



# Solvency Financial Condition Report VIVAT 2017

Zwitserleven



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actiam

VIVAT



# Contents

>	<b>1. Introduction</b>	4
	1.1. 2017 at a Glance	5
	1.2. Summary	8
>	<b>2. Business and Performance</b>	12
	2.1. Business	12
	2.2. Performance from underwriting activities	17
	2.3. Performance from investment activities	25
	2.4. Performance of other activities	29
	2.5. Any other disclosures	31
>	<b>3. System of Governance</b>	32
	3.1. General governance arrangements	32
	3.2. Remuneration	37
	3.3. Fit and proper	39
	3.4. Risk management system	40
	3.5. ORSA	46
	3.6. Internal control system	48
	3.7. Internal audit	49
	3.8. Actuarial function	50
	3.9. Outsourcing	50
	3.10. Any other disclosures	51
>	<b>4. Risk profile</b>	52
	General	52
	4.1. Risk classification	58
	4.2. Underwriting risk	61
	4.3. Market risk	74
	4.4. Counterparty default risk	86
	4.5. Liquidity risk	88
	4.6. Non-financial risk	90
	4.7. Other risks	94
>	<b>5. Valuation for Solvency purposes</b>	95
	5.1. Balance sheet	96

5.2. Solvency II reporting framework	98
5.3. Assets	114
5.4. Technical provision	123
5.5. Liabilities	134
5.6. Any other disclosures	136
5.7. Off-balance sheet items	136
<b>6. Capital management</b>	<b>137</b>
6.1. General	137
6.2. Capital position	138
6.3. Solvency Capital Requirement and Minimum Capital Requirement	147
6.4. Any other disclosures	151
<b>ANNEX I</b>	<b>152</b>
Related subsidiaries VIVAT NV	152
Related subsidiaries SRLEV NV	153
Related subsidiaries VIVAT Schadeverzekeringen NV	153
<b>ANNEX II</b>	<b>154</b>
Disclosure QRT's VIVAT NV	154
Disclosure QRT's SRLEV NV	154
Disclosure QRT's VIVAT Schadeverzekeringen NV	155
Disclosure QRT's Proteq Levensverzekeringen NV	155



# 1. Introduction

The structure of the Solvency and Financial Condition Report (SFCR) has been prepared in accordance with annex XX of the delegated acts. The subjects addressed are based on articles 51 to 56 of the Solvency II directive and articles 292 up to 298 of the Delegated Acts. Furthermore, the figures presented in this report are in line with the Quantitative Reporting Templates as reported to the supervisor. In this SFCR report of VIVAT NV we will use the name 'VIVAT' for the consolidated insurance business as a whole. The SFCR of VIVAT is a combined report which also includes the solo insurance entities SRLEV NV, VIVAT Schadeverzekeringen NV and Proteq Levensverzekeringen NV.

In the following chapters, the various topics are covered, as required by the Delegated Acts. Chapter 2 describes the business and performance of VIVAT and of its solo entities. Chapter 3 discusses the system of governance. Chapter 4 contains the risk profile. Chapter 5 starts with a description of the method of valuation of the Solvency II balance sheet, followed by the various balance sheet items which are explained in relation to the IFRS financial statements. Chapter 6 provides a more detailed explanation of the own funds and Solvency Capital Requirements under Solvency II.

In this report the shown figures of SRLEV NV, VIVAT Schadeverzekeringen NV and Proteq Levensverzekeringen NV are unconsolidated figures, whereas the figures of VIVAT are consolidated figures. All amounts in this report are prepared in millions of euros being the functional currency of VIVAT and all its underlying entities.

The Quantitative Reporting Templates that are to be disclosed per legal entity are added in annex II. The figures presented in this report are in line with these templates.



# 2017 at a Glance

“ 2017 was an important year for VIVAT. It was the first full year after an extensive transformation in which staff costs were reduced by 24% and VIVAT’s focus could shift to growth. This successful transformation is reflected in our financial performance and in the positive developments in our product lines. VIVAT’s Solvency II ratio of 162% remained above its internal target. During the past year a lot of progress was made to create a leading, customer-focused and innovation-driven insurance company. Processes were optimised, resulting in cost reductions and improving service levels. I would like to take this opportunity to give sincere thanks to our customers, business partners, investors, employees and all other stakeholders.

*Ron van Oijen, CEO VIVAT*

”

## About VIVAT



## Our Performance

### Gross Premium Income

 **2,923** mln EUR

2016: 2,508 mln EUR

### Solvency II Own Funds

 **3,780** mln EUR

2016: 4,319 mln EUR

### Solvency II ratio

 **162%**

2016: 175%

### Net Result IFRS

 **-116** mln EUR

2016: 168 mln EUR

### IFRS Equity

 **3,547** mln EUR

2016: 3,698 mln EUR

### Total Assets

 **58,200** mln EUR

2016: 58,495 mln EUR

# Our Main Brands

**Zwitserleven**

**0.5** million participants



**1.8** million clients

**actiam**

**54.1** billion EUR

assets under management

## Our Highlights

### Innovation



VIVAT opened Innovation Centre: VINCE.



VIVAT implemented a unified customer relationship management system.



ADS & VIVAT opened an 'Insurance Lab'.

### Awards



VIVAT won two international awards for cooperation with start-ups.



Zwitserleven and Reaal in VBDO Top 3 most responsible investment policy.  
Fair Insurance Guide gave maximum score to VIVAT in report on deforestation and land robbery.



Zwitserleven awarded as Best Pension Provider in the Netherlands by World Finance.



ACTIAM achieved top scores in the annual responsible investment research conducted by the PRI.

### New



VIVAT launched nowGo, a new digital brand.



Zwitserleven introduced customer loyalty programme Zelect.



Zwitserleven launched the 'Roadtrip' campaign.



Reaal launched the 'Lekker Geregeld' campaign.



Reaal Dier & Zorg biggest panda insurer in The Netherlands.

### Sustainability



36,1 % reduction use of paper.



14,9 % CO<sub>2</sub> emissions reduction.



28,6 % reduction of waste.



VIVAT has 100% green gas and electricity.



VIVAT changed lease policy to help CO<sub>2</sub> reduction.

## Four key Strategic Themes

VIVAT has defined four key themes for the whole company. These themes are embedded in execution and change of VIVAT:



Customer Centricity



Data



Digitalisation



Innovation



## 1.2. Summary

The Solvency Financial Condition Report VIVAT provides insight in:

### **Business and Performance: Results Reflect Transformation of VIVAT**

2017 was an important year for VIVAT. In the first full year after an extensive transformation in which we reduced staff costs by 24%, we were able to shift the focus to sustainable profitable growth. The success of this transformation is reflected in our financial performance and in the positive developments in our product lines. We closed 2017 with a negative result of -/- € 116 million (2016: € 168 million). The result was negatively impacted by accounting differences between the market and book value of assets and liabilities, resulting in an addition to the technical provisions from the LAT-shortfall of € 360 million. The result was positively impacted by a significant decrease in operational expenses due to the reorganization that was finalised in 2016.

In May 2017 VIVAT NV issued € 650 million of senior notes. The € 650 million senior notes have a fixed coupon at 2.375% per annum and a maturity of seven years. In June 2017 SRLEV agreed a Capital Subordinated Loan for an amount of € 250 million. The Capital Subordinated Loan is a tier 1 perpetual loan issued by VIVAT NV with a fixed interest rate of 7.75%.

In November 2017, VIVAT NV issued \$ 575 million (€ 476 million) in subordinated notes. The notes qualify as Tier 2 regulatory capital under Solvency II. The proceeds of the issuance were used to redeem the subordinated loans issued by Anbang Group Holdings Co. Limited. A new subordinated private loans of € 95 million is issued by VIVAT NV.

### **System of Governance**

VIVAT implemented a consistent and efficient risk management system in which specific Solvency II requirements such as the key functions and the Own Risk and Solvency Assessment (ORSA) are incorporated. It operates an integrated approach, with risk management integral part of the decision making process.

In 2017, VIVAT has focused on new opportunities and sustainability towards our clients. The strategic ambition to become an innovative insurer has led to several initiatives in products, services, methodologies and processes. The continued focus on cost reduction and revenue models could impact and influence operational and compliance risks. VIVAT has defined the target IT landscape and has made nontarget systems redundant – this rationalisation will continue in 2018. In addition, VIVAT has reduced its number of models in 2017, lowering model risk. This contributes to a more efficient and reliable valuation of underwriting and market risks and the determination of the solvency ratio.

Further information about System of Governance has been included in chapter 3 'System of Governance'.

### **Risk profile**

VIVAT is focusing on improving capital generation by re-risking, improving its combined ratio and value of new business, and further optimising its risk profile taking into account its risk appetite. Optimising will also decrease the spread risk which originates from differences between the VIVAT asset portfolio and the reference portfolio of the Volatility Adjustment (VA).

The process of reducing the spread mismatch between assets (mainly German and Dutch government bonds) and liabilities (mainly swap plus Solvency II Volatility Adjustment) started in 2016. The basis risk was



further mitigated during 2017 by replacing long duration German and Dutch government bonds by swaps combined with short duration government bonds.

The main risk profile changes in 2017 relate to changes in currency risk, lapse risk and counterparty default risk.

The issued senior and subordinated notes, which VIVAT issued successfully were used to redeem the subordinated loans issued by Anbang at par. This transaction results in a substantial smaller interest rate charge, but leads to an increase in the SCR due to an increased currency risk.

The capital charge for underwriting risk decreased due to the successful implementation of the mass lapse reinsurance contract.

Counterparty Default Risk decreased mainly due to ending the security lending program, a substantial drop in receivables older than 3 months from intermediaries and policyholders and from contractually securing the savings amount of Savings Mortgages.

### Managing Sensitivities of Regulatory Solvency

In addition to underwriting risks, important market risks are interest rate risk and spread risk (credit spreads). Sensitivity to interest rates is measured by means of a parallel movement in the yield curve.

The Ultimate Forward Rate (UFR) of 4.2% prescribed by the European Insurance and Occupational Pensions Authority (EIOPA) also introduces a risk. Over the course of time, the positive valuation effect of the UFR reduces, which puts downward pressure on the trend in solvency in the future. EIOPA decided to yearly decrease the UFR starting in 2018 with 0.15% per year. This will have a negative impact on solvency and the IFRS result.

The solvency of the Life Insurance portfolio is sensitive to changes in the parameters used for calculating the market value of insurance liabilities. These relate to mortality risk, longevity risk, expense risk and surrender risk. The Non-Life business is sensitive to changes in the disability ratios.

Quantitative information about risks and related sensitivities for both Solvency II and IFRS have been described in chapter 4 'Risk profile'.

### Valuation for Solvency purposes

The assets and liabilities in the Solvency II balance sheet are recognized and measured at fair value in accordance with the Solvency II regulation.

The following significant differences in measurement under Solvency II and under IFRS exist:

- Technical provisions - Under Solvency II the technical provisions (including provisions for saving mortgages) are measured using Solvency II parameters, taking into account current market estimates. Under IFRS a liability adequacy test on the premium and claims reserves is performed, if the carrying amount of the technical provision is inadequate, the provision is increased. With respect to economic parameters used, there are differences regarding the interest rate curve and the cost of capital.
- Deferred Tax Assets - Due to differences in the valuation of the technical provisions the resulting DTA position is different.

To determine the capital requirements at consolidated level, VIVAT applies the 'Accounting consolidation based method', according to which the capital requirements are calculated based on the Solvency II consolidated balance sheet.

Further information about valuation and an explanation of various balance sheet items has been included in chapter 5 'Valuation for Solvency purposes'.

## Capital Management

Capitalisation refers to the extent to which VIVAT and its underlying legal entities have capital to cover unforeseen losses and to achieve the strategic objectives of the company. The required capital of VIVAT has to meet internal risk appetite standards as well as external requirements of regulators, rating agencies and also includes commercial considerations. In 2017 VIVAT concluded that the Solvency Capital Requirement (SCR) was appropriate and that the solvency was sufficient.

Under Solvency II, the supervision of the risks to which an insurer is exposed and the management of those risks play a central role. The financial requirements reflect the risks to which insurers are exposed. Moreover, Solvency II aims to be in line with market developments and the internal risk management systems used by insurers.

VIVAT discloses its solvency position and financial condition on a Solvency II basis by means of public reports as required by law. Solvency II applies to the supervised insurance entities and also to the consolidated activities of VIVAT.

VIVAT calculates its position under Solvency II using the standard formula, applying the Volatility Adjustment (VA) and thus making use of the possibility of applying long-term guarantee measures. VIVAT does not apply the Matching Adjustment.

In € millions/percentage	SRLEV		VIVAT Schade		Proteq		VIVAT	
	2017	2016	2017	2016	2017	2016	2017	2016
Total eligible own funds <sup>1</sup>	3,246	3,424	570	554	92	110	3,780	4,319
SCR	2,061	2,295	351	365	35	61	2,327	2,466
Solvency II ratio	158%	149%	162%	152%	263%	181%	162%	175%

<sup>1</sup> The total eligible own funds slightly differs from the one reported in the annual report VIVAT NV 2017 (3,772 mln) respectively annual report SRLEV NV (3,228 mln).

Solvency II ratio (standard model) of VIVAT NV decreased to 162% (175% at year-end 2016) as a result of a sharp decrease of the Volatility Adjustment (VA) which was only partly offset by an increase in the market value of the credit spread sensitive part of the investment portfolio.

Solvency II ratio (standard model) of SRLEV NV increased to 158% (149% at year-end 16) mainly following a € 250 million restricted Tier 1 loan provided by VIVAT, partly offset by a decrease of the Volatility Adjustment.

The Solvency II ratio of VIVAT Schadeverzekeringen NV increased from 152% to 162%, mainly due to the new parameter slightly offset by the decrease of the Volatility Adjustment.

The Solvency II ratio of Proteq levensverzekeringen NV increased from 181% to 263%, mainly due to the re-balancing of the interest rate risk to a Solvency II basis offset by a decrease as a result of updated expense and underwriting risk parameters.

The internal risk limit for the Solvency II capital ratio on VIVAT level amounts to 140%. When determining the Solvency II capital ratio, the loss absorbing capacity of deferred tax assets may be set off against the Solvency Capital Requirement. Tax offsetting (Loss Absorbing Capacity of Deferred Taxes) in the SCR is applied at 0% for VIVAT and its legal entities, except for legal entities with a net Deferred Tax Liability (net DTL). In these cases tax offsetting equals the net DTL-position.

The classification of the hybrid capital of VIVAT NV and SRLEV NV (outstanding on 31 December 2017) into Tier 1 and Tier 2 capital is based on the transitional measures contained in the level 1 regulations, and aligned with DNB.

Further information about Capital Management has been included in chapter 6 'Capital Management'.

We also refer to the Annual Report 2017 of VIVAT NV, in which more information has been included.

Amstelveen, 7 May 2018



## 2. Business and Performance

### 2.1. Business

#### 2.1.1. About VIVAT

##### VIVAT

VIVAT is a Dutch insurance company that offers a variety of insurances. Via its main brands Reaal and Zwitserleven and niche labels nowGo, Proteq, Route Mobiel and Zelf, VIVAT provides pensions, individual life, property & casualty and disability insurances. VIVAT is also offering asset management services via its asset manager ACTIAM. VIVAT primarily operates in the Netherlands, except for ACTIAM that also manages assets in Europe.

VIVAT generated € 2,923 million in gross written premiums (GWP) in 2017 which makes VIVAT one of the top 5 insurance companies in the Netherlands.

VIVAT's main offices are located in Amstelveen and Alkmaar. VIVAT also has smaller offices in Utrecht, Rotterdam and Assen.

##### Structure

VIVAT is organised into four product lines:

- Non-Life: this product line offers property, casualty and disability insurance for retail and SME markets (VIVAT Schadeverzekeringen).
- Individual Life: the portfolio of this product line mainly consists of life annuity insurance policies, mortgage-related endowment policies, term-life policies and unit-linked insurance policies. Individual Life operates in the retail and SME markets (SRLEV and Proteq Levensverzekeringen).
- Life Corporate: this product line offers pension solutions for business customers. A range of products provides the employees of our customers freedom in making the right decisions to secure their financial future. The main brand of this product line is Zwitserleven (SRLEV).
- Asset Management: this product line offers a comprehensive range of investment funds and investment solutions that ranges from responsible index investing to impact investing (ACTIAM).

The chart below translates the product lines structure into the legal structure of VIVAT.



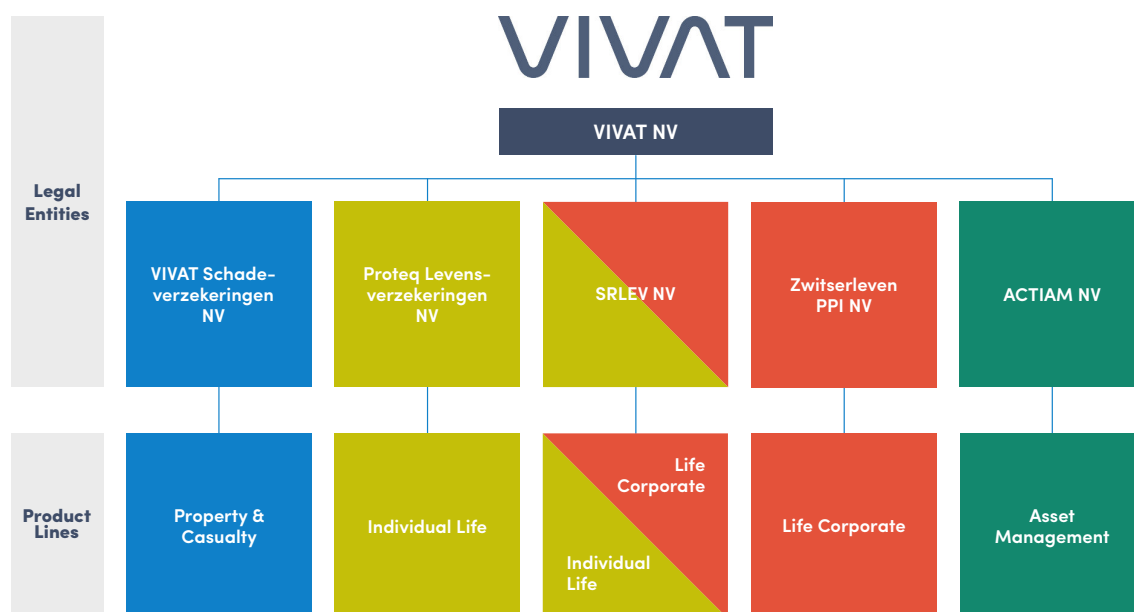


Figure 1: Structure VIVAT

Anbang Group Holdings Co. Limited, an indirect subsidiary of Anbang Insurance Group Co., Ltd., is the sole shareholder of VIVAT NV.

Within these product lines VIVAT recognises the following material lines of business:

Life insurance (SRLEV and Proteq Levensverzekeringen):

- > Insurance with profit participation;
- > Index-linked and unit-linked insurance;
- > Other life insurance.

Non-Life insurance (VIVAT Schadeverzekeringen):

- > Property insurance;
- > Casualty insurance;
- > Disability insurance.

## 2.1.2. Name and contact details

### Business information

Reporting reference date:	December 31, 2017
Group undertaking name:	VIVAT NV
Solo undertaking name:	SRLEV NV VIVAT Schadeverzekeringen NV Proteq Levensverzekeringen NV
Address:	Burg. Rijnderslaan 7, Amstelveen
Contact:	Victor Zijlema +31(0) 205436053
Shareholder:	Anbang Group Holdings Co. Limited 1 Austin Road West, Level 67, International Commerce Centre, Kowloon, Hong Kong, China
Supervisor:	De Nederlandsche Bank Westende 1, 1017 ZN Amsterdam +31(0) 205249111
External auditor:	Ernst & Young Accountants LLP Cross Towers, Antonio Vivaldistraat 150, 1083 HP Amsterdam +31(0) 884071000

### External auditor

The external auditor of VIVAT is Ernst & Young Accountants LLP (EY). EY has been appointed for the years 2016-2019 to audit the group financial statements of VIVAT NV as well as among others, the financial statements of the solo undertakings SRLEV NV, VIVAT Schadeverzekeringen NV and Proteq Levensverzekeringen NV and the prescribed subset of the Quantitative Reporting Templates. The SFCR has not been audited by EY.

## 2.1.3. Main brands

### Zwitserleven

Zwitserleven is a leading pension insurer in the Netherlands. Zwitserleven offers wealth accumulation products 'for later'.

For the fifth consecutive year, Zwitserleven has been awarded for having the most sustainable investment policy in the Netherlands.

### Reaal

Reaal offers Life and Non-life insurance products. Reaal improves the financial resilience of customers by helping them make well-considered choices about their financial situation.

In 2016 Proteq Dier & Zorg was rebranded to Reaal Dier & Zorg, so the brand leader in insurance for pet dogs and cats is now part of the Reaal family.

## **nowGo**

VIVAT's new digital channel nowGo enables customers to buy smart and simple products directly online. Fast, completely tailored and at a competitive price.

NowGo was launched in November and started with its focus on three segments: car, travel and living. As part of the introduction a new unique product was introduced: AirCare, offering the first European short term flight insurance.

## **ACTIAM**

ACTIAM is an alternative investment funds manager in accordance with the Dutch Financial Supervision Act. ACTIAM manages the assets of VIVAT's insurance entities, Listed and Non-listed Investment Funds for institutional and retail investors, various Pension Funds, Insurance Companies and Corporate Clients in Europe.

ACTIAM provides fund management services to both retail and institutional investors and asset management services to institutional investors.

### **2.1.4. Legal structure**

VIVAT NV owns 100% of the shares of the following main companies:

- > SRLEV NV
- > VIVAT Schadeverzekeringen NV
- > Proteq Levensverzekeringen NV
- > ACTIAM NV
- > Zwitserleven PPI NV

See Annex I for a list of material related undertakings.

### **2.1.5. Developments**

In 2017, VIVAT has focused on new opportunities and sustainability towards our clients. The strategic ambition to become an innovative insurer has led to several initiatives in products, services, methodologies and processes. The continued focus on cost reduction and revenue models could influence operational and compliance risks. These risks are addressed, managed and monitored within the VIVAT risk framework to maintain a sound and controlled organisation.

In order to realise more efficiency, VIVAT has defined the target IT landscape and has made non-target systems redundant – this rationalisation will continue in 2018. In addition, VIVAT has reduced its number of models in 2017, lowering model risk. This contributes to a more efficient and reliable valuation of underwriting and market risks and the determination of the solvency ratio. By following a risk based model validation calendar, we have been able to confirm that model improvements led to further reduction of model risk. Uncertainty arising from the remaining conversion projects was mitigated by continuous monitoring, applying workarounds and adopting a process for early provisioning in the accounts.

VIVAT continues to invest in the development of the control environment by the strategic programmes such as Data management and Risk Model Landscape. By doing so we are aiming to improve process controls, management information, risk management policies and first line risk maturity.

Due to new legislation both in the Netherlands and in the EU (General Data Protection Regulation - further: GDPR) privacy risks have become more relevant. Therefore ITC has set up a broad privacy programme to make VIVAT compliant with current privacy regulations. VIVAT is aware of the increasing strategic importance of collecting, managing and using data. Currently we are implementing a sustainable design for Data Governance to manage and monitor the diverse data related initiatives, taking into account all the relevant legislation, e.g. GDPR.



## 2.2. Performance from underwriting activities

### 2.2.1. VIVAT

In the table below the statement of profit or loss account by entity is presented:

#### Statement of profit or loss account by entity 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other <sup>1</sup>	VIVAT
<b>&gt; Income</b>					
Premium income	2,241	671	7	4	2,923
Less: Reinsurance premiums	12	39	-	-	51
<b>Net premium income</b>	<b>2,229</b>	<b>632</b>	<b>7</b>	<b>4</b>	<b>2,872</b>
Fee and commission income	26	-	-	61	87
Fee and commission expense	8	-	-	17	25
<b>Net fee and commission income</b>	<b>18</b>	<b>-</b>	<b>-</b>	<b>44</b>	<b>62</b>
Share in result of associates	9	-2	-	-6	1
Investment income	1,395	16	13	6	1,430
Investment income for account of policyholders	428	-	-	7	435
Result on investments for account of third parties	49	-	-	8	57
Result on derivatives	-388	-9	-12	-	-409
Other operating income	15	-	-	-	15
<b>Total income</b>	<b>3,755</b>	<b>637</b>	<b>8</b>	<b>63</b>	<b>4,463</b>
<b>Expenses</b>					
Technical claims and benefits	3,389	376	-	49	3,814
Charges for account of policyholders	77	-	-	10	87
Acquisition costs for insurance activities	23	143	-	-7	159
Result on liabilities from investments for account of third parties	49	-	-	8	57
Staff costs	154	73	3	51	281
Depreciation and amortisation of non-current assets	3	5	-	2	10
Other operating expenses	41	26	1	27	95
Impairment losses	4	-	-	4	8
Other interest expenses	110	11	-	6	127
Other expenses	-	-	-	-	-
<b>Total expenses</b>	<b>3,850</b>	<b>634</b>	<b>4</b>	<b>150</b>	<b>4,638</b>
<b>Result before taxation</b>	<b>-95</b>	<b>3</b>	<b>4</b>	<b>-87</b>	<b>-175</b>
Taxation	-40	1	1	-21	-59
<b>Net result continued operations for the period</b>	<b>-55</b>	<b>2</b>	<b>3</b>	<b>-66</b>	<b>-116</b>

<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitterleven PPI NV and of the subsidiaries of SRLEV (e.g. N.V. Pension ESC) and VIVAT Schadeverzekeringen. For more details we refer to Annex I.

## Statement of profit or loss account by entity 2016

In € millions	SRLEV	VIVAT Schade <sup>1</sup>	Proteq	Other <sup>2</sup>	VIVAT <sup>3</sup>
<b>&gt; Income</b>					
Premium income	1,830	666	7	5	2,508
Less: Reinsurance premiums	16	45	-	-	61
<b>Net premium income</b>	<b>1,814</b>	<b>621</b>	<b>7</b>	<b>5</b>	<b>2,447</b>
Fee and commission income	38	-	-	60	98
Fee and commission expense	2	-	-	30	32
<b>Net fee and commission income</b>	<b>36</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>66</b>
Share in result of associates	9	1	-	-9	1
Investment income	2,755	19	14	6	2,794
Investment income for account of policyholders	895	-	-	7	902
Result on investments for account of third parties	39	-	-	4	43
Result on derivatives	-265	18	14	-	-233
Other operating income	1	-	-	-1	-
<b>Total income</b>	<b>5,284</b>	<b>659</b>	<b>35</b>	<b>42</b>	<b>6,020</b>
<b>Expenses</b>		<b>-</b>		<b>-</b>	
Technical claims and benefits	3,118	426	29	18	3,591
Charges for account of policyholders	1,339	-	-	10	1,349
Acquisition costs for insurance activities	24	129	-	-18	135
Result on liabilities from investments for account of third parties	39	-	-	4	43
Staff costs	265	110	5	46	426
Depreciation and amortisation of non-current assets	6	7	-	2	15
Other operating expenses	48	32	1	17	98
Impairment losses	-2	12	-	18	28
Other interest expenses	114	7	-	-17	104
Other expenses	-	-	-	1	1
<b>Total expenses</b>	<b>4,951</b>	<b>723</b>	<b>35</b>	<b>81</b>	<b>5,790</b>
<b>Result before taxation</b>	<b>333</b>	<b>-64</b>	<b>-</b>	<b>-39</b>	<b>230</b>
Taxation	81	-16	-	-3	62
<b>Net result continued operations for the period</b>	<b>252</b>	<b>-48</b>	<b>-</b>	<b>-36</b>	<b>168</b>

<sup>1</sup> As of 2017 designated parts of the disability insurance liabilities, which previously were measured using locked-in interest rates, are measured using current market interest rates. The comparative figures affected have been adjusted accordingly resulting in a decrease of equity per 1 January 2016 of € 8 million, the impact on profit or loss after taxation in 2016 is a gain of € 9 million.

<sup>2</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitterleven PPI NV and of the subsidiaries of SRLEV (e.g. N.V. Pension ESC) and VIVAT Schadeverzekeringen. For more details we refer to Annex I.

<sup>3</sup> The comparative figures 2016 (net result, investment income, total income, result before taxation, taxation, total assets and total equity) have been adjusted due to changes in policies and presentation in 2017.

VIVAT's net result IFRS in 2017 of -/- € 116 million was negatively impacted by accounting differences between the market and book value of assets and liabilities, resulting in an addition to the technical provisions from the LAT-shortfall of € 360 million. For a more detailed explanation of the development in the IFRS LAT, we refer to Note 16 in the Notes to the Consolidated Financial Statements of VIVAT NV 2017.

Premium income increased 17% from € 2,508 million to € 2,923 million. This increase was mainly attributable to a single premium pension contract of € 375 million. Excluding this one-off, the premium increased by € 40 million, predominantly in Life Corporate. Premium income of P&C increased slightly and premium income of Individual Life was stable in challenging market conditions.

Direct investment return remained stable compared to 2016, given the challenging capital market and the optimisation of the investment portfolio that just has started.

Operating expenses have decreased following the restructuring in 2016, lowering staff costs by € 26 million. The total operating expenses have fallen by more than € 100 million from 2015 to 2017 on a comparable basis, despite the normal average wage increase during this period. Following the significant FTE reduction in 2016, the number of FTEs has decreased by 632 FTEs in 2017 to 2,466 FTEs at year end 2017 (31 December 2016: 3,674 FTEs) contributing to lower staff costs.

The addition of € 360 million to the LAT shortfall in 2017 compared to a LAT release of € 59 million in 2016.

Other realised and unrealised changes in the fair value of assets and liabilities that effect IFRS result were lower in 2017 compared to 2016, mainly due to lower realised gains on equity investments and real estate.

Non-operating expenses and profits consist of non-recurring items (> € 10 million) of a non-operational nature. In 2017, the net amount consisted mainly of a provision release of a legal claim of € 15 million. In 2016, the net amount consisted mainly of the restructuring provision and a goodwill impairment.

In the table below the IFRS premiums, technical claims and benefits are broken down by entity:

### Premiums, technical claims and benefits by entity

In € millions	SRLEV		VIVAT Schade		Proteq		Other		Total	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Premiums earned (gross)	2,241	1,830	671	666	7	7	3	5	2,922	2,508
Reinsurers' share	12	16	39	45	-	-	-	-	51	61
<b>Premiums earned</b>	<b>2,229</b>	<b>1,814</b>	<b>632</b>	<b>621</b>	<b>7</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>2,871</b>	<b>2,447</b>
Claims incurred (gross)	3,271	3,174	391	440	11	12	26	26	3,699	3,652
Reinsurers' share	24	22	5	30	-	-	-	-	29	52
<b>Claims incurred</b>	<b>3,247</b>	<b>3,152</b>	<b>386</b>	<b>410</b>	<b>11</b>	<b>12</b>	<b>26</b>	<b>26</b>	<b>3,670</b>	<b>3,600</b>
Changes in other technical provisions (gross)	204	1,292	-12	16	-11	17	9	2	190	1,327
Reinsurers' share	-15	-13	-2	-	-	-	-	-	-17	-13
<b>Changes in other technical provisions</b>	<b>219</b>	<b>1,305</b>	<b>-10</b>	<b>16</b>	<b>-11</b>	<b>17</b>	<b>9</b>	<b>2</b>	<b>207</b>	<b>1,340</b>
<b>Total technical claims and benefits</b>	<b>3,466</b>	<b>4,457</b>	<b>376</b>	<b>426</b>	<b>-</b>	<b>29</b>	<b>35</b>	<b>28</b>	<b>3,877</b>	<b>4,940</b>

The following paragraphs show the results per legal entity.

## 2.2.2. SRLEV

The figures shown in the table below are unconsolidated figures.

### Statement of profit and loss account SRLEV

In € millions	Life Corporate		Individual Life		Total	
	2017	2016	2017	2016	2017	2016 <sup>1</sup>
<b>&gt; Income</b>						
Premium income	1,362	950	879	880	2,241	1,830
Less: Reinsurance premiums	3	2	9	14	12	16
<b>Net premium income</b>	<b>1,359</b>	<b>948</b>	<b>870</b>	<b>866</b>	<b>2,229</b>	<b>1,814</b>
Fee and commission income	3	4	23	34	26	38
Fee and commission expense	2	1	6	1	8	2
<b>Net fee and commission income</b>	<b>1</b>	<b>3</b>	<b>17</b>	<b>33</b>	<b>18</b>	<b>36</b>
Share in result of associates	-	-	9	9	9	9
Investment income	701	1,996	694	759	1,395	2,755
Investment income for account of policyholders	193	726	235	169	428	895
Result on investments for account of third parties	-	-	49	39	49	39
Result on derivatives	-327	-317	-61	52	-388	-265
Other operating income	15	-	-	1	15	1
<b>Total income</b>	<b>1,942</b>	<b>3,356</b>	<b>1,813</b>	<b>1,928</b>	<b>3,755</b>	<b>5,284</b>
<b>&gt; Expenses</b>						
Technical claims and benefits	2,455	2,114	934	1,004	3,389	3,118
Charges for account of policyholders	-361	921	438	418	77	1,339
Acquisition costs for insurance activities	2	3	21	21	23	24
Result on liabilities from investments for account of third parties	-	-	49	39	49	39
Staff costs	86	141	68	124	154	265
Depreciation and amortisation of non-current assets	1	1	2	5	3	6
Other operating expenses	22	22	19	26	41	48
Impairment losses	3	-1	1	-1	4	-2
Other interest expenses	34	32	76	82	110	114
Other expenses	-	-	-	-	-	-
<b>Total expenses</b>	<b>2,242</b>	<b>3,233</b>	<b>1,608</b>	<b>1,718</b>	<b>3,850</b>	<b>4,951</b>
<b>Result before taxation</b>	<b>-300</b>	<b>123</b>	<b>205</b>	<b>210</b>	<b>-95</b>	<b>333</b>
Taxation	-84	30	44	51	-40	81
<b>Net result continued operations for the period</b>	<b>-216</b>	<b>93</b>	<b>161</b>	<b>159</b>	<b>-55</b>	<b>252</b>

<sup>1</sup> The comparative figures 2016 (net result, investment income, total income, result before taxation, taxation, total assets and total equity) have been adjusted due to changes in policies and presentation in 2017.

### Life Corporate

VIVAT's Life Corporate product line offers pension solutions for business customers. A range of products provide the employees of our customers freedom in making the right decisions to secure their financial future. The brand of this product line is Zwitserleven.



Gross written premium income increased by 43% compared to 2016, predominantly as a result of a pension fund buy-out of € 375 million single premium. Excluding the buy-out, premiums of direct pension products increased by € 37 million.

The net result IFRS decreased to -/- € 239 million, mainly driven by negative changes in the position of LAT shortfall, partly mitigated by lower cost, the absence of restructuring costs and a provision release for a legal claim. This year € 360 million net was added to the provisions due to a LAT shortfall in 2017, while € 59 million net was released in 2016. The full LAT shortfall is allocated to Life Corporate.

## Individual Life

The portfolio of the Individual Life product line mainly consists of life annuity insurance policies, mortgage-related endowment policies and unit-linked insurance policies. These products are targeted at the retail and SME markets.

Gross premium income remained stable at € 879 million, notwithstanding the shrinking individual life market. The decrease in regular premium income is compensated by income from single premium products. Net premium income increase is the result of an expired reinsurance contract in 2016.

The net result IFRS remained stable. The decrease in operating expenses, mostly as a result of the restructuring program, were largely offset by a lower cost coverage. The lower cost coverage was related to the shrinking portfolio and competitive market circumstances.

In the table below the IFRS premiums, technical claims and benefits are broken down to Solvency II Line of Business:

### Premiums, technical claims and benefits per line of business SRLEV

In € millions	Insurance with profit participation		Index-linked and unit-linked insurance		Other life insurance		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
Premiums written (gross)	266	299	673	742	1,302	789	2,241	1,830
Reinsurers' share	6	5	-	-	6	11	12	16
<b>Premiums written</b>	<b>260</b>	<b>294</b>	<b>673</b>	<b>742</b>	<b>1,296</b>	<b>778</b>	<b>2,229</b>	<b>1,814</b>
Claims incurred (gross)	684	1,113	2,006	1,556	581	505	3,271	3,174
Reinsurers' share	1	1	1	2	22	19	24	22
<b>Claims incurred</b>	<b>683</b>	<b>1,112</b>	<b>2,005</b>	<b>1,554</b>	<b>559</b>	<b>486</b>	<b>3,247</b>	<b>3,152</b>
Changes in other technical provisions (gross)	932	143	-973	-16	245	1,165	204	1,292
Reinsurers' share	-	-1	-	-	-15	-12	-15	-13
<b>Changes in other technical provisions</b>	<b>932</b>	<b>144</b>	<b>-973</b>	<b>-16</b>	<b>260</b>	<b>1,177</b>	<b>219</b>	<b>1,305</b>
<b>Total technical claims and benefits</b>	<b>1,615</b>	<b>1,256</b>	<b>1,032</b>	<b>1,538</b>	<b>819</b>	<b>1,663</b>	<b>3,466</b>	<b>4,457</b>

### 2.2.3. VIVAT Schadeverzekeringen

The figures shown in the table below are unconsolidated figures.

## Statement of profit or loss account VIVAT Schadeverzekeringen (P&C)

In € millions	2017	2016 <sup>1</sup>
<b>&gt; Income</b>		
Premium income	671	666
Less: Reinsurance premiums	39	45
<b>Net premium income</b>	<b>632</b>	<b>621</b>
Share in result of associates	-2	1
Investment income	16	19
Result on derivatives	-9	18
<b>Total income</b>	<b>637</b>	<b>659</b>
<b>&gt; Expenses</b>		
Technical claims and benefits	376	426
Acquisition costs for insurance activities	143	129
Staff costs	73	110
Depreciation and amortisation of non-current assets	5	7
Other operating expenses	26	32
Impairment losses	-	12
Other interest expenses	11	7
<b>Total expenses</b>	<b>634</b>	<b>723</b>
<b>Result before taxation</b>	<b>3</b>	<b>-64</b>
Taxation	1	-16
<b>Net result continued operations for the period</b>	<b>2</b>	<b>-48</b>

<sup>1</sup> As of 2017 designated parts of the disability insurance liabilities, which previously were measured using locked-in interest rates, are measured using current market interest rates. The comparative figures affected have been adjusted accordingly resulting in a decrease of equity per 1 January 2016 of € 8 million, the impact on profit or loss after taxation in 2016 is a gain of € 9 million.

