions for additional health insurance are determined using a development factor model in combination with the Bornhuetter-Ferguson method for each claim year at the aggregated level including all health services and products.

For the current claim year, an estimation is made on the basis on an expected loss methodology. Until enough claims are booked to switch to an estimation based on the chain ladder method. In practice, this number of claims is reached by the end of the first half year.

The best estimate claims provision is discounted at the interest rate term structure (zero coupon curve) prescribed by EIOPA. The prevailing yield curve is set internally at group level.

#### Cash flows

The cash flow pattern of the claim provisions is based on the history of paid claims including expert judgements for the most recent information in a chain ladder model at the level of health type<sup>7</sup> aggregated per year and quarter.

#### Best estimate of premium provision

The best estimate for the premium provision is determined using estimated future cash flows from portfolio growth, premium income (only a commercial premium for ASR Aanvullende Ziektkostenverzekeringen N.V.), claims payments and claims handling costs as included in the premium determination and sales results for the new insurance year. This relates to the next 12-month insurance period (one-year contract boundary) and serve as the benchmark for the scale of the premium provision on the reference date.

The cash flow pattern of the future claim provision is based on paid claims in a chain ladder model. The assumptions are:

- Claims received in past months are predictive for the future payment pattern of claims.
- The payment patterns are constant / equal divided for the coming months to year end.
- The payment pattern for the future claims is equal to the payment pattern of the current (already) paid claims

The same yield curve, which a.s.r. sets internally at group level and subsequently supplied to the supervised entity, is used as for the outstanding claims provisions.

### Claims handling costs

The cash flows for claims handling costs are proportional to the cash flows of the paid claims for the claim provisions. The percentage of claim handling costs is equal to the ratio 'released claims handling costs at the end of year T-1 divided by paid claims including own risk at the end of year T-1 independent of claim years. This fixed percentage is applied to the outstanding claims provision for the current year in the reporting period (t) and for earlier years (t-1, t-2, ..., t-n), and to the outstanding claims provision for future years in earlier years. The result is a provision for claims handling costs. The provision for claims handling costs is included in the best estimate for the outstanding claims and premium provisions. The remaining (other) costs are paid uniformly in a year.

### Risk margin methodology

The insurance risks have been determined in accordance

with the standard formula described in the Delegated Regulation. a.s.r. group applies the Cost of Capital method that is applicable to ASR Basis Ziektkostenverzekeringen N.V. and ASR Aanvullende Ziektkostenverzekeringen N.V. as well with a Cost of Capital rate of 6%.

Solvency II describes 4 methods to calculate the risk margin. a.s.r. group has chosen to use the alternative method 1. This method calculates the required future capitals by an approach per risk (sub) module. An approach can of course also be the full calculation of the risk module. The required capital uses the SCR for non-hedgeable risks type 2.

### Impact volatility adjustment

ASR Aanvullende Ziektkostenverzekeringen N.V. applies the volatility adjustment for discounting cash flows to determine the best estimate and in determining the Required Capitals for the SCR. In the next table the impact is shown of this volatility adjustment on the financial position and own funds of ASR Aanvullende Ziektkostenverzekeringen N.V.

#### Impact of applying VA = 0 bps

	24		VA = 4 bps		VA = 0 bps		Impact	
	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017	31 December 2018	31 December 2017
TP	2,179	4,648	2,196	4,655	17	6		
SCR	13,425	14,266	13,426	14,291	1	25		
MCR	3,468	3,623	3,469	3,636	1	13		
Basic own funds (total)	26,317	44,016	26,305	44,011	-12	-5		
Eligible own funds	26,317	44,016	26,305	44,009	-12	-6		

## D.2.3 Level of uncertainty

This paragraph contains a description of group policy, which is applicable for the solo entity. 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, a model validation process mitigates the risk of material misstatements or that key facts have been omitted. In addition, FRM, in its role as the second line of defense, performs an independent internal review of the technical provisions as described in the previous phase.

## D.2.4 Reinsurance and special purpose vehicles (SPVs)

Not applicable to ASR Aanvullende Ziektkostenverzekeringen N.V.



## 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>Similar to non-life</b>			
Best estimate	-		1,288
Risk margin	-		891
<b>Technical provision</b>	<b>5,451</b>	<b>-3,272</b>	<b>2,179</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.

### Similar to Non-life

The revaluation for Similar to Non-life (medical expense) is caused by:

- The IFRS LAT margin: -€ 3,272 thousand.

Directed by the regulator in Solvency reporting the perpetual hybrid loans are classified as subordinated liabilities.

### 21. Other liabilities

Other Liabilities contains different small line items:

#### 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.

## 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 valuation methods for IFRS and Solvency II purposes are addressed in detail per liability category. In this paragraph line items 18-21 from the simplified balance-sheet above are described.