Gross premium income increased by 1% in 2017 to € 671 million compared to 2016. Operating expenses (excluding reorganisation expenses in 2016) were lower as a result of the 2016 restructuring program.

The net IFRS result improved by € 50 million to € 2 million compared to 2016, due to lower operating expenses due to the reorganisation in 2016 and an improved technical result. In 2017 the technical result in, mainly, Motor and Liability improved significantly on the back of a lower claims ratio. The technical result of 2016 was heavily impacted by the hail storm (impact +/- € 15 million).

The COR of 99.0% improved 5.9 %-points compared to 2016. This improvement was driven by the lower claims ratio and expense ratio. Excluding the hail storm in 2016, the COR improved by 2.9 %-points (COR excluding hail storm 2016 was 101.9%).

The interest expenses include expenses of € 8 million net on the subordinated loans provided by VIVAT to VIVAT Schadeverzekeringen NV.

In the table below the IFRS premiums, technical claims and benefits are broken down to Solvency II Line of Business:

## Premiums, technical claims and benefits per line of business P&C

In € millions	Total Non-life		Health (similar to Life)		Total	
	2017	2016	2017	2016	2017	2016
Premiums earned (gross)	581	574	90	92	671	666
Reinsurers' share	34	40	5	5	39	45
<b>Premiums earned</b>	<b>547</b>	<b>534</b>	<b>85</b>	<b>87</b>	<b>632</b>	<b>621</b>
Claims incurred (gross)	346	403	45	37	391	440
Reinsurers' share	2	25	3	5	5	30
<b>Claims incurred</b>	<b>344</b>	<b>378</b>	<b>42</b>	<b>32</b>	<b>386</b>	<b>410</b>
Changes in other technical provisions (gross)	-	-	-12	16	-12	16
Reinsurers' share	-	-	-2	-	-2	-
<b>Changes in other technical provisions</b>	<b>-</b>	<b>-</b>	<b>-10</b>	<b>16</b>	<b>-10</b>	<b>16</b>
<b>Total technical claims and benefits</b>	<b>344</b>	<b>378</b>	<b>32</b>	<b>48</b>	<b>376</b>	<b>426</b>

## Premiums, technical claims and benefits per line of business Non-life

In € millions	Fire and other damage to property insurance		Motor insurance		Marine, aviation and transport insurance		General liability insurance		Other insurance		Total Non-life	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Premiums earned (gross)	212	198	198	203	36	36	54	49	81	88	581	574
Reinsurers' share	11	14	2	2	1	2	2	1	18	21	34	40
<b>Premiums earned</b>	<b>201</b>	<b>184</b>	<b>196</b>	<b>201</b>	<b>35</b>	<b>34</b>	<b>52</b>	<b>48</b>	<b>63</b>	<b>67</b>	<b>547</b>	<b>534</b>
Claims incurred (gross)	131	143	131	164	23	24	18	26	43	46	346	403
Reinsurers' share	-3	8	-2	5	1	1	-5	-1	11	12	2	25
<b>Claims incurred</b>	<b>134</b>	<b>135</b>	<b>133</b>	<b>159</b>	<b>22</b>	<b>23</b>	<b>23</b>	<b>27</b>	<b>32</b>	<b>34</b>	<b>344</b>	<b>378</b>
<b>Total technical claims and benefits</b>	<b>134</b>	<b>135</b>	<b>133</b>	<b>159</b>	<b>22</b>	<b>23</b>	<b>23</b>	<b>27</b>	<b>32</b>	<b>34</b>	<b>344</b>	<b>378</b>

### 2.2.4. Proteq Levensverzekeringen

The figures shown in the table below are unconsolidated figures.

## Statement of profit or loss account Proteq Levensverzekeringen

In € millions	2017	2016
<b>&gt; Income</b>		
Premium income	7	7
Less: Reinsurance premiums	-	-
<b>Net premium income</b>	<b>7</b>	<b>7</b>
Investment income	13	14
Result on derivatives	-12	14
<b>Total income</b>	<b>8</b>	<b>35</b>
<b>&gt; Expenses</b>		
Technical claims and benefits	-	29
Staff costs	3	5
Other operating expenses	1	1
<b>Total expenses</b>	<b>4</b>	<b>35</b>
<b>Result before taxation</b>	<b>4</b>	<b>-</b>
Taxation	1	-
<b>Net result continued operations for the period</b>	<b>3</b>	<b>-</b>

The net result continued operations for the period increased to € 3 million in 2017 mainly due to lower staff expenses.

In the table below the IFRS premiums, technical claims and benefits are broken down to Solvency II Line of Business:

## Premiums, technical claims and benefits per line of business

In € millions	Insurance with profit participation		Index-linked and unit-linked insurance		Other life insurance		Total	
	2017	2016	2017	2016	2017	2016	2017	2016
Premiums written (gross)	6	7	-	-	1	-	7	7
Reinsurers' share	-	-	-	-	-	-	-	-
<b>Premiums written</b>	<b>6</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>7</b>	<b>7</b>
Claims incurred (gross)	7	7	-	-	4	5	11	12
Reinsurers' share	-	-	-	-	-	-	-	-
<b>Claims incurred</b>	<b>7</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>5</b>	<b>11</b>	<b>12</b>
Changes in other technical provisions (gross)	2	2	-	-	-13	15	-11	17
Reinsurers' share	-	-	-	-	-	-	-	-
<b>Changes in other technical provisions</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-13</b>	<b>15</b>	<b>-11</b>	<b>17</b>
<b>Total technical claims and benefits</b>	<b>9</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>-9</b>	<b>20</b>	<b>-</b>	<b>29</b>

## 2.3. Performance from investment activities

In the next section in the tables IFRS figures are shown, allowing for a comparison with 2016.

### 2.3.1. VIVAT

The following tables show a breakdown of the investment income in the profit and loss of VIVAT:

#### Breakdown investment income in profit and loss account 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Investment income	1,395	16	13	6	<b>1,430</b>
Result on derivatives	-388	-9	-12	-	<b>-409</b>
<b>Total</b>	<b>1,007</b>	<b>7</b>	<b>1</b>	<b>6</b>	<b>1,021</b>

#### Breakdown investment income in profit and loss account 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Investment income	2,755	19	14	6	<b>2,794</b>
Result on derivatives	-265	18	14	-	<b>-233</b>
<b>Total</b>	<b>2,490</b>	<b>37</b>	<b>28</b>	<b>6</b>	<b>2,561</b>

#### Result on investment income

The following tables show a further breakdown of the investment income:

#### Breakdown of investment income 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Interest	1,004	16	13	-9	<b>1,024</b>
Dividend	31	-1	-	-	<b>30</b>
Rental income	14	-	-	11	<b>25</b>
Rental expense	-2	-	-	-3	<b>-5</b>
<b>Total interest dividend and rental income</b>	<b>1,047</b>	<b>15</b>	<b>13</b>	<b>-1</b>	<b>1,074</b>
Realised revaluations	390	1	-	-1	<b>390</b>
Unrealised revaluations	-42	-	-	8	<b>-34</b>
<b>Total revaluations through P&amp;L</b>	<b>348</b>	<b>1</b>	<b>-</b>	<b>7</b>	<b>356</b>
<b>Total investment income</b>	<b>1,395</b>	<b>16</b>	<b>13</b>	<b>6</b>	<b>1,430</b>

## Breakdown of investment income 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Interest	1,075	19	13	-14	<b>1,093</b>
Dividend	39	-	-	1	<b>40</b>
Rental income	10	-	-	12	<b>22</b>
Rental expense	-2	-	-	-3	<b>-5</b>
<b>Total interest dividend and rental income</b>	<b>1,122</b>	<b>19</b>	<b>13</b>	<b>-4</b>	<b>1,150</b>
Realised revaluations	1,627	-	1	4	<b>1,632</b>
Unrealised revaluations	6	-	-	6	<b>12</b>
<b>Total revaluations through P&amp;L</b>	<b>1,633</b>	<b>-</b>	<b>1</b>	<b>10</b>	<b>1,644</b>
<b>Total investment income</b>	<b>2,755</b>	<b>19</b>	<b>14</b>	<b>6</b>	<b>2,794</b>

The investment income of VIVAT primarily consist of interest income and realized revaluations. The decrease in investment income in 2017 is caused by the high level of sales in 2016. The sales of bonds decreased in 2017 compared to 2016, which leads to lower realised gains and losses. Because of these sales the interest income on the available for sale portfolio decreases.

The investment income in the segment "Other" includes mainly rental income from the participations of SRLEV and interest income concerning intercompany loans. The interest income decreased with +/- € 69 million compared to 2016 as a result of the preparation for re-risking. Long duration Sovereign bonds are sold and short duration Sovereign bonds are bought as liquid assets for re-risking. A large part (€ 68 million) of the decrease in interest income is offset by an increase in technical provision, due to amortization of realized results because of the application of shadow- and discretionary profit sharing accounting.

## Result on derivatives

### Breakdown of result on derivatives 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Result on derivatives held for cash flow hedge accounting	-4	-	-	-	<b>-4</b>
Market value movements in derivatives held for fair value hedge accounting	16	-	-	-	<b>16</b>
Market value movements of derivatives held for ALM not classified for hedge accounting	-400	-9	-12	-	<b>-421</b>
<b>Total interest dividend and rental income</b>	<b>-388</b>	<b>-9</b>	<b>-12</b>	<b>-</b>	<b>-409</b>



## Breakdown of result on derivatives 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Result on derivatives held for cash flow hedge accounting	5	-	-	-	5
Market value movements in derivatives held for fair value hedge accounting	5	-	-	-	5
Market value movements of derivatives held for ALM not classified for hedge accounting	-275	18	14	-	-243
<b>Total interest dividend and rental income</b>	<b>-265</b>	<b>18</b>	<b>14</b>	<b>-</b>	<b>-233</b>

The result on derivatives is due to market value movements of derivatives for hedging interest rate sensitivities.

## 2.3.2. SRLEV

### Investment income

#### Breakdown of investment income 2017

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Investment property	Total
Interest	157	410	437	-	1,004
Dividend	-	31	-	-	31
Rental income	-	-	-	14	14
Rental expense	-	-	-	-2	-2
<b>Total interest dividend and rental income</b>	<b>157</b>	<b>441</b>	<b>437</b>	<b>12</b>	<b>1,047</b>
Realised revaluations	2	384	1	3	390
Unrealised revaluations	-4	-43	-	5	-42
<b>Total revaluations through P&amp;L</b>	<b>-2</b>	<b>341</b>	<b>1</b>	<b>8</b>	<b>348</b>
<b>Total investment income</b>	<b>155</b>	<b>782</b>	<b>438</b>	<b>20</b>	<b>1,395</b>

#### Breakdown of investment income 2016

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Investment property	Total
Interest	93	535	447	-	1,075
Dividend	-	39	-	-	39
Rental income	-	-	-	10	10
Rental expense	-	-	-	-2	-2
<b>Total interest dividend and rental income</b>	<b>93</b>	<b>574</b>	<b>447</b>	<b>8</b>	<b>1,122</b>
Realised revaluations	1	1,623	3	-	1,627
Unrealised revaluations	-3	-	-	9	6
<b>Total revaluations through P&amp;L</b>	<b>-2</b>	<b>1,623</b>	<b>3</b>	<b>9</b>	<b>1,633</b>
<b>Total investment income</b>	<b>91</b>	<b>2,197</b>	<b>450</b>	<b>17</b>	<b>2,755</b>

### Fair value through profit or loss

Fair value through profit or loss investments consist primarily of interest income from bonds.

### Available for sale

SRLEV holds fixed-income assets to generate interest income. These fixed income assets are generally classified as Available For Sale and consist mainly of Dutch and German Government bonds. The decrease in investment income in 2017 is caused by the high level of sales in 2016. The sales of bonds decreased in 2017 compared to 2016, which leads to lower realised gains and losses. Because of these sales the interest income on the available for sale portfolio decreases.

### Loans and receivables

The investment income of Loans and receivables relates to loans and saving mortgages. Investment income of saving mortgages was € 237 million in 2017.

## 2.3.3. VIVAT Schadeverzekeringen

### Investment income

#### Breakdown of investment income 2017

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Total
Interest	2	14	-	16
Dividend	-	-1	-	-1
<b>Total interest dividend and rental income</b>	<b>2</b>	<b>13</b>	<b>-</b>	<b>15</b>
Realised revaluations	-	1	-	1
Unrealised revaluations	-	-	-	-
<b>Total revaluations through P&amp;L</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>1</b>
<b>Total investment income</b>	<b>2</b>	<b>14</b>	<b>-</b>	<b>16</b>

#### Breakdown of investment income 2016

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Total
Interest	3	16	-	19
Dividend	-	-	-	-
<b>Total interest dividend and rental income</b>	<b>3</b>	<b>16</b>	<b>-</b>	<b>19</b>
Realised revaluations	-	-	-	-
Unrealised revaluations	-	-	-	-
<b>Total revaluations through P&amp;L</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total investment income</b>	<b>3</b>	<b>16</b>	<b>-</b>	<b>19</b>

VIVAT Schadeverzekeringen holds fixed-income assets to generate interest income. These fixed-income assets are classified as Available For Sale and mainly consist of Dutch and German Government bonds.

### Result on derivatives

The results on derivatives is due to market value movements of derivatives for hedging interest rate sensitivities.

## 2.3.4. Proteq Levensverzekeringen

### Investment income

#### Breakdown of investment income 2017

In € millions	Fair value through profit or loss	Available for sale	Total
Interest	1	12	13
Realised revaluations	-	-	-
<b>Total investment income</b>	<b>1</b>	<b>12</b>	<b>13</b>

#### Breakdown of investment income 2016

In € millions	Fair value through profit or loss	Available for sale	Total
Interest	1	12	13
Realised revaluations	-	1	1
<b>Total investment income</b>	<b>1</b>	<b>13</b>	<b>14</b>

Proteq Levensverzekeringen holds fixed income assets to generate interest income. These fixed-income assets are classified as available for sale and mainly consist of Dutch and German Government bonds.

### Result on derivatives

The results on derivatives is due to market value movements of derivatives for hedging interest rate sensitivities.

## 2.4. Performance of other activities

The performance of other activities relate to VIVAT NV, ACTIAM NV, Zwitserleven PPI NV and of the subsidiaries of SRLEV (e.g. N.V. Pension ESC) and VIVAT Schadeverzekeringen. For more details we refer to Annex I.

### Zwitserleven PPI

In € thousands	2017	2016
<b>&gt; Result</b>		
Total Income	1,550	765
Total costs	1,723	1,092
Net result continued operations for the period	-130	-245

The total income of Zwitserleven PPI relates to management and administrative fees. In 2017 Zwitserleven PPI has grown significantly in number of clients and its services. As a result, the total income and corresponding costs increased.

## ACTIAM

In € millions	2017	2016
<b>&gt; Result</b>		
Total Income	44	38
Operating expenses	42	40
Restructuring costs	-	1
Total costs	42	41
Net result continued operations for the period	1	-2
Assets under management (€ billions)	54.1	54.6

Total income relates to asset management fees, which were higher in 2017 as a result of increased net fee income with stable fee expenses. Total income improved despite a small decline in assets under management, as a result of outflows due to maturing and changing product propositions by distributors of the unit linked investment funds. The decline in captive funds was partly offset by new third party inflows from responsible index funds for retail investors.

Operating expenses rose by € 2 million as a result of strategic investments to support future sustainable profitable growth. In July 2017, ACTIAM outsourced its middle and back office activities to BNP Paribas which will help lower the cost base going forward.

The net result continued operations for the period increased compared to last year (2016: -/- € 2 million).

## Holding

In € millions	2017	2016
<b>&gt; Result</b>		
Net fee and commission income	-1	8
Investment income	9	15
Total Income	8	23
Operating expenses	21	19
Restructuring costs	-	4
Total costs	21	23
Impairment losses	-	17
Other interest expenses	18	4
Net result continued operations for the period	-40	-20

Net result continued operations for the period decreased by € 20 million compared to 2016, mainly driven by higher interest expenses and investments for strategic projects. Interest expenses increased in 2017 due to a \$ 190 million Tier 2 loan issued to the shareholder in December 2016 and the € 650 million senior notes issued in May 2017. These changes in the funding profile reduced the net underlying result by € 11 million. Due to the refinancing of the subordinated notes, interest expenses will decrease by € 17 million going forward. One-off costs relating to strategic projects had a negative impact on the net underlying result of € 8 million.

In 2017, the assets and liabilities of Volmachtkantoor Nederland BV were transferred to P&C (previously part of Holding), leading to both lower income (€ 8 million) and lower expenses (€ 11 million) in the P&L of the Holding.

In 2016 an impairment of goodwill of € 17 million negatively impacted the net result continued operations for the period of the Holding.

## **2.5. Any other disclosures**

No other disclosures are applicable.

## 3. System of Governance

### 3.1. General governance arrangements

VIVAT NV is a public limited company. Anbang Group Holdings Co. Limited holds 100% of the shares in VIVAT NV. VIVAT has a two-tier board structure consisting of an Executive Board (EB) and a Supervisory Board (SB).

VIVAT is a matrix organisation with both product and functional lines focusing on sustainable profitable growth. The governance model of VIVAT reflects this matrix organisation with product lines being sponsored by various board members and functional lines included in the various product line management teams. This allows control at the level of management teams facilitating the product lines, risk and finance to work together at this level. At the level of the board, sponsorship by each EB member of product and functional lines ensure that they are closely involved in the business of the company.

#### 3.1.1. The Executive Board

The Executive Board is responsible for the strategy and management of the company. The Executive Board as of 31 December 2017 consists of the following:

##### Composition, Appointment and Role

Name	Nationality	Position	Date of appointment
J.J.T. (Ron) van Oijen	Dutch	Chief Executive Officer	14 March 2016
Y. (Yinhua) Cao	Chinese	Chief Financial Officer	23 October 2015
L. (Lan) Tang	British	Chief Risk Officer	26 July 2015
W.M.A. (Wendy) de Ruiter-Lörx	Dutch	Chief Commercial Officer	24 May 2016
X.W. (Xiao Wei) Wu	Chinese	Chief Transformation Officer	26 July 2015
J.C.A. (Jeroen) Potjes	Dutch	Chief Operating Officer	24 May 2016
F. (Feng) Zhang <sup>1</sup>	Chinese	Chief of Staff	26 July 2015

<sup>1</sup> Mr Zhang resigned as per 11 April, 2018.

**J.J.T. (Ron) van Oijen** (1961) is chief executive officer. He obtained a master's degree in actuarial science at the University of Amsterdam, followed by an advanced management programme at the Wharton Business School. Van Oijen started his career at Aegon and ING in the Netherlands. He subsequently worked as chief executive officer of ING Life and ING Bank in the Czech Republic and Slovakia for four years. In Seoul and Hong Kong he lead the large ING Life branches in India, Thailand and South Korea as regional chief executive officer, after which he was appointed as chief executive officer of AIA Thailand. Van Oijen is also a member of the board of the Association of Insurers and president of the Royal Actuarial Association of the Netherlands. In 2017 he was appointed as chairman of the supervisory board of football club NEC.

**Y. (Yinhua) Cao** (1975) is chief financial officer. He has a bachelor's degree in international finance from the Shanghai University of Economics and Finance. Cao started his career in the financial service sector at



PricewaterhouseCoopers in 1998. He was the lead audit partner for large insurance companies and asset management companies, and as the lead partner, he was also involved in various finance and solvency consulting programs for insurers. His last position with PricewaterhouseCoopers was the partner of the financial service group. At Anbang, he commenced as managing director of Anbang Asset Management Hong Kong and finance director of the Anbang Insurance Group Co., Ltd.. Cao is also a member of the financial and economic committee of the Association of Insurers.

**L. (Lan) Tang** (1974) is chief risk officer of the Executive Board. He has a bachelor degree in engineering from Beijing University of Aeronautics and Astronautics and a master degree in actuarial science from Central University of Finance and Economics in Beijing. Tang is a qualified actuary of the United Kingdom. He worked as a consulting actuary for an actuarial consulting firm in London, after which he worked for a global actuarial consulting firm in Hong Kong and an accounting firm in China. In 2010, he started to work as the chief actuary of Anbang Life, where his last position was the deputy general manager and chief actuary of Anbang Life. Tang is also chairman of Fidea NV, as well as a member of the supervisory boards of ACTIAM Beleggingsfondsen NV, RZL Beleggingsfondsen NV and Zwitserleven Beleggingsfondsen. He is also a non-executive director of Bank Nagelmackers NV.

**W.M.A. (Wendy) de Ruiter-Lörx** (1973) is chief commercial officer of the Executive Board. She holds a master's degree in business economics from Erasmus University Rotterdam. She also completed a master's in management & organisation at TIAS Business School in Tilburg. She started her career at ING and Nationale Nederlanden, where she worked for 15 years, fulfilling various managerial roles in operations and product and process management at both Nationale Nederlanden and ING Bank. Her most recent position at Nationale Nederlanden was that of director of retail clients. De Ruiter-Lörx joined Reaal Life as a unit manager in 2012. Two years later, she was appointed director of Reaal's life business in charge of life policies and mortgages. De Ruiter-Lörx is a member of the distribution committee of the Association of Insurers.

**X.W. (Xiao Wei) Wu** (1980) is chief transformation officer of the Executive Board. She has a bachelor's degree in international finance from the University in Fudan, China, and a master's degree in business administration from China Europe International Business School in Shanghai. She worked as associate principal at McKinsey Shanghai, for the insurance sector in Asia. In 2012, Wu commenced at the Anbang group of companies and subsequently worked as director of strategy, director of IT and director of risk. Wu is non-executive member and chairwoman of Anbang Belgium Holding NV and Bank Nagelmackers NV.

**J.C.A. (Jeroen) Potjes** (1965) is chief operating officer of the Executive Board. He earned a master's degree in econometrics from Erasmus University Rotterdam as well as a doctorate in economics from the same university. Potjes joined ING Verzekeringen in 1992; he started out at the head office before being assigned to Japan between 1997 and 2001 and to Hong Kong until 2008; in Hong Kong, he served as chief financial officer of the insurance business and asset manager of ING Asia Pacific. He returned to the Netherlands in 2008, when he became responsible for the risk management practices of the global insurance business of ING and subsequently NN Group. During this period, Potjes also sat on the supervisory board of ING Re, ING's reinsurance business. Potjes joined Anbang in 2015, one of his roles being that of non-executive director of Anbang Belgium Holding NV. Potjes is also a member of the committee life insurance of the Association of Insurers and a member of the board of SIVI.

**F. (Feng) Zhang** (1979) is chief of staff of the Executive Board. He has a master's degree in business administration from the University of Northumbria at Newcastle and a bachelor's degree in literature from Wuhan University, China. Zhang joined Anbang in 2005, worked as director of claims, underwriting, sale and

marketing and human resources. In 2011 he commenced as deputy general manager of Anbang Property and Casualty Insurance. His last positions were general manager of Anbang Property and Casualty Insurance, director of Anbang Life Insurance, director of Anbang Annuity Insurance and chairman of the board at Anbang Property and Casualty Insurance. Mr Zhang resigned as per 11 April, 2018.

## Governing Rules

VIVAT adheres to the Code of Conduct of Insurers 2015.

VIVAT aims to have gender balance of having at least 30% men or 30% women on the board of directors. VIVAT currently has close to 30% females on the board.

The governing rules of VIVAT are set out in the articles of association and regulations of the Executive Board of VIVAT. Under the articles of association and regulations, certain decisions of the Executive Board are subject to the approval of its shareholder and/or the Supervisory Board of the relevant company or companies. The members of the Executive Board of VIVAT NV are the same as the management board members of SRLEV NV, VIVAT Schadeverzekeringen NV and Proteq Levensverzekeringen NV. This means that the shared management principle has been implemented at all management levels.

As part of the continuing education programme of VIVAT, the Executive Board members participate in various education sessions. These sessions are sometimes attended together with the Supervisory board members or with senior management of VIVAT and are provided by internal and external speakers. The continuing education programme this year included sessions such as PRIIPS, GDPR, inducements, Data analytics and cybercrime.

VIVAT NV is a public limited company. Anbang Group Holdings Co. Limited holds 100% of the shares in VIVAT NV. The Chinese regulator China Insurance Regulatory Committee (CIRC) announced on Feb 23, 2018 that it is temporarily taking over the management of Anbang. VIVAT has taken notice of this.

### 3.1.2. The Supervisory Board

#### Composition, appointment and role

Name	Nationality	Position	Date of appointment
M.W. (Maarten) Dijkshoorn	Dutch	Chairman	23 December 2016
M.R. (Miriam) van Dongen	Dutch	Member	26 July 2015
M. (Ming) He	American	Member	26 July 2015
K.C.K. (Kevin) Shum	British	Member	26 July 2015
P.P.J.L.M.G. (Pierre) Lefèvre	Belgian	Member	26 July 2015

**M.W. (Maarten) Dijkshoorn** was appointed as chairman of the Supervisory Board on 23 December 2016. He is a member of the remuneration and nomination committee, a member of the risk committee and a member of the audit committee. Dijkshoorn has worked in the financial services industry for more than 40 years. From 2002 to 2009, Dijkshoorn was chief executive officer and chief operational officer of Eureka BV (Achmea). Prior to that, Dijkshoorn held various management functions within Nationale-Nederlanden for 25 years. He was, until recently, supervisory board member of Monuta and MediRisk and chairman of the supervisory board of de Goudse Verzekeringen NV.

**M.R. (Miriam) van Dongen** was appointed as member of the Supervisory Board on 26 July 2015. She is chair of the audit committee and member of the risk committee and member of the remuneration and nomination committee. She has over 20 years of experience in corporate finance, business strategy and in the financial services industry. In 2007, Van Dongen joined Achmea BV/Eureko BV as chief financial officer of the health division. She holds various supervisory board positions and is the chair of the audit committees of these supervisory boards. Van Dongen currently serves as supervisory board member and the chair of the audit committee of CB Logistics and PGGM NV. She is also member of the supervisory board and the chair of the audit committee of Optiver. Recently, she has been appointed member of the Supervisory Council and chair of audit committee of The Netherlands' Kadaster (Land Registry) and board member of Stichting Administratiekantoor Aandelen KAS BANK.

**M. (Ming) He** was appointed as member of the Supervisory Board on 26 July 2015. He is member of the audit committee. He went to Chengdu University of technology in China for his college education and completed a bachelor degree in 1982. He obtained a master's degree at Bowling Green State University in 1992 and a MBA at the American Graduate School of International Management in 1998. He started his career at the Superior Environment Corporation in 1992 as an environmental engineer. In 2009, he joined Anbang Insurance Group Co., Ltd. as chief investment director of Anbang Property & Casualty Insurance Co., Ltd. In 2012 he was appointed as director and general manager of Anbang Asset Management. He is chief executive officer of AB Win Win II [LP].

**P.P.J.L.M.G. (Pierre) Lefèvre** was appointed as member of the Supervisory Board on 26 July 2015. He is chairman of the risk committee and member of the audit committee. After his studies in mechanical engineering and industrial administration, Lefèvre became internal auditor at Unilever before joining AXA Belgium NV in Belgium as a financial controller. He continued his career with AXA Belgium as general manager for Individual Life and later on as general manager for P&C Personal Lines. In 1994, he moved to AXA United Kingdom plc. as chief executive officer of the P&C insurance business and was subsequently appointed chairman of the board. In 1998 he was appointed as chief executive officer of AXA Netherlands. Between 2002 and 2013 Lefèvre fulfilled various chief executive officer roles in subsidiaries of Groupama SA. Since 2013, Lefèvre has acted as independent non-executive director and chair of the risk committee of Hasting Insurance Group Holdings PLC and, since 2014 as senior advisor of Eurohold Corporate Finance, SL. He also serves as an independent non-executive director and chairman of the risk committee of Advantage Insurance Company Limited and as non-executive director of Anbang Belgium Holding NV. He is also an independent non-executive director, member of the nomination and governance committee and chairman of the audit, risk and compliance committee of Fidea NV.

**K.C.K. (Kevin) Shum** was appointed as member of the Supervisory Board on 26 July 2015. He is chair of the remuneration and nomination committee and member of the risk committee. Shum joined Anbang Insurance Group Co., Ltd. in March 2014. With over 20 years' experience in the financial industry, Shum is a qualified solicitor of England & Wales, a solicitor of Hong Kong, a member of the Chartered Institute of Arbitrators in the U.K. and is a Chartered Financial Analyst in the U.S. Prior to joining Anbang, Shum worked as a private practitioner at Coudert Brothers LLP and Jun He Law Offices, as counsel for private equity firm Alliance Capital Asia Limited and a hedge fund of CCIB Asset Management Co. Limited. He currently serves as Executive Director, Legal and Compliance, for Anbang Overseas Holdings Co. Limited, is a non-executive director of Fidea NV (chair of governance, nomination and remuneration committee) as well as a member of the supervisory boards of ACTIAM Beleggingsfondsen NV, RZL Beleggingsfondsen NV and Zwitserleven Beleggingsfondsen.

## **Meetings of the Supervisory Board**

The Supervisory Board meets on a regular basis in accordance with an annual schedule. The Supervisory Board has drawn up regulations that elaborate and expand on a number of provisions from the articles of association. These regulations set out additional powers. All members of the Supervisory Board have declared their acceptance of the substance of these regulations and have undertaken to abide by the rules contained therein.

## **Functioning of the Supervisory Board**

The Supervisory Board aims to have a strong representation of diversity in terms of experience, gender, age, professional and cultural background. In accordance with the regulations of the Supervisory Board, the Supervisory Board considers complementarity, collegial collaboration, independence and diversity to be conditions for a proper performance of duties by the Supervisory Board.

All members have confirmed the moral and ethical conduct declaration, which includes the need to make a balanced assessment of the interests of customers, shareholder, bondholders, employees and the society in which the company operates. The regulations of the Supervisory Board explicitly provide that the Supervisory Board shall strike a careful balance between the interests of the company's stakeholders, such as the clients of the company, shareholder and employees.

## **Self-assessment**

The Supervisory Board carries out a self-assessment once every three years facilitated by an external consultant. This was done in 2016. The Chairman of the Supervisory Board will, regarding the year 2017, conduct individual interviews with Supervisory Board and Executive Board members to evaluate the functioning of the Supervisory Board as a whole, the functioning of the individual committees, the individual supervisory directors and the relationship with the Executive Board during 2017.

## **Continuing Education**

Members of the Supervisory Board are encouraged to maintain their expertise at the required standard and enhance it where necessary. In this context, a program is compiled for the Supervisory Board every year. Each year the Supervisory Board members take at least three training courses within the framework of continuing education. The continuing education program relates to relevant developments within VIVAT NV and the financial sector, corporate governance in general and of the financial sector in particular, customers, integrity, risk management, financial reporting and audit. The participation of the members of the Supervisory Board in the programme was monitored.

These continuing education sessions included – amongst others – topics on Cyber Security, IFRS 9, Risk Appetite Statement, Deep dive financials and pensions.

## **Important Topics and Key Discussions**

The formal meetings of the Supervisory Board were every six weeks and several additional meetings and conference calls were held. The attendance rate at meetings and committees is high, demonstrating the strength of the Supervisory Board's commitment. None of the Supervisory Board members were frequently absent at these meetings and meaning that there was always a valid quorum.

During the formal meetings the Supervisory Board was updated on strategic activities and topical issues. Furthermore, the Supervisory Board was briefed on the discussions and resulting recommendations from Supervisory Board committee meetings. Twice a year the Supervisory Board had business reviews with all product lines to discuss their business activities and key initiatives.

In 2017 the Supervisory Board discussed and approved several items, such as:

- > Debt issuance
- > Re-risking program
- > Strategy update
- > Risk Appetite
- > General Data Protection Regulation
- > Investment insurance policies
- > Operational Plan

The Supervisory Board and the Chairman of the Supervisory Board had regular contact about these subjects with other stakeholders of VIVAT NV, the Dutch Central Bank (DNB) and Dutch Authority for Financial Markets (AFM).

### **Cooperation with Committees**

The Supervisory Board has three committees: the Audit Committee, the Risk Committee and the Remuneration and Nomination Committee. Each member of the Supervisory Board has sufficient knowledge and experience to assess the main aspects of VIVAT's policy and to form an independent opinion of the basic risks. Decisions regarding risk management and risk control are prepared and recommended by the Risk Committee (RC) and the Audit Committee (AC), respectively. These committees are carefully composed where at least two members of these committees have knowledge of risk management / risk control and internal control / reporting respectively. The Audit Committee discussed the audit scope, key audit matters, the external auditor's report and the management letter of the external auditor. The independence of the external auditor and fees were also reviewed by the Audit Committee. The Audit Committee maintains regular contact with the external auditor by meetings between the chair of the Audit Committee and the external auditor.

The Supervisory Board's Remuneration and Nomination Committee (ReNomCo) prepares decisions on remuneration regarding Identified Staff and employees in control functions. The ReNomCo members have sufficient expertise with regard to remuneration policies, culture and incentives.

Cooperation between the Supervisory Board and the committees was positive. The meetings of the committees drill down into the subject matter so that the decisions of the Supervisory Board can be carefully prepared. The substance of the meetings of the committees is fed back to the meeting of the Supervisory Board to ensure that the supervisory directors are kept fully informed and are well positioned to take prudent decisions.

The Supervisory Board wants to thank the Executive Board and all employees for their efforts in 2017. Special word of thanks to Mr. Feng Zhang. During his period as member of the Executive Board Mr. Feng Zhang supervised certain staff functions of the company. The Supervisory Board thanks Mr. Feng Zhang for his dedication and contribution to setting up an efficient, customer-oriented organisation and his contribution to the substantial cost reductions.

## **3.2. Remuneration**

### **3.2.1. Remuneration policy VIVAT NV**

For the 'Remuneration policy VIVAT NV' we refer to paragraph 4.4. of the Annual Report VIVAT NV 2017.

### 3.2.2. Actual Remuneration (former) Members of the Executive Board

The following table provides a breakdown of the total remuneration of the Executive Board for the year 2016 and 2017, including former and existing key management. More information about the remuneration of the boards and comparative information has been included in Note 22 of the Annual report VIVAT NV 2017.

#### Breakdown of Remuneration (former) Members of the Executive Board

In € thousands	2017	2016
Short-term employee benefits	4,691	4,419
Post-employment benefits	150	125
Termination benefits	-	695
<b>Total</b>	<b>4,841</b>	<b>5,239</b>

#### Loans, advances and guarantees

There are no loans, advances and guarantees outstanding on 31 December 2017 (and 2016) and/or granted to members of the Executive Board during 2017.

### 3.2.3. Actual Remuneration (former) Members of the Supervisory Board

The following table provides an overview of the total remuneration of the Supervisory Board members in 2016 and 2017 (excluding 21% VAT).

#### Breakdown of Remuneration (former) Members of the Supervisory Board

In € thousands	2017	2016
Total fixed actual remuneration for Supervisory Board members	610	543
Total remuneration for delegated Supervisory Board members	-	188
Total remuneration for the members of the Supervisory Board's Committees	25	25
<b>Total</b>	<b>635</b>	<b>756</b>

#### Loans, advances and guarantees

There are no loans, advances and guarantees outstanding on 31 December 2017 (and 2016) and/or granted to members of the Supervisory Board during 2017.

### 3.2.4. Balances and Transactions with Shareholders and Key Management Personnel of VIVAT

#### Identity of related parties

Parties are considered to be related if one party can exercise control or significantly affect the other party's financial or operating policies. VIVAT's related parties are its parent Anbang and affiliates and VIVAT's key management personnel and their close family members. Unless stated otherwise, transactions with related parties are conducted at arm's length.



## Intra-group Balances and Transactions between VIVAT NV, Anbang and Affiliates

	Anbang		Affiliates		Total	
In € millions	2017	2016	2017	2016	2017	2016
<b>&gt; Positions</b>						
Other assets	-	-	2	-	2	-
Other liabilities	2	-	-	-	-	-
Subordinated private loans	-	482	-	-	-	482
<b>&gt; Transactions</b>						
Obtain loans	-	482	-	-	-	482
Interest expense	30	-	-	-	30	-
Redemption loans including interest	484	-	-	-	484	-
Service fees expenses	2	-	-	-	-	-
Service fees income	-	-	2	-	2	-

The intra-group balances and transactions between VIVAT NV, Anbang and affiliates in 2017 were:

- In November 2017, VIVAT NV issued \$ 575 million (€ 476 million) in subordinated notes. The net proceeds of the subordinated notes applied by VIVAT have been deployed to repay the subordinated private loans provided by Anbang Group Holdings Co. Limited.
- In 2017 VIVAT have provided administration and investment services to certain affiliates of Anbang in the Netherlands and Belgium, a part of those fees are outstanding at the end of 2017.
- In 2017 Anbang have provided IT services to VIVAT, these fees are outstanding at the end of 2017.

## Intra-group Balances and Transactions with Key Management Personnel of VIVAT

The key management personnel consists exclusively of the members of the Executive Board and the Supervisory Board. This applies to VIVAT and also to SRLEV NV, Proteq Levensverzekeringen NV and VIVAT Schadeverzekeringen NV.

The Executive Board comprised seven members as at 31 December 2017 (31 December 2016: 7). The Supervisory Board comprised five members as at 31 December 2017 (31 December 2016: 5).

### 3.3. Fit and proper

The requirements on suitability for employees who effectively run VIVAT or have other key functions have been extensively described in their specific job profiles. The job profiles reflect the required experience and expertise of the (key)functions. The job profiles are frequently reviewed. All employees (including directors and senior management) are obliged to take the oath financial sector within three months of their appointment. The oath also reflects the required suitability and integrity of the (key)functions.

As part of its legal duties, the Dutch Central Bank (DNB) assesses the suitability and integrity of prospective directors. The suitability and integrity of prospective second tier senior managers are assessed within VIVAT. This internal assessment is subject of approval by the DNB. Employees with intended key functions are also assessed on suitability and integrity within VIVAT. VIVAT has a pre-employment screening policy

and second tier screening policy in place which covers both the screening on integrity and suitability of the key functions and second tier senior managers.

Within VIVAT are several instruments in place to assess and direct employees (including employees with key functions) on suitability and integrity during their employment. The regular screening on suitability and integrity is performed in accordance with the key functions fit and proper policy. VIVAT and senior management in particular, also have the responsibility to detect and report signals of unreliable behaviour of employees. Employees whose integrity is not beyond any doubt can be sanctioned in accordance with the sanctions regulations of VIVAT.

### **3.4. Risk management system**

#### **3.4.1. Risk management system general**

##### **3.4.1.1. General**

VIVAT has established a Risk Management System that is aimed at a controlled and effective achievement of the strategic objectives. It relates risks to the strategic, financial and operational objectives as well as to the objectives in the areas of sustainability and reputation. The framework consists of organizational, control and culture components. The management of VIVAT recognises that transparency is a vital element in effective risk management. The Executive Board and the VIVAT Risk Committee (VRC), which is responsible for setting the Risk Management System, monitor that the desired culture and level of risk awareness are translated into identifiable aspects, such as desirable behaviour, details of the risk appetite or criteria for evaluation of employees.

The Executive Board of VIVAT has set guidelines in the areas of strategy, culture and risk governance in order to enable risk assessments to be performed properly and efficiently. These guidelines apply to the entire organisation. VIVAT seeks to have an open culture in which risks can be discussed, employees feel a responsibility to share information on risks and (pro)active risk management is appreciated.

The established Integrated Control Framework (ICF) provides the basis for the internal control system on risk maturity of process key controls and management controls within VIVAT. The management of Product or Functional Lines is responsible for day-to-day operations within the Risk Management System, schedules the testing of operating effectiveness of key controls and prepares operational plans on a yearly basis. These plans are subject to the approval of the Executive Board of VIVAT.

For all components within the ICF, standards include applicable minimum requirements. All components of VIVAT are scored for each Product Line and Functional Line by a yearly assessment of all Management Controls, in which both first line and second line of defence are involved.

##### **3.4.1.2. Overview**

In the Risk Management System, specific Solvency II requirements such as the Key Functions and the Own Risk and Solvency Assessment (ORSA) are incorporated. The VIVAT Risk Management System operates an integrated approach for risks that the organisation is or could be exposed to, with Risk Management being an integral part of the decision making process. Major decisions of the Executive Board have to be accompanied by a Key Function opinion.

The core of the VIVAT Risk Management System consists of a Governance part at which, starting from the VIVAT Vision and Mission and business strategy, the Risk Strategy and Risk Appetite are derived. The components Risk Policy, Risk Classification and Risk Organisation are necessary conditions to enable these strategic risk processes. To ensure an integrated approach the second line Key Functions and the business use the same risk classification, operations are covered by the Risk Appetite and are aligned by a policy structure.

Governance including an adequate Risk Culture, is conditional for performing risk management on tactical and operational level, with as the core a control cycle of risk identification-measurement- mitigation and continuous monitoring and reporting. The Risk Management Process is supported by the ICF, build up from several components that together form the basis for sound and controlled business operations and hence for visibly being in control of VIVAT and its Product and Functional lines. The ICF measures maturity of risk management and ensures steering on correct and complete risk reports.

The internal reports are a part of (the operation of) the Risk Management Process. The reports on recognized types of risks are input for the integrated risk reports, enabling Key Risk Indicator (KRI) monitoring and drawing management attention to deviations of the risk tolerance limits.

VIVAT performs Risk Self Assessments (RSA) and Strategic Risk Assessments (SRA). An ORSA is incorporated in the VIVAT Risk Management System and is performed at least annually.

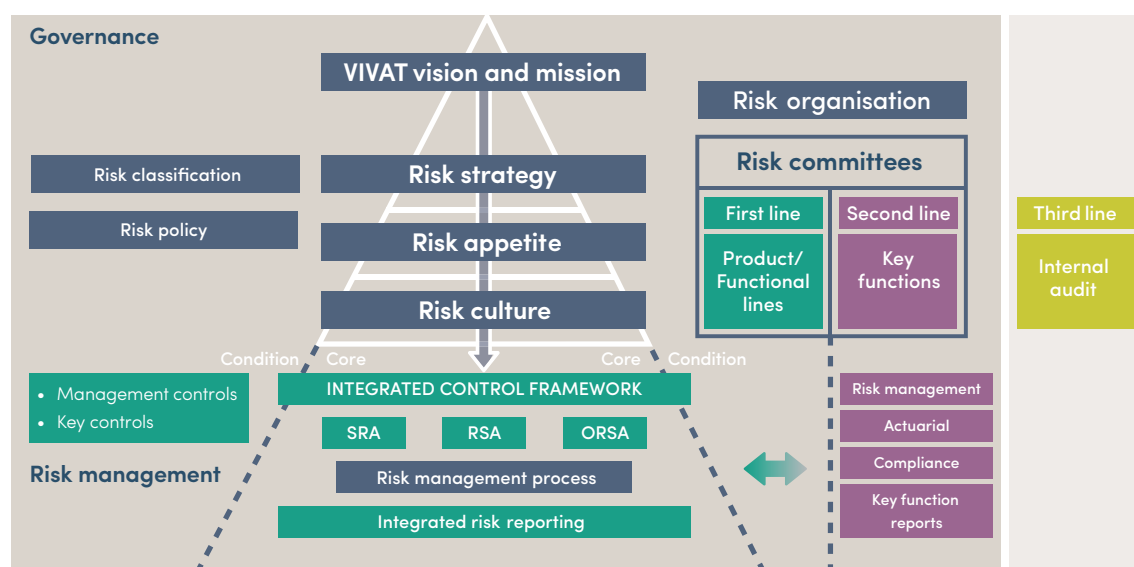


Figure 2: Risk Management

### 3.4.2. Risk management governance

#### 3.4.2.1. Mission and Vision

The vision of VIVAT to be a leading financial service provider results in a mission, focusing on comprehensive products and services leveraging state of the art technologies. From this starting point, the Risk Strategy contributes to a sustainable profitable growth of VIVAT, for the benefit of all its stakeholders.

VIVAT takes its role in society seriously. Corporate responsibility (CR) forms an integral part of the strategy and business operations. VIVAT wishes to offer competitively priced products in efficient business processes, using a central back office in addition. VIVAT pursues a customer-centric strategy, with both Zwitterleven and Reaal positioned clearly and appealing to different segments. The focus on these flagship brands allows for a more agile and lean operation bringing costs to a lower required level.

#### 3.4.2.2. Risk Strategy

VIVAT has derived a Risk Strategy, a supporting set of objectives following from the VIVAT vision and mission to achieve the strategic goals. VIVAT aims for a robust and strong capital position, which contributes to both the confidence that customers have in the institution and the access to financial markets. VIVAT offers competitively priced products by utilising economies of scale in its organisation. The Risk Strategy is expressed in the Risk Appetite.

As main principles VIVAT has defined a robust capital position, stable profitability, a prudent and consistent risk policy, regulatory compliance, social responsibility and effective and efficient customer solutions.

VIVAT provides guarantees for future payments to its customer and therefore VIVAT needs a strong capital position. The Executive Board would like to hold a buffer above regulatory requirement to absorb temporary volatility and provide more certainty to its customers.

#### 3.4.2.3. Risk Appetite

The Risk Appetite is set yearly by the Executive Board and confirmed by the Risk Committee (RC) of the Supervisory Board. This is limited by the risk capacity, which indicates the maximum amount of risk VIVAT can accept at consolidated level, in view of its capital and liquidity position and any restrictions due to funding agreements or requirements imposed by regulators. The Risk Appetite is subsequently translated into practical risk objectives.



Figure 3: Risk Appetite framework

Risk Appetite is defined at VIVAT level. Subsequently it is developed in more detail on the individual legal entity level or specific Product or Functional Lines in the form of individual quantitative risk limits and qualitative constraints. The limits are measurable; the qualitative constraints are observable. When implementing the strategy, the Executive Board gives guidelines to the Product Lines for establishing Operational plans, taking into account the set Risk Appetite and corresponding limits. With those objectives and constraints as starting point, the Product Lines optimize risk and return by developing the best possible products and services.

The Risk Appetite evaluation, which is carried out at least once a year, consists of a number of steps, including risk identification, the determination of risk capacity, the selection of measures, risk mitigation, risk criteria, reporting and monitoring.

#### 3.4.2.4. Risk Culture

Culture and conduct in general play a vital role in steering a company, and specifically in adequate risk management. Both are considered standard elements in performance evaluation meetings and in annual performance objectives. VIVAT has awareness programs in place that focus on how employees hold each other accountable for their conduct and how they can escalate matters if necessary. VIVAT has five core behaviours: Client Focus, Result Driven, Immediate Execution, Take Responsibility and Change Attitude.

VIVAT realizes that the tone at the top is defining for Risk Culture, which makes communication and exemplary behaviour determinant. VIVAT encourages an open corporate culture in which risks are to be discussed, employees feel responsible to share knowledge on risks and where (pro) active risk management

is appreciated. Exemplary behaviour, the openness for discussion of dilemmas, practicability of policy and transparency are inseparably linked to an open corporate culture.

Risk Culture is also embedded in the organisation by risk management being an integral part of the organizational processes and decision making of VIVAT. Decision making is clear, explicit, and in line with the Risk Policy and Risk Appetite of VIVAT. The management teams of the Product Lines and Functional Lines promote awareness of risks and are supported by the second line departments of the Risk organisation. The management teams are responsible for ensuring that risk decisions are made in accordance with the delegated authorities, in consultation with all second line Solvency II key functions.

Furthermore, VIVAT ensures that senior management and employees on key functions are fit and proper to fulfill their job. Finally, VIVATs Remuneration Policy discourages taking undesired and irresponsible risks focused on short-term profit and personal gain.

### 3.4.2.5. Risk Organisation

VIVAT implemented the “Three Lines of Defence” control model (3LoD) including the Solvency II Key Functions and a risk committee governance structure. It contributes to the strengthening of the Risk Culture, taking responsibility for managing risks and internal control, and eventually to the further optimization and integration of the risk management.

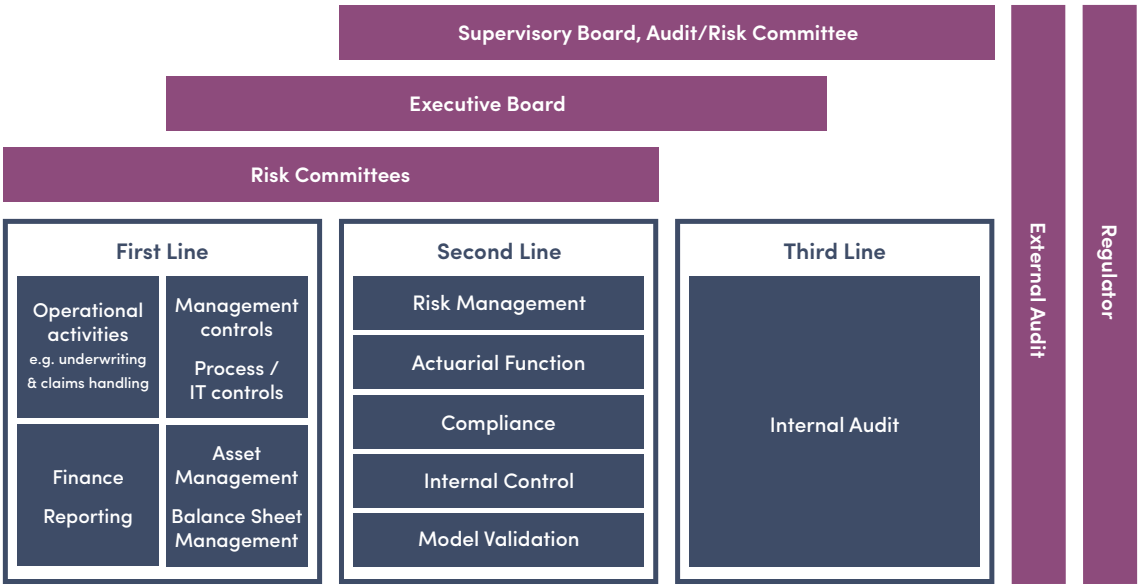


Figure 4: Three Lines of Defence

#### First line: risk taker

Business plans are prepared in the first line. With this preparation, the first line operationalizes the (risk) strategy, focusing on the primary process (i.e. underwriting, claims handling, preparing financial accounts) of the business and investment activities.

Within the policy framework and subject to internal procedures and risk limits, it is the objective of the risk taker to achieve an optimum risk/return. Consequently risks are managed by identifying, measuring,



mitigating and monitoring them and report whether the risks remain within the risk appetite of VIVAT and its underlying entities.

Risk Self Assessments are carried out and in combination with the ORSA, these assessments could lead to changes in the (risk) strategy. For all these activities the first line has an active role in various risk committees including the ability to demonstrate management and process controls according to the standards as set by the ICF.

## **Second line: risk management**

The second line has a monitoring role in respect of the risk management actions and activities carried out by the first line. The second line assesses actions in the first line as well as the effectiveness of procedures by means of testing key controls, and is responsible for monitoring the overall risk profile to be in line with the risk appetite.

The second line is also responsible for formulating the Risk Management System and setting Risk Policies. The first line is responsible for the execution of these policies. The second line assesses policy compliance on a regular basis, using risk reports, reports on management and process key controls and own observations. Furthermore, the second line sets the mandates in line with the risk appetite. It also defines basic principles and preconditions for risk models and the control framework and supports central decision-making bodies. The data used, including models, assumptions and techniques, are validated periodically.

The second line risk management organisation of VIVAT is part of the Risk department, resorting under the Chief Risk Officer (CRO). This department includes the second line Financial and Non-Financial Risk departments. The CRO is member of the Executive Board.

## **Third line: internal audit**

Audit VIVAT is the independently operating audit function and has a supervising role assessing the functioning of the risk management system (including the interaction between first and second line). For a further explanation of Internal audit see section 3.7.

## **Risk Committees**

In addition to the risk management organisation, VIVAT has established Risk Committees to manage risks effectively. VIVAT has established at Group level the following Risk Committees: VIVAT Risk Committee (VRC), Asset Liability Committee (ALCO), Policies Models and Assumptions Committee (PMAC), Investment Committee (IC) and Product Committee (PC). The latter is leading for the underlying PMP MT's (Product, Marketing, Pricing) in the Product Lines. In the ORC MT's, the issues regarding Operational Risk and Compliance are discussed.

## **Key Functions**

In accordance with Solvency II VIVAT recognizes four Key Functions. A function as intended in Solvency II is not a person or a department but an internal capacity to perform certain tasks and responsibilities. The Functions are established on Group level and carry out activities on behalf of all insurance entities of VIVAT. The CRO is the Risk Management Function Holder, the Director Financial Risk is the Actuarial Function Holder and the Director Non-financial Risk is the Compliance Function Holder. The Director Audit VIVAT is the Audit Function Holder.

The Enterprise Risk Management Report (ERM Report) is an integrated comprehensive report on the major financial and non-financial risks within VIVAT. It consists of reports from the three second line Key Functions (Risk Management Function, Actuarial Function and Compliance Function) and shows both the development and the outlook with regard to actuarial, financial, model and non-financial risks, and in addition strategic developments. The ERM Report presents both new and progress on existing high risk findings and/or issues compiled on the basis of the information obtained from monitoring reports, risk dashboards, RAS, Internal Control Statements, reports by internal and external regulators, incidents and issues reported, and own assessments & perceptions. It contains a second line opinion on the development of the various risks, the dependency, and the impact on OP, solvency and strategy. The Risk opinion is discussed in the risk committees and in EB, VRC and the Risk Committee of the SB.

The Actuarial Function opines on the adequacy of the Technical Provision used for IFRS-LAT and Solvency II purposes. It furthermore assesses the reliability and adequacy of Underwriting and Reinsurance programs. The Actuarial Function Report (AFR) is submitted to the VRC and the Audit Committee of the Supervisory Board. Regularly the AF submits an update based on the findings in the AFR, supplemented with recent findings and advices. This update is part of the ERM Report.

The main purpose of the Compliance Function is to support management in conducting its business operations in a controlled, honest and sound manner, and with regard to the risks which in this context are a threat to achieving the strategic objectives, obligations arising from laws and regulations, insights from social discussions and guidelines imposed by regulators. The Compliance Function provides regularly, as part of the ERM Report, a report on the most important Compliance Risks of VIVAT to the VRC and the Risk Committee of the Supervisory Board.

### 3.4.2.6. Risk Policy

VIVAT has an integrated risk management policy structure. The entire policy structure is accessible to employees through the internal policy site. The policy structure ensures the timely identification and assessment of risks and adequate monitoring and reporting of the material risks, both on board and workplace level. The Risk Policy is structured in levels, the aim is to give insight in the cascading from (Solvency II-) legislation, (second line) risk policy, corresponding processes and (first line) implementation. At least once a year the Risk Policies are assessed, adjusted if necessary and approved following regular governance.

## 3.5. ORSA

As part of its risk-management system VIVAT conducts its own risk and solvency assessment (ORSA). That assessment includes:

- the overall assessment of solvency taking into account the specific risk profile, approved risk tolerance limits and the business strategy of VIVAT;
- the significance in which the risk profile of VIVAT deviates from the assumptions underlying the SCR calculated with the standard formula.

The ORSA is an integral part of VIVAT's management control cycle and is filed with the regulator. VIVAT has performed a 'single' ORSA for VIVAT and its underlying legal entities, as approved by the regulator.

### 3.5.1. ORSA Process

The ORSA considers external factors, the business strategy, future developments, the risk profile and risk appetite to assess the amount and quality of capital. An overview is shown in the figure below.

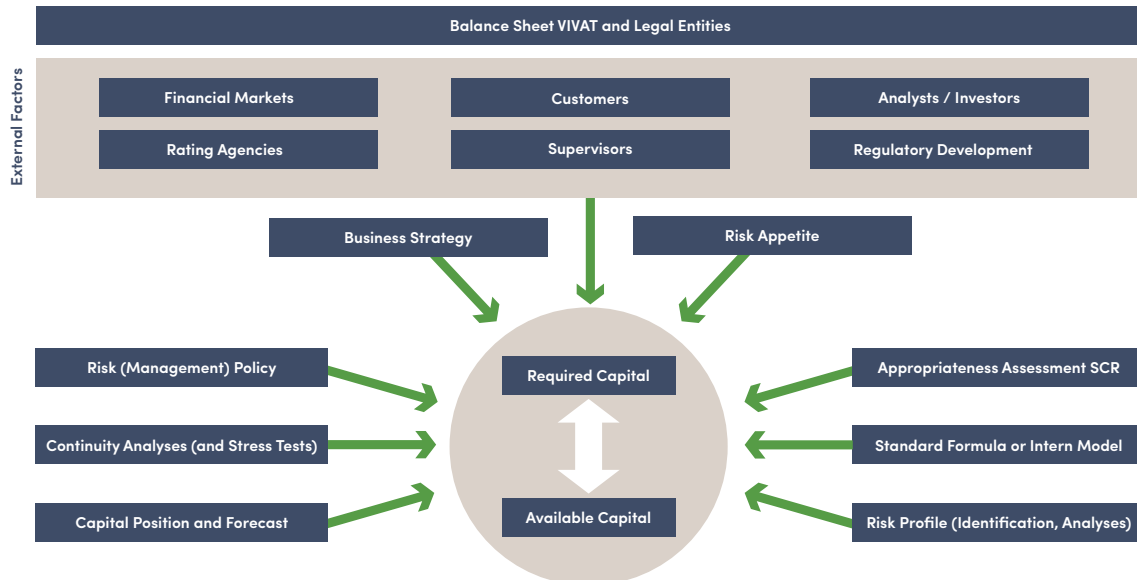


Figure 5: ORSA Process

VIVAT performs the ORSA annually and if any significant change in its risk profile occurs. The Executive Board is owner of the ORSA and actively involved. Adequacy of capital is tested against a range of stressed scenarios thereby considering the possible effect of management actions.

### 3.5.2. Scenario Tests and Mitigation Action

Every year an extensive risk identification process takes place. The identified risks are subject to a wide range of stress scenarios. The selected stress scenarios are severe but possible and used to test the financial position of VIVAT in case the risk occurs. This is in contrast to the Recovery Plan, where the scenarios should be severe enough to create a direct threat to the going concern of VIVAT in its current form.

For all scenarios in the ORSA mitigating management actions have been assessed.

### 3.5.3. Main Conclusions

The ORSA concludes that for VIVAT and its subsidiaries:

- the Solvency Capital Requirement (SCR) as calculated with the standard formula is appropriate;
- the Solvency is adequate on a forward looking medium term given the risk tolerance and the business strategy.

Based on the standard formula after diversification, the top 3 single risks of VIVAT are Longevity Risk, Expense Risk and Spread Risk. VIVAT is especially sensitive for longevity risk. When taking into account

mitigation actions VIVAT's solvency is adequate for all evaluated stresses, including stress scenarios related to aforementioned risks.

## 3.6. Internal control system

### 3.6.1. Integrated Control Framework

The Integrated Control Framework (ICF) contains a set of (management and process) controls and an analysis on operating effectiveness enabling management to adequately manage risks, following (strategic) objectives and VIVAT's risk appetite. The controls enable the identification of gaps in the control framework and monitoring on follow-up using a standardized approach.

The ICF forms the basis for sound and controlled operations within VIVAT and monitors Process Controls and Management Controls.

### 3.6.2. Process Controls and Management Controls

The effectiveness of Process (key) Controls within VIVAT is scheduled each quarter for independent testing by first line management. The second line (internal control) subsequently performs reviews or reperformance.

Management Controls (or Entity level Controls) give insight in the maturity of risk management and mitigation in the individual product- and functional lines. The standards and control objectives used relate to relevant legislation (e.g. WFT, Solvency II) and internal policies.

In 2017 Integrated Risk Management was further optimized by implementation of special tooling and further alignment / development of policies and procedures regarding Process Management, Action monitoring and the Loss Database. Reports from the tooling will be used to further analyse and improve the completeness and quality of design for both management and process controls based on all risk categories as described in the risk classification.

During 2017 VIVAT has performed a self-assessment on management controls (or Entity level Controls). Based on this assessment it was found that the overall maturity level improved significantly in comparison to last year due to:

- Formalized Strategy setting & embedding in performance management
- Reinforcement first line Risk Management
- Expansion of Integrated Risk Management

The self-assessment also identified improvements that will be implemented in 2018.

### 3.6.3. Compliance function

The main purpose of the Compliance Function is to support management in conducting its business operations in a sound and controlled manner, and with regard to the risks which in this context are a threat to achieving the strategic objectives, obligations arising from laws and regulations, insights from social discussions and guidelines imposed by regulators, through:

- Systematic identification analysis of Integrity Risks;

- Drafting and communicating understandable and clear policies and guidelines with regard to Compliance Risks;
- (Pro) actively promoting within VIVAT, a culture of integrity and openness;
- Stimulating and substantively monitoring the Product Lines and Functional Lines in adhering to relevant laws and regulations, codes of conduct, policies and (internal) standards, and also monitoring the implementation of laws and regulations within VIVAT on progress and monitoring the design, existence and operation of the 1st line responsibility to implement laws and regulations. Monitoring by the Compliance Function focuses on laws and regulations related to integrity and behaviour;
- Challenging both solicited and unsolicited proposals, advises, steering information and management in relation to integrity and Compliance Risks;
- Reporting to EB and SB on adherence to laws and regulations and with regard to identified shortcomings, which remedial measure were taken or are required to be taken.

The Compliance Function is a second line function and is assigned to the CRO. It carries out its activities on behalf of all entities of VIVAT and performs its tasks independently and takes into account the interests of all its relevant stakeholders. The Director of Non-Financial Risk is the Compliance Function Holder (CFH). In order to ensure the independent role of the CFH, several safeguards have been implemented, amongst others that the CFH (a) is represented in the VRC and the Operational Risk & Compliance and Product Marketing Pricing MT's; (b) has periodic bilateral meetings with the CEO and an escalation line to the CEO and if deemed necessary by the CFH, to the Chairman of the SB; and (c) the Annual Compliance Plan and budget of the Compliance Function is subject to approval by the EB and the Risk Committee of the SB.

Following the transitional period of 2016 VIVAT operated in 2017 under the new operating model and governance structure. The continued focus on cost reduction and revenue models could influence operational and compliance risks. These risks are addressed, managed and monitored within the VIVAT risk framework to maintain a sound and controlled organisation.

### 3.7. Internal audit

Audit VIVAT is the independently operating (third line) audit function and has a supervising role assessing the functioning of the risk management system (including the interaction between first and second line).

Audit VIVAT does not take part in determining, implementing or steering the risk policy. Audit VIVAT reports to the chairman of the Executive Board of VIVAT and has a reporting line to the Chairman of the Audit Committee of the Supervisory Board of VIVAT.

Audit performs independent and objective audits and reviews to assess whether there is an adequate and efficient Risk Management System within the business processes which supports the realisation of the organisation's strategic objectives; whether there is sufficient, reliable management information, which is used for testing the realisation of the objectives and whether (business, financial, reporting or other) processes are efficient and effective. Furthermore, Audit VIVAT assesses whether VIVAT complies with laws and regulations and if assets (e.g. physical, intellectual, policy & company data) are safeguarded adequately. The agenda of Audit VIVAT is determined by the Audit Committee.

At least once a year the internal audit policy is assessed, adjusted if necessary and approved by the EB and SB.

In the quarterly report, Audit VIVAT informs the Executive Board and the Audit Committee of VIVAT. This quarterly report contains at least an executive summary containing findings and issues relating to deficiencies regarding the governance, internal control and risk management system; findings and observations that are substantial for the risk profile; the executive summary of all audits reported in the quarter and a follow-up monitoring of recommendations of Audit, regulators and external auditor.

### 3.8. Actuarial function

The Director of Financial Risk (FR) is accountable for the Actuarial Function (AF). The main responsibilities of the Actuarial Function are to coordinate the calculation of the technical provision, to express an opinion on the overall underwriting policy, to express an opinion on the adequacy of reinsurance arrangements and to contribute to the effective implementation of the risk-management system, in particular with respect to the risk modelling underlying the calculation of the capital requirements and to the own risk and solvency assessment.

In order to ensure an independent opinion of the AF, safeguards have been implemented. The AF is represented in various risk committees. That is, in particular, the RC, VRC, ALCO, PMAC, PC and the PMPs of the Product Lines. The representation and escalation procedure are registered in the mandates of the committees. The AF co-operates closely with the Risk Management Function. The Director Financial Risk reports to the CRO, however the AF holder has a direct escalation line to both Executive Board and the Chairman of the SB. Position, rights and authorities of the AF are defined and approved on by the VRC.

### 3.9. Outsourcing

VIVAT outsources several activities, remaining responsible at all times for the activities that have been outsourced. VIVAT distinguishes between the following main outsourcing categories:

- Outsourcing of business processes to external service providers (Business Process Outsourcing), this concerns primary processes and ancillary processes.
- Outsourcing to other legal entities within VIVAT. Control principles are applied in proportionality to the intra-group relation. This applies for example for the key functions.
- The outsourcing of IT processes and/or assets to external service providers and/or suppliers: purchase of standard software, software development (customisation), management of IT components, housing of IT, or external hosting and management (Cloud qualifies as outsourcing of IT services).
- Authorized agents: the outsourcing of insurance activities to authorized agents. A mandate for an authorised agent is a far-reaching form of outsourcing. Increasing the number of duties that the insurer outsources to an authorised agent makes the insurer more dependent on that authorised agent and creates a greater need for effective risk management.
- Asset management. The VIVAT outsourcing policy applies to outsourcing to ACTIAM by insurance entities within VIVAT and/or subsequent sub-outsourcing by ACTIAM to a party outside VIVAT Group. With respect to outsourcing of asset management, ACTIAM has its own outsourcing policy.

VIVAT has set specific frameworks and directives, described in the outsourcing risk policy, to take its responsibility for the activities that have been outsourced. To assure a controlled outsourcing setting requirements, activities and responsibilities are formulated and executed for the purpose of achieving effective risk management over its outsourced activities. The department involved performs a Risk Self Assessment, and defines a set of requirements on the quality of the outsourcing partner. In the contract among others is agreed on an exit strategy and the monitoring approach.

### **3.10. Any other disclosures**

No other disclosures are applicable.



## 4. Risk profile

### General

VIVAT is focusing on improving capital generation by re-risking, improving its combined ratio and value of new business, and further optimizing its risk profile taking into account its Risk Appetite. Optimizing will also decrease the spread risk which originates from differences between the VIVAT asset portfolio and the reference portfolio of the Volatility Adjustment (VA).

The process of reducing the spread mismatch between assets (mainly German and Dutch government bonds) and liabilities (mainly swap plus Volatility Adjustment) started in 2016. The basis risk was further mitigated during 2017 by replacing long duration German and Dutch government bonds by swaps combined with short duration government bonds.

The main risk profile changes in 2017 relate to changes in currency risk, lapse risk and counterparty default risk.

VIVAT successfully issued € 650 million senior notes to institutional investors. € 250 million of the proceeds were provided to SRLEV NV as restricted Tier 1 loan in June 2017. In November 2017 VIVAT issued \$ 575 million of subordinated notes to institutional investors. The proceeds of the issuance were used to redeem the subordinated loans issued by Anbang at par. This transaction results in a substantial smaller interest rate charge, but leads to an increase in the SCR due to an increased currency risk.

The capital charge for underwriting risk decreased due to the successful implementation of the mass lapse reinsurance contract. The contract was signed and in force as of December 31, 2016 and included in the SCR calculations as of June 30, 2017.

Counterparty Default Risk decreased mainly due to ending the security lending program, a substantial drop in receivables older than 3 months from intermediaries and policyholders and from contractually securing the savings amount of Savings Mortgages.

### Development Solvency Ratio

The development in 2017 of the solvency ratio is explained by the analysis of change as presented in the graph below. The movement consists of the categories Capital Generation, Market Impacts, One-off items and Other.

The methodology for deriving the analysis of change is still under investigation and may be subject to change in 2018 and onward.

Capital Generation is the change of eligible own funds caused by realized organic capital generation due to expected asset return, release of risk margin, unwinding of the UFR and insurance results.



In market impacts the impact of economic variance to the asset return is taken into account (i.e. spread and interest rate movement). Next to these movements, also the change caused by volatility and symmetric adjustments is taken into account.

One-time items show the impact of events like mass lapse reinsurance contract, tier 1 and tier 2 capital changes and the corresponding impact on currency risk, ending of the security lending program and re-balancing the interest rate risk.

Other consists mainly of changes in models, insurance parameters, impact of tiering restrictions, as well as other business developments.

## VIVAT

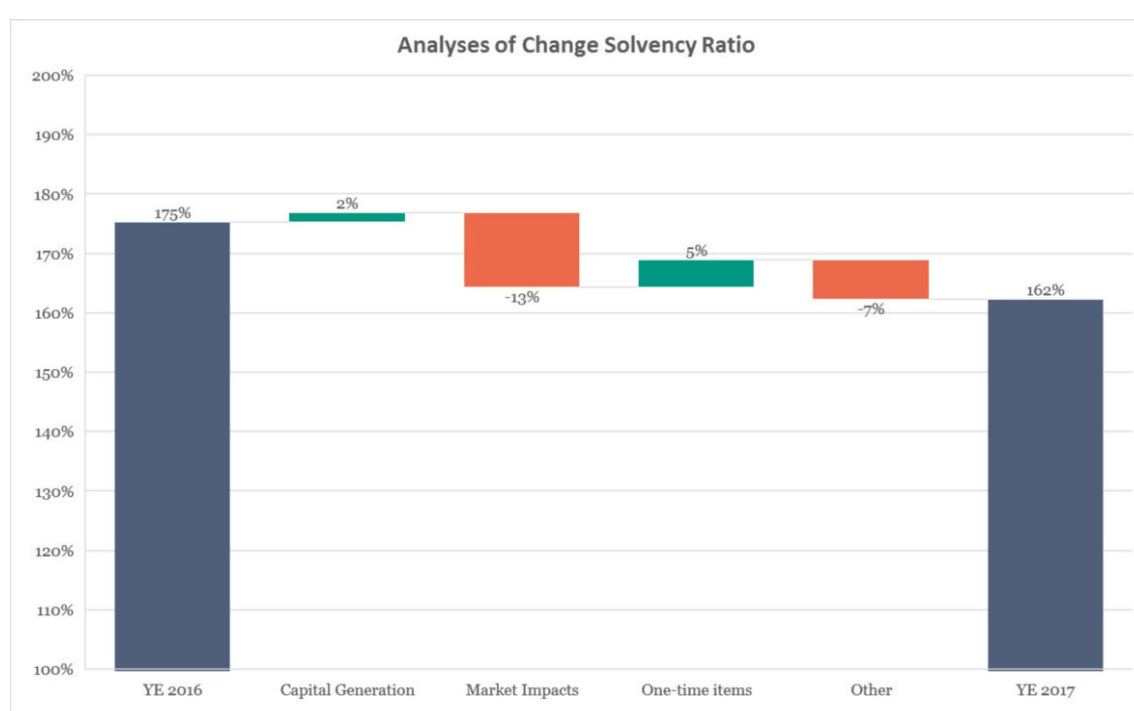


Figure 6: Analysis of Change Solvency Ratio VIVAT

The Solvency II ratio of VIVAT NV decreased from 175% to 162%. The main drivers of this movement are:

### Capital Generation (+/+2%)

The increase of the Solvency II ratio of 2% is explained by an increase in eligible own funds due to expected asset returns and release of risk margin. This movement is partly offset by the unwinding of the UFR.

### Market Impacts (-/-13%)

The decrease in Solvency II ratio of 13% is mainly due to the change in VA. Under the Solvency II regime the swap curve with a prescribed Ultimate Forward Rate (UFR) is used when discounting insurance liabilities, adjusted for credit risk (CRA) and a Volatility Adjustment (VA). The VA moves along with the credit spreads, but still substantial basis risk remains because the VA is based on a reference portfolio instead of

VIVAT's own asset portfolio, and also a 65% scaling factor is applied to determine the VA. VIVAT is overweight in AAA rated European government bonds compared to the VA reference portfolio. The decrease of the Volatility Adjustment from 13 bp to 4 bp led to an increase of the value of the technical provisions (negatively impacting the S2 ratio by approximately 15%), that is only slightly offset by an increase of the value of the spread sensitive assets, leading to a significant decrease of the Solvency II ratio.

#### One-time Items (+/+5%)

One-time Items increased the Solvency II ratio with 5%, mainly by decreasing the risk profile. Most important movement in the risk profile is an decrease of underwriting risk, an decrease of counterparty default risk and an increase of currency risk.

- The mass lapse re-insurance contract improved our risk profile and is the main driver for the decrease in life underwriting risk, leading to a reduction in the Solvency Capital Requirement for underwriting risk, which in turn leads to an increase of the Solvency II ratio of 5%.
- The decrease of the counterparty default risk due to ending the security lending program and contractually securing the savings amount of Savings Mortgages leads to an increase of the Solvency II ratio of 6%.
- The increase of the currency risk, negatively impacting the Solvency II ratio with approximately 6%, was mainly due to the different treatment of previous issued subordinated debt in foreign currency and the new issuance of \$ 575 million of subordinated notes to institutional investors.

#### Other (-/-7%)

The most important drivers for the decrease in Solvency II ratio of 7% in this category, consist of changes in tiering restrictions and updating the underwriting risk parameters.

- The loss of eligible own funds due to the increase of the tiering restriction, caused by the decrease of the SCR, led to a decrease of the Solvency II ratio of approximate 4%.
- Updated expense- and other underwriting risk parameters account for an approximate 3% reduction of the Solvency II ratio.

## SRLEV

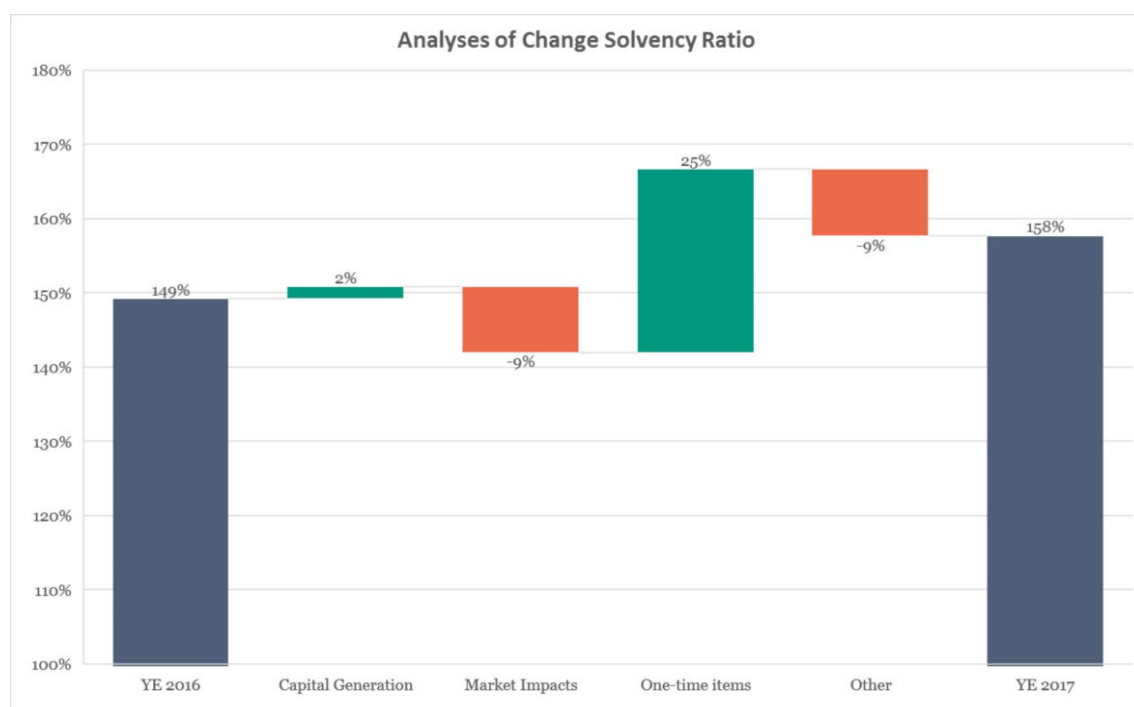


Figure 7: Analysis of Change Solvency Ratio SRLEV

The Solvency II ratio from SRLEV N.V. increased from 149% to 158%. In the annual report of SRLEV an expected increase of the Solvency II ratio to 157% has been reported.

The main drivers of this movement are:

### Capital Generation (+/+2%)

The increase of the Solvency II ratio of 2% is explained by an increase in eligible own funds due to expected asset returns and release of risk margin. This movement is partly offset by the unwinding of the UFR.