#### 18. Pension benefit obligations

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

On group level a.s.r. has in place a number of defined benefit plans for own staff. Current service costs for the OTSO's are included in operating expenses.

#### 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 ASR Aanvullende Ziektkostenverzekeringen N.V.

According to IFRS, the perpetual hybrid loans are measured at amortized cost. For the purpose of Solvency II, they are both measured at fair value.

#### 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 recognized 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 recognized on the Solvency II balance sheet.

Solvency II prescribes that all contingent liabilities be recognized 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 recognized on the Solvency II balance sheet.

The ASR Aanvullende Ziektkostenverzekeringen N.V. solvency ratio does not include contingent liabilities.

### **D.3.2 Reconciliation from Solvency II equity to EOF**

The differences described in the above sections are the basis for the reconciliation of IFRS equity to equity Solvency II. To reconcile from Solvency II Equity to EOF, the following movements are taken into consideration:

#### **Subordinated liabilities**

As per 2018, the subordinated liabilities are no longer included as part of EOF as directed by the regulator. Further information of this liabilities is described in section E.

#### **Foreseeable dividends and distributions**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

#### **Deductions for participations in financial and credit institutions**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

#### **Tier 3 Limitations**

In accordance with the Delegated Regulation EOF is divided in tiering components. There are boundary conditions related to the size of these components. Excess of this limits results in capping of EOF. For ASR Aanvullende Ziektkostenverzekeringen N.V. capping does not apply per Q4 2018.

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

ASR Aanvullende Ziektkostenverzekeringen N.V. does not apply alternative methods for valuation.