### Market Impacts (-/-9%)

The decrease in Solvency II ratio of 9% is mainly due to the change in VA. Under the Solvency II regime the swap curve with a prescribed Ultimate Forward Rate (UFR) is used when discounting insurance liabilities, adjusted for credit risk (CRA) and a Volatility Adjustment (VA). The VA moves along with the credit spreads, but still substantial basis risk remains because the VA is based on a reference portfolio instead of SRLEV's own asset portfolio, and also a 65% scaling factor is applied to determine the VA. SRLEV is overweight in AAA rated European government bonds compared to the VA reference portfolio. The decrease of the Volatility Adjustment from 13 bp to 4 bp led to an increase of the value of the Liabilities that's only partly offset by an increase of the value of the spread sensitive assets, leading to a decrease of the Solvency II ratio.

### One-time Items (+/+25%)

One-time Items increased the Solvency II ratio with 25%, mainly driven by:

- The Own Funds of SRLEV N.V. increased due to the restricted tier 1 loan of € 250 million provided by VIVAT in June 2017, leading to an increase in the Solvency II ratio of 11%.

- The mass lapse re-insurance contract improved our risk profile and is the main driver for the decrease in life underwriting risk, leading to a reduction in the Solvency Capital Requirement for underwriting risk, which in turn leads to an increase of the Solvency II ratio of 6%.
- The decrease of the counterparty default risk due to ending the security lending program and contractually securing the savings amount of Savings Mortgages leads to an increase of the Solvency II ratio of 7%.

#### Other (-/-9%)

The most important drivers for the decrease in Solvency II ratio of 9% in this category, consist of changes in tiering restrictions and updating the underwriting risk parameters.

- The loss of eligible own funds due to the increase of the tiering restriction, caused by the decrease of the SCR, led to a decrease of the Solvency II ratio of approximate 2%.
- Updated expense- and other underwriting risk parameters for calculating the future expected cashflows for insurance liabilities account for an approximate 8% reduction of the Solvency II ratio.

### VIVAT Schadeverzekeringen

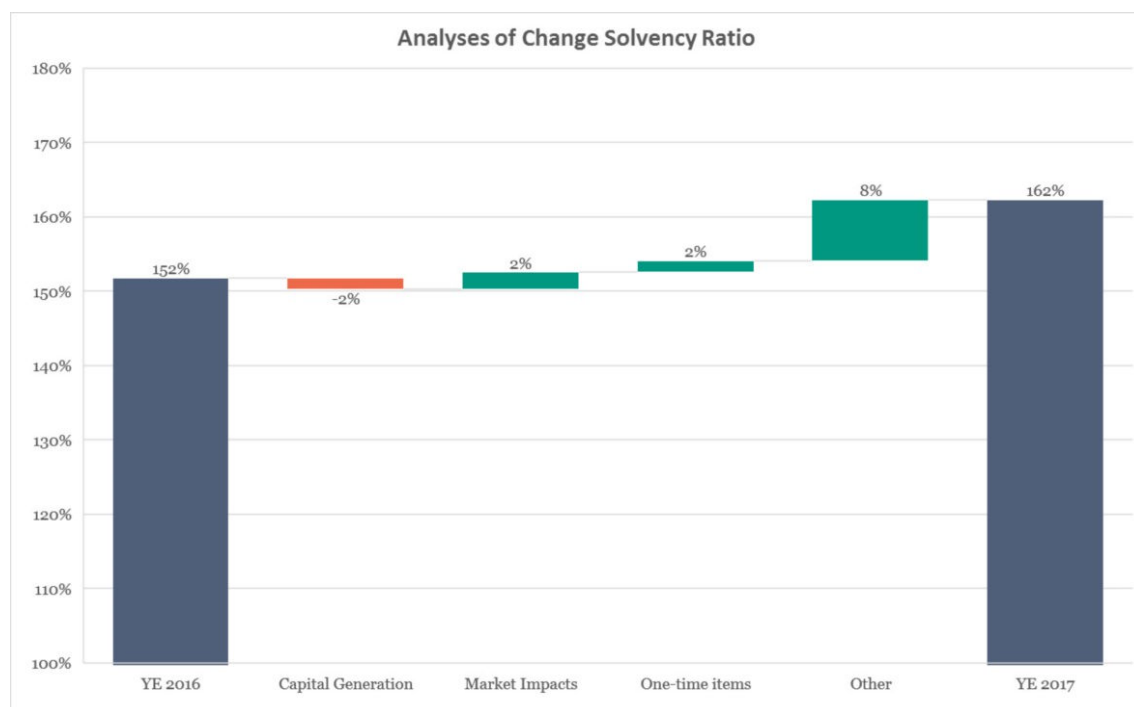


Figure 8: Analysis of Change Solvency Ratio VIVAT Schadeverzekeringen

The Solvency II ratio of VIVAT Schade increased from 152% to 162%, The main drivers of this movement are:

#### Capital Generation (-/-2%)

Capital Generation was negative and had a negative impact on Solvency II ratio of -2%. Capital generation was negative due to a negative technical result partly offset by the expected asset return. The negative technical results of VIVAT Schadeverzekeringen by P&C products are partly offset by the positive results on the disability portfolio.

### Market Impacts (+/+2%)

The increase of the Solvency II ratio of 2% can be mainly explained by the (non-parallel) increase in the interest rates.

### One-time Items (+/+2%)

A decrease of the counterparty default risk due to ending the security lending program is the main driver for the increase of the Solvency II ratio of 2%.

### Other (+/+8%)

The increase in Solvency II ratio of 8% can be mainly explained by the parameter update for the disability portfolio resulting in lower disability rates and higher rehabilitation rates used for calculating the value of the liabilities, resulting in an increase of own funds.

## Proteq Levensverzekeringen

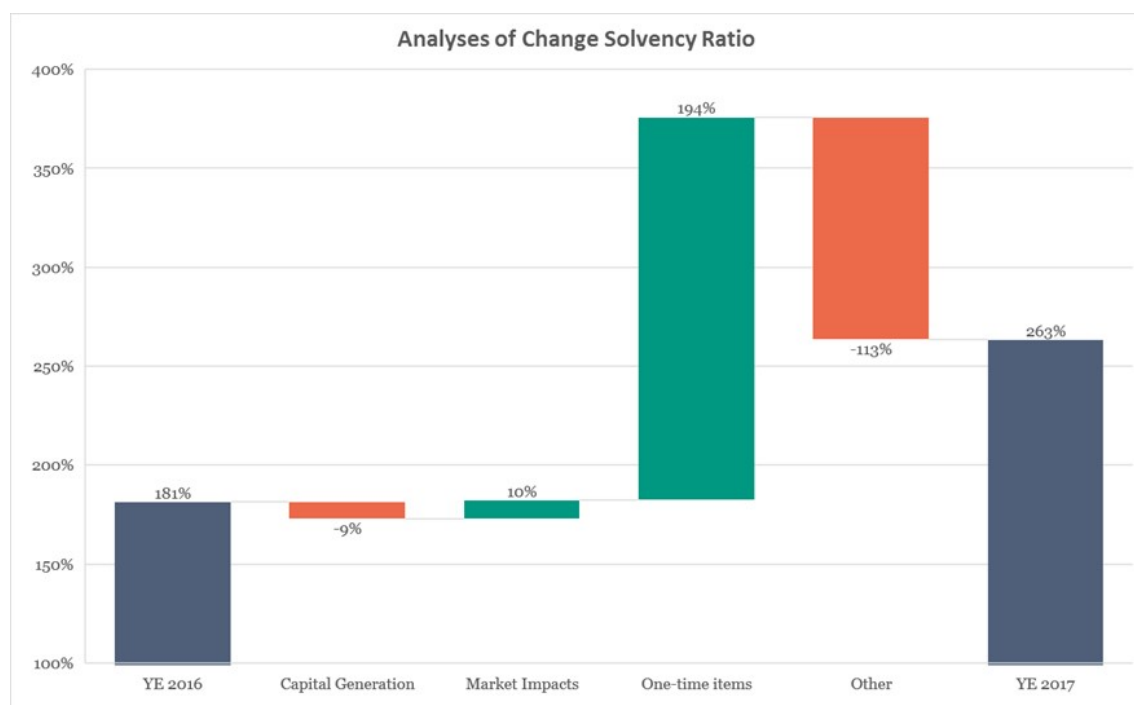


Figure 9: Analysis of Change Solvency Ratio Proteq Levensverzekeringen

The Solvency II ratio of Proteq levensverzekeringen N.V. increased from 181% to 263%. The main drivers of this movement are:

### Capital Generation (-/-9%)

A small decrease of the eligible own funds due to the unwinding of the UFR, only partly offset by relative low expected asset returns as a result of a conservative asset mix and the release of risk margin led to a decrease of the Solvency II ratio of 9%.

#### Market Impacts (+/+10%)

The increase of the Solvency II ratio of 10% can be mainly explained by the (non-parallel) increase in the interest rates.

#### One-time Items (+/+194%)

The main driver of the increase of the Solvency II ratio of 194% is the decrease of the SCR market risk due to the re-balancing of the interest rate risk to a Solvency II basis.

#### Other (-/-113%)

Updated expense- and underwriting risk parameters are the main driver for the 113% reduction of the Solvency II ratio.

### 4.1. Risk classification

VIVAT provides insight into the risks for the business itself and for its stakeholders to manage these risks within the indicated tolerance levels. This includes both behaviour related and financial aspects of Risk Management. To provide clarity in the communication and management of risks, the risk classification incorporates a comprehensive list of mutually exclusive risk types to which VIVAT is exposed or could be exposed to.

VIVAT has defined and structured different risk types, partly on the basis of applicable laws and regulations (such as Solvency II Standard Formula), and partly on own assessment of risks given VIVAT's risk profile. As part of its strategy, VIVAT deliberately takes Underwriting risks and Market risks aiming for returns. As a consequence, taking Counterparty risk and Liquidity risk may contribute to those returns. Compliance risk and Operational risks are inherent risks that do not provide more returns when taking more risk and have to be controlled and managed at a minimal level.

Strategic developments (governance, positioning, external developments) relate to future business developments and may eventually emerge as one of the main or sub risk types and are monitored in the ERM Report. In the risk assessment on the Operational Plans several internal and external strategic development scenarios are taken into account.

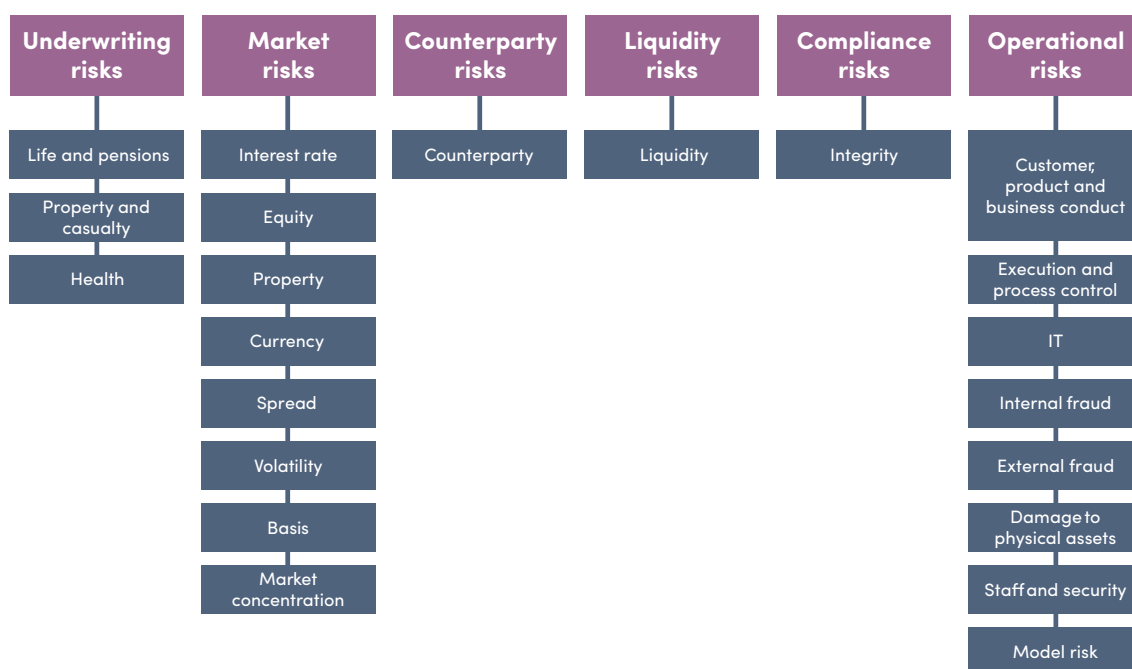


Figure 10: Risk classification

Not all of the risk categories are part of the Solvency Capital Requirement (SCR) calculation. The SCR calculation does not contain Liquidity and Compliance Risk. The tables below show a breakdown of the SCR of VIVAT and of its solo entities:

### Solvency Capital Requirement at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Life underwriting risk	1,501	-	26	1,520
Underwriting risk Non-Life	-	208	-	208
Underwriting risk Health	-	271	-	271
Market risk	742	29	15	836
Counterparty default risk	136	9	1	145
Diversification	-499	-160	-9	-881
<b>Basic Solvency Capital Requirement</b>	<b>1,880</b>	<b>357</b>	<b>33</b>	<b>2,099</b>
Operational risk	181	21	2	203
Loss-absorbing capacity of technical provisions	-	-	-	-
Loss-absorbing capacity of deferred taxes	-	-27	-	-
<b>Net Solvency Capital Requirement</b>	<b>2,061</b>	<b>351</b>	<b>35</b>	<b>2,302</b>
Capital requirements of other financial sectors				25
<b>Consolidated Group SCR</b>				<b>2,327</b>

## Solvency Capital Requirement at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Life underwriting risk	1,616	-	19	1,630
Underwriting risk Non-Life	-	215	-	215
Underwriting risk Health	-	279	-	279
Market risk	924	33	51	822
Counterparty default risk	263	13	3	275
Diversification	-655	-168	-13	-970
<b>Basic Solvency Capital Requirement</b>	<b>2,148</b>	<b>372</b>	<b>60</b>	<b>2,251</b>
Operational risk	170	23	2	194
Loss-absorbing capacity of technical provisions	-23	-	-	-
Loss-absorbing capacity of deferred taxes	-	-30	-1	-
<b>Net Solvency Capital Requirement</b>	<b>2,295</b>	<b>365</b>	<b>61</b>	<b>2,445</b>
Capital requirements of other financial sectors				21
<b>Consolidated Group SCR</b>				<b>2,466</b>

The risk categories will be explained in the more detail in the next paragraph.

The main risk profile changes in 2017 relate to changes in life underwriting risk (lapse risk), market risk (currency risk) and counterparty default risk.

Changes in the item "Diversification" is the result of changes in the underlying risk modules. Not all risks will materialize at the same time and at their full magnitude resulting in diversification between different risk types. Interest rate shocks can also have an impact on the Loss-absorbing capacity of technical provisions (LAC TP). Article 83 of the Delegated Regulations requires to report this impact separately from the SCR Interest rate scenario. Therefore the SCR Interest rate scenario does not change the value.

The Loss Absorbing Capacity of Deferred Taxes in the SCR is set at 0%, except for legal entities with a net Deferred Tax Liability (DTL). In these cases the Loss Absorbing Capacity of Deferred Taxes equals the net DTL-position.

Capital Requirements of other financials sectors refer to holdings which are subject to a different regime than Solvency II.

To give more insight in the risks the company is exposed to, sensitivities are determined on best effort basis for different underwriting and market risks in paragraph 4.2 and further. For underwriting risks and spread risks the sensitivities shown are the estimated impact on own funds without recalculating the SCR after shock. For the other market risks the sensitivities shown are the estimated impact on own funds including the estimated impact on the SCR market and life underwriting risk after shock.

More information about the Solvency Capital Requirement is given in chapter 6. The way in which the risk categories are managed is discussed below.



## 4.2. Underwriting risk

### 4.2.1. Risks – general

The underwriting risk is the risk that the own funds, earnings or solvency will be threatened as a result of the inability to make payments (either now or in the future) from premium and/or investment income owing to incorrect and/or incomplete assumptions (mortality, longevity, disability, claims, policy holders' behaviour, catastrophes, interest and expenses) used in the development of the product and the determination of its premium. A distinction is made between Life (including Pensions) and Non-Life (Property&Casualty and Disability). The interest rate risk related to insurance products forms part of the market risk.

### 4.2.2. Risk management process

VIVAT assesses new underwriting risks continuously and manages existing underwriting risks, for both new business and for the existing portfolio.

#### Operational Plan

Derived from the VIVAT strategy, the Operational Plan (OP) describes the planned development of the insurance portfolio together with the related capital requirement for the next three years, based on expected new business and the existing portfolio. The OP sets out in broad terms whether VIVAT wants to enter new markets, which forms of distribution will be used, whether new (forms of) insurance products will be developed, and which products will be adjusted or terminated. It also lays down possible measures relating to acceptance and the mitigation of claims.

#### Product Development, Pricing and Acceptance

In accordance with the OP, new or adjusted products are developed which follow the Product Approval and Review Process (PARP). Starting from the customer's interests the target group, coverage and terms and conditions are determined. This is the basis for the best estimate risk premium, taking into account options and guarantees, capital requirements and the internal pricing curve. Furthermore, criteria related to profitability and risk control measures (acceptance criteria, clauses, any reinsurance) have to be met.

The Product Committee (PC), in which the Solvency II second line Key Functions are represented, is responsible for approval new products, including the pricing. A selling product review is performed regularly, existing products follow a risk based product review calendar.

#### Technical Provisions

At the Non-Life Insurance businesses, all relevant information on portfolio and claims developments is used for the calculation of the Technical Provision and the SCR on a quarterly basis. At Life, the provision is calculated monthly. A liability adequacy test on the (IFRS) premium and claims reserves is performed once a quarter (at the Life and Pensions businesses) or once every six months (at the Non-Life Insurance businesses), or more frequently if this is deemed necessary. Any reserves that are inadequate are increased. The most recent insights as to parameters are involved here. The Actuarial Function assesses the Solvency II Technical Provision and expresses an opinion on its reliability and adequacy at least once a year.

#### Parameter Study

For long-term policies (Life, Disability) evaluation of the underwriting parameters (e.g. mortality, lapses, disability, recovery) takes place by a parameter study. The aim of this study is to value the existing insurance

portfolio and set the cost price of new Life insurance policies. For short-term policies the Non-Life underwriting parameters are evaluated every quarter, other parameters (like lapse) at least once a year. Thereby relevant information on portfolio developments is taken into account. At the Non-Life business, the tariff structure of each product is regularly assessed by means of analysis. Monitoring takes place on the basis of the combined ratio of each branch and distribution.

## Portfolio Analysis

Portfolio analysis is aimed at optimising risks and returns within the risk policy structure. This can lead to new strategic insights in areas such as entering new markets or terminating products. The analysis is based on the impact of underwriting risks following from various measures: IFRS-based liability adequacy test (LAT), long term profitability, SCR and VNB. Based on the risk appetite, VIVAT mitigates underwriting risks primarily by means of diversification and reinsurance.

### 4.2.3. Life

Life includes SRLEV and Proteq Levensverzekeringen

#### 4.2.3.1. Risk categories

The underwriting risk in the Life business includes the significant sub-risk categories of mortality risk, longevity risk, lapse risk, catastrophe risk and expense risk. It can also include disability and recovery risk to a limited degree. VIVAT is also exposed to interest rate risk in the context of guarantees for both IFRS and Solvency II.

#### Mortality Risk and Longevity Risk

The risk most typically associated with Life insurance policies is mortality risk. This risk mainly affects the duration and timing of the payment of the insured cash flows. Mortality risk indicates the risk for the company of the policyholder dying earlier than expected. In the case of a life benefit, the mortality risk for VIVAT is that the policyholder might live longer than expected (longevity risk). The financial impact of the difference between the date the policyholder is expected to die and the actual date of death can be substantial, particularly in the case of longevity risk.

To forecast the survival probabilities of the entire population, VIVAT uses the model published by the Netherlands Actuarial Association (AG2016) which combines mortality rates of several European countries with those of The Netherlands. The probabilities are reviewed at least once a year and updated if necessary to include the most recent observations. Once a year VIVAT also reviews and if required updates the empirical figures for portfolio mortality on the basis of research into observed mortality within the Life portfolio. The use of the existing AG2016 table was confirmed for 2017.

#### Disability-morbidity Risk

Other underwriting risks that affect the Life insurance portfolio is the risk of being (partly) incapacitated for work for a period or on a permanent basis. The financial impact is mostly dependent on the age, the sum insured and the disability percentage of the policy holder.

#### Lapse Risk

Other underwriting risks that affect the Life insurance portfolio are risks associated with policyholders' behaviour, such as early surrender (the policyholder terminates the policy before the maturity date) or

conversion to a paid-up status (the policyholder terminates the regular premium payment before the maturity date).

### Life Expense Risk

VIVAT runs expense risk if actual costs turn out to be higher than the amounts received from the cost loadings included in the pricing calculation. This relates to changes in the level, trend or volatility of the costs related to the fulfilment of insurance or reinsurance contracts.

VIVAT uses a 'moderate going concern' assumption in its models. This means that it expects the portfolio to decline in size owing to sustainable profitable growth from new policies failing to keep pace with the expiry of existing policies. As a result, it will be harder to spread fixed costs over a declining total number of policies. This assumption is reflected in the projection parameters for the technical provision.

### Life Catastrophe Risk

With respect to Life insurance, in the event of a catastrophe the risks will be concentrated primarily in the group insurance portfolio. Participants in a group contract often work at the same location or undertake joint activities, which brings about a concentration of risk. Such concentrations of risks have been partly offset through the use of reinsurance.

### Interest Rate Guarantee Risk

In the case of traditional insurance policies, VIVAT bears the interest rate risk on the investments that are held to cover the obligations to policyholders. When a benefit or annuity payment is due, VIVAT pays the policy holder a predetermined nominal amount. In contrast, VIVAT does not run any interest rate risk on pure unit-linked contracts. However, VIVAT has issued interest rate guarantees for some unit-linked insurance policies, as a result of which it is exposed to an interest rate risk in respect of products of this type. A guaranteed minimum return on maturity applies in the case of unit-linked investment policies with an interest rate guarantee.

In the case of Group insurance policies with separate accounts, it is the policyholder that, in principle, bears the market risk. The policyholder is the institution that concluded the contract to insure the pension commitments for its employees with VIVAT. VIVAT guarantees the payment of the insured pension rights. The value of the investments has to be at least sufficient to cover the provision for accrued pension rights that are guaranteed. Additional measures may also have been agreed contractually to compensate for investment losses up to a certain amount (e.g. the creation of an additional provision/buffer in the investment account). VIVAT is entitled to reduce the market risk if the additional provisions/buffers are insufficient. If the value of the investments (including any contractually agreed additional measures) turns out to be insufficient, the remaining deficit is for the risk of VIVAT.

The following table indicates which risks are associated with specific products for the Life insurance portfolio of VIVAT.

## Products in the Life insurance portfolio (Solvency II)

Product	Product features		Risks per product					
	Guarantee	Profit-Sharing	Mortality	Longevity	Catastrophe	Lapse	Expense	Disability
Savings-based mortgage	Mortgage interest		√		√	√	√	
Life annuity	Regular payment			√			√	
Term insurance	Insured capital	<sup>1</sup>	√		√	√	√	
Traditional savings	Insured capital	√	√	√	√	√	√	
Funeral insurance	Insured capital	√	√		√	√	√	
Individual insurance policies in investment units	<sup>2</sup>		√	√	√	√	√	
Group insurance policies in cash	Regular payment / Insured capital	√	√	√	√	√	√	√
Group insurance policies in investment units	<sup>3</sup>			√	√	√	√	√
Group insurance policies with separate accounts	Regular payment / Insured capital <sup>4</sup>			√		√	√	√

<sup>1</sup> Partly company profit-sharing

<sup>2</sup> In some insurance guaranteed minimum yield applies at maturity

<sup>3</sup> In some insurance guaranteed minimum yield applies at maturity

<sup>4</sup> End of contract date contract contributory is not mandatory

### 4.2.3.2. Life insurance portfolio

The Life insurance portfolio contains individual (Individual Life) and Group insurance (Life Corporate) policies.

Individual policies are sold as policies with a fixed sum insured and policies with a benefit in units (unit-linked and universal life insurance). The traditional products were sold without or with profit sharing. The unit linked policies are without or with guarantees.

The Individual Life insurance portfolio mainly consists of unit-linked insurance policies, savings mortgage policies, endowments and other savings policies, term life policies, funeral policies and Life annuity insurance policies providing regular payments for a fixed period or for the remainder of the holder's life.

The Life Corporate portfolio consists of both traditional contracts where the investment risk is borne by the insurer, investment insurance (unit linked and universal life) and separate accounts, where the investment risk is borne by the customer. The separate accounts have an interest guarantee whereby at the current low interest rates this option has value for the customer.

The total portfolio is spread over policies with mortality risk and policies with longevity risk.

VIVAT sells individual Life insurance policies and annuities in the retail and SME markets in the Netherlands. With respect to new business, the focus is primarily on term Life insurance. These are sold via the labels Reaal and Zwitserleven by intermediaries and through direct channels. Furthermore, mortgage-related capital insurance is sold. The individual life insurance is aimed at private households.

VIVAT's corporate Life insurance portfolio focuses on the entire corporate market in the Netherlands.

### Co-insurance Life

VIVAT has concluded a number of co-insurance contracts with one or more other insurers. In general, risk assessments are based on the information provided by the administrating company. In the case of co-insurance, each co-insurer is liable for its own part of the insurance. Every year, the leader of the contract draws up a report that VIVAT uses to monitor the development of the portfolio and determine the provisions.

#### 4.2.3.3. Life reinsurance

The insurance business has a largely integrated reinsurance programme for the life and disability portfolio. As in previous years, separate reinsurance contracts for life and disability have been in force for the individual and group portfolios. The catastrophe reinsurance contract was concluded as an umbrella cover for the different sub portfolios together.

In 2017, the retention of life and disability for individual risks corresponded to € 1.5 million sum at risk per insured, for group risks the retention corresponded to € 1.0 million sum at risk per insured. The retention of the catastrophe cover amounts from € 15 million up to € 90 million. For 2018, the appropriateness of the current structure of the reinsurance program will be assessed with the aim to align this conservative structure with the risk management principles as described in the Reinsurance Policy.

To protect VIVAT for the risk of a mass lapse event, VIVAT has placed a non-proportional mass lapse stop loss reinsurance contract (indemnity based) with an effective date of December 31, 2016. The impact has been reflected in the 2017 SCR calculations.

#### 4.2.3.4. Sensitivities and SCR

The value of the Life insurance portfolio is sensitive to changes in the underwriting parameters used for calculating the market value of liabilities. In order to obtain information on these sensitivities, the effects of changes in mortality rates, surrender rates (including conversions to non-contributory policies) and expense assumptions, including inflation, are calculated separately. The most material items have been disclosed.

The key sensitivities of IFRS equity to changes in the underwriting parameters are the sensitivities to longevity risk and expenses. Due to the long term nature of the Life insurance portfolio these sensitivities are very sensitive for interest rate movements.

The important sensitivities of Solvency II ratio to changes in the underwriting parameters are the sensitivities to longevity risk and expenses.

The Solvency II ratio sensitivities for underwriting parameters are based on the estimated impact on own funds without recalculating the SCR after shock.

## VIVAT

### Sensitivity as a result of changes in technical parameters

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
10% increase in surrender rates (including non-contributory continuation)	4	-11	4	-11	2%	0%
10% lower mortality rates for all policies (longevity risk)	-251	-256	-251	-256	-14%	-14%
10% increase in expenses assumptions + 1% increase in inflation	-434	-469	-434	-469	-24%	-25%

## SRLEV

### Sensitivity as a result of changes in technical parameters

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
10% increase in surrender rates (including non-contributory continuation)	4	-12	4	-12	1%	0%
10% lower mortality rates for all policies (longevity risk)	-254	-260	-254	-260	-17%	-15%
10% increase in expenses assumptions + 1% increase in inflation	-417	-456	-417	-456	-27%	-26%

## Proteq Levensverzekeringen

### Sensitivity as a result of changes in technical parameters

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
10% increase in surrender rates (including non-contributory continuation)	-	1	-	1	0%	1%
10% lower mortality rates for all policies (longevity risk)	3	4	3	4	9%	6%
10% increase in expenses assumptions + 1% increase in inflation	-19	-13	-19	-13	-54%	-21%

### Mortality risk

The capital requirement for life mortality risk is equal to the loss in basic own funds resulting from an instantaneous permanent increase of 15% in the mortality rates used for the calculation of the technical provisions. The increase in mortality rates will apply only to insurance policies for which the increase in mortality rates leads to an increase in technical provisions, without risk margin, being the best estimate provision.

### Longevity Risk

The capital requirement for life longevity risk is equal to the loss in basic own funds resulting from an instantaneous permanent decrease of 20% in the mortality rates used for the calculation of the technical provisions. The conditions for the calculation are exactly the same as those specified in relation to life mortality risk, although in this case it concerns an increase in the best estimate provision in the event of a falling mortality rate. The groups whom this concerns will generally be those that are not affected by the life mortality risk.

## Disability-morbidity risk

Please refer to section 4.2.4 Non-life.

## Lapse risk

The capital requirement for life lapse risk is equal to the largest of the following capital requirements:

- The capital requirement for the risk of a permanent increase in lapse rates.  
This is equal to the loss in basic own funds of insurance and reinsurance undertakings that would result from an instantaneous permanent increase of 50%.
- The capital requirement for the risk of a permanent decrease in lapse rates.  
This is equal to the loss in basic own funds of insurers and re-insurers that would result from an instantaneous permanent decrease of 50%.
- The capital requirement for mass lapse risk.  
This is equal to the loss in basic own funds that would result from a discontinuance of 40% of the policies.
- The mass lapse shock is the dominant shock for VIVAT and its subsidiaries

## Life expense risk

The capital requirement for life-expense risk is equal to the loss in basic own funds that would result from the following combination of instantaneous changes:

- an increase of 10% in the amount of expenses taken into account in the calculation of the technical provisions;
- an increase of 1 percentage point in the cost-push inflation rate (expressed as a percentage) used for the calculation of the technical provision.

The above shock is applied to all VIVAT's continuing operating expenses. Only the 10% increase is applied on the management fee of the investment portfolio, because these expenses are not sensitive to inflation.

## Revision risk

This risk is not present in the portfolio, the effect of the shock is set to 0.

## Life catastrophe risk

The capital requirement for life catastrophe risk is equal to the loss in basic own funds resulting from an instantaneous permanent increase of 0.15 percentage points to the mortality rates in the following 12 months.

The increase in mortality rates will apply only to insurance policies for which the increase in mortality rates leads to an increase in technical provisions, without risk margin, being the best estimate provision.

## Diversification

Not all risks will materialize at the same time and at their full magnitude resulting in diversification between different risk types.

The tables below show the SCR of the underwriting risk Life, In these calculations only the policies which are negatively affected by these sensitivities are taken into account.

## SCR Life underwriting risk at 31 December 2017

In € millions	SRLEV	Proteq	VIVAT
Mortality risk	256	6	262
Longevity risk	1,071	-	1,071
Disability-morbidity risk	22	-	22
Lapse risk	222	1	223
Life expense risk	581	23	604
Life catastrophe risk	193	-	193
Diversification	-844	-4	-855
<b>SCR Life underwriting risk</b>	<b>1,501</b>	<b>26</b>	<b>1,520</b>

## SCR Life underwriting risk at 31 December 2016

In € millions	SRLEV	Proteq	VIVAT
Mortality risk	243	7	250
Longevity risk	1,023	-	1,023
Disability-morbidity risk	13	-	13
Lapse risk	399	5	404
Life expense risk	640	13	653
Life catastrophe risk	214	-	214
Diversification	-916	-6	-927
<b>SCR Life underwriting risk</b>	<b>1,616</b>	<b>19</b>	<b>1,630</b>

### VIVAT

The Solvency Capital Requirement for life underwriting risk decreased mainly due to a decrease of the lapse risk due to the implementation of the mass lapse reinsurance contract. Other relevant drivers are an increase of interest rates, updated parameters and portfolio development. The updated parameters lead to an increase of longevity risk (and decrease of mortality risk and life catastrophe risk) and a decrease of expense risk. Disability/ Morbidity risk has increased.

### SRLEV

The Solvency Capital Requirement for life underwriting risk decreased mainly due to a decrease of the lapse risk due to the implementation of the mass lapse reinsurance contract. Other relevant drivers are an increase of interest rates, updated parameters and portfolio development. The updated parameters lead to an increase of longevity risk (and decrease of mortality risk and life catastrophe risk) and a decrease of expense risk. Disability/ Morbidity risk has increased.

### Proteq Levensverzekeringen

Updated expense parameters lead to an increase of the expense risk and a decrease of the lapse risk.

## 4.2.4. Non-Life

For the division of risks into sub-risks in the Non-life insurance portfolios, VIVAT makes a distinction between Health underwriting risk and Non-Life underwriting risk.

The emphasis of this portfolio is on three segments: Fire, Motor and Disability. The insurance policies are mostly sold through authorized agents and distribution partners to retail and SME customers. In addition,



sales are also effected via direct channels. The disability insurance products in the portfolio include both individual coverage (for self-employed persons) and group coverage for employees. Only individual insurance contracts are currently sold.

The health underwriting risk module consists of the following three submodules:

- SCR for the Health Non-SLT underwriting risk
- SCR for the Health SLT risk
- SCR for the Health catastrophe risk

The Health catastrophe sub-module relates to all health insurance policies (i.e. both SLT and Non-SLT). In the following two subparagraphs the Non-Life underwriting risk and the health underwriting risks are assessed. In the third subparagraph the important role reinsurance has on the risk profile of VIVAT Schadeverzekeringen N.V. is mentioned.

#### 4.2.4.1. Disability

The classification of Life insurance risks also applies to these insurance policies, although the materiality of these risks is different. The Non-life insurer pays disability benefits that stem from the individual and group portfolios. The Life insurer pays disability benefits that relate to the cover that forms part of a Life insurance contract.

##### **Disability risk, recovery risk and lapse risk**

In the case of disability insurance, the main risks are the disability risk, recovery risk and lapse risk. The disability risk and recovery risk are risks that appear when a policyholder becomes unfit for work and receives benefits during the period this situation remains to exist. The risks relate to the amount, duration and timing of the payment of the insured cash flows. The disability risk is the risk that more policyholders than expected become disabled, or that policyholders become more severely disabled than expected. The recovery risk is the risk that fewer policyholders recover or that the policyholder recovers to a lesser extent than expected. The lapse risk is the risk associated with the consequences of cancellation by the policyholder before the envisioned end date of the policy.

VIVAT manages this risk by continuously monitoring the inflow, outflow and by promoting/offering reintegration pathways.

#### 4.2.4.2. Property & Casualty

The risks of Property & Casualty (P&C) can be divided into risks related to claims, whether reported or not, that have already occurred (reserve risk), and risks related to future claims arising from current contracts (premium risk and catastrophe risk).

##### **Reserve risk**

Reserve risk is the risk that the accrued claims reserves are insufficient to settle all claims already incurred. VIVAT manages this risk by means of monitoring best estimate trends in the claims development based on claim year on a regular basis. VIVAT has assigned specialised departments for the handling and run-off of claims (including bodily injury claims). Experts in these departments handle claims on an item-by-item basis, make estimates of the size of the claim, and monitor the progress of claims settlement. The long-tailed claim areas at VIVAT are disability claims, bodily injury claims and liability claims.

A liability adequacy test on the (IFRS) premium and claims reserves is performed once a quarter (at the Life and Pensions business) or once every six months (at the Non-Life Insurance business), or more frequently if this is deemed necessary. Any reserves that are inadequate are increased. The most recent insights as to parameters are involved here.

For short-term policies (P&C), the Non-life underwriting parameters are evaluated every quarter, other parameters (like lapse) at least once a year. In these evaluations relevant information on portfolio developments is taken into account. At the Non-life business, the tariff structure of each product is regularly assessed by means of analysis. Monitoring takes place on the basis of the combined ratio of each branch and distribution channel.

### **Premium risk**

Premium risk is the risk that premiums pertaining to future exposure are insufficient to meet all corresponding claims and costs. VIVAT manages this risk by means of the product development, pricing and acceptance procedures as described in section 4.2.2 Risk management process.

### **Catastrophe risk**

Catastrophe risk is the risk of losses due to extreme or exceptional events. This includes both natural disasters and events caused by human actions. Geographically, the risk in the Non-life portfolio of VIVAT is almost entirely concentrated in the Netherlands. There is concentration of underwriting risks in the Fire segment, where storm risk is an important factor. In addition, the concentration of risks can occur in apartment buildings, city blocks and office buildings. The concentration of risks also occurs in the group accident portfolio and the group disability schemes. VIVAT reinsures catastrophe risks due to perils of nature (such as storms) or terrorism. Catastrophes resulting from acts of violence, nuclear incidents or floods are excluded under the standard policy conditions. Through participation in the nuclear insurance pool and the environmental insurance pool, specifically insured risks are shared with other insurers.

### **Co-Insurance**

VIVAT Schadeverzekeringen NV is represented at the Rotterdam Insurance Exchange through its co-insurance unit. Risks in the Fire, Transport and Liability segments are underwritten. The focus is on the medium-sized and large business segments of the corporate insurance market.

#### **4.2.4.3. Non-Life reinsurance**

The use of reinsurance is an important role in managing the net risk profile of the Non-Life portfolio. The reinsurance program consists of reinsurance contracts per line of business and makes no specific distinction between the various distribution channels. In addition to the regular protection for the portfolios, VIVAT Schadeverzekeringen N.V. has concluded a catastrophe contract for covered natural perils (storm, hail) and the accumulation of losses due to one event (e.g. conflagration) within the fire portfolio.

The 2017 reinsurance program was largely a continuation of the program for 2016. From risk management and capital management considerations, the capacity of the catastrophe programme is aligned with the Risk Appetite of VIVAT.

## Non-life insurance retention

In € thousands		2018	2017	2016
Coverage:				
Fire	per risk	2,000	2,000	2,000
Motor third-party liability	per risk	2,500	2,500	2,500
General liability	per risk	1,500	1,500	1,000
Accidents	per risk	1,000	750	750
Transport	per risk	1,000	1,000	1,000
Disability (risk capital)	per risk	1,500	1,500	1,500
Catastrophe	per event	20,000	20,000	20,000

The level of retention of the VIVAT Non-life reinsurance contracts is in line with the size of the underwriting portfolios and the principles of the Reinsurance Policy. The reinsurance programme consists of reinsurance contracts per line of business and makes no specific distinction between the various distribution channels.

### 4.2.4.4. Sensitivities and SCR Non-life

The own funds of P&C Insurance are sensitive to results in the Non-life claims, disability and loss ratio's. The table below shows the sensitivity for different shocks. The IFRS net result sensitivity for an increase of claims of 10% is equal to the impact on IFRS shareholder equity and decreased from minus € 32 million to minus € 29 million.

### Sensitivity as a result of changes in parameters

In %	Solvency II ratio	
	2017	2016
Claims +10%	-8%	-9%
Disability +25% and Recovery -20%	-49%	-50%
Loss ratio current accident year +10%	-7%	-8%

### Non-Life premium and reserve risk

The capital requirement for the premium and reserve underwriting risk is dependent on the standard deviation and volume of the premiums and outstanding reserves.

### Non-Life Lapse risk

The capital requirement for the lapse risk is equal to the loss in basic own funds as a consequence of an instantaneous discontinuance of 40% of the insurance policies for which discontinuance would result in an increase of the best estimate provision. Compared to premium & reserve risk and the catastrophe risk this risk is limited.

### Non-Life catastrophe risk

In calculating the SCR for the Non-Life portfolio the following main drivers are identified: premium & reserve risk, cat risk and lapse risk. Due to risk diversification between the risks the total risk is less than the aggregated results and thus a diversification effect originates. In the following table the net SCR outcome for each risk is given.

## SCR underwriting risk Non-Life

In € millions	2017	2016
Non-Life premium and reserve risk	183	190
Non-Life lapse risk	4	4
Non-Life catastrophe risk	63	63
Diversification	-42	-42
<b>SCR Non-Life underwriting risk</b>	<b>208</b>	<b>215</b>

The movement in the SCR underwriting risk is limited and can be explained by regular portfolio development.

### 4.2.4.5. Sensitivities and SCR Health

The health underwriting risk relates to occupational disability policies and the casualty, sickness benefits and pet care portfolio. As the risk profiles of these insurance policies differ, a distinction is made in risks between:

- health insurance policies which provide for long-term benefits and thus resemble Life policies (Health SLT);
- health insurance policies which provide for short-term benefits and thus resemble Non-Life insurance (Health Non-SLT);
- risks relating to a mass accident, an accident concentration risk and a pandemic. This results in a third main risk module within Health and is the Health catastrophe risk (Health Cat).

#### SLT Mortality risk

This risk applies to the Health SLT active portfolio for which mortality rates may have a negative impact on the best estimate. For the Health SLT Inactive portfolio a shorter life will mean less future payments. The impact is marginal because the end date of the contract limits the mortality risk.

#### SLT Longevity risk

This risk only applies to Health SLT Inactive portfolio. The impact is marginal because the end date of the contract limits the longevity risk.

#### SLT Disability-morbidity risk

The capital requirement for morbidity risk (or incapacity for work risk) is equal to the loss in basic own funds that would result from the following combination of instantaneous permanent changes:

- an increase of 35% in the disability rates which are used in the calculation of technical provisions in the following 12 months;
- an increase of 25% in the disability rates which are used in the calculation of technical provisions in all months thereafter;
- a decrease of 20% in the rehabilitation rates for the calculation of the technical provision for all years.

The shock on disability applies to both the first year as well as risk after the first year and has major impact on both the Health SLT active portfolio as well as the Health SLT inactive portfolio. The parameters in the shock are at the core of the product and given the duration of the controls the impact of this shock is very significant in the Non-Life portfolio.

## SLT Lapse risk

The high exposure to lapse is mostly driven by the expected future profits contained in the disability portfolio. The lapse risk is based on a formula of different type of shocks (see Life portfolio). The impact is mainly seen at the health SLT active portfolio. There is a (marginal) impact on the inactive portfolio, because disabled policy holders can rehabilitate.

## SLT Expense risk

The impact of the expense risk shock is relatively limited for the disability portfolio.

## SLT Revision risk

The capital requirement for revision risk is equal to the loss in basic own funds that would result from an instantaneous permanent increase of 3% in the amount of annuity benefits only on annuity insurance and reinsurance obligations where the benefits payable under the underlying policies could increase as a result of changes in the legal environment or in the state of health of the insured person. Due to the fact that disability claims are paid out in the form of an annuity, there is a sensitivity to this shock. However, it is limited.

The health SLT underwriting risk applies to occupational disability policies. Virtually the same sub-modules as defined for the Life underwriting risk (see section 4.2.3.4) apply to the SLT health underwriting risk. Also virtually the same are the extent of shocks and the correlation assumptions between the shocks.

## SCR Health SLT underwriting risk

In € millions	2017	2016
SLT Longevity risk	3	4
SLT Disability-morbidity risk	233	245
SLT Lapse risk	79	77
SLT Expense risk	22	20
SLT Revision risk	15	16
Diversification	-90	-91
<b>SCR Health SLT underwriting risk</b>	<b>262</b>	<b>271</b>

The parameter update for the disability portfolio resulted in lower disability rates and higher rehabilitation rates used for calculating the value of the liabilities, resulting in a lower disability-morbidity risk and a lower SCR.

## SCR Health underwriting risk

In € millions	2017	2016
<b>SCR Health SLT underwriting risk</b>	<b>262</b>	<b>271</b>
Non-SLT premium reserve risk	15	14
Non-SLT lapse risk	3	3
Diversification	-3	-3
<b>SCR Health Non-SLT underwriting risk</b>	<b>15</b>	<b>14</b>
Health catastrophe risk	3	3
Diversification	-9	-9
<b>Total health underwriting risk</b>	<b>271</b>	<b>279</b>

## Non-SLT SCR

Due to the limited size of the portfolio, the sensitivity is limited.

## 4.3. Market risk

### 4.3.1. Risks – general

Market risks can potentially have a substantial financial impact on the value of the assets and liabilities of the insurance business. Unfavourable changes in market conditions have an impact on VIVAT's earnings and/or own funds. To manage the mismatch between the assets and liabilities an ALM (Asset and Liability Management)-framework is in place. This framework is designed to bring about an investment strategy that optimizes the relationship between risks and returns. The framework also ensures that VIVAT's operations remain within the boundaries of its risk appetite.

The market risk is the risk arising from the level or volatility of market prices of financial instruments which have an impact of the value of the assets and liabilities of VIVAT. The ALM-framework aims to properly reflect the structural mismatch between assets and liabilities, with respect to the duration thereof.

The following eight sub-market risks have been defined: interest rate risk, equity risk, property risk, spread risk, basis risk, market risk concentrations, currency risk and volatility risk. VIVAT can achieve its financial objectives by managing these risks adequately. It does this by reducing losses due to movements in the level and/or volatility of market prices of financial assets.

VIVAT monitors and mitigates market risk in close cooperation with ACTIAM, the asset manager of VIVAT. For mitigation, instruments such as interest rate swaps, futures, FX forwards, interest rate swaptions and fixed income investments are used.

### 4.3.2. Risk management process ALM

The ALM-policy covers the management of market risk, counterparty default risk and liquidity risk.

The starting point for the ALM policy is the ALM study, which is drawn up annually. The ALM study seeks to find an optimum between risk and return within the preconditions that apply with regards to solvency, and laws and regulations. This ALM study is used as a basis for defining a Strategic Asset Allocation (SAA), which is in turn used to translate specific investment activities into an investment plan and investment mandates for ACTIAM, taking into account the risk limits based on the Risk Appetite Statements (RAS), solvency ratio, the tax position and the long-term risk exposure. In order to spread the risk, the risk is spread across a range of risk drivers, asset classes and sectors. When finalizing the SAA, specific attention is paid to the availability of sufficient expertise in the segments in which investments are held. All investments are monitored by means of reports on performance and capital.

Investments are made in accordance with the prudent person principle and in the interest of the policyholders. The prudent person principle forms part of the ALM policy. Investments are made exclusively in assets and instruments which risks are properly identified, measured, monitored, managed, controlled and reported.

## Sensitivity analyses and stress tests

Stress tests provide information on how sensitive investments and liabilities are to interest rate risk and other market risk. These risks are quantified (and monitored) on a regular basis.

For interest rate risk several parallel and non-parallel shocks are defined. For market risk a number of combined scenarios is determined with (different) simultaneous shocks to the various sub-market risks.

These market risk scenarios are monitored and reported on a regular basis, and if deemed necessary adjustments are made to existing risk exposures based on overlay hedging tools. This evaluation is supported by metrics for yield curve risk and non-linear interest rate risk. In this manner, VIVAT manages market risk from a holistic balance sheet perspective.

This approach reflects the sensitivity of the entire statement of financial position (of fixed cash flows, options, risk margin and required capital) drawn up on a Solvency II basis.

### 4.3.3. SCR Market risk

Exposure to market risk is measured under the Solvency II regime using adverse movements in financial variables. The main driver of market risk is the Solvency Capital Requirement for spread risk and to lesser extent the Solvency Capital Requirements for Equity and interest rate risk.

The relevant types of market risk in Solvency II are displayed in the table below:

#### SCR Market risk at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Interest rate risk	239	12	14	224
Equity risk	204	12	-	196
Property risk	82	-	-	117
Spread risk	471	17	2	489
Currency risk	31	-	-	175
Diversification	-285	-12	-1	-365
<b>SCR market risk</b>	<b>742</b>	<b>29</b>	<b>15</b>	<b>836</b>

#### SCR Market risk at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Interest rate risk	247	15	51	257
Equity risk	248	10	-	242
Property risk	67	-	-	103
Spread risk	515	22	3	509
Concentration risk	-	1	1	-
Currency risk	10	1	-	11
Diversification	-163	-16	-4	-300
<b>SCR market risk</b>	<b>924</b>	<b>33</b>	<b>51</b>	<b>822</b>

## VIVAT

The main drivers for the SCR market risk increase are an increase in the currency risk and a decrease in the equity risk. In the Solvency II regime the capital requirement for currency risk is determined on the assets over the liabilities, not taken into account the issued subordinated notes in foreign currency. This leads to an exposure of the currency risk in the standard formula. The equity risk decreased mainly due to a tactical adjustment in the asset portfolio.

## SRLEV

The main driver for the SCR market risk decrease is an increase of diversification benefits and a decrease in equity and spread risk. SRLEV manages its interest rate risk by stabilizing the Solvency II ratio after an up or down interest rate shock. The interest rate sensitivity shifted from an interest rate down scenario towards an interest rate up scenario. This results in a different prescribed correlation matrix with more diversification benefits. The equity risk decreased mainly due to a tactical adjustment in the asset portfolio and spread risk decreased mainly due to changes in the capital structure of SRLEV.

## VIVAT Schadeverzekeringen

Market risk is very limited compared to the Non-life and Health risk. The development of the SCR market risk is mainly due to normal market and portfolio developments.

## Proteq Levensverzekeringen

The main driver for the decrease of the SCR market risk is the re-balancing of the interest rate risk on a Solvency II basis.

### 4.3.3.1. Interest rate risk

Interest rate risk is a key component of VIVAT's market risk profile. Interest rate risk arises when the interest rate sensitivities of the assets and liabilities are not completely equal and it is expressed as movements in the capital position if market rates change. Moreover, the expected fixed cash flows from technical provisions are matched with fixed-income investments as much as possible. The profit-sharing and return guarantees to policyholders are an additional source of interest rate risk. Due to the long term nature of the Life and Pension insurance portfolio it is very sensitive to interest rate movements. This sensitivity is partly mitigated by the use of interest rate derivatives to hedge the guarantees and profit-sharing in the Life insurance portfolio.

VIVAT uses a scenario based approach to control the sensitivity of solvency to market conditions, such as interest rates and spreads. The key solvency metric to express the risk is based on the regulatory solvency reported to the Dutch Central Bank (DNB). This method is chosen because VIVAT has decided to use regulatory solvency as the principle factor in managing market risks.

From this perspective also the UFR of 4.2% prescribed by EIOPA introduces a risk. Over the course of time, the positive valuation effect of the UFR reduces, which puts downward pressure on the trend in solvency in the future. EIOPA decided to yearly decrease the UFR starting in 2018 with 0.15% per year. This will have a negative impact on solvency.

The tables below show the sensitivity of the IFRS result, IFRS equity and Solvency II ratio to changes in interest rates as a result of a decrease or an increase by 0.5% of the interest rates (maintaining the UFR at 4.2%), decreases in the UFR of 0.15% and 0.5% and the impact of the VA on the Solvency II ratio.



Under IFRS the impact of different UFR is slightly different than under Solvency II due to tiering and the VA (not applicable under IFRS).

## VIVAT

### Sensitivity VIVAT

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Interest +50 bps	-41	-129	-41	-129	6%	-1%
Interest -50 bps	69	166	69	166	-9%	1%
UFR -15 bps	-58	-74	-58	-74	-7%	-4%
UFR -50 bps	-198	-245	-198	-245	-15%	-13%
Excluding VA	-	-	-	-	-11%	-23%

## SRLEV

### Sensitivity SRLEV

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Interest +50 bps	-51	-104	-51	-104	5%	1%
Interest -50 bps	68	137	68	137	-10%	-2%
UFR -15 bps	-56	-71	-56	-71	-4%	-4%
UFR -50 bps	-190	-238	-190	-238	-18%	-14%
Excluding VA	-	-	-	-	-12%	-24%

## VIVAT Schadeverzekeringen

### Sensitivity VIVAT Schadeverzekeringen

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Interest +50 bps	-3	0	-3	0	5%	6%
Interest -50 bps	3	0	3	0	-6%	-7%
UFR -15 bps	0	0	0	0	-1%	0%
UFR -50 bps	-1	0	-1	0	-1%	0%
Excluding VA	-	-	-	-	-1%	-3%

## Proteq Levensverzekeringen

### Sensitivity Proteq levensverzekeringen

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Interest +50 bps	-4	-32	-4	-32	19%	-30%
Interest -50 bps	5	36	5	36	-21%	55%
UFR -15 bps	-2	-2	-2	-2	-8%	-1%
UFR -50 bps	-8	-7	-8	-7	-33%	-3%
Excluding VA	-	-	-	-	-9%	-10%

VIVAT's interest rate hedging policy aims to ensure that obligations towards policyholders are fulfilled in both the short term and the long term. In addition, it aims to enable its providers of capital to receive a reasonable return (in terms of market value) that is in line with VIVAT's risk exposure and to stabilize the solvency capital. VIVAT manages its interest rate risk by stabilizing the Solvency II ratio after an up or down interest rate shock, taking the UFR of 4.2% into account. This generally results in a negative own funds impact for interest rate up movements and a positive own funds impact for interest down movements.

The capital requirement for interest rate risk is determined on the basis of two scenarios in which the risk free yield curve is exposed to shocks affecting both assets and liabilities. The first scenario is 'interest rate up' and the second 'interest rate down'. The capital requirement for interest rate risk is defined by the scenario which has the most negative impact on basic own funds. The sign of the SCR interest rate shock (up or down) has to be determined based on the net SCR interest rate risk in accordance with SII legislation. However, the gross SCR interest rate risk determines the size of SCR interest rate risk. The interest rate scenario used for the up and down Solvency II shocks are prescribed; being in effect a parallel up shock of 100 bps and a non-parallel down shock increasing from 0 to minus 71 bps, both without re-applying the UFR. For VIVAT, SRLEV and VIVAT Schadeverzekeringen the up shock is leading, whereas for Proteq Levensverzekeringen the down shock is leading.

### SCR Interest rate risk at 31 December 2017

In € millions	SRLEV	VIVAT Schade <sup>1</sup>	Proteq	VIVAT
SCR interest up shock	-239	-12	-5	-224
SCR interest down shock	-232	-	-14	-246
<b>SCR interest rate risk</b>	<b>239</b>	<b>12</b>	<b>14</b>	<b>224</b>

<sup>1</sup> Positive own funds impacts are set to zero

### SCR Interest rate risk at 31 December 2016

In € millions	SRLEV	VIVAT Schade <sup>1</sup>	Proteq	VIVAT
SCR interest up shock	-183	-15	-51	-257
SCR interest down shock	-247	-	-	-235
<b>SCR interest rate risk</b>	<b>247</b>	<b>15</b>	<b>51</b>	<b>257</b>

<sup>1</sup> Positive own funds impacts are set to zero

The interest rate risk for VIVAT, SRLEV and VIVAT Schade mainly changed due to market and portfolio developments. The interest rate risk for Proteq changed due to rebalancing the interest rate risk. For VIVAT, the sign of the net shock now differs from the sign of the gross shock, resulting in the up shock to be leading for SCR interest rate risk.

#### 4.3.3.2. Equity risk

The IFRS-based equities classification also includes participations in funds that invest in other types of securities like money market funds and other (non-investment grade) fixed income funds. The ALM policy and the market sensitivities are adjusted to reflect the underlying risk under Solvency II and IFRS for a more economic approach ("look through"), including the impact of the shock on the liabilities. VIVAT periodically

examines the impact of changes in the equity markets on the result and on own funds. Scenario analysis are used for this purpose, in line with the situation applying in the case of interest rate risk.

The tables below show the results of this analysis at the reporting date net of taxation. Upward effects on equity are processed in the revaluation reserve and do not impact earnings. A downward effect on equity does impact the net result in case of an impairment (for the accounting policies on impairments see section 6.1.5 in the Annual Report for Accounting policies regarding the statement of financial position).

## VIVAT

### Sensitivity VIVAT

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Equities +10%	21	23	37	55	1%	2%
Equities -10%	-32	-31	-37	-55	-1%	-2%

## SRLEV

### Sensitivity SRLEV

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Equities +10%	21	23	33	52	1%	2%
Equities -10%	-32	-31	-33	-52	-1%	-2%

## VIVAT Schadeverzekeringen

### Sensitivity VIVAT Schadeverzekeringen

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Equities +10%	-	-	3	3	1%	1%
Equities -10%	-	-	-3	-3	-1%	-1%

The SCR for equity risk is equal to the loss in market value of the basic own funds in the event of a sudden shock to equities including a so-called symmetric adjustment. This adjustment corrects the equity shock for the difference between the current level of global equity prices and a long-term average and can vary between a minus 10% adjustment and a plus 10% adjustment.

SCR for equity risk consists of type 1 and type 2 equities. Type 1 equities are equities listed in regulated markets which are members of the EEA or OECD. Type 2 equities are equities listed in countries other than members of the EEA and/or OECD, non-listed equities, private equities, hedge funds, commodities and other alternative investments.

The SCR for equity risk is defined as the aggregation of the capital requirement for type 1 equities and the capital requirement for type 2 equities, allowing a correlation of 0.75 between types 1 and 2.

A transitional arrangement can be applied to type 1 equities in order to reduce the standard capital charge. VIVAT does not apply this transitional arrangement.

The table below shows the SCR for equity risk:

### SCR Equity risk at 31 December 2017

In € millions	SRLEV	VIVAT Schade	VIVAT
Type 1 equities	161	1	143
Type 2 equities	53	11	65
Diversification	-10	-	-12
<b>Equity risk</b>	<b>204</b>	<b>12</b>	<b>196</b>

### SCR Equity risk at 31 December 2016

In € millions	SRLEV	VIVAT Schade	VIVAT
Type 1 equities	136	-	136
Type 2 equities	129	10	123
Diversification	-17	-	-17
<b>Equity risk</b>	<b>248</b>	<b>10</b>	<b>242</b>

The equity risk of VIVAT and SRLEV decreased mainly due to a tactical adjustment in the asset portfolio.

SRLEV reports on unconsolidated basis, resulting into a classification of property risk to type 2 strategic equity risks for several subsidiaries (which are listed in Annex I). This results in a higher equity charge for SRLEV than VIVAT (consolidated). The opposite effect occurs when calculating the amount of property risk.

The SCR for type 1 originates for a great part from contracts where the investment risk is born by the policyholder (unit linked and collective investment undertakings).

#### 4.3.3.3. Property risk

Property risk is defined as the sensitivity of the value of assets and liabilities to changes in the level or volatility of the market prices of real estate.

The IFRS-based equities classification also includes participations in funds that invest in other types of securities. The ALM policy and the market sensitivities are adjusted to reflect the underlying risk under Solvency II and IFRS based on an economic approach ("look through"). VIVAT periodically examines the potential impact of changes in the property markets on the net result and on shareholders' equity based on scenario analysis in line with the situation applying in the case of interest rate risk. The table below shows the indicative results of this analysis at the reporting date net of taxation.

#### VIVAT Sensitivity VIVAT

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Property +10%	33	28	35	31	1%	1%
Property -10%	-33	-29	-35	-31	-1%	-1%

## SRLEV

### Sensitivity SRLEV

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Property +10%	33	28	35	31	2%	2%
Property -10%	-33	-29	-35	-31	-2%	-2%

The SCR for property risk is equal to the loss in the basic own funds that would result from an instantaneous decrease of 25% in the value of property. Property consists of direct property (e.g. buildings and investments in owner-occupied properties) and indirect interests in property (through investment funds). VIVAT applies the look-through approach in determining the SCR for property risk also taking the effect of any leverage on the Net Asset Value of property funds into account.

The table below shows the SCR for property risk:

### SCR Property risk

In € millions	2017	2016
Property risk SRLEV	82	67
<b>Property risk VIVAT</b>	<b>117</b>	<b>103</b>

Property risk of VIVAT and SRLEV increased due to the acquisition of property which increased our rental income.

The main difference between SRLEV and VIVAT regarding the SCR for property risk is that SRLEV is based on unconsolidated figures whereas VIVAT is based on consolidated figures.

#### 4.3.3.4. Spread risk

Spread risk is defined as the sensitivity of the value of assets and liabilities to changes in the level or volatility of the credit spread above the risk-free interest rate term structure. The spread risk for the insurance business arises in the fixed-income investment portfolio, which includes securitizations, loans, corporate and government bonds that are sensitive to changes in credit risk surcharges. Increasing credit risk surcharges have a negative effect on the market value of underlying bonds.

Credit risk surcharges are also a source of basis risk in the valuation of insurance liabilities. The basis risk relates to the risk of a mismatch between the interest rate used in the valuation of the liabilities and the interest rate used for the asset portfolio. This basis risk mainly emanates from the risk that movements in the interest rate on the EU government bonds held in portfolio will not be synchronous with movements in the swap rate.

The swap curve (including UFR) is currently used when discounting insurance liabilities under IFRS. A change in the swap curve has a direct impact on the value of the insurance liabilities. This leads to volatility in the available capital, as the interest rate used for the valuation of the investment portfolio differs from the relevant swap curve for the insurance liabilities.

Under the Solvency II regime the swap curve with a prescribed Ultimate Forward Rate (UFR) is used when discounting insurance liabilities, adjusted for credit risk (CRA) and a Volatility Adjustment (VA). The VA moves along with the credit spreads, but still substantial basis risk exists because the VA is based on a reference portfolio instead of VIVAT's own asset portfolio, and also a 65% scaling factor is applied to determine the VA. For managing market risks a number of combined scenarios is determined with (different) simultaneous shocks to risk categories. In this scenario based approach among others credit spreads, volatility (interest rate volatility and equity volatility) and best estimates for the VA are taken into account.

While interest rate risk regarding the Solvency II ratio sheet is well matched, there remains significant volatility as the credit risk profile of VIVAT differs from the profile implied by the Volatility Adjustment (VA). The basis risk was further mitigated during 2017 by replacing long German and Dutch government bonds by swaps combined with short government bonds. The basis risk is still material, in case of higher rates (spreads) for bonds, IFRS equity is affected.

An increase of credit spreads will directly have a negative short-term effect on IFRS equity and net result, in the long run, spreads are expected to be realized, mitigating this short term negative effect. Under Solvency II an increase of credit spreads also leads to an increase of the Volatility Adjustment impacting the value of the liabilities. VIVAT assumes that an increase of all credit spreads of 50 bps leads to an increase of the VA of 23 bps, an increase of 50 bps on corporates to an increase of the VA of 14 bps and an increase of 50 bps on government bonds to an increase of the VA of 9 bps. The change of the VA has no impact on the value of the liabilities under IFRS.

## VIVAT

### Sensitivity VIVAT

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Credit spreads Government Bonds +50 bps	-506	-753	-506	-753	-18%	-29%
Credit spreads Corporates/Mortgages +50 bps	-111	-117	-111	-117	13%	9%
All Credit spreads +50 bps	-617	-870	-617	-870	-5%	-20%

The replacement of the long term government bonds by swaps combined with short term government bonds led to a lower IFRS sensitivity for credit spreads (especially for government bonds). This also led to a lower sensitivity of the Solvency II ratio for credit spreads (especially for government bonds).

## SRLEV

### Sensitivity SRLEV

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Credit spreads Government Bonds +50 bps	-473	-711	-473	-711	-15%	-29%
Credit spreads Corporates/Mortgages +50 bps	-109	-104	-109	-104	18%	12%
All Credit spreads +50 bps	-582	-815	-582	-815	3%	-17%

During 2017 long term government bonds (mainly German and Dutch) were replaced by swaps combined with short term government bonds, leading to a lower IFRS sensitivity for credit spreads (especially for

government bonds). This also led to a lower sensitivity of the Solvency II ratio for credit spreads (especially for government bonds).

## VIVAT Schadeverzekeringen

### Sensitivity VIVAT Schadeverzekeringen

In € millions	IFRS net result		IFRS Shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Credit spreads Government Bonds +50 bps	-10	-18	-10	-18	-2%	-4%
Credit spreads Corporates/Mortgages +50 bps	-2	-4	-2	-4	1%	0%
All Credit spreads +50 bps	-13	-22	-13	-22	-1%	-4%

Credit spread sensitivity decreased over 2017.

## Proteq Levensverzekeringen

### Sensitivity Proteq Levensverzekeringen

In € millions	IFRS net result		IFRS shareholders' equity		Solvency II ratio	
	2017	2016	2017	2016	2017	2016
Credit spreads Government Bonds +50 bps	-26	-39	-26	-39	-64%	-57%
Credit spreads Corporates/Mortgages +50 bps	0	-1	0	-1	20%	8%
All Credit spreads +50 bps	-26	-39	-26	-39	-48%	-49%

Credit spread sensitivity decreased over 2017.

## Solvency Capital Requirement for spread risk

The SCR for spread risk is determined by calculating the impact on the eligible own funds 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, loans and structured products. The capital requirement takes into account the market value, the modified duration and the credit quality category.

## SCR Spread risk at 31 December 2017

In € millions	SRLEV	VIVAT Schade		Proteq	VIVAT
Bonds and loans	424	16		2	441
Securitisation positions	47	1		-	48
<b>Spread risk</b>	<b>471</b>	<b>17</b>		<b>2</b>	<b>489</b>

## SCR Spread risk at 31 December 2016

In € millions	SRLEV	VIVAT Schade		Proteq	VIVAT
Bonds and loans	454	21		3	447
Securitisation positions	61	1		-	62
<b>Spread risk</b>	<b>515</b>	<b>22</b>		<b>3</b>	<b>509</b>

The SCR for spread risk of VIVAT, VIVAT Schadeverzekeringen and Proteq Levensverzekeringen decreased mainly due to normal market and portfolio developments. European sovereigns and sub-sovereigns are excluded from spread risk. The SCR for spread risk of SRLEV decreased mainly due to changes in the capital structure of SRLEV.

#### 4.3.3.5. Concentration risk

Concentration risk is defined as all risk exposures associated with a potential loss that is significant to endanger the solvency or financial position of insurance and reinsurance undertakings.

A concentration risk charge is prescribed under Solvency II when the issuer exposure exceeds a certain percentage threshold of the asset base depending on the credit rating of the issuer and the type of investment. The SCR for concentration risk is calculated on the basis of single name exposure. This means that undertakings which belong to the same corporate Group are treated as a single name exposure.

VIVAT and its insurance entities still hold substantial investments in German and Dutch government bonds and supranational issuers which are excluded from (the Solvency II scope of) concentration risk. As of 31 December 2017, the applicable Solvency II thresholds have not been exceeded and as a result no concentration risk charge was applicable to VIVAT or its insurance entities.

#### 4.3.3.6. Currency risk

Currency risk is defined as the sensitivity of the value of assets and liabilities to changes in the level or volatility of exchange rates. The currency risk of VIVAT is caused by a combination of investments and liabilities in foreign currencies that are not perfectly matched.

With respect to fixed-income investments, VIVAT's policy is to permit only a very limited currency risk. Given this, the currency risk on fixed-income investments denominated in foreign currency is, in principle, hedged with currency swaps.

Currency risk also arises in relation to the equity investments of VIVAT. This currency risk, after netting the currency risk in other non-fixed-income investments and liabilities, is structurally hedged using forward currency contracts or currency swaps if the net exposure without applying look through principle exceeds € 10 million.

The effects of changes in foreign exchange markets on the net result, own funds and solvency are measured periodically using scenario analysis. The Solvency II currency exposure is determined using the look through principle regarding investment funds. This results in slightly higher currency exposure.

The SCR for currency risk is equal to the loss in the basic own funds that would result from an instantaneous change in the value of the foreign currency against the local currency. For each foreign currency this involves taking the maximum of the impact on the basic own funds of a 25% increase or 25% decrease in the value of the currency. The total SCR for currency risk is then obtained by the sum of the 'individual' currencies.



## SCR Currency risk

In € millions	2017	2016
Currency risk SRLEV	31	10
Currency risk VIVAT Schadeverzekeringen	-	1
<b>Currency risk VIVAT</b>	<b>175</b>	<b>11</b>

In November 2017 VIVAT issued \$ 575 Million of subordinated notes to institutional investors. The proceeds of the issuance were used to redeem the subordinated loans issued by Anbang. This transaction results in a substantial smaller interest rate burden. The resulting currency exposure is fully hedged on a P&L and eligible own funds basis, but impacts the Solvency Capital Requirement. In the Solvency II regime the capital requirement for currency risk is determined on the assets over the liabilities, not taken into account the subordinated notes in foreign currency.

### 4.3.3.7. Volatility risk

The volatility risk is the risk of losses due to changes in volatility (parameters) and is measured and presented separately. It is addressed in the market sub risks as described before. VIVAT and subsidiaries are sensitive to volatility on both sides of the balance sheet. Embedded options on the liability side and swaptions as hedges on the asset side. Because of the hedges, the residual volatility risk is not material.

### 4.3.3.8. Diversification

Not all risks will materialize at the same time and at their full magnitude, resulting in diversification between different risk types. Solvency II prescribes a correlation matrix for the diversification effect in the SCR Market Risk module in order to aggregate the results of the types of market risks. This leads to a lower amount of total Market Risk compared to the sum of the individual market risk types. Solvency II furthermore prescribes that a downward SCR interest rate shock will be more correlated with an equity, spread and property shock compared to an upward interest rate shock.

At 31 December 2017, VIVAT, SRLEV and VIVAT Schadeverzekeringen had a net balance sheet exposure to an upward interest rate shock, whereas Proteq Levensverzekeringen was exposed to a downward interest rate shock. This has led to lower diversification benefits for Proteq Levensverzekeringen compared to the other entities.

## 4.4. Counterparty default risk

### 4.4.1. Risks – general

VIVAT defines counterparty default risk as the risk of potential losses due to an unexpected payment default of the counterparties and debtors of insurance and reinsurance undertakings within the next twelve months.

The SCR Counterparty Default Risk covers risk-mitigating contracts, such as reinsurance arrangements, insurance securitisations, repos, (unsecured) savings parts, derivatives, retail mortgages and receivables from intermediaries, as well as any other credit exposures not covered by the definition of SCR Spread Risk.

For each counterparty, the overall credit default risk exposure of the insurance or reinsurance undertaking concerned to that counterparty is measured, irrespective of the legal form of its contractual obligations to that undertaking. Its calculation also takes into account collateral or other security held by or for the account of the insurance or reinsurance undertaking and the risks associated therewith.

Besides the calculation of SCR Counterparty Default Risk, VIVAT has developed a complementary Counterparty Risk Policy for internal use. This risk is measured as Loss At Default (LAD) and Stress Loss (SL) and combines instruments/exposures that are in scope for both SCR Concentration Risk and SCR Counterparty Default Risk. Appropriate internal LAD and SL limits have been incorporated in the ALM policy and must be adhered to.

VIVAT uses this methodology to aggregate and monitor all types of exposures to various types of individual counterparties, such as (sub)sovereigns, financials and corporates. The periodic Counterparty Risk reports are discussed by the Investment Committee, and appropriate measures are taken when limits are exceeded.

### 4.4.2. Risk management process

VIVAT manages and verifies counterparty default risk within the set frameworks. Investments may be sold when deemed necessary, risk mitigating contracts or clauses are drawn up in cooperation with ACTIAM and Legal Affairs. The counterparty default risk at VIVAT is measured by means of measuring the exposure to individual parties and, as the case may be, aggregating exposures with similar characteristics.

For each type of credit risk, the roles, powers and responsibilities of officers and committees, including tiered decision-making powers, are recorded in the policy documents for the relevant type of credit risk.

#### Fixed-income investment portfolio

The counterparty default risk within the interest-bearing investment portfolios of VIVAT is the risk that an issuer of a bond or a debtor of a private loan does no longer meet its obligations. The strategic allocation along the various investment grade categories within the interest-bearing portfolio is determined in the context of ALM and laid down in mandates with the asset managers.

#### Derivatives exposure

The counterparty default risk related to the market value of the derivatives held by VIVAT with a counterparty is managed by means of a Credit Support Annex (CSA) agreement in accordance with standard industry practice. These agreements provide that the underlying value of the derivatives must be posted as collateral in liquid instruments, such as cash and government bonds, to cover the counterparty default risk.

## Reinsurance

VIVAT pursues an active policy with respect to the placement of reinsurance contracts, using a panel consisting of reinsurers with solid ratings. The general policy is that reinsurers should have a minimum rating of A-. However, given the long-term nature of the underlying business, the current casualty panel consists of reinsurers with at least an A- rating, while the panel for life and disability reinsurance contracts consists of reinsurers with at least an AA- rating. Continuity and diversification within the panels of reinsurers is an important principle.

## Mortgage portfolio

VIVAT is exposed to counterparty default risk on its mortgage portfolio. Part of this portfolio is guaranteed by the National Mortgage Guarantee Fund (NHG). The average Loan to Value ratio has improved due to amortisation of the outstanding mortgage balance and an increase in Dutch housing prices in 2014-2017. The market value of the portfolio has decreased due to scheduled amortisation and prepayments. In the course of 2017, VIVAT started the origination of new mortgages.

### Mortgages by security type

In € millions	2017	2016
Mortgages < 75% of foreclosure value	547	569
Mortgages > 75% of foreclosure value <100%	421	492
Mortgages > 100% of foreclosure value	354	430
Mortgages with National Mortgage Guarantee	1,021	1,157
<b>Residential property in the Netherlands</b>	<b>2,343</b>	<b>2,648</b>
Fair value adjustment	218	251
<b>Total residential property in the Netherlands</b>	<b>2,561</b>	<b>2,899</b>

### 4.4.3. SCR Counterparty default risk

The counterparty default risk module reflects the possible loss as a consequence of bankruptcies or a reduction in the credit standing of counterparties over a 12-month period. The SCR for the counterparty default risk is determined by aggregating the capital requirements related to type 1 and type 2 exposures.

#### Counterparty default risk at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Type 1 exposures	33	5	1	39
Type 2 exposures	109	4	-	114
Diversification	-6	-	-	-8
<b>SCR counterparty default risk</b>	<b>136</b>	<b>9</b>	<b>1</b>	<b>145</b>

#### Counterparty default risk at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	VIVAT
Type 1 exposures	87	9	3	94
Type 2 exposures	192	5	-	197
Diversification	-16	-1	-	-16
<b>SCR counterparty default risk</b>	<b>263</b>	<b>13</b>	<b>3</b>	<b>275</b>

In 2017 Counterparty Default Risk decreased mainly due to ending the security lending program, a substantial drop in receivables older than 3 months from intermediaries and policyholders and from contractually securing the saving amount of Savings Mortgages.

Type 1 exposures are exposures that are expected to involve low diversification effects and for which the counterparty is likely to have an external rating. Solvency II treats the following as type 1 exposures:

- risk-mitigation contracts, including reinsurance arrangements, special purpose vehicles (SPVs), insurance securitisations and derivatives;
- cash at bank;
- deposits with ceding undertakings;
- commitments received by an insurance or reinsurance undertaking which have been called up but are unpaid;
- legally binding commitments which the insurer has provided or arranged and which may create payment obligations depending on the credit standing of a counterparty.

The capital requirement for counterparty default risk on type 1 exposures is a percentage of the total losses given-default on all type 1 exposures, the percentage is dependent on the variance between the type 1 exposures, the higher the variance the lower the percentage.

The loss-given default (LGD) on a single-name exposure is equal to the sum of the LGDs on each of the underlying exposures to counterparties belonging to the relevant single-name exposure.

Type 2 exposures consist of all exposures to which the capital requirement for spread risk is not applicable and which are not of type 1. In general, these are diversified exposures which do not have an external rating. Solvency II explicitly mentions the following exposures in the context of type 2:

- receivables from intermediaries;
- policyholder debtors;
- mortgage loans which meet a set of requirements.

The capital requirement for credit risk on type 2 exposures is equal to the loss in the basic own fund as defined by EIOPA.

## Diversification

Not all risks will materialize at the same time and at their full magnitude resulting in diversification between different risk types.

## 4.5. Liquidity risk

### 4.5.1. Risks – general

Liquidity risk is defined as the risk that VIVAT would have insufficient liquid assets to meet its financial liabilities in the short term, in a going concern situation or in times of a stress situation, or if obtaining the necessary liquidity would mean incurring unacceptable costs or losses.

The liquidity risk is monitored and managed both at consolidated level and at legal entity level.

## 4.5.2. Risk management proces

The policy of VIVAT is to have more liquidity available than it is required to hold based on internal risk management minimum levels. The objective of the internal risk management minimum levels is to ensure that VIVAT is able to fulfill its obligations towards policyholders and all legal obligations.

The liquidity risk policy uses three sources of liquidity:

1. the cash position
2. the liquidity buffer
3. the liquidity contingency policy.

### Cash position

The first source of liquidity concerns the cash position. This position is built up from the cash management process from investments (managed by ACTIAM) and cash management process from underwriting and operating activities. In the investments cash management process all cash flows from investments are managed by our Asset Manager (ACTIAM).

VIVAT has taken into account that all obligations to policyholders must be respected and that these obligations will be paid throughout the underwriting and other operating cash management process. If at any time these obligations exceed the premium income additional cash will be transferred from the investment cash management process. Otherwise, when premiums exceed the payments in the operational cash management process, cash will be transferred to the investments cash management process, for the purpose of the investing excess cash (temporarily).

### Liquidity buffer

The second source is the liquidity buffer. Together with the cash position, the liquidity buffer forms the overall liquidity position of the entity. The liquidity buffer is a good indicator for the overall liquidity position of VIVAT and takes into account all available assets and the impact of prescribed shocks in a stress situation. Monitoring of this buffer accounts for an important part of the daily activities of VIVAT.