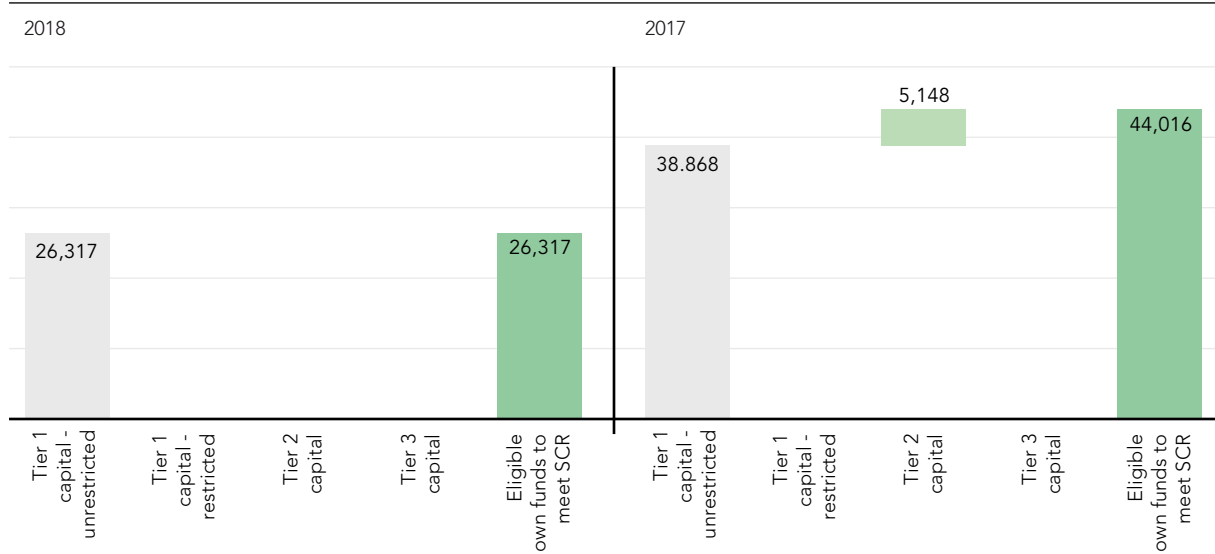
### **D.5 Any other information**

Not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

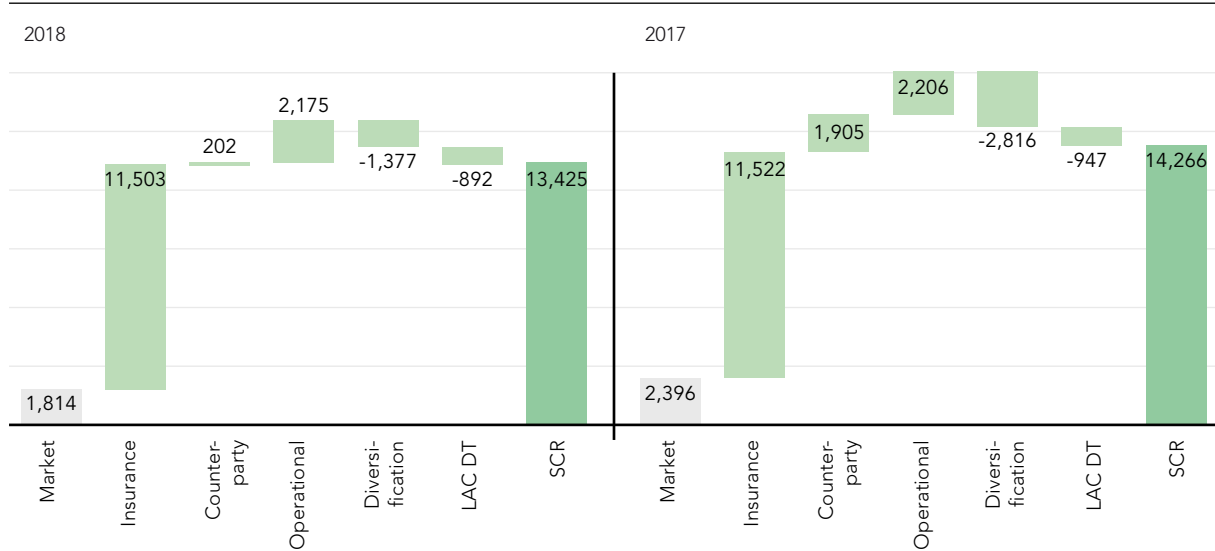
# E Capital management

## Key figures

### Eligible own fund

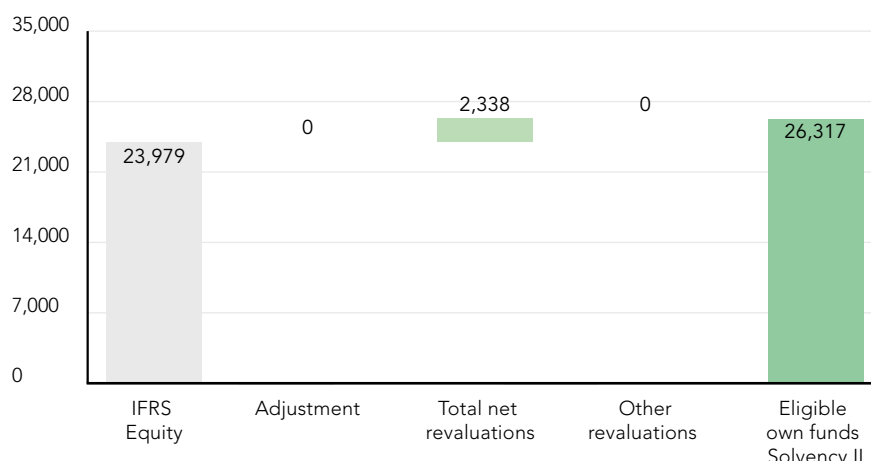


### The solvency capital requirement is build up as follows:



The solvency ratio stood at 196% as per 31 December 2018 based on the standard formula as a result of € 26,317 thousand EOF and € 13,425 thousand SCR as mentioned in D.3.2, the method to calculate EOF is different in 2018 compared to 2017. In 2017 the subordinated loans were part of the EOF calculation whereas in 2018 these have been excluded (SCR ratio 2017 is 309% including the subordinated loan and 272% excluding the subordinated loan).

## Reconciliation total equity IFRS vs EOF Solvency II



An extensive explanation of the reconciliation from IFRS equity to Solvency II eligible own funds was 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

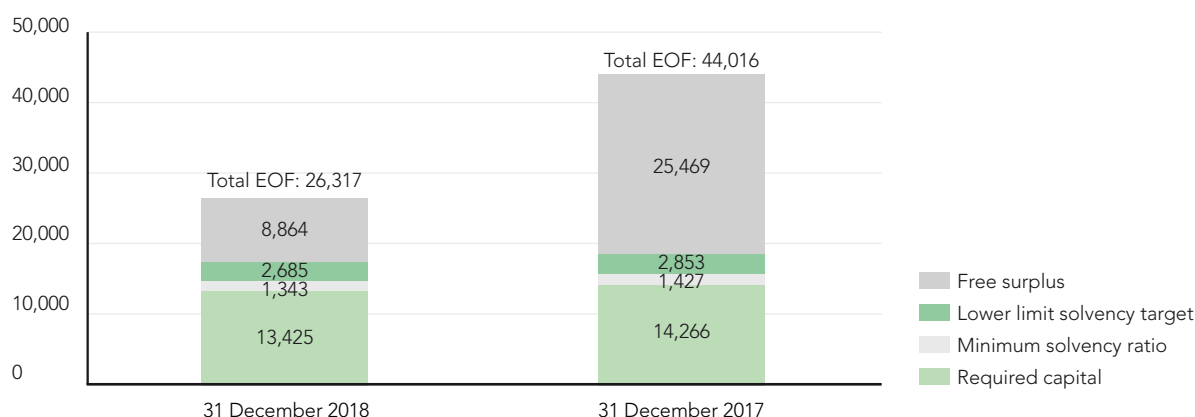
The group is committed to maintain a strong capital position in order to be a robust and sustainable insurer for its policyholders and other stakeholders. The objective is to maintain a solvency ratio well above the minimum levels as defined in the risk appetite statements and above the relevant management 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 110%. The lower limit solvency target is 130%. The management threshold level for the solvency ratio is above 150%. The solvency ratio stood at 196% at 31 December 2018, which was comfortably above the internal requirement of 110%.