### Liquidity contingency policy

The last source of liquidity relates to a situation in which the normal liquidity and buffers turn out to be insufficient. In case of such a contingency, VIVAT has implemented a Crisis Management Team (CMT) structure and a predefined set of potential management actions. The CMT must take timely action in rapidly deteriorating liquidity circumstances in order to avoid a bankruptcy that could occur in the worst case and/or to settle all of the obligations under the insurance portfolio in an orderly manner.

## 4.5.3. Exposure

The required liquidity is determined based on absorbing shocks in a stress situation. The shocks are applied on prescribed risk categories. These risk categories are mass lapse (Life insurance), storm-/hail damage (Non-life insurance) and interest rate movements. In total, the liquidity buffer is sufficient to cover a severe liquidity stress scenario.

### Expected Profit Included in Future Premiums

The Expected Profit Included in Future Premiums (EPIFP) is defined as the profit that is included in the future premiums. In summary, the legislation indicates that the determination of the EPIFP should be based on the

assumption that future premiums are no longer received as from the reporting date, regardless of any contractual obligations of the policyholder. Based on this, the EPIFP represents the difference between the best estimate provision without profitable future premiums (but including non-profitable future premiums) and the normal best estimate.

## Expected Profit Included in Future Premiums

In € millions	2017	2016
SRLEV	1,253	1,639
VIVAT Schadeverzekeringen <sup>1</sup>	206	189
Proteq Levensverzekeringen	17	21
<b>VIVAT<sup>1</sup></b>	<b>1,476</b>	<b>1,849</b>

<sup>1</sup> Of which € 15 million relates to the Non-Life business (2016: nihil).

The decrease of the EPIFP is mainly due to the increased lapse rates within the Individual Life Portfolio and regular portfolio development.

## 4.6. Non-financial risk

### 4.6.1. Risks – general

The Non-Financial Risk department (NFR), which is part of the Risk department resorting under the CRO, monitors and provides advice to management on compliancy risk and operational risk.

#### Compliance risk

Compliance risk is the risk that an organization could suffer legal or regulatory sanctions, material financial loss, or loss of reputation as a result of non-compliance with laws, regulations, rules, self-regulatory standards, codes and unwritten rules that apply to its activities.

Non-compliance with integrity- and conduct related rules can lead to regulatory action, financial loss or damage to the reputation of VIVAT, for example fines, compensation, disciplinary action, imprisonment or exclusion proceedings.

Laws and regulations within scope consist among others of those laws and regulations under which the supervisory authorities (Authority for the Financial Markets (AFM), Dutch Central bank (DNB), Authority for Consumers and Markets (ACM) and Data Protection Authority (AP) supervise aspects related to non-financial risks, such as the Dutch Financial Supervision Act (Wft), the Dutch Money Laundering and Terrorist Financing (Prevention) Act (*Wwft*), the Dutch Sanctions Act, as well as relevant European laws such as Solvency II, AIFMD and guidance from the Dutch Association of Insurers and other relevant bodies.

#### Operational risk

Operational Risk is the risk of unexpected direct or indirect losses due to inadequate or failed internal processes and systems, caused by inadequate setup or actions being taken, (deliberate) human error or external events. Operational Risk is overarching in nature and linked to all of VIVAT's activities. VIVAT recognizes the following types of operational risk: Customer, Products and Business Conduct risk, Execution & Process Control risk, Model risk, IT risk, Fraud risk, Damage to physical assets risk and Staff & security risk.

## 4.6.2. Risk management process

In managing non-financial risks VIVAT follows the risk management process as set out in section 3.6.

### Risk identification

VIVAT systematically analyses Compliance and Operational Risks based on risk assessment and risk analysis, and gives insights to and reports on them.

### Risk measurement

In addition VIVAT initiates integrity-investigations, risk self-assessments and incident analysis. In cooperation with the business, NFR measures the level of risk maturity of the first line management of Non-Financial Risk by assessing the structure and effectiveness of management and process controls.

### Risk mitigation

NFR supports and challenges the first line in the recognition and mitigation of Non-Financial Risks. For this, it carries out research, monitors control measures and informs management. This includes an integrated incident overview, the Non-Financial Risk Appetite KRI scores, and the effectiveness of management and process controls to draw attention to relevant issues in the field of internal control. NFR facilitates the business in training & awareness on Compliance and Operational Risks.

### Risk monitoring and reporting

NFR is represented in the Risk Committee of the Supervisory Board, the VRC, the PC and in the ORC's and PMP's of the MTs (see section 3.4.2.5 Risk Organisation) of VIVAT. NFR monitors the progress of the implementation of laws and regulations and also on design, existence and operational effectiveness of the first line responsibility to implement laws and regulations. Within the PMP MTs NFR advises on the development, evaluation and approval of products in accordance with laws, regulations, the AFM criteria and criteria related to treating customers fairly.

In line with the VRC frequency NFR draws up a Non-Financial Risk report, which provides a comprehensive overview of the major Non-Financial Risks and incidents within VIVAT. The Non-Financial Risk report is combined with the Financial Risk, Model Risk and Actuarial Function reports into the Enterprise Risk Management Key Take Aways.

## 4.6.3. Developments

In 2017 VIVAT has focused on new opportunities and sustainability towards our clients. The strategic ambition to become an innovative insurer has led to several initiatives in products, services, methodologies and processes. The continued focus on cost reduction and revenue models could influence operational and compliance risks. These risks are addressed, managed and monitored within the VIVAT risk framework to maintain a sound and controlled organization.

## 4.6.4. Exposure to non-financial risks

During 2017 VIVAT finalized implementation of the Integrated Control Framework consisting of process and management controls. This enables the organization to manage and monitor Compliance and Operational Risks in an efficient and effective manner. In this paragraph the main developments and risks are

described. VIVAT's management is of the opinion that action plans and programs are in place to sufficiently address and mitigate these risks.

## Compliance Risk

Risks (including reputational risk) are still evident in the non-accruing investment-linked policy file, owing to the combined effects of continuing media exposure, political opinion, court judgements, inaction on the part of customers, required recording and activation efforts and approaching deadlines. VIVAT still has some repair activities scheduled and expects to achieve, in line with instructions from the AFM, the set target dates for activation.

Owing to the great complexity of the legislation concerning Solvency II, IFRS, GDPR, ILM, IDD, PRIIPS and Supply Chain Responsibility, changes to the pension legislation (Witteveen, net graduated scale), legislation may not be implemented in good time as a result of which VIVAT would not be compliant and would inter alia suffer reputational damage as a result.

Due to new legislation both in the Netherlands and in the EU (General Data Protection Regulation) privacy risks should be taken into account. Special precautions are in order to avoid data breaches when personal data is transferred to third parties, especially to parties in countries outside the EU that do not provide an adequate level of protection. Therefore ITC has set up a broad privacy programme in order to pay full attention to VIVAT's compliance with the privacy regulation.

## Operational Risk

### Execution and process control risk

After the impactful reorganization of 2016, including organizational changes and experienced staff leaving, there was an increased risk of operational incidents occurring in 2017. Although the number of incidents increased, the overall impact remained on the same scale as in 2016 and all incidents were addressed.

Process Key Control testing was transferred from the ICF program to the business, enhancing the control environment. Key Control testing, retesting by second line Risk and reporting on Key Control results is now supported by tooling in which the Management Key Controls are also incorporated.

A focused approach contributed to lowering the number of high risk issues reported in the Non-Financial Risk report. Nonetheless the remaining high risks, especially GDPR and Unit Linked Policies are receiving VIVAT's continued attention so they will be solved in 2018.

## Model risk

In 2017 VIVAT has further reduced its number of models, as part of a strategic program of VIVAT that aims to rationalize the model landscape. This leads to reduction of model risk and contributes to a more efficient and reliable valuation of underwriting and market risks and the determination of the solvency ratio. By following a risk based model validation calendar, the validation of models in several segments confirmed that model improvements led to further reduction of model risk. Uncertainty resulting from remaining conversion projects has been mitigated by continuous monitoring, applying workarounds and a process for early provisioning in the accounts.

## Information Technology risk

In order to realize more efficiency, VIVAT defined the IT landscape and non-target systems are made redundant. This rationalization will continue in 2018. Besides, the IT focus is on innovations like new and modern



apps. The IT organization has implemented the Agile way of working and Continuous Delivery, to improve on efficiency and to decrease time-to-market. The first synergy benefits of the IT cooperation of VIVAT with the other European Anbang companies like Fidea and Nagelmackers have been achieved. VIVAT is aware that these developments require high standards of change management within the IT department to maintain an IT landscape that is in control and is managing IT risks.

VIVAT is aware of the increasing strategic importance of collecting, managing and use of data, taking into account relevant legislation, e.g. GDPR. VIVAT is currently implementing a sustainable design for Data Governance to manage and monitor the diverse data related initiatives.

### Outsourcing / Cloud computing

VIVAT is shifting away from handling IT matters itself in favour of outsourcing in areas of the consumer value chain where VIVAT is less distinctive. VIVAT assesses how the required functionalities in that value chain can be purchased or outsourced as components. VIVAT performs risk assessments for new outsourcing initiatives, the results of which are reflected in the contracts with outsourcing partners. A good supplier management is set up in order to maintain the desired level of control over outsourcing.

### Cybercrime risk

Fighting cybercrime is a key priority for a financial organization like VIVAT. Cyber criminals are always trying to compromise financial companies, for example with ransomware. In 2017 no major incidents related to cybercrime occurred within VIVAT. Cybercrime will remain high on the agenda of the VIVAT management. Appropriate organizational and technological measures have been taken in order to be able to tackle the cybercrime risks, like the cooperation with the National Cyber Security Center and other major Dutch insurance companies. Also in 2018 new measures will be implemented to stay in control over the cybercrime risk.

### Staff and security risk

After the organizational changes and relatively high staff turnover in 2016, VIVAT still has been well aware of the associated risks (such as sick leave) and has continued the closely monitoring in 2017.

## 4.6.5. SCR 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. This takes into account legal risks, but risks that are a consequence of strategic decisions or reputational risks are disregarded. The technical provision for own risk is part of the calculation of the SCR operational risk.

The basic capital requirement for operational risk is calculated by taking the maximum of (a) the capital requirement for operational risks on the basis of earned premiums and (b) the capital requirement for operational risks on the basis of technical provisions and adding 25% of the expenses incurred in respect of unit linked business.

## SCR Operational risk

In € millions	2017	2016
SRLEV	181	170
VIVAT Schadeverzekeringen	21	23
Proteq Levensverzekeringen	2	2
<b>VIVAT</b>	<b>203</b>	<b>194</b>

The SCR operational risk for VIVAT and SRLEV increased due to the reclassification of Unit Linked policies with guarantees. These policies are now taken into account similar to traditional products.

## 4.7. Other risks

There are no other material risks to be disclosed.



## 5. Valuation for Solvency purposes

In this section the shown figures of SRLEV, VIVAT Schadeverzekeringen and Proteq Levensverzekeringen are unconsolidated figures, whereas the figures of VIVAT are consolidated figures. The IFRS balance items have been mapped in accordance with the Solvency II classifications and therefore can differ in classification from the published IFRS consolidated financial statements 2017 of VIVAT.

The IFRS balance sheet total in the Annual Report 2017 of VIVAT of € 56,747 million differs by € 454 from the total statutory accounts value in SII balance sheet of € 56,293 million. The difference of the IFRS balance sheet versus the statutory accounts value in Solvency II balance sheet is explained by the minority share of third parties in the investment funds in which VIVAT invests.

Given that VIVAT is the largest investor in these funds, it has 'control' over the relevant activities of these funds. Through the application of IFRS 10, VIVAT has to fully consolidate these funds, as a result of which the minority share of third parties (other investors in these funds) is also included in the balance sheet as an investment. The counterpart on the liabilities side are the liabilities towards third parties arising from these investments.

Under Solvency II, where IFRS 10 is not applied for consolidation, these investments are recognized in the balance sheet in proportion to the participation in the funds.

Of the IFRS balance sheet item "Investments for account of third parties" of € 630 million in the Annual Report, € 454 million relate to these investment funds and € 176 million to investments of Zwitserleven PPI that are presented in the SII balance sheet under any other assets.

The IFRS equity in the Annual Report 2017 of SRLEV of € 3,217 million differs from the statutory accounts value 'Excess of assets over liabilities' in SII balance sheet of € 2,957 million. The difference concerns the Capital Subordinated Loan of € 260 million, which is classified as Subordinated liabilities in the Solvency II balance sheet.

## 5.1. Balance sheet

### Balance sheet at 31 December 2017

Assets	SRLEV		VIVAT Schade		Proteq		Other <sup>1</sup>		VIVAT	
In € millions	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Goodwill and intangible assets	-	-	-	1	-	-	-	-	-	1
Deferred tax assets	625	475	-	-	4	2	-9	14	620	491
Property, plant & equipment held for own use	44	44	-	-	-	-	21	21	65	65
Investments	29,897	29,869	1,548	1,540	562	562	-238	-230	31,769	31,741
Assets held for index-linked and unit-linked contracts	13,011	12,932	-	-	-	-	270	270	13,281	13,202
Loans and mortgages	10,616	8,932	51	51	-	-	863	860	11,530	9,843
Reinsurance recoverables	91	91	83	90	-	-	-	-	174	181
Receivables	271	271	81	81	-	-	-54	-54	298	298
Cash and cash equivalents	145	145	43	43	4	4	67	67	259	259
Any other assets, not elsewhere shown	24	24	-	8	-	-	180	180	204	212
<b>Total assets</b>	<b>54,724</b>	<b>52,783</b>	<b>1,806</b>	<b>1,814</b>	<b>570</b>	<b>568</b>	<b>1,100</b>	<b>1,128</b>	<b>58,200</b>	<b>56,293</b>

Liabilities	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
In € millions	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Technical provisions	47,658	45,302	1,061	1,169	467	459	-243	-135	48,943	46,795
Contingent liabilities	-	-	-	-	-	-	-	-	-	-
Provisions other than technical provisions	35	35	-	-	-	-	9	9	44	44
Pension benefit obligations	19	184	26	26	-	-	540	375	585	585
Deposits from reinsurers	87	81	21	21	-	-	-	-	108	102
Deferred tax liabilities	-	-	27	4	-	-	-27	-4	-	-
Derivatives	606	606	8	8	6	6	16	16	636	636
Debts owed to credit institutions	1,826	1,626	16	16	-	-	642	642	2,484	2,284
Liabilities	930	930	76	76	5	5	-3	60	1,008	1,071
Subordinated liabilities <sup>2</sup>	1,068	1,062	157	150	-	-	-176	-167	1,049	1,045
Any other liabilities, not elsewhere shown	-	-	-	-	-	-	184	184	184	184
<b>Total liabilities</b>	<b>52,229</b>	<b>49,826</b>	<b>1,392</b>	<b>1,470</b>	<b>478</b>	<b>470</b>	<b>942</b>	<b>980</b>	<b>55,041</b>	<b>52,746</b>

<b>Excess of assets over liabilities<sup>3</sup></b>	<b>2,495</b>	<b>2,957</b>	<b>414</b>	<b>344</b>	<b>92</b>	<b>98</b>	<b>158</b>	<b>148</b>	<b>3,159</b>	<b>3,547</b>
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<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitterleven PPI NV and of the subsidiaries of SRLEV (e.g. N.V. Pension ESC) and VIVAT Schadeverzekeringen. For more details we refer to Annex I.

<sup>2</sup> The subordinated liabilities in the Solvency II and IFRS balance sheet also include the Capital Subordinated Loan of € 260 mln. The subordinated liabilities are further specified in section 6.2.1.3.

<sup>3</sup> The own funds are further specified in section 6.2.1.

## Balance sheet at 31 December 2016

Assets	SRLEV		VIVAT Schade		Proteq		Other <sup>1</sup>		VIVAT	
In € millions	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Goodwill and intangible assets	-	-	-	4	-	-	-	-	-	4
Deferred tax assets	535	455	-	-	-	-	-38	-29	497	426
Property, plant & equipment held for own use	44	44	-	-	-	-	30	30	74	74
Investments	29,414	29,376	1,673	1,673	596	596	-611	-602	31,072	31,043
Assets held for index-linked and unit-linked contracts	14,023	13,923	-	-	-	-	328	328	14,351	14,251
Loans and mortgages	10,659	8,841	1	1	-	-	769	764	11,429	9,606
Reinsurance recoverables	118	106	101	117	-	-	-	-	219	223
Receivables	384	384	66	66	-	-	-102	-102	348	348
Cash and cash equivalents	270	270	53	53	7	7	80	80	410	410
Any other assets, not elsewhere shown	25	25	1	1	-	-	69	69	95	95
<b>Total assets</b>	<b>55,472</b>	<b>53,424</b>	<b>1,895</b>	<b>1,915</b>	<b>603</b>	<b>603</b>	<b>525</b>	<b>538</b>	<b>58,495</b>	<b>56,480</b>

Liabilities	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
In € millions	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Technical provisions	48,496	46,023	1,157	1,237	475	471	-211	-114	49,917	47,617
Contingent liabilities	-	-	-	-	-	-	-	-	-	-
Provisions other than technical provisions	40	40	-	-	-	-	110	110	150	150
Pension benefit obligations	9	182	26	26	-	-	543	370	578	578
Deposits from reinsurers	96	96	23	23	-	-	-	-	119	119
Deferred tax liabilities	-	-	27	14	1	2	-28	-16	-	-
Derivatives	471	471	10	10	5	5	-	-	486	486
Debts owed to credit institutions	1,329	1,329	22	22	-	-	1	1	1,352	1,352
Liabilities	1,417	1,417	76	76	12	12	-257	-181	1,248	1,324
Subordinated liabilities <sup>2</sup>	834	831	158	150	-	-	102	108	1,094	1,089
Any other liabilities, not elsewhere shown	-	-	-	-	-	-	67	67	67	67
<b>Total liabilities</b>	<b>52,692</b>	<b>50,389</b>	<b>1,499</b>	<b>1,558</b>	<b>493</b>	<b>490</b>	<b>327</b>	<b>345</b>	<b>55,011</b>	<b>52,782</b>
<b>Excess of assets over liabilities<sup>3</sup></b>	<b>2,780</b>	<b>3,035</b>	<b>396</b>	<b>357</b>	<b>110</b>	<b>113</b>	<b>198</b>	<b>193</b>	<b>3,484</b>	<b>3,698</b>

<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitterleven PPI NV and of the subsidiaries of SRLEV (e.g. N.V. Pension ESC) and VIVAT Schadeverzekeringen. For more details we refer to Annex I.

<sup>2</sup> The subordinated liabilities are further specified in section 6.2.1.3.

<sup>3</sup> The own funds are further specified in section 6.2.1.

## 5.2. Solvency II reporting framework

### 5.2.1. Solvency II accounting principles

VIVAT, incorporated and established in the Netherlands, is a public limited liability company incorporated under the laws of the Netherlands. VIVAT is a wholly owned subsidiary of Anbang Group Holdings Co. Limited with a registered office at Hong Kong, People's Republic of China, ultimate parent of which is Anbang Insurance Group Co., Ltd. with its headquarters in Beijing, People's Republic of China. VIVAT Verzekeringen is the trade name of VIVAT NV. VIVAT holds 100% of the shares in SRLEV, VIVAT Schadeverzekeringen and Proteq Levensverzekeringen.

In the consolidated Solvency II (SII) balance sheet the name 'VIVAT' is used when discussing the consolidated activities of VIVAT, its insurance entities and other entities.

The main accounting policies used in the preparation of the consolidated SII balance sheet are set out in this section.

#### General accounting policies

The following policies have been applied in the course of preparing SII consolidated balance sheet:

- Going concern basis: VIVAT's business will be continued for the foreseeable future.
- Accrual basis: the effects of transactions and other events and circumstances on a reporting entity's economic resources and claims in the periods in which those effects occur, even if the resulting cash receipts and payments occur in a different period.
- Materiality concept: information is viewed as material if omitting it or misstating it could influence decisions that users make on the basis of SII consolidated balance sheet. Materiality of an item depends on its amount, nature or combination of both.

#### Functional currency and reporting currency

The SII consolidated balance sheet has been prepared in millions of euros (€). The euro is the functional and reporting currency of VIVAT. All financial data presented in euros is rounded to the nearest million, unless stated otherwise. Counts are based on unrounded figures. Their sum may differ from the sum of the rounded figures.

Further details on the accounting policies applied to the conversion of transactions and translation of items in the statement of financial position denominated in foreign currencies are provided in the section below entitled 'Foreign currencies'.

#### Foreign currencies

Upon initial recognition, transactions in foreign currencies are converted into euros against the exchange rate at the transaction date. Items in the SII consolidated balance sheet denominated in foreign currencies are translated into euros at the exchange rate applicable at the reporting date.

#### Accounting based on transaction date and settlement date

All purchases and sales of financial instruments that have been settled in accordance with standard market practices are recognised at the transaction date, i.e. the date on which VIVAT commits itself to buying or selling the asset or liability. All other purchases or sales are recognised as forward transactions until they are settled.

## Offsetting financial instruments

Financial assets and liabilities are offset and their net amounts are reported in SII consolidated balance sheet, if a legally enforceable right to set off the recognised amounts exists, as well as an intention to settle the items on a net basis, or to settle the asset and the liability simultaneously. If these conditions are not met, amounts are not offset

## Estimates and assumptions

The preparation of SII consolidated balance sheet requires VIVAT to make estimates based on complex and partially subjective assumptions. These estimates have a significant impact on the reported amounts of assets and liabilities and the contingent assets and liabilities at the reporting date. In this process, management judges situations on the basis of available information and financial data that could potentially change in the future. Although estimates are made to the best of the management's knowledge, actual results may differ from these estimates and the use of other assumptions or data can lead to materially different results.

Estimates and underlying assumptions are reviewed on a regular basis. The resulting impact on accounting estimates is recognised in the period in which the estimate is revised or in the period of revision and future periods if the revision impacts both the reporting period and future periods. The main accounting policies involving the use of estimates concern the methods for determining liabilities arising from insurance contracts, the provisions for bad debts, the fair value of assets and liabilities, and impairments.

## Fair value of assets and liabilities

Assets and liabilities are recognized and measured in accordance with the Solvency II regulations.

Assets are measured at the amount for which they could be exchanged between knowledgeable, willing parties in an arm's length transaction. Liabilities are measured at the amount for which they could be settled between knowledgeable, willing parties in an arm's length transaction. In determining the fair value, Solvency II applies the principles of IFRS 13 (with the exception of own credit rate adjustment for financial liabilities).

The fair value of non-financial assets is determined based on the "highest and best use" concept. This concept takes into account the economic benefits, that would be generated either by best use of the asset by VIVAT or by selling the asset to another party. Furthermore, the "highest and best use" concept is based on the use of the asset that is physically, legally and financially viable. The fair value of a non-financial asset based on the "highest and best use" concept is determined regardless of the actual VIVAT's intention to utilise the asset.

The fair value of financial instruments is based on a hierarchy that categorises the inputs to the valuation techniques used to measure fair value.

The fair value hierarchy gives the highest priority to quoted, unadjusted prices in active markets for identical assets or liabilities and the lowest priority to alternative valuation models:

- Quoted market price in active markets for the same assets (QMP)  
Quoted prices from exchanges, brokers or pricing institutions are observable for all financial instruments in this valuation category. In addition, these financial instruments are traded on an active market, which allows the price to accurately reflect current and regular market transactions between independent

parties. The investments in this category mainly concern listed equities and bonds, including investment funds on behalf of policyholders, underlying investments of which are listed.

➤ **Quoted market price in active markets for similar assets (QMPS)**

This category includes financial instruments for which no quoted prices are available but fair value of which is determined using models where the parameters include available market inputs. These instruments are mostly privately negotiated derivatives and private loans. This category also includes investments whose prices have been supplied by brokers but for which the markets are inactive. In these cases, available prices are largely supported and validated using market inputs, including market rates and actual risk premiums related to credit rating and sector classification.

➤ **Alternative valuation methods (AVM)**

The financial instruments in this category have been assessed individually. The valuation is based on management's best estimate, taking into account most recently known prices. In many cases analyses prepared by external valuation agencies are used. These analyses are based on data unobservable in the market, such as assumed default rates associated with certain ratings.

## **Solvency II presentation of assets and liabilities**

SII requires the balance sheet template to be used. VIVAT presents its assets and liabilities according to these standards.

### **Assets**

#### **Goodwill and intangible assets**

VIVAT does not recognise goodwill or other intangible assets in the Solvency II consolidated balance sheet.

#### **Deferred tax assets (and liabilities)**

Deferred tax assets and liabilities are recognised for tax losses carried forward and for temporary differences between the tax bases of assets and liabilities and their amounts recognised in Solvency II balance sheet. This is based on the tax rates applicable at the reporting date and the tax rates that will apply in the period in which the deferred tax assets or tax liabilities are settled.

Deferred tax assets and liabilities are measured at the undiscounted amount expected to be received or paid. Deferred tax assets are only recognised if sufficient taxable profits are expected to be available in the near future against which these temporary differences can be settled. Deferred taxes are recognised for temporary differences between the carrying amount and the value for tax purposes.

Deferred tax assets are assessed at the reporting date; if it is no longer likely that the related taxable profit will be achieved, the asset is reduced to its recoverable value.

The deferred tax assets and deferred tax liabilities are presented on a net basis.

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

This balance sheet item comprises owner-occupied property, IT equipment and other property and equipment.

##### **Owner-occupied property**

Owner-occupied property mainly comprises offices (land and buildings) and is measured at fair value (revaluation model) based on annual valuations performed by external, independent appraisers with adequate professional expertise and experience in the specific location and categories of properties.



According to the revaluation model the asset is measured at its fair value less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

Owner-occupied property is measured at fair value on an unlet or (partially) let basis, depending on the situation. The purpose of a valuation is to determine the value for which the asset would be sold in an orderly transaction between market participants at the measurement date. The capitalisation method is used to determine this value. This method uses an expected return at inception and the market rental value to determine the fair value of an asset. Gains and losses on owner-occupied property include lease incentives, discount rates and expected vacancy, making allowance for the location, quality, age and liquidity of the property in question.

### **IT equipment and other property and equipment**

IT equipment and other property and equipment is measured at fair value determined based on the highest and best use by VIVAT (amount of economic benefits generated by VIVAT utilising the asset).

Repair and maintenance expenses incurred after the acquisition of an asset that increase or extend the future economic benefits of assets in relation to their original use are capitalised.

Assets are depreciated on a straight-line basis over their useful lives, taking into account any residual value.

### **Investments**

This balance sheet item comprises the following items:

- > Property (other than for own use)
- > Participations
- > Equities
- > Bonds
- > Collective investments undertakings
- > Derivatives
- > Deposits other than cash equivalents

### **Property (other than for own use)**

Investment property, comprising retail properties and offices, residential properties and land, is held to generate long- term rental income or capital appreciation or both. If a property qualifies as part investment property and part owner- occupied property, it is recognised within property and equipment, unless the owner-occupied part makes up less than 20% of the total number of square metres.

Investment property is measured at fair value, including transaction costs, upon initial recognition. Investment property qualifies as a long-term investment and is measured at fair value, i.e. its value in a (partially) let state. The fair value is based on valuations performed every year by independent external appraisers with adequate expertise and specific experience in property locations and categories.

The purpose of a valuation is to determine the value for which the asset would be sold in an orderly transaction between market participants at the measurement date. The capitalisation method is used to determine this value. This method uses an expected return since inception and the market rental value to determine the fair value of an asset. Gains and losses on investment property include lease incentives, discount rates and expected vacancy, but allowance is made for location, quality, age and liquidity of the property as well.

## Participations

This item comprises the subsidiaries and associates of VIVAT, that are not consolidated in the Solvency II consolidated balance sheet. These participations are recognised and measured according to the (adjusted) equity method.

## Equities

The listed equities are measured at fair value based on quoted prices in an active market for the same assets. The unlisted equities are measured at fair value based on available market information (quoted market prices in active markets for similar assets). If these data are not available, the fair value is determined based on alternative valuation methods.

## Bonds

On the Solvency II balance sheet bonds are divided into following categories:

- > government bonds
- > corporate bonds
- > structured notes
- > collateralised securities

The fair value of government bonds and corporate bonds is based on quoted prices in an active market for the same assets. If there is no active market, the fair value is derived from quoted market prices in active markets for similar assets.

As there is generally no active markets for structured notes and collateralised securities, their fair value is determined based on from quoted market prices in active markets for similar assets. If the data is not available, the fair value is determined based on alternative valuation methods.

The fair value of the bonds includes the accrued interest.

## Collective investment undertakings

This item comprises investments in investment fund units, the fair value of these funds is determined based on alternative valuation methods.

## Derivatives

Derivatives are recognised at fair value upon inception. The fair value of the derivatives is based on a present value model or an option valuation model (alternative valuation methods). VIVAT recognises derivatives with a positive market value as assets and derivatives with a negative market value as liabilities.

## Deposits other than cash equivalents

These assets concern receivables from banks with a remaining maturity of one month or more and the saving components of mortgages. The fair value of the amounts receivable with the maturity of less than 12 months is assumed to equal their nominal value. The fair value of saving components of mortgages is determined with alternative valuation models.

## Assets held for index-linked and unit-linked funds

This item corresponds to the investments for account of policyholders, that are measured at fair value, which is determined based on quoted prices in an active market for the same assets. If there is no active market,

the fair value is derived from quoted market prices in active markets for similar assets. If the data is not available, the fair value is determined based on alternative valuation models.

## **Loans and mortgages**

On the Solvency II balance sheet loans and mortgages are divided into following categories:

- > loans on policies
- > loans & mortgages to individuals
- > other loans & mortgages

The fair value of the loans & mortgages includes the accrued interest.

### **Loans on policies**

This item corresponds to the loans issued with life insurance policies as collateral. Since there is no active market for these loans, the fair value is either derived from quoted market prices in active markets for similar assets. If the data is not available, the fair value is determined based on alternative valuation methods.

### **Loans and mortgages to individuals**

The mortgages are measured at fair value, determination of which is based on alternative valuation models. These models rely primarily on the customer interest rates on the primary market. These interest rates are corrected for miscellaneous surcharges such as surcharges for price rate risks and origination costs. The adjustments for prepayments are taken into account in the cash flow projection and an add-on for interest-only mortgages also taken into account. This method is referred to as the top-down approach.

### **Other loans & mortgages**

Since this item comprises loans and mortgages, for which there is no active market, the fair value is either derived from quoted market prices in active markets for similar assets. If the data is not available, the fair value is determined based on alternative valuation methods.

## **Reinsurance recoverables**

For the valuation of the best estimate provision reinsurance the cash flows are measured separately and are not offset against the best estimate provision of the insurance obligations. The credit default risk is based on the expected loss of reinsurance cover in case of bankruptcy of the reinsurer. When determining the risk margin, the credit default risk relating to reinsurance is also taken into account.

### **Life**

The insurance risks corporate life contracts are primarily mitigated on the basis of surplus reinsurance with a retention limit. The duration of the reinsurance contract is one year. The reinsurer participates in premium and claim in the same proportion as the retention to the reinsured amount. For the best estimate of this surplus reinsurance contract the future cash flows of this contract are estimated by using realized premium and claims in the last five years.

The individual life contracts are primarily reinsured on a proportional basis. For these contracts the best estimate reinsurance is determined as a percentage of the best estimate for the underlying insurance technical provision.

For the disability coverage within SRLEV and Non-Life portfolio there is a catastrophe excess of loss reinsurance contract. The best estimate for excess-of-loss reinsurance takes into account that VIVAT does not expect to benefit from or lose to the reinsurer.

### **Non-Life and Health Non-SLT**

The insurance risks are mitigated on the basis of excess-of-loss reinsurance risk with a variable retention per line of business. In addition to the regular reinsurance of the portfolios there is a catastrophe reinsurance contract to cover claims arising from natural perils (storm, hail) and accumulation of risk in the fire portfolio.

The best estimate provision reinsurance is determined based on a simplified method, according to which this best estimate under Solvency II is assumed to equal its IFRS value, taking the counterparty risk into account.

### **Health-SLT**

The insurance risks are mitigated on the basis of quota share ratio (QSR) at policy level. That means that the reinsurer's share is equal to the amount of the insured amount depending on the proportion between retention and the total exposure.

The best estimate provision reinsurance is calculated as the present value of the incoming and outgoing reinsured cash flows arising from the existing reinsurance contracts. The cash flows are determined on a policy-by-policy approach and based on the reinsurance percentage resulting from the reinsurance contract. This percentage is applied to both the outgoing gross premiums, as to the outgoing gross claims. It takes into account the reduction of credit default risk. For the estimation of the reinsured cash flow, the contractual redemption scheme after a period of 6 years disablement is not taken into account.

### **Insurance & intermediaries receivables**

This item comprises current receivables corresponding to insurance activities of VIVAT as well as receivables from intermediaries. As these assets have a short-term character, these are measured at their nominal value, since it is assumed to be equal to their fair value.

### **Reinsurance receivables**

This item comprises current past due receivables corresponding to reinsurance companies. Depending on the short- or longer term character of these assets, they are measured at their nominal value or calculated using the expected future cashflows, the interest rate curve and relevant spread. Amounts receivable or owed but not past due have been included in cash inflows that form the basis for measurement of the gross technical provisions and the share of reinsurers in technical provisions.

### **Receivables (trade, not insurance)**

This item comprises miscellaneous amounts receivable. Bearing in mind short-term the character of these assets, they are measured at their nominal value, since it is assumed to equal their fair value.

### **Cash and cash equivalents**

This item comprises cash and cash equivalents including bank balances and demand deposits with a remaining maturity of less than one month. Bearing in mind the short-term character of these assets, they are measured at their nominal value, since it is assumed to equal their fair value.

## **Any other assets, not elsewhere shown**

This item comprises the assets that are not recognised as the items in the Solvency II balance sheet described above. These assets comprise mainly the accrued interest on amounts receivable that are not recognized as investments and the investments of Zwitserleven PPI. The accrued interest is measured at its nominal value, which is assumed to equal its fair value. The fair value of the investments of Zwitserleven PPI is determined in the same way as the fair value of other investments (refer to the section “Investments” for more information).

## **Liabilities**

### **Technical provisions**

Under Solvency II the item technical provision comprises the best estimate and the risk margin.

#### **Best estimate (BE)**

Under Solvency II, the BE is determined by the present value of the expected value of all future cash flows, including options and guarantees and expenses arising from the insurance contract.

BE includes all the options and guarantees embedded in the products, including discretionary profit sharing (based on VIVAT's discretion), non-discretionary profit sharing (based on objective standards that have to be met), indexation on disability insurance, unit linked guarantees and the paid-up option for separate accounts. The value of the options embedded in the insurance contracts may be split into net asset value (IVOG) and time value (TVOG).

Future cash flows are based on realistic and appropriate underwriting parameters such as mortality, disability, policyholders' behavior, claims handling and all expenses (including investment costs) arising from the settlement of the insurance contracts, taking into account expected future developments with a material impact on existing policies.

The cash flows are discounted with the specific yield curve set by EIOPA with a Volatility Adjustment and the ultimate forward rate. VIVAT only uses the curve for the euro, since there are no material insurance liabilities in foreign currencies. The risk-free interest rate under Solvency II is based on interest rate swap rates for the euro, adjusted for credit risk. For the periods for which swap rates are no longer available in liquid and transparent market, the yield curve is extrapolated using the so-called ultimate forward rate; a long-term forecast of the real interest rate, taking into account the expected inflation.

#### **Life**

The BE concerning Life is the present value of all cash flows arising from existing contracts in the Life portfolio. The cash flow projections are made for the individual and for group contracts. The Individual Life contracts include savings mortgage insurance, annuities, saving insurance policies, term insurance policies and funeral expenses insurance policies. The Group insurance comprises primarily the collective pension contracts (including traditional, unit-linked and separate accounts).

The expected future cash flows include future expected benefits, expected premiums, recurring expenses as well as cash flows corresponding to contractual profit-sharing (where applicable). For parameters such as mortality, longevity, costs or lapse, the best estimate assumptions are made and applied to the cash flow projections.

## Non-Life and Health non-SLT

For Non-Life and Health non-SLT insurance contracts the distinction is made between premium and claims provisions. The gross premium provision is the sum of the present value of all cash flows arising from current contracts or related to future insurance coverage. This includes expected premiums, expected future claim payments relating to provided coverage and estimated costs associated with those premium revenues and claim payments.

When detailed data is not available, the cash flows are estimated using parameters that are set at an aggregate level (by line of business and distribution channel). The main parameters are the expected loss ratios, premiums and the provision for unearned premiums.

The claim provision comprises the best estimates of IBNR (modelled based on miscellaneous methods; mainly chain ladder methods, expected ratio methods or Bornhuetter-Ferguson) and cost provision (future costs arising from existing insurance contracts including claim handling costs and investment costs).

## Health SLT

The BE concerning Health SLT is the present value of all cash flows arising from existing contracts in the disability portfolio, determined according to the methods that are similar to techniques used in valuing Life-portfolios (Similar to Life Techniques: SLT). Existing contracts also include all current claims.

The expected future cash flows include future expected benefits, recurring costs, claim handling costs, commissions and premiums. The BE cash flows are estimated using realistic risk factors including disability and recovery, lapse rates, mortality and costs. The entire disability portfolio is divided into underlying portfolios so that the portfolio-specific risks are taken into account. Most parameters are determined based on portfolio data. Where appropriate, indexation is determined according to the CBS wage index and U-yield.

## Risk margin

Under Solvency II a risk margin is an addition to the BE provision. The risk margin can be seen as a compensation for the capital required to carry non-hedgeable risks arising from an insurance contract. The risk margin is such as to ensure that the value of the Technical Provision is equivalent to the amount that another insurer would be expected to require in order to take over the insurance liabilities until their maturity.

The risk margins are determined using the Cost of Capital method (CoC). Each year the projection of the Solvency Capital Requirement (SCR) takes place by applying the shocks according to the standard model. The risk margins per year are determined by multiplying the SCR with a CoC rate of 6% and discounted using the interest rate structure set by EIOPA.

## Parameters

The value of the insurance liabilities is determined with miscellaneous parameters which can be subdivided into non-economic and economic parameters. Under the non-economic parameters there are insurance underwriting and expense parameters. The chance an insured event takes place is estimated with use of underwriting parameters. To meet the obligation towards the policyholders, costs are incurred. These are contained in expense parameters for cash flow projections. The cash flows are discounted with use of economic parameters. In addition, the economic parameters also determine the funds returns and profit-sharing returns, such as the u-yield. Inflation, which mainly applies to the development of costs, also falls under the economic parameters. The rules for setting and changing these parameters are in accordance with VIVAT parameter governance.