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 recognized in the capital position of the group, since a.s.r. has the ability to realize the capital of this OTSO, for example by selling the entity.

The table below shows how the eligible own funds of ASR Aanvullende Ziektkostenverzekeringen N.V. relate to the different capital targets.

## Market value own funds under Solvency II



### E.1.2 Tiering own funds

The table below details the capital position of ASR Aanvullende Ziektkostenverzekeringen N.V. as at the dates indicated. With respect to the capital position, Solvency II requires the insurers to categorize own funds into the following three tiers with differing qualifications as eligible available regulatory capital:

- Tier 1 capital consists of Ordinary Share Capital and Reconciliation reserve.
- 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. ASR Aanvullende Ziektkostenverzekeringen N.V. has no ancillary own fund items.

- Tier 3 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	26,317	38,868
Tier 1 capital - restricted	-	-
Tier 2 capital	-	5,148
Tier 3 capital	-	-
<b>Eligible own funds to meet SCR</b>	<b>26,317</b>	<b>44,016</b>

### E.1.3 Own funds versus MCR

The 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	26,317	38,868
Tier 1 capital - restricted	-	-
Tier 2 capital	-	725
Tier 3 capital	-	-
<b>Eligible own funds to meet MCR</b>	<b>26,317</b>	<b>39,592</b>

According to Delegated Regulation article 248 to 251 the MCR (€ 3,468 thousand) of ASR Aanvullende Ziektkostenverzekeringen N.V. is calculated as a linear function of premiums, technical provisions and capital at risk.

### E.1.4 Description of grandfathering

Grandfathering is not applicable for ASR Aanvullende Ziektkostenverzekeringen N.V.

31 December 2018. The required capital (before diversification) consists for € 1,814 thousand out of market risk and the insurance risk amounted to € 11,503 thousand as per 31 December 2018.

## E.2 Solvency Capital Requirement

### Capital requirement

The required capital stood at € 13,425 thousand per

ASR Aanvullende Ziektkostenverzekeringen N.V. complied during 2018 with the applicable externally imposed capital requirement. The table below presents the solvency ratio as at the date indicated.

#### Eligible own funds to meet the SCR

	31 December 2018	31 December 2017
Eligible Own Funds Solvency II	26,317	44,016
Required capital	13,425	14,266
<b>Solvency II ratio</b>	<b>196%</b>	<b>309%</b>

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 € 892 thousand.

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

### **E.3 Use of standard equity risk sub-module in calculation of Solvency Capital Requirement**

The 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 ASR Aanvullende Ziektkostenverzekeringen N.V. 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 policy and capital management actions**

a.s.r. has formulated its dividend policy in line with its current strategy. ASR Aanvullende Ziektkostenverzekeringen N.V. intends to pay an annual dividend that creates sustainable long-term value for its shareholders. ASR Aanvullende Ziektkostenverzekeringen N.V. aims to operate at a solvency ratio, calculated according to the standard formula, above a management threshold level. This management threshold level for ASR Aanvullende Ziektkostenverzekeringen N.V. is currently defined as above 150% of the SCR.

In general, a.s.r. does not expect to pay cash dividends if the a.s.r. solvency ratio (calculated according to the standard formula) falls below 130%. ASR Aanvullende Ziektkostenverzekeringen N.V. currently intends to consider investing capital above the solvency ratio (calculated according to the standard formula) of 150% with the objective of creating value for its shareholders. If and when ASR Aanvullende Ziektkostenverzekeringen N.V. operates at a certain level considerably above the 150%, and ASR Aanvullende Ziektkostenverzekeringen N.V. assesses that it cannot invest this capital in value creating opportunities for a prolonged period of time, ASR Aanvullende Ziektkostenverzekeringen N.V. may decide to return (part of this) capital to shareholders. If ASR Aanvullende Ziektkostenverzekeringen N.V. elects to return capital, it intends to do so in the form that is efficient for shareholders at that time. Specifically regarding ASR Aanvullende Ziektkostenverzekeringen N.V. in 2018, 15 million capital withdrawals have taken place, but no dividend.

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