## Non-economic parameters

Life underwriting parameters are population mortality, insured mortality, lapse and disability.

### Population mortality

VIVAT uses the population mortality forecast of Het Koninklijk Actuarieel Genootschap (AG). In the years in which the AG table is not published, on the basis of new observations VIVAT itself investigates a suitable prognosis table. VIVAT has reconstructed the AG method. In the intervening years, both European data and Dutch data are added. From this research follows a proposal for a new prognosis table which must be approved before it can be used. It is also possible that it is concluded that the last known AG prognosis table is still appropriate. This generic prognosis table is adjusted at a maximum of once a year after the availability of new figures with regard to mortality and possible adjustments of population mortality models.

### Insured mortality

In addition to the generic prognosis table, the mortality assumption also consists of a component per sub-portfolio within the Life insurance business. With this component, for each age the (percentage) distance is determined between insured mortality (in the specific sub-portfolio) and population mortality. It is assumed that this distance does not change during the entire projection. A distinction is made according to the following factors:

- > Internal homogeneous risk group
- > Age
- > Sex
- > Smoking / no smoking
- > Expired duration from the start date

For most Individual Life products, the insured mortality is determined on the basis of own perception. Exception are the annuities where the insured mortality can be equated with the nationally determined insured mortality of the CVS. For Corporate Life products market figures (CVS) are available and used. It is checked annually whether the observed perception fits within the confidence interval for the market figures. If this is not the case, it is still possible to opt for the use of own observations.

### Lapse

The most important forms of lapse are:

- > Surrender (including partial surrender)
- > Paid-up (including premium reduction, therefore partial paid-up)

The surrender and paid-up parameters are annually derived from experience figures. The entire policy history is taken into account. The figures resulting from the established methodology are assessed in consideration of possible trend breaks or incidents. If necessary, the figures to be used are adjusted on the basis of expert judgment. For the lapse parameters a distinction is made according to the following factors:

- > Internal homogeneous risk group
- > Age
- > Premium payment / no premium payment
- > Expired duration from the start date
- > Well / no profit sharing
- > Subgroup / label

On the basis of research it is assessed whether a specific cohort has sufficient exposure to give it separate lapse parameters and which of the above-mentioned variables are significant. In the analysis of lapse influences of economic and other special circumstances on the behavior of policyholders should be taken into account. If there is a link between the lapse rates and the elements mentioned then this mechanism must be included in the models. If there is no connection between the lapse rates and the elements mentioned, this must be demonstrated.

### **Partner frequencies**

The partner frequencies were revised in 2017 after a long period of time. The partner frequencies currently applied in the projections are based on Het Centraal Bureau voor de Statistiek (CBS) figures. It is not possible to base the partner frequencies on own insurance experience because insufficient data is available.

### **Disability**

The disability parameters of SRLEV are based on own insurance experience data. Due to the unavailability of detailed data the recovery rates are based on market data which is corrected with an overall percentage derived from own data. The disability and recovery parameters are assessed annually.

Underwriting parameters for Non-Life are mainly run off patterns and loss ratios, and for disability insurance disability, recovery and lapse. The best estimate assumptions are substantiated by research into the own portfolio and relevant market data. The parameters are assessed annually. In the assumptions no implicit margins are taken into account.

The costs included in the Best Estimate provision are divided into operating costs and investment costs. The operating costs include all costs, including internal invoicing, that are made within the entity. The investment costs include all fees that are paid to the asset manager.

### **Operating costs**

Based on an Activity Based Costing (ABC) model, the operating costs, excluding the one-off costs, are split into:

- > Acquisition costs and continuous costs;
- > Fixed and variable costs;
- > Product groups and / or products;
- > Costs for premium-paying and paid-up policies.

In the projection of these costs, inflation, synergy and costs of shrinking markets are taken into account.

### **Investment costs**

Investment costs in the form of management and administration costs are included in accordance with the contract conditions between ACTIAM and SRLEV on calculation date. A distinction is made between reimbursements per asset category. The costs are measured in basis points and corrected with the anticipated profit sharing of the asset manager. This profit sharing is kept constant throughout the projection.

### **Economic parameters**

The yield curve for valuing technical provisions is determined in accordance with the Solvency II regulations. The administration costs are adjusted for inflation.



## Uncertainty in cash flows

The models used by VIVAT for estimating the best estimate cash flows meet the requirements of the Solvency II Level 2 directives and follow a model validation process. The uncertainty concerns in particular the parameters applied. The cash flow projection, which is used for the calculation of the Best Estimate, explicitly or implicitly takes into account all the uncertainties in the cash flows, including the following, if relevant:

- uncertainty in the timing, frequency and severity of insured events;
- uncertainty in the size of the eligible costs;
- uncertainty in the expected future developments, as set put above, to the extent that this is practicable;
- uncertainty in the policyholder behavior;
- dependence between two or more causes of uncertainty;
- dependence on cash flows of the conditions prior to the date of the cash flow.

## Contingent liabilities

Contingent liabilities are defined as:

- a possible obligation arising from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events or
- a present obligation, payment of which is not probable.

VIVAT recognises contingent liabilities on the balance sheet, if they are material. Valuation of contingent liabilities is based on the probability weighted cash-flow method using the basic risk-free interest rate term structure.

The contingent liabilities are presented on the Solvency II consolidated balance sheet if they can be measured reliably, meaning that timing, amount and probability of the outflow of economic benefits can be estimated reliably. If the liability cannot be measured reliably, it is not recognised, instead it is reported in the section 5.7 Off-balance sheet items. Contingent liabilities are subject to continuous assessment.

## Provisions other than technical provisions

### General

Provisions are recognised if there is a legally enforceable or constructive obligation arising from events in the past, the settlement of the obligation is likely to result in an outflow of economic benefits, and a reliable estimate of the obligation can be made.

Provisions are measured at the present value of the expected future cash flows.

### Restructuring provision

The restructuring provision consists of expected severance pay and other costs that are directly related to restructuring programs. These costs are recognised as an addition to the provision in the period in which a legally enforceable or constructive obligation to make payments arises. No provision is recognised for costs or future operating losses from continuing operations.

VIVAT recognises restructuring provision if it has demonstrably committed itself, either through a constructive or legally enforceable obligation, to:

- terminating the employment contracts of current employees in accordance with a detailed formal plan without the option of the plan being withdrawn; or
- paying termination benefits as a result of an offer to encourage voluntary redundancy. Benefits that fall due after more than twelve months after the reporting date are discounted.

## Legal provisions

VIVAT recognises a provision for the estimated liability with respect to ongoing legal proceedings. The provision comprises an estimate of the legal fees and payments due in the course of the legal proceedings, to the extent that it is more likely than not that an obligation exists at the reporting date. The provision is recognised if the obligation can be reliably estimated.

## Pension benefit obligation

This item comprises the provision for employees' pension benefits as well as other long term employee benefits.

## Pension benefits

VIVAT's main pension scheme is a defined contribution scheme administrated by Stichting Pensioenfondsen SNS REAAL. New staff is included in this scheme. In addition, a number of defined benefit plans were acquired from of insurance companies in the past. The members of those schemes are referred to as deferred members or retirees.

### *Defined contribution scheme*

According to this pension scheme, defined contributions are paid to separate entities, primarily to Stichting Pensioenfondsen SNS REAAL, an independent pension fund. Besides the defined contributions, VIVAT has no obligation to make additional payments to the scheme to make up for deficits resulting from actuarial or investment risk.

### *Defined benefit schemes*

A number of defined benefit schemes for (former) employees still exist. The net liability related to these schemes is represented by the difference between the present value of the future liabilities to pay the participants' pensions (gross pension entitlements) and the value of the qualifying assets of these schemes. Qualifying assets are investments relating to pension funds or insurance contracts with insurance companies other than VIVAT.

## Other long-term employee benefits

This item refers to jubilee benefits and to discounts granted for bank and insurance products to (former) employees after the date of their retirement. The amount of the obligation is based on the present value of the discounts offered after the retirement date, taking into account actuarial assumptions about mortality and interest. Furthermore, an obligation for reimbursement of medical expenses is recognised. A liability for the expected expenses of these reimbursements during the period of employment is recognised according to the methods used to determine the defined pension schemes. To qualify for these benefits, an employee's contract is required to run until his or her retirement age and it is to span a specified minimum period.

## Deposits from reinsurers

VIVAT enters reinsurance programmes to provide protection against underwriting risks arising in the miscellaneous insurance portfolios. The share of reinsurance companies in the technical provisions is accounted for as reinsurance recoverables and mirrored by deposits from reinsurers. These deposits represent the amount payable to reinsurers arising from reinsurance contract and may become payable on demand. The fair value of these deposits is determined based on the value of reinsurance recoverables.

## Deferred tax liabilities

Refer to the section "Deferred tax assets (and liabilities)" under "Assets".

## **Derivatives**

Refer to the section "Financial instruments - derivatives" under Assets.

## **Debts owed to credit institutions**

This item comprises unsubordinated debts to credit institutions, including the amounts payable arising from sale and repurchase agreements and cash collaterals.

The debts owed to credit institutions are measured at their nominal value, since it is assumed to equal their fair value.

## **Insurance and intermediaries payables**

This item comprises current payables corresponding to insurance activities of VIVAT as well as payables to intermediaries. Bearing in mind short-term character of these assets, these are measured at their nominal value, since it is assumed to be equal to their fair value.

## **Reinsurance payables**

This item comprises current payables to reinsurance companies. Depending on the short- or longer term character of these payables, they are measured at their nominal value or calculated using the expected future cashflows and interest rate curve.

## **Payables (trade, not insurance)**

This item comprises miscellaneous amounts payable. Short-term employee benefits including salaries, short paid leave, profit-sharing and bonus schemes are also presented as this item. Bearing in mind short-term character of these assets, these are measured at their nominal value, since it is assumed to equal their fair value.

## **Subordinated liabilities**

Subordinated debt includes the subordinated bonds and private loans issued by VIVAT.

The fair value of subordinated debt is determined by discounting the cash flows at the interest rate based on the swap rate observable in the market and a risk premium. The risk premium is determined based on the difference between the coupon interest rate of the subordinated loan and the swap rate at issue date. This premium remains constant over time.

In accordance with Solvency II VIVAT does not adjust the fair value of the subordinated loans with the changes in own credit risk, as subordinated debt are considered to be funding (core capital) and not an investment. The own credit risk is mainly used by investors interested in the market price of a financial instrument.

Value of the loans includes accrued interest.

## **Any other liabilities, not elsewhere shown**

This item comprises the liabilities that cannot be recognised the items in the Solvency II balance sheet described above. These liabilities comprise mainly the accrued interest on short-term amounts payable and the liabilities to participants of Zwitserleven PPI. The accrued interest is measured at its nominal value, which is assumed to equal its fair value. The fair value of the liabilities of Zwitserleven PPI is determined as the fair value Zwitserleven PPI's investments (refer to the section "Investments" for more information).

## 5.2.2. Subsidiaries and scope of consolidation

To determine the capital requirements at consolidated level, VIVAT applies the 'Accounting consolidation based method', according to which the capital requirements are calculated based on the Solvency II consolidated balance sheet.

### Group companies

According to Solvency II the Group is defined as a parent company and its participations: subsidiaries and the entities in which the parent or its subsidiaries hold a participation, as well as undertakings linked to each other by:

- management on a unified basis pursuant to a contract or provisions in the memorandum or articles of association
- participation in the administrative, management or supervisory bodies.

The Group is based on the establishment of a strong and sustainable financial and operational relationship among those undertakings. This establishment may have legal as well as constructive character. The method according to which the Group companies are accounted for in the consolidated Solvency II balance is determined by the influence exercised by the parent company as well as the activities of the Group company.

Since SRLEV and VIVAT Schadeverzekeringen are wholly owned subsidiaries of VIVAT, VIVAT can indirectly exercise the influence on all participations of SRLEV and VIVAT Schadeverzekeringen. As a result, all these participations are included in the consolidation scope, as if they were direct participations of VIVAT.

### Full consolidation

Under Solvency II full consolidation has to be applied to the subsidiaries of the parent company that are:

- insurance or reinsurance companies
- insurance holding companies
- ancillary services undertakings

Subsidiaries are the participations, on which VIVAT might directly or indirectly exercise the dominant influence:

- participations in which VIVAT directly or indirectly holds more than one half of the voting rights;
- entities, in which VIVAT does not hold majority voting rights, but that are managed by VIVAT on a unified basis pursuant to a contract or provisions in the memorandum or articles of association;
- entities, in which VIVAT does not hold majority voting rights, but the administrative, management or supervisory bodies of which comprise the same people as VIVAT;
- entities on which VIVAT might exercise dominant influence in a different way.

The consolidation also encompasses the proportional share of the other undertakings according to the relevant sectoral rules in relation to holdings in related undertakings which are investment fund managers or institutions for occupational retirement provisions. The consolidation is applied from the date on which VIVAT gains dominant influence until the date this influence ceases. The other types of subsidiaries are not consolidated under Solvency II – they are accounted for based on equity method (refer to the section below).

## Adjusted equity method

Participations at the adjusted equity method are initially measured at their acquisition price (including transaction costs) and subsequently increased with VIVAT's share of equity of these participations. Equity of the related participations is determined according to Solvency II principles.

The adjusted equity method is applied to the subsidiaries of VIVAT that do not qualify to be fully consolidated (refer to the section above) as well as entities in which VIVAT has significant influence, but in which no dominant influence can be exercised. The existence of the significant influence is assumed as:

- representation on the board of directors or equivalent governing body of the investee
- participation in the policy-making process
- material transactions between the investor and the investee
- interchange of managerial personnel
- provision of essential technical information

The participations are recognised in the Solvency II consolidated balance sheet from the date on which VIVAT gains dominant or significant influence until the date this influence ceases. The application of the adjusted equity method depends on the activities of the entity:

- participations in associated insurance companies and associated companies providing ancillary services are accounted for with adjusted equity method based on Solvency II principles;
- if the application of adjusted equity method is impracticable for the companies not operating in finance industry, the IFRS equity method may be used after eliminating the goodwill and the intangible assets that cannot be sold.

## Elimination of Group transactions

The Solvency II consolidated balance sheet is prepared net of any intra-group transactions.

## Consolidation process

The consolidation process constitutes the part of the larger control framework within VIVAT's accounting and as such is a subject to detailed testing to ensure the correctness of the work performed. The intra group transactions, due to the presence of specific national and international legislation along with exposure to certain risks, are also strictly controlled and monitored by a number of internal and external stakeholders.

### 5.2.3. Events after the Reporting Date

#### Change name Reaal Schadeverzekeringen NV

As from March 5, 2018 Reaal Schadeverzekeringen NV has changed its name changed to VIVAT Schadeverzekeringen NV.

#### Storm claims

In January 2018 the storm claims for VIVAT Schadeverzekeringen NV was around € 20 million before tax, after re-insurance.

#### Sale of CED Holding BV

In February 2018 the sale of the associate CED Holding BV has been completed; In VIVAT's statement of financial position year-end 2017, the associate was presented as an asset held for sale.

## 5.3. Assets

In case the Solvency II measurement is equal to the IFRS measurement we refer to the Annual Report of VIVAT NV 2017.

### 5.3.1. Goodwill and intangible assets

Under the Solvency II regime, intangible assets can only be recognized on the balance sheet, if the intangible asset: a) can be traded separately and b) there is an active market for similar assets. The intangible assets on the VIVAT IFRS consolidated balance sheet do not meet the aforementioned criteria.

### 5.3.2. Deferred tax assets and liabilities

In the Solvency II balance sheet, all items are measured at their market value, which can be estimated either through mark-to-market or mark-to-model techniques. As in the Solvency II balance sheet unrealized gains and losses are recognised, the corresponding deferred tax liability or asset is recognized simultaneously. For calculating the amount of deferred taxes, local income tax regulations apply; all deferred taxes in the Solvency II balance sheet are calculated using the current applicable rate of 25%.

A deferred tax asset (DTA) is the amount of income taxes recoverable in the future arising from deductible temporary differences between the carrying amount of an asset or liability and its tax base. VIVAT has recognised no deferred tax assets arising from the carryforward of unused tax losses.

A deferred tax liability (DTL) is the amount of income tax payable arising from taxable differences between the carrying amount of an asset or liability and its tax base.

#### Adjustment in presentation

The deferred tax assets and deferred tax liabilities were presented separately in the statement of financial position at 31 December 2016. However, deferred tax assets and deferred tax liabilities relate to corporate income tax levied by the same Dutch Tax Authorities and therefore have to be offset under IAS 12 'Income Taxes'. This has been adjusted in 2017. The Solvency II amount of deferred tax assets and deferred tax liabilities offset at the end of 2016 was € 1.486 million and € 989 million respectively. Impact of this change on own funds in 2017 and in 2016 is nil.

VIVAT is with her subsidiaries, SRLEV, VIVAT Schadeverzekeringen, Proteq Levensverzekeringen, Zwitterleven PPI and ACTIAM a so called fiscal unity (fiscale eenheid).

The adjustment in the deferred tax is 25% of all market value adjustments in the Solvency II balance sheet.

## From IFRS to Solvency II tax position at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
IFRS tax position	475	-4	2	17	491
<i>Tax adjustments for:</i>					
Difference in the valuation of assets	-451	-	-	4	-447
Difference in the valuation of technical provisions	589	-25	2	-26	539
Difference in the valuation of other liabilities	12	2	-	23	37
<b>SII tax position</b>	<b>625</b>	<b>-27</b>	<b>4</b>	<b>18</b>	<b>620</b>

## From IFRS to Solvency II tax position at 31 December 2016

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
IFRS tax position	455	-14	-2	-13	426
<i>Tax adjustments for:</i>					
Difference in the valuation of assets	-490	1	-	2	-487
Difference in the valuation of technical provisions	612	-16	1	113	710
Difference in the valuation of other liabilities	-43	2	-	-112	-152
<b>SII tax position</b>	<b>535</b>	<b>-27</b>	<b>-1</b>	<b>-10</b>	<b>497</b>

For a further explanation of the IFRS tax position we refer to section 6.3 Note 8 Deferred Tax in the Annual Report of VIVAT NV 2017.

The underlying method of calculating the deferred tax assets and liabilities is the same for IFRS and for Solvency II; the tax value of assets and liabilities is compared with the amounts recognised in the balance sheet. Under IFRS the tax value of assets and liabilities is compared to the amounts recognised and measured based on IFRS. Respectively, under Solvency II, the tax values of assets and liabilities are compared to the amounts recognised and measured based on Solvency II.

### 5.3.3. Investments

The table below shows the value of the investments broken down by Solvency II and IFRS valuation.

#### Breakdown of investments at 31 December 2017

In € millions	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Property (other than for own use)	245	245	-	-	-	-	135	135	380	380
Holdings in related undertakings, including participations	84	96	12	4	-	-	-89	-100	7	-
Equities	-	-	36	36	-	-	1	1	37	37
Bonds	25,445	25,427	1,302	1,302	549	549	-360	-342	26,936	26,936
Collective Investments Undertakings	2,847	2,847	178	178	7	7	66	66	3,098	3,098
Derivatives	741	741	19	19	-	-	-	-	760	760
Deposits other than cash equivalents	535	513	1	1	6	6	9	10	551	530
<b>Investments</b>	<b>29,897</b>	<b>29,869</b>	<b>1,548</b>	<b>1,540</b>	<b>562</b>	<b>562</b>	<b>-238</b>	<b>-230</b>	<b>31,769</b>	<b>31,741</b>

#### Breakdown of investments at 31 December 2016

In € millions	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Property (other than for own use)	142	142	-	-	-	-	132	132	274	274
Holdings in related undertakings, including participations	74	86	8	8	-	-	-75	-87	7	7
Equities	104	104	36	36	-	-	1	1	141	141
Bonds	26,290	26,269	1,403	1,403	596	596	-984	-963	27,305	27,305
Collective Investments Undertakings	1,586	1,586	195	195	-	-	315	315	2,096	2,096
Derivatives	1,061	1,061	30	30	-	-	-	-	1,091	1,091
Deposits other than cash equivalents	157	128	1	1	-	-	-	-	158	129
<b>Investments</b>	<b>29,414</b>	<b>29,376</b>	<b>1,673</b>	<b>1,673</b>	<b>596</b>	<b>596</b>	<b>-611</b>	<b>-602</b>	<b>31,072</b>	<b>31,043</b>

The Property (other than for own use) in the category Other relate to property held on consolidated level. Holdings in related Undertakings in the category Other relate to the elimination of investments in associates on consolidated level. The single consolidation of SRLEV presents the notes, on the group level (VIVAT) the underlying mortgages are presented. The amount of Collective Investments Undertakings in Other relate to an investment in liquidity funds by VIVAT.



## Valuation

All investments are measured at market value under IFRS and Solvency II, except the deposits other than cash equivalents. These are valued at amortized costs under IFRS instead of market value under the SII-regime.

### Valuation at 31 December 2017

In € millions	Quoted market price	Quoted market price for similar assets	Alternative valuation method	Total
Property (other than for own use)	-	-	380	<b>380</b>
Holdings in related undertakings, including participations	-	-	7	<b>7</b>
Equities	-	-	37	<b>37</b>
Bonds	25,734	476	726	<b>26,936</b>
Collective Investments Undertakings	2,681	-	417	<b>3,098</b>
Derivatives	-	-	760	<b>760</b>
Deposits other than cash equivalents	-	-	551	<b>551</b>
<b>Investments</b>	<b>28,415</b>	<b>476</b>	<b>2,878</b>	<b>31,769</b>

### Valuation at 31 December 2016

In € millions	Quoted market price	Quoted market price for similar assets	Alternative valuation method	Total
Property (other than for own use)	-	-	274	<b>274</b>
Holdings in related undertakings, including participations	-	-	7	<b>7</b>
Equities	-	-	141	<b>141</b>
Bonds	25,759	859	687	<b>27,305</b>
Collective Investments Undertakings	1,838	-	258	<b>2,096</b>
Derivatives	-	-	1,091	<b>1,091</b>
Deposits other than cash equivalents	-	-	158	<b>158</b>
<b>Investments</b>	<b>27,597</b>	<b>859</b>	<b>2,616</b>	<b>31,072</b>

### Property (other than for own use)

Property other than for own use is in general investment properties. Investment property mainly consist of offices and retail properties. For more on the valuation of property other than for own use, see section 5.2.1.

### Holdings in related undertakings, including participations

The holdings in related undertakings of VIVAT consist mainly of the principal associate (CED). CED Holding BV is an associate of VIVAT Schadeverzekeringen NV, which is a subsidiary of VIVAT NV. VIVAT Schadeverzekeringen NV has 23% of the ownership interest in CED Holding BV. At year-end 2017 VIVAT is in the process of selling CED Holding BV. With this in mind, the associate is recognized as held for sale in the IFRS balance sheet and presented under 'Any other assets'. In the Solvency II balance sheet the item is reclassified from the balance sheet item 'Any other assets' to 'Holdings in related undertakings, including participations'. CED is no longer considered to be a strategic to VIVAT. In February 2018 the sale of CED has been completed.

The holdings in related undertaking, including participations are attributable to SRLEV € 84 million (2016: € 74 million), VIVAT Schadeverzekeringen €12 million (2016: € 8 million) and Other € -89 million (2016: € -75 million).

For a detailed overview of the related subsidiaries of VIVAT, SRLEV, VIVAT Schadeverzekeringen and Proteq Levensverzekeringen see Annex I.

## Equities

Equities relate mainly to unlisted participations which are considered strategic by VIVAT. For a more detailed description of the market risk related to equities and the distinction between type 1 and type 2 equities, see section 4.3.3.2. The equities are attributable to VIVAT Schadeverzekeringen € 36 million (2016: € 36 million) and Other € 1 million (2016: € 1 million). The equity risk of VIVAT and SRLEV (2016: €104 million) decreased mainly due to a tactical adjustment in the asset portfolio.

## Bonds

The table below provides a breakdown of bonds:

### Breakdown of bonds at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Government Bonds	18,581	948	494	566	<b>20,589</b>
Corporate Bonds	4,998	338	55	-	<b>5,391</b>
Structured notes	25	1	-	-	<b>26</b>
Collateralised securities	1,841	15	-	-926	<b>930</b>
<b>Bonds</b>	<b>25,445</b>	<b>1,302</b>	<b>549</b>	<b>-360</b>	<b>26,936</b>

### Breakdown of bonds at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total <sup>1</sup>
Government Bonds	19,701	1,039	524	30	<b>21,294</b>
Corporate Bonds	4,293	341	72	-	<b>4,706</b>
Structured notes	30	1	-	-	<b>31</b>
Collateralised securities	2,266	22	-	-1,014	<b>1,274</b>
<b>Bonds</b>	<b>26,290</b>	<b>1,403</b>	<b>596</b>	<b>-984</b>	<b>27,305</b>

<sup>1</sup> As a result of a change of the CIC code of some bonds a reclassification of € 724 million has been made from the category government to the corporate bonds.

The column 'Other' € -360 million (2016: € -984 million) concern government bonds of ACTIAM NV € 4 million (2016: € 30 million), VIVAT holding € 562 million (2016: nihil) and the elimination of collateralised securities € 926 million (2016: € 1,014 million). These collateralised securities constitute the intra-group notes issued by the Share Debt Programme 1 BV to finance a portfolio of mortgages and purchased by SRLEV.

The table below provides a breakdown of bonds by sector:

### Breakdown of bonds by sector at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT	Percentage
Sovereign	18,581	948	494	566	20,589	76%
Financial sector	3,467	150	29	-	3,646	14%
Non financial sector	1,925	193	26	-	2,143	8%
Mortgage backed securities	1,472	11	-	-926	558	2%
<b>Total</b>	<b>25,445</b>	<b>1,302</b>	<b>549</b>	<b>-360</b>	<b>26,936</b>	<b>100%</b>

### Breakdown of bonds by sector at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT	Percentage
Sovereign	19,701	1,039	524	30	21,294	78%
Financial sector	3,995	257	24	-	4,276	16%
Non financial sector	800	87	48	-	935	3%
Mortgage backed securities	1,794	20	-	-1,014	800	3%
<b>Total</b>	<b>26,290</b>	<b>1,403</b>	<b>596</b>	<b>-984</b>	<b>27,305</b>	<b>100%</b>

In 2017 the next steps have been made into re-risking the portfolio by divesting fixed-income investments primarily German and Dutch government bonds. Investments mainly increased in bonds from European and other international institutions and government bonds of Japan and France.

The table below provides a breakdown of bonds by rating:

### Breakdown of bonds by rating at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT	Percentage
AAA	15,088	777	493	413	16,771	62%
AA	3,931	265	17	153	4,366	16%
A	2,988	106	18	-	3,112	12%
BBB	2,312	152	21	-	2,485	9%
< BBB	34	2	-	-	36	0%
Not rated	1,092	-	-	-926	166	1%
<b>Total</b>	<b>25,445</b>	<b>1,302</b>	<b>549</b>	<b>-360</b>	<b>26,936</b>	<b>100%</b>

### Breakdown of bonds by rating at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT	Percentage
AAA	17,665	895	528	30	19,118	70%
AA	3,356	202	15	-	3,573	13%
A	1,863	125	30	-	2,018	7%
BBB	2,188	179	23	-	2,390	9%
< BBB	50	2	-	-	52	0%
Not rated	1,168	-	-	-1,014	154	1%
<b>Total</b>	<b>26,290</b>	<b>1,403</b>	<b>596</b>	<b>-984</b>	<b>27,305</b>	<b>100%</b>

## Government Bonds

Government Bonds consists mainly of bonds issued by European governments. The vast majority of the governments bond are Dutch, German and bonds of European and other international institutions. Only a small part of the portfolio consists of bonds issued by Japan, Spain and Italy. The table below shows the breakdown of government bonds by geographic area.

### Breakdown of government bonds by geographic area

In € millions	2017		2016	
Germany	7,143	35%	9,649	45%
Netherlands	6,381	31%	7,208	34%
International institutions	1,688	8%	-	0%
Austria	1,057	5%	920	4%
France	1,055	5%	768	4%
Belgium	634	3%	570	3%
Ireland	504	2%	298	1%
Luxembourg	493	2%	881	4%
Japan	482	2%	-	0%
Spain	431	2%	446	2%
Italy	381	2%	430	2%
Other	340	2%	124	1%
<b>Total</b>	<b>20,589</b>	<b>100%</b>	<b>21,294</b>	<b>100%</b>

## Corporate Bonds

Corporate Bonds consists of bonds issued by European, Australian and American companies which are active in different sectors (e.g. financial services, industry, public administration and defense).

## Collective Investments Undertakings

The Collective Investments Undertakings amount to € 3,098 million (2016: € 2,096 million) and are largely consisting different investment funds among others money market funds € 2,259 million (2016: € 1,311 million) and debt funds € 664 million (2016: € 590 million). The Collective Investments Undertakings are attributable to SRLEV € 2,847 million (2016: € 1,586 million), VIVAT Schadeverzekeringen € 178 million (2016: € 195 million) and Other € 66 million (2016: € 315 million).

## Derivatives

The table below provides a breakdown of derivatives:

### Breakdown of derivatives at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Total
Call Options	149	-	149
Put Options	62	-	62
Swaps	512	19	531
Forwards	18	-	18
<b>Derivatives</b>	<b>741</b>	<b>19</b>	<b>760</b>

### Breakdown of derivatives at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Total
Call Options	174	-	174
Put Options	82	-	82
Swaps	803	30	833
Forwards	2	-	2
<b>Derivatives</b>	<b>1,061</b>	<b>30</b>	<b>1,091</b>

Derivatives are primarily held to hedge the market risk. For more information on the measurement and valuation of derivatives see section 5.2.1.

## Deposits other than cash equivalents

The deposits other than cash equivalents amounts to € 551 million (2016: € 158 million). The difference of € 21 million (2016: € 29 million) between the Solvency II value and the IFRS value is due to difference in valuation. The deposits other than cash equivalents under IFRS are measured at amortized costs and under the SII-regime at market value.

### 5.3.4. Assets held for index-linked and unit-linked contracts

The assets held for index-linked and unit-linked contracts amount to € 13,281 million (2016: € 14,351 million) and include investments under unit-linked policies and separate investment deposits for corporate pension contracts.

The main differences of € 79 million (2016: € 100 million) between the IFRS valuation and the Solvency II valuation are caused by the revaluation of the assets related to the saving mortgages for the part that is reported as unit-linked. Regarding the savings elements of savings-linked mortgages the following valuation method is applied: for the valuation of the asset, the cash flows of the savings part have been projected

until the interest reset using the fixed mortgage interest rate.

The value of the assets is calculated as the present value of the cash flows of the assets during this fixed interest period using the swap curve increased with a spread related to the remaining risk (dependent on the counterparty and underlying collateral) in the asset for discounting.

### 5.3.5. Loans and mortgages

The loans and mortgages amount to € 11,530 million (2016: € 11,429 million). The difference of € 1,687 million (2016: € 1,823 million) between the Solvency II value and the IFRS value is due to difference in valuation. The loans and mortgages are under IFRS measured at amortized cost or nominal value and under the SII-regime at market value.

The Mortgages Valuation Model consists of two parts: the projection of the expected future cash flows, where prepayment is also taken into account, and the determination of the spread on top of the risk-free interest rate curve (Swap mid-price) for the purpose of discounting the cash flows. This spread will be obtained based the consumer tariffs for the available fixed interest rate terms. Then the consumer tariffs are adjusted for expected prepayment. There is a discount for the origination costs and price offer risk and an add-on for mortgages which are non-linear or non-annuity.

#### Loans and mortgages at 31 December 2017

In € millions	SRLEV		VIVAT	
	SII	IFRS	SII	IFRS
Mortgages to individuals	1,636	1,436	2,561	2,343
Private loans linked to savings mortgages	6,098	5,054	6,098	5,054
Other loans and mortgages	2,878	2,438	2,867	2,442
Loans on policies	4	4	4	4
<b>Total</b>	<b>10,616</b>	<b>8,932</b>	<b>11,530</b>	<b>9,843</b>

#### Loans and mortgages at 31 December 2016

In € millions	SRLEV		VIVAT	
	SII	IFRS	SII	IFRS
Mortgages to individuals	1,885	1,653	2,899	2,648
Private loans linked to savings mortgages	6,620	5,294	6,620	5,294
Other loans and mortgages	2,150	1,890	1,906	1,660
Loans on policies	4	4	4	4
<b>Total</b>	<b>10,659</b>	<b>8,841</b>	<b>11,429</b>	<b>9,606</b>

### 5.3.6. Reinsurance recoverables

The difference of € -7 million (2016: € -4 million) in the reinsurance recoverables is caused by an adjustment to market value calculation under the SII-regime. See also section 5.4 for an explanation of the technical provisions.

### 5.3.7. Any other assets, not elsewhere shown

The any other assets, not elsewhere shown include investments for the account of participants of Zwitserleven PPI € 176 million (2016: € 67 million).

## 5.4. Technical provision

### Breakdown of technical provisions at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Best estimate (Gross)	45,987	889	437	-243	47,070
Risk Margin	1,671	172	30	-	1,873
<b>Total technical provisions (Gross)</b>	<b>47,658</b>	<b>1,061</b>	<b>467</b>	<b>-243</b>	<b>48,943</b>

### Breakdown of technical provisions at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Best estimate (Gross) before reclassification	46,705	974	440	327	48,446
Reclassification pension commitments under Technical Provisions	-	-	-	-538	-538
<b>Best estimate (Gross) after reclassification</b>	<b>46,705</b>	<b>974</b>	<b>440</b>	<b>-211</b>	<b>47,908</b>
Risk Margin	1,791	183	35	-	2,009
<b>Total technical provisions (Gross)</b>	<b>48,496</b>	<b>1,157</b>	<b>475</b>	<b>-211</b>	<b>49,917</b>

#### 5.4.1. Technical provisions SRLEV

The technical provisions of SRLEV in the balance sheet decreased in 2017 with € 838 million to an amount of € 47,658 million. Excluding the risk margin and the recoverables from reinsurance the gross best estimate decreased in 2017 with € 691 million to an amount of € 45,896 million.

The table below provides an overview of the technical provisions of SRLEV.

### Breakdown technical provisions Life SRLEV (Net) at 31 December 2017

In € millions	Insurance with profit participation	Index-linked and unit-linked	Other life insurance	Total
Best estimate (Gross)	13,998	13,715	18,274	<b>45,987</b>
Best estimate (Recoverable from reinsurance)	-8	1	-84	<b>-91</b>
<b>Best estimate (net)</b>	<b>13,990</b>	<b>13,716</b>	<b>18,190</b>	<b>45,896</b>
Risk Margin	456	355	860	<b>1,671</b>
<b>Technical provisions Solvency II</b>	<b>14,446</b>	<b>14,071</b>	<b>19,050</b>	<b>47,567</b>
Technical provisions IFRS (net) <sup>1</sup>	14,201	13,874	17,543	<b>45,618</b>
<b>Differences</b>	<b>245</b>	<b>197</b>	<b>1,507</b>	<b>1,949</b>

<sup>1</sup> The IFRS technical provisions in the balance sheet amount to € 45,302 million (excluding ESC). The difference with the technical provisions IFRS net in this specification is due to the recoverables from reinsurance (€ 91 million) and surplus investments (€ -407 million).

## Breakdown technical provisions Life SRLEV (Net) at 31 December 2016

In € millions	Insurance with profit participation	Index-linked and unit-linked	Other life insurance	Total
Best estimate (Gross)	15,260	14,733	16,712	<b>46,705</b>
Best estimate (Recoverable from reinsurance)	-8	2	-112	<b>-118</b>
<b>Best estimate (net)</b>	<b>15,252</b>	<b>14,735</b>	<b>16,600</b>	<b>46,587</b>
Risk Margin	530	472	789	<b>1,791</b>
<b>Technical provisions Solvency II</b>	<b>15,782</b>	<b>15,207</b>	<b>17,389</b>	<b>48,378</b>
Technical provisions IFRS (net) <sup>1</sup>	15,679	14,951	15,790	<b>46,420</b>
<b>Differences</b>	<b>103</b>	<b>256</b>	<b>1,599</b>	<b>1,958</b>

<sup>1</sup> The IFRS technical provisions in the balance sheet amount to € 46.023 million (excluding ESC). The difference with the technical provisions IFRS net in this specification is due to the recoverables from reinsurance (€ 106 million) and surplus investments (€ -503 million).

During 2017 part of the paid-up group insurance policies in investment units were transferred from the index and unit linked portfolio to the other life insurance portfolio.

The table below shows a breakdown of the technical provisions of SRLEV per Line of Business.

## Breakdown technical provisions Life SRLEV per Line of Business (Net) at 31 December 2017

In € millions	Best estimate		Risk Margin		SII	IFRS
	Gross	Net	Net		Net	Net <sup>1</sup>
Savings-based mortgages	5,834	5,748	93		5,841	4,740
Life annuity	4,056	4,056	211		4,267	4,181
Term insurance	-39	-39	201		163	95
Traditional savings	5,971	5,961	83		6,043	5,927
Funeral insurance	988	988	52		1,040	1,027
<b>Individual insurance policies in cash</b>	<b>16,810</b>	<b>16,714</b>	<b>640</b>		<b>17,354</b>	<b>15,970</b>
Individual insurance policies in investment units	4,965	4,966	146		5,113	4,985
Group insurance policies in cash	15,462	15,466	676		16,142	15,774
Group insurance policies in investment units	8,750	8,750	209		8,958	8,889
<b>Total</b>	<b>45,987</b>	<b>45,896</b>	<b>1,671</b>		<b>47,567</b>	<b>45,618</b>

<sup>1</sup> The IFRS technical provisions in the balance sheet amount to € 45.302 million (excluding ESC). The difference with the technical provisions IFRS net in this specification is due to the recoverables from reinsurance (€ 91 million) and surplus investments (€ -407 million).



## Breakdown technical provisions Life SRLEV per Line of Business (Net) at 31 December 2016

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net <sup>1</sup>
Savings-based mortgages	6,120	6,008	106	6,114	4,818
Life annuity	4,028	4,029	210	4,239	4,193
Term insurance	-165	-165	197	32	-36
Traditional savings	6,601	6,591	103	6,694	6,563
Funeral insurance	990	990	56	1,046	1,047
<b>Individual insurance policies in cash</b>	<b>17,574</b>	<b>17,453</b>	<b>672</b>	<b>18,125</b>	<b>16,585</b>
Individual insurance policies in investment units	5,209	5,210	222	5,432	5,219
Group insurance policies in cash	14,396	14,399	648	15,047	14,884
Group insurance policies in investment units	9,526	9,525	249	9,774	9,732
<b>Total</b>	<b>46,705</b>	<b>46,587</b>	<b>1,791</b>	<b>48,378</b>	<b>46,420</b>

<sup>1</sup> The IFRS technical provisions in the balance sheet amount to € 46.023 million (excluding ESC). The difference with the technical provisions IFRS net in this specification is due to the recoverables from reinsurance (€ 106 million) and surplus investments (€ -503 million).

### Methods and assumptions

The main components of calculating the technical provisions are the used methods and assumptions. VIVAT uses a general actuarial market approach taking into account the contract boundaries of the insurance contract. The material methods and assumptions that are used in the calculation of the technical provisions of Life are described in section 5.2.1.

### Differences valuation Solvency II and IFRS

As per year-end 2017, the liability adequacy test results in a deficit making market consistent valuation of the technical provisions mandatory under IFRS 4. Under Solvency II the technical provisions are also market consistent measured. The differences between Solvency II and IFRS valuation are than confined to:

Standard modelsegmentation	IFRS Technical provision (gross)	SII Technical provision (gross)
SRLEV	1. Market consistent valuated technical provision, except for saving mortgages which is at nominal value	1. Market consistent valuated technical provision
	2. Swap curve with UFR for discounting	2. By EIOPA prescribed curve: swap curve adjusted for credit risk (Volatility Adjustment) and with UFR for discounting
	3. As a result of internal research the Cost of Capital (CoC) is 4%	3. According to SII-requirements the CoC is 6%

As shown in the table 'Breakdown technical provisions Life SRLEV per Line of Business (Net)' the difference between the Solvency II and IFRS value is € 1.9 billion. This difference is mainly caused by the valuation of savings mortgages from nominal value to Solvency II market value (€ 1.2 billion) and the difference in the Cost of Capital percentage (€ 0.6 billion). The difference in curve has only a small effect.

### Level of Uncertainty

Uncertainty arises from risks SRLEV is exposed to. SRLEV has defined and structured different risk types, partly on the basis of current legislation and regulations (SII Standard Formula), and partly on the basis of

own assessment of risks. With regards to the valuation of technical provisions Vivat recognizes model risk, covering uncertainty in the models, the parameters and in the data. The risks related to these uncertainties are mitigated by complying to Risk Policy (RP) procedures and processes for the development of models, the estimation of parameters and the use of data. According to this policy, model validations and second line reviews or assessments are performed. Next to that, at least once a year model risk is also assessed at Group and legal entity levels, during the regular Own Risk Solvency Assessment (ORSA) process, when the appropriateness test is executed.

### Impact Volatility Adjustment

SRLEV applies the Volatility Adjustment for discounting cash flows to determine the best estimate and in determining the capital requirement under the SCR. The following table shows the impact of this Volatility Adjustment on the financial position and own funds of SRLEV:

#### Impact of applying Volatility Adjustment at 31 December 2017

In € millions	VA = 4 bp	VA = 0 bp	Impact
Technical provisions	47,658	47,821	163
Basic own funds	3,562	3,439	-123
Eligible own funds to meet SCR	3,246	3,093	-153
SCR	2,061	2,131	70
MCR	927	959	32
Solvency II ratio	158%	145%	-13%

#### Impact of applying Volatility Adjustment at 31 December 2016

In € millions	VA = 13 bp	VA = 0 bp	Impact
Technical provisions	48,496	49,024	528
Basic own funds	3,615	3,218	-397
Eligible own funds to meet SCR	3,424	2,893	-531
SCR	2,295	2,302	7
MCR	1,033	1,036	3
Solvency II ratio	149%	126%	-24%

### Matching Adjustment

SRLEV does not apply a Matching Adjustment as referred to in Article 77 of Directive 2009/138/EC.

### Risk-free yield curve

SRLEV does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Transition deductions

SRLEV does not apply a transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Material changes in assumptions

There have been no material changes in the relevant assumptions underlying the calculation of technical provisions.

## Significant simplified methods

No significant simplified methods were used to calculate the technical provisions.

## Reinsurance

For a further explanation of Life reinsurance see section 4.2.3.3.

### 5.4.2. Technical provisions VIVAT Schadeverzekeringen

The technical provisions of VIVAT Schadeverzekeringen (excluding recoverables from reinsurance) decreased from € 1,056 million in 2016 to € 978 million in 2017. This is a decrease of € 78 million. Excluding the reinsurance recoverables and the risk margin results in the movement of the gross best estimate. The gross best estimate decreased from € 974 million in 2016 to € 889 million in 2017 resulting in a total decrease of € 85 million. The major cause of the decrease in gross technical provisions is the experience variance. The experience variance has resulted in a decrease of € 54 million. This is mainly caused by the decreasing size of portfolios. Furthermore, parameter updates have resulted in a total decrease of € 35 million, € -38 million for Health and € 3 million for Non-Life. The new yield curve has resulted in a total decrease of € 8 million.

The insurance liabilities within VIVAT Schadeverzekeringen will compensate the insured or a third party in the event of damage caused by an uncertain event. These non-life insurance contracts mainly have a period of one year of coverage. Payments to be made after the occurrence of the insured event are either fixed (e.g. contractual benefit in case of disability) or related to the extent of the economic loss (in accordance with the indemnity principle) suffered by the policyholder or a third party.

The insurance liabilities within VIVAT Schadeverzekeringen are split in Non-Life, Health Non-SLT and Health SLT segments, in line with the insurance lines of business as defined by Solvency II. These segments are measured separately and technical provisions are calculated per homogeneous risk group. Within Non-Life, the homogeneous risk groups Motor, Transport, Fire, Liability and Other are covered. Income protection due to Accidents as well as Medical expenses are covered within Health Non-SLT where Disability insurance (AOV) is covered within Health SLT.

#### Breakdown technical provisions Non-Life (Net) at 31 December 2017

In € millions	Non-Life	Health (similar to Non-Life)	Health (similar to Life)	Total
Best estimate (Gross)	662	19	208	<b>889</b>
Best estimate (Recoverable from reinsurance)	-43	-	-40	<b>-83</b>
<b>Best estimate (net)</b>	<b>619</b>	<b>19</b>	<b>168</b>	<b>806</b>
Risk Margin	39	2	131	<b>172</b>
<b>Technical provisions Solvency II</b>	<b>658</b>	<b>21</b>	<b>299</b>	<b>978</b>
Technical provisions IFRS (net)	696	22	361	<b>1,079</b>
<b>Differences</b>	<b>-38</b>	<b>-1</b>	<b>-62</b>	<b>-101</b>

## Breakdown technical provisions Non-Life (Net) at 31 December 2016

In € millions	Non-Life	Health (similar to Non-Life)	Health (similar to Life)	Total
Best estimate (Gross)	705	18	251	<b>974</b>
Best estimate (Recoverable from reinsurance)	-57	-	-44	<b>-101</b>
<b>Best estimate (net)</b>	<b>648</b>	<b>18</b>	<b>207</b>	<b>873</b>
Risk Margin	42	2	139	<b>183</b>
<b>Technical provisions Solvency II</b>	<b>690</b>	<b>20</b>	<b>346</b>	<b>1,056</b>
Technical provisions IFRS (net)	720	20	380	<b>1,120</b>
<b>Differences</b>	<b>-30</b>	<b>-</b>	<b>-34</b>	<b>-64</b>

## Breakdown technical provisions Non-Life per Line of Business (Net) at 31 December 2017

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net
Motor insurance	365	352	20	<b>373</b>	383
Marine, aviation and transport insurance	36	35	2	<b>36</b>	39
Fire and other damage to property insurance	109	103	6	<b>109</b>	132
General liability insurance	141	118	9	<b>128</b>	132
Other	11	11	2	<b>12</b>	10
<b>Technical provision Non-Life (excluding health)</b>	<b>662</b>	<b>619</b>	<b>39</b>	<b>658</b>	<b>696</b>
Health Non SLT	19	19	2	<b>21</b>	22
<b>Technical provision Health (similar to Non-Life)</b>	<b>19</b>	<b>19</b>	<b>2</b>	<b>21</b>	<b>22</b>
Health SLT	208	168	131	<b>299</b>	361
<b>Technical provision Health (similar to Life)</b>	<b>208</b>	<b>168</b>	<b>131</b>	<b>299</b>	<b>361</b>
<b>Technical provision</b>	<b>889</b>	<b>806</b>	<b>172</b>	<b>978</b>	<b>1,079</b>

## Breakdown technical provisions Non-Life per Line of Business (Net) at 31 December 2016

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net
Motor insurance	395	375	23	<b>399</b>	407
Marine, aviation and transport insurance	36	35	2	<b>37</b>	41
Fire and other damage to property insurance	118	107	6	<b>113</b>	120
General liability insurance	146	120	10	<b>130</b>	142
Other	10	11	1	<b>12</b>	10
<b>Technical provision Non-Life (excluding health)</b>	<b>705</b>	<b>648</b>	<b>42</b>	<b>691</b>	<b>720</b>
Health Non SLT	18	18	2	<b>20</b>	20
<b>Technical provision Health (similar to Non-Life)</b>	<b>18</b>	<b>18</b>	<b>2</b>	<b>20</b>	<b>20</b>
Health SLT	251	207	139	<b>345</b>	380
<b>Technical provision Health (similar to Life)</b>	<b>251</b>	<b>207</b>	<b>139</b>	<b>345</b>	<b>380</b>
<b>Technical provision</b>	<b>974</b>	<b>873</b>	<b>183</b>	<b>1,056</b>	<b>1,120</b>

### Methods and assumptions

The main components of calculating the technical provisions are the used methods and assumptions. VIVAT uses a general actuarial market approach taking into account the contract boundaries of the insurance contract. The material methods and assumptions that are used in the calculation of the technical provisions of Non-Life, Health Non-SLT and Health SLT are described in section 5.2.1.

### Differences valuation Solvency II and IFRS

There is a number of important differences in measuring the technical provisions between best estimate under SII and provisions under IFRS regulation. The most important differences are shown in the table below.

Standard model segmentation	IFRS Technical provision (gross)	SII Technical provision (gross)
Non-Life and Health NSLT	1. Claim provision determined on claim by claim basis	1. Claim provision determined on claim by claim basis
	2. IBNR provision on estimated claim development including risk margin	2. Best estimate IBNR provision on actual claim development excluding risk margin
	3. Provision claim handling fixed	3. Best estimate claim handling provision
	4. Provision investment costs nil	4. Best estimate investment costs provision
	5. Risk margin included in IBNR provision	5. Risk margin based on SCR
	6. No discounting	6. Technical provision based on discounted cash flows
Health SLT	1. Claim provision determined on claim by claim basis and fixed interest rate	1. Best estimate present value of future incoming and outgoing cash flows (SLT method). EIOPA interest curve.
	2. IBNR provision fixed	2. IBNR provision nil
	3. Provision claim handling fixed	3. Best estimate claim handling provision
	4. Provision investment costs nil	4. Best estimate investment costs provision
	5. Risk margin nil	5. Risk margin based on SCR
	6. Discounting only in claim provision	6. Technical provision based on discounted cash flows

## Level of Uncertainty

Uncertainty arises from risks VIVAT Schadeverzekeringen is exposed to. VIVAT Schadeverzekeringen has defined and structured different risk types, partly on the basis of current legislation and regulations (SII Standard Formula), and partly on the basis of own assessment of risks. With regards to the valuation of technical provisions Vivat recognizes model risk, covering uncertainty in the models, the parameters and in the data. The risks related to these uncertainties is mitigated by complying to Risk Policy (RP) procedures and processes for the development of models, the estimation of parameters and the use of data. According to this policy, model validations and second line reviews or assessments are performed. Next to that, at least once a year model risk is also assessed at group and legal entity levels, during the regular Own Risk Solvency Assessment (ORSA) process, when the appropriateness test is executed.

## Impact Volatility Adjustment

VIVAT Schadeverzekeringen applies the Volatility Adjustment for discounting cash flows to determine the best estimate and in determining the capital requirement under the SCR. The following table shows the impact of this Volatility Adjustment on the financial position and own funds of VIVAT Schadeverzekeringen:

### Impact of applying Volatility Adjustment at 31 December 2017

In € millions	VA = 4 bp	VA = 0 bp	Impact
Technical provisions	1,061	1,063	2
Basic own funds	570	569	-1
Eligible own funds to meet SCR	570	569	-1
SCR	351	353	2
MCR	114	114	-
Solvency II ratio	162%	161%	-1%

## Impact of applying Volatility Adjustment at 31 December 2016

In € millions	VA = 13 bp	VA = 0 bp	Impact
Technical provisions	1,157	1,166	9
Basic own funds	554	548	-6
Eligible own funds to meet SCR	554	546	-8
SCR	365	368	3
MCR	116	116	-
Solvency II ratio	152%	148%	-3%

### Matching Adjustment

VIVAT Schadeverzekeringen does not apply a Matching Adjustment as referred to in Article 77 of Directive 2009/138/EC.

### Risk-free yield curve

VIVAT Schadeverzekeringen does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Transition deductions

VIVAT Schadeverzekeringen does not apply a transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Material changes in assumptions

There have been no material changes in the relevant assumptions underlying the calculation of technical provisions.

### Significant simplified methods

No significant simplified methods were used to calculate the technical provisions.

### Reinsurance

For a further explanation of Non-Life reinsurance see section 4.2.4.3.

## 5.4.3. Technical provisions Proteq Levensverzekeringen

The table below provides us an overview of the technical provisions of Proteq Levensverzekeringen.

### Breakdown technical provisions Life Proteq Levensverzekeringen (Net) at 31 December 2017

In € millions	Insurance with profit sharing	Other life insurance	Total
Best estimate (Gross)	300	137	437
Best estimate (Recoverable from reinsurance)	-	-	-
<b>Best estimate (net)</b>	<b>300</b>	<b>137</b>	<b>437</b>
Risk Margin	17	13	30
<b>Technical provisions Solvency II</b>	<b>317</b>	<b>150</b>	<b>467</b>
Technical provisions IFRS (net)	313	146	459
<b>Differences</b>	<b>4</b>	<b>4</b>	<b>8</b>

## Breakdown technical provisions Life Proteq Levensverzekeringen (Net) at 31 December 2016

In € millions	Insurance with profit sharing	Other life insurance	Total
Best estimate (Gross)	304	136	440
Best estimate (Recoverable from reinsurance)	-	-	-
<b>Best estimate (net)</b>	<b>304</b>	<b>136</b>	<b>440</b>
Risk Margin	21	14	35
<b>Technical provisions Solvency II</b>	<b>325</b>	<b>150</b>	<b>475</b>
Technical provisions IFRS (net)	323	148	471
<b>Differences</b>	<b>2</b>	<b>2</b>	<b>4</b>

Proteq Levensverzekeringen mainly has Funeral insurance.

### Level of Uncertainty

Uncertainty arises from risks Proteq Levensverzekeringen is exposed to. Proteq Levensverzekeringen has defined and structured different risk types, partly on the basis of current legislation and regulations (SII Standard Formula), and partly on the basis of own assessment of risks. With regards to the valuation of technical provisions Vivat recognizes model risk, covering uncertainty in the models, the parameters and in the data. The risks related to these uncertainties is mitigated by complying to Risk Policy (RP) procedures and processes for the development of models, the estimation of parameters and the use of data. According to this policy, model validations and second line reviews or assessments are performed. Next to that, at least once a year model risk is also assessed at Group and legal entity levels, during the regular Own Risk Solvency Assessment (ORSA) process, when the appropriateness test is executed.

### Differences valuation Solvency II and IFRS

Per ultimo 2016 the liability adequacy test results in a deficit making market consistent valuation of the technical provisions mandatory under IFRS 4. Under Solvency II the technical provisions are also market consistent valued. The differences between Solvency II and IFRS valuation are than confined to:

Standard modelsegmentation	IFRS Technical provision (gross)	SII Technical provision (gross)
Proteq	1. Market consistent valuated technical provision	1. Market consistent valuated technical provision
	2. Swap curve with UFR for discounting	2. By EIOPA prescribed curve for discounting
	3. As a result of internal research the CoC is 4%	3. According to SII-requirements the CoC is 6%

The difference between the Solvency II and IFRS value of € 8 million is mainly caused by difference in the Cost of Capital percentage. The difference in curve has only a small effect.

### Impact Volatility Adjustment

Proteq Levensverzekeringen applies the Volatility Adjustment for discounting cash flows to determine the best estimate and in determining the capital requirement under the SCR. The following table shows the impact of this Volatility Adjustment on the financial position and own funds of Proteq Levensverzekeringen:



## Impact of applying Volatility Adjustment at 31 December 2017

In € millions	VA = 4 bp	VA = 0 bp	Impact
Technical provisions	467	470	3
Basic own funds	92	90	-2
Eligible own funds to meet SCR	92	90	-2
SCR	35	35	-
MCR	14	14	-
Solvency II ratio	263%	257%	-6%

## Impact of applying Volatility Adjustment at 31 December 2016

In € millions	VA = 13 bp	VA = 0 bp	Impact
Technical provisions	475	485	10
Basic own funds	110	104	-6
Eligible own funds to meet SCR	110	101	-9
SCR	61	59	-2
MCR	15	15	-
Solvency II ratio	181%	171%	-9%

### Matching Adjustment

Proteq Levensverzekeringen does not apply a Matching Adjustment as referred to in Article 77 of Directive 2009/138/EC.

### Risk-free yield curve

Proteq Levensverzekeringen does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Transition deductions

Proteq Levensverzekeringen does not apply a transition deductions as referred to in Article 308 of Directive 2009/138/EC.

### Material changes in assumptions

There have been no material changes in the relevant assumptions underlying the calculation of technical provisions.

### Significant simplified methods

No significant simplified methods were used to calculate the technical provisions.

## 5.5. Liabilities

In case the Solvency II measurement is equal to the IFRS measurement we refer to the Annual Report of VIVAT NV.

### 5.5.1. Contingent liabilities

For the definition of contingent liabilities Solvency II refers to IFRS. Under Solvency II it is required to recognise contingent liabilities on the balance sheet if they are material. On the basis of the analysis of VIVAT, there are no contingent liabilities included in the Solvency II balance sheet at the end of 2017.

Under Solvency II, VIVAT has not measured the contingent liability relating to unit- linked policies in calculating the own funds as no reliable estimate can be made of the outcome. This is consistent with the measurement under IFRS.

For further information about off-balance sheet items, see section 5.7.

### 5.5.2. Pension benefit obligations

#### Adjustment in presentation

In 2016 the provision for employees' pension benefits of VIVAT was presented as technical provisions in the Solvency II balance sheet. This has been adjusted in 2017. The provision for employees' pension benefits for VIVAT has been presented as pension benefit obligation in the Solvency II balance sheet (same as under IFRS). The comparative figures have been adjusted accordingly.

#### Breakdown of pension benefit obligations 2017

In € millions	SRLEV	VIVAT Schade	Other	VIVAT
Present value of defined benefit obligations	206	29	405	641
Fair value of plan assets	-23	-3	-46	-73
Effect of asset ceiling	1	-	1	2
<b>Present value of the net liabilities</b>	<b>184</b>	<b>26</b>	<b>360</b>	<b>570</b>
Reclassification pension commitments under Technical Provisions	-165	-	165	-
<b>IAS 19 surplus after reclassification</b>	<b>19</b>	<b>26</b>	<b>525</b>	<b>570</b>
Other employee benefit commitments	-	-	15	15
<b>Total</b>	<b>19</b>	<b>26</b>	<b>540</b>	<b>585</b>

## Breakdown of pension benefit obligations 2016

In € millions	SRLEV	VIVAT Schade	Other	VIVAT
Present value of defined benefit obligations	203	29	399	631
Fair value of plan assets	-21	-3	-41	-65
Effect of asset ceiling	-	-	-	-
<b>Present value of the net liabilities</b>	<b>182</b>	<b>26</b>	<b>358</b>	<b>566</b>
Reclassification pension commitments under Technical Provisions	-173	-	173	-
<b>IAS 19 surplus after reclassification</b>	<b>9</b>	<b>26</b>	<b>531</b>	<b>566</b>
Other employee benefit commitments	-	-	12	12
<b>Total</b>	<b>9</b>	<b>26</b>	<b>543</b>	<b>578</b>

The net present value of the defined benefit obligations € 641 million (2016: € 631 million) is calculated on basis of the prescribed IFRS discount rate. The insured rights are taken into account for the SCR calculation, using the SCR results of the pension commitments under technical provisions, based on Solvency II assumptions.

The column 'Other' € 540 million (2016: € 543 million) concern the pension benefit obligation of VIVAT NV and VIVAT Schadeverzekeringen € 360 million (2016: € 358 million) and the reclassification of the pension commitments from the technical provisions of SRLEV € 165 million (2016: € 173 million).

Pension benefit obligations different from the financial statements do not exist. We refer to section 6.3 Note 17 Provisions for Employee Benefits in the Annual Report VIVAT NV 2017. In this section the main actuarial parameters and sensitivity of the present value of pension obligations are explained also.

### 5.5.3. Debts owed to credit institutions

The table below provides an overview of the debts owed to credit institutions:

#### Debts owed to credit institutions at 31 December 2017

In € millions	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Borrowings	-	-	-	-	-	-	642	642	642	642
Due on demand	398	398	16	16	-	-	-	-	414	414
Deposits and certificates	525	525	-	-	-	-	-	-	525	525
Private loans	903	703	-	-	-	-	-	-	903	703
<b>Total</b>	<b>1,826</b>	<b>1,626</b>	<b>16</b>	<b>16</b>	<b>-</b>	<b>-</b>	<b>642</b>	<b>642</b>	<b>2,484</b>	<b>2,284</b>

## Debts owed to credit institutions at 31 December 2016

	SRLEV		VIVAT Schade		Proteq		Other		VIVAT	
In € millions	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Borrowings	-	-	-	-	-	-	-	-	-	-
Due on demand	456	456	22	22	-	-	1	1	479	479
Deposits and certificates	148	148	-	-	-	-	-	-	148	148
Private loans	725	725	-	-	-	-	-	-	725	725
<b>Total</b>	<b>1,329</b>	<b>1,329</b>	<b>22</b>	<b>22</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>1,352</b>	<b>1,352</b>

Debts owed to credit institutions increased mainly due to an increase of deposits and certificates. Under Solvency II private loans increased due to a reclassification from nominal value to market value.

### Borrowings

On May 17th 2017 VIVAT NV issued € 650 million of senior notes. The € 650 million senior notes have a fixed coupon at 2.375% per annum and a maturity of seven years.

### Borrowings: Statement of Changes

In € millions	2017
<b>Balance as at 1 January</b>	<b>-</b>
Issue of senior notes	650
Incurred transaction costs	-9
Amortisation	1
<b>Balance as at 31 December</b>	<b>642</b>

### Due on demand

The amount of € 414 million (2016: € 479 million) due on demand relates to cash collateral. Deposits and certificates are comprised of liabilities under repo agreements.

### Private loans

The private loans of € 903 million (2016: € 725 million) relates to the saving components of mortgages. The difference of € 200 million between the IFRS figures and the Solvency II figures is due to different measurement methods (at nominal value under IFRS and at market value under Solvency II).

## 5.5.4. Other liabilities

Within the column 'Other' under IFRS the surplus assets of ESC Pensioen N.V. € 63 million (2016: € 76 million) are classified as other liabilities, while classified as Technical provisions under the Solvency II.

## 5.6. Any other disclosures

No other disclosures are applicable.

## 5.7. Off-balance sheet items

Off balance sheet positions different from the financial statements do not exist. We refer to section 6.3 Note 21 Guarantees and Commitments in the Annual Report VIVAT NV 2017.



## 6. Capital management

### 6.1. General

#### 6.1.1. Definition

Capitalisation refers to the extent to which VIVAT and its underlying legal entities have capital to cover unforeseen losses and to achieve the strategic objectives of the company. The required capital of VIVAT has to meet internal risk appetite standards as well as external requirements of regulators, rating agencies and also includes commercial considerations. Capitalisation generally refers to the relationship between risk-bearing activities and available regulatory capital (own funds).

#### 6.1.2. Capital policy

The objective of the Capital Policy is to ensure that there is sufficient capital to fulfill obligations towards policyholders and meet legal requirements. The second objective of the Capital Policy is to ensure capital is used as efficiently and flexibly as possible to facilitate the implementation of VIVAT's strategy.

In addition to the Capital Policy, a Recovery Plan exists which describes the procedure that applies in a contingency situation. In this context, a contingency situation is defined as a situation in which a capital deficit arises, or threatens to arise, which poses a direct threat to the going concern of VIVAT in its current form. In its Risk Appetite Statements, VIVAT has defined specific triggers that determine whether a contingency situation exists. The emphasis of these triggers is on capital metrics and these are linked to governance and management measures. VIVAT's Capital Policy forms the basis for lower level policies, process descriptions and procedures.

Management uses the Capital and Funding Plan, ALM study, Risk Dashboards, ORSA, Recovery Plan and Financial Risk Reporting for the purpose of managing the capital position. The Capital and Funding Plan describes the medium-term activities in the area of capital and funding. This includes a forecast of solvency for the next five years. The Capital and Funding Plan is based on the Operational Plan as supplied by the underlying Product Lines.

#### 6.1.3. Regulatory framework

Under Solvency II, the supervision of the risks to which an insurer is exposed and the management of those risks play a central role. The capital requirements reflect the risks to which insurers are exposed. Moreover, Solvency II aims to be in line with market developments and the internal risk management systems used by insurers.

Capitalisation is covered in all three pillars of the Solvency II framework:

The first pillar contains the prudential rules regarding minimum solvency. This pillar introduces two risk-weighted measures: the Minimum Capital Ratio (MCR), and the Solvency Capital Ratio (SCR).

The second pillar includes the ORSA, the process under which VIVAT has to evaluate its capitalisation periodically. A mandatory part of the ORSA involves determining whether the SCR is an appropriate measure for VIVAT's risk profile.

The way in which VIVAT has to report its exposure and capital adequacy to the market (disclosure) is laid down in the third pillar. VIVAT discloses its solvency position and financial condition on a Solvency II basis by means of public reports as required by law. Solvency II applies to the supervised insurance entities and also to the consolidated activities of VIVAT.

#### 6.1.4. Recovery plan

VIVAT is required to establish a recovery plan, which describes the procedures in a contingency situation. In this context, a contingency situation is defined as a situation in which a capital deficit arises, or threatens to arise, which poses a direct threat to the going concern of VIVAT in its current form. The Recovery Plan is updated on an annual basis. The Recovery Plan includes early warning indicators for emerging crises, a crisis management governance framework and the management actions VIVAT has at its disposal in a crisis situation to maintain its core businesses viable for the future. The management actions are evaluated in a scenario analysis. The annual update of the Recovery Plan is performed in conjunction with the ORSA process and its results are shared with the regulator.

### 6.2. Capital position

The supervisory authorities EIOPA and DNB have produced several public guidance notes on the interpretation of Solvency II and VIVAT produces all regulatory reports that are mandatory under the Solvency II legislation.

For internal purposes, VIVAT calculates the Solvency II position on a monthly basis. VIVAT calculates its position under Solvency II using the standard formula, applying the Volatility Adjustment (VA) and thus making use of the possibility of applying long-term guarantee measures. VIVAT does not apply the Matching Adjustment. The required and available capital (own funds) under Solvency II are determined on the basis of information at year-end 2017. The yield curve used as at 31 December 2017, including the Ultimate Forward Rate (UFR), Credit Risk Adjustment (CRA) and VA, is published by EIOPA.

When determining the Solvency II capital ratio, the loss absorbing capacity of deferred tax assets may be set off against the Solvency Capital Requirement (SCR). VIVAT has examined whether, following a loss of the same scale as the (pre-tax) SCR shock, future fiscal profits will be sufficient to be able to recover, partially or fully, the change in deferred tax asset created by that loss. The Loss Absorbing Capacity of Deferred Taxes in the SCR is set at 0% for VIVAT and its legal entities, except for legal entities with a net Deferred Tax Liability (DTL). In these cases the Loss Absorbing Capacity of Deferred Taxes equals the net DTL-position. The net Deferred Tax Asset on the balance sheet of VIVAT as at 31 December 2017 is valued at 100% under IFRS.

## 6.2.1. Own funds

Under Solvency II, capital is called 'eligible own funds' and is divided into three tiers. These tiers reflect the ability to absorb capital losses, with Tier 1 being the highest capital quality and Tier 3 the lowest. VIVAT does not have 'ancillary own funds' (such as letters of credit and guarantees) which require supervisory approval.

The classification of the hybrid capital of VIVAT NV and SRLEV NV (outstanding on 31 December 2017) into Tier 1 and Tier 2 capital is based on the transitional measures contained in the level 1 regulations, and aligned with DNB.

The following table shows the breakdown of the eligible own funds, starting from shareholders' equity:

### Breakdown of eligible own funds at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Issued share capital	-	11	3	-14	-
Share premium reserve	2,064	399	45	1,801	<b>4,309</b>
Retained earnings 2017	-55	2	3	-66	<b>-116</b>
Other reserves	948	-68	47	-1,573	<b>-646</b>
Capital Subordinated Loan	260	-	-	-260	-
<b>Shareholders' equity</b>	<b>3,217</b>	<b>344</b>	<b>98</b>	<b>-112</b>	<b>3,547</b>
Reconciliation IFRS-Solvency II	-460	69	-6	10	<b>-387</b>
Capital Subordinated Loan	-263	-	-	263	-
Subordinated liabilities	1,068	157	-	-176	<b>1,049</b>
Deductions other financial undertakings	-	-	-	-35	<b>-35</b>
<b>Total basic own funds after Deductions other financial undertakings</b>	<b>3,562</b>	<b>570</b>	<b>92</b>	<b>-50</b>	<b>4,174</b>
Own funds of other financial sectors	-	-	-	34	<b>34</b>
Tiering restriction	-316	-	-	-112	<b>-428</b>
<b>Total eligible own funds</b>	<b>3,246</b>	<b>570</b>	<b>92</b>	<b>-128</b>	<b>3,780</b>

## Breakdown of eligible own funds at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Issued share capital	-	11	3	-14	-
Share premium reserve	2,064	399	45	1,801	<b>4,309</b>
Retained earnings 2016	252	-48	-	-36	<b>168</b>
Other reserves	719	-4	65	-1,558	<b>-778</b>
<b>Shareholders' equity</b>	<b>3,035</b>	<b>358</b>	<b>113</b>	<b>193</b>	<b>3,699</b>
Reconciliation IFRS-Solvency II	-254	38	-3	5	<b>-214</b>
Subordinated liabilities	834	158	-	102	<b>1,094</b>
Deductions other financial undertakings	-	-	-	-28	<b>-28</b>
<b>Total basic own funds after Deductions other financial undertakings</b>	<b>3,615</b>	<b>554</b>	<b>110</b>	<b>272</b>	<b>4,551</b>
Own funds of other financial sectors	-	-	-	27	<b>27</b>
Tiering restriction	-191	-	-	-68	<b>-259</b>
<b>Total eligible own funds</b>	<b>3,424</b>	<b>554</b>	<b>110</b>	<b>231</b>	<b>4,319</b>

The following table shows the Movements in the reporting period of basic own funds:

## Movements in the reporting period of basic own funds

In € millions	SRLEV	VIVAT Schade	Proteq	Other	Total
Balance as at January 1, 2017	3,424	554	110	231	<b>4,319</b>
Share premium account related to ordinary share capital	-	-	-	-	-
Reconciliation reserve	-640	17	-22	197	<b>-448</b>
An amount equal to the value of net deferred tax assets	90	-	4	29	<b>123</b>
Capital Subordinated Loan issued	263	-	-	-263	-
Deductions other financial undertakings	-	-	-	7	<b>7</b>
<b>Total movements basic own funds</b>	<b>3,137</b>	<b>571</b>	<b>92</b>	<b>201</b>	<b>4,001</b>

### > Subordinated liabilities - movements in the reporting period

- Issued	345	-	-	146	<b>491</b>
- Redeemed	-101	-	-	-383	<b>-484</b>
- Movements in valuation	-10	-1	-	-41	<b>-52</b>
<b>Total movements subordinated liabilities</b>	<b>234</b>	<b>-1</b>	<b>-</b>	<b>-278</b>	<b>-45</b>
Own funds of other financial sectors	-	-	-	-7	<b>-7</b>
Tiering restriction	-125	-	-	-44	<b>-169</b>
<b>Balance as at December 31, 2017</b>	<b>3,246</b>	<b>570</b>	<b>92</b>	<b>-128</b>	<b>3,780</b>



Basic Own Funds are own-fund items that are on the balance sheet of VIVAT and are permanently available to absorb losses (e.g. paid-in ordinary share capital). Such items may be used to cover a part of the SCR. Currently VIVAT does not have 'ancillary own funds' (such as letters of credit and guarantees) which require supervisory approval.

In Other the difference between the group and the sum of its subsidiaries is shown.

For VIVAT, the following two undertakings do not need to comply with Solvency II and therefore the capital requirements for both undertakings should be based on sectorial regulation and need to be taken into account within the consolidated (VIVAT) balance sheet under own funds of other financial sectors:

- ACTIAM N.V. is an investment undertaking and holds a license as asset manager with supervision of the Autoriteit Financiële Markten (AFM). The capital requirement of ACTIAM N.V. should be based on the capital requirements as determined in the Financial Supervision Act ('Wet op het financieel toezicht', 'Wft'), with possibly an additional required capital due to the requirements of the Alternative Investment Fund Managers Directive (AIFMD) with respect to professional liability of asset fund managers.
- Zwitserleven PPI N.V. holds a license as a 'payment institution' with supervision of the Dutch Central Bank (DNB). Zwitserleven PPI N.V. recognises the investments held on behalf of participants and the related liabilities in its balance sheet. Zwitserleven PPI N.V. is not the risk owner and the financial statements are based on Dutch GAAP.

### 6.2.1.1. Ordinary share capital

The ordinary share capital of VIVAT is € 238,500. The share capital has been fully paid-up and consists of ordinary shares with a nominal value of € 500 each. 477 ordinary shares had been issued at 31 December 2017.

#### Breakdown of issued shares

In numbers	SRLEV	VIVAT Schade	Proteq	VIVAT
Authorised share capital	450	100,000	35,000	2,385
Share capital in portfolio	360	75,000	28,000	1,908
<b>Issued share capital as at December 31, 2017</b>	<b>90</b>	<b>25,000</b>	<b>7,000</b>	<b>477</b>

#### Breakdown of share capital

In € thousands	SRLEV	VIVAT Schade	Proteq	VIVAT
Authorised share capital	225	45,400	15,890	1,193
Share capital in portfolio	180	34,050	12,712	954
<b>Issued share capital as at December 31, 2017</b>	<b>45</b>	<b>11,350</b>	<b>3,178</b>	<b>239</b>

### 6.2.1.2. Reconciliation reserve

The following table shows the reconciliation reserve:

#### Breakdown of reconciliation reserve at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Other IFRS reserves	948	-68	47	-1,573	-646
Retained earnings 2017	-55	2	3	-66	-116
Reconciliation IFRS-Solvency II	-460	69	-6	10	-387
Capital Subordinated Loan	-10	-	-	10	-
Transfer of net deferred tax assets from tier 1 to tier 3	-625	-	-4	9	-620
<b>Total reconciliation reserve</b>	<b>-202</b>	<b>3</b>	<b>40</b>	<b>-1,610</b>	<b>-1,769</b>

#### Breakdown of reconciliation reserve at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
Other IFRS reserves	719	-4	65	-1,558	-778
Retained earnings 2016	252	-48	-	-36	168
Reconciliation IFRS-Solvency II	-254	38	-3	5	-214
Transfer of net deferred tax assets from tier 1 to tier 3	-535	-	-	38	-497
<b>Total reconciliation reserve</b>	<b>182</b>	<b>-14</b>	<b>62</b>	<b>-1,551</b>	<b>-1,321</b>

The main changes in 2017 in respect to reconciliation relate to changes in the VA.

In Solvency II the balance between the deferred tax assets and liabilities (DTA and DTL) is classified as tier 3 capital within the own funds. The eligible amount of Tier 3 items is maximised at 15% of the SCR. This restriction applies to VIVAT and SRLEV due to its relative large net DTA positions. The restriction is not applicable for VIVAT Schadeverzekeringen and Proteq Levensverzekeringen.

#### Reconciliation IFRS-Solvency II

The reconciliation encompasses the following significant differences in measurement under Solvency II and under IFRS:

- Technical provisions - Under Solvency II the technical provisions (including provisions for saving mortgages) are measured using Solvency II parameters, taking into account current market estimates. Under IFRS a liability adequacy test on the technical provision is performed, if the carrying amount of the technical provision is inadequate, the provision is increased. With respect to economic parameters used, there are differences regarding the interest rate curve and the cost of capital.
- Deferred Tax Assets - Due to differences in the valuation of the technical provisions the resulting DTA position is different.

### 6.2.1.3. Subordinated liabilities

Under Solvency II the available own funds include subordinated debt including accrued interest with regard to this debt.

#### Breakdown of subordinated liabilities at 31 December 2017

In € millions							
	Currency	Interest	SII Value (EUR)	Nominal amount (EUR)	Issue date	First call date	Expiration date
<b>&gt; VIVAT</b>							
<i>Tier 2</i>							
VIVAT (US Dollar)	USD	6.250%	490	479	2017-nov	2022-nov	perpetual
<b>Total</b>			<b>490</b>	<b>479</b>			
<b>&gt; SRLEV</b>							
<i>Tier 1</i>							
SRLEV (Swiss Franc)	CHF	mid-swap plus 5.625%	91	90	2011-jul	2018-dec	perpetual
VIVAT NV	EUR	7.750%	263	250	2017-jun	2022-jun	perpetual
			<b>354</b>	<b>340</b>			
<i>Tier 2</i>							
SRLEV NV	EUR	9.000%	468	400	2011-apr	2021-apr	2041-apr
VIVAT NV	EUR	7.750%	149	140	2015-dec	2025-dec	2025-dec
VIVAT NV	EUR	3.780%	97	95	2017-nov	2022-nov	2027-nov
			<b>714</b>	<b>635</b>			
<b>Total</b>			<b>1,068</b>	<b>975</b>			
<b>&gt; VIVAT Schade</b>							
<i>Tier 2</i>							
VIVAT NV	EUR	7.750%	85	80	2015-dec	2025-dec	2025-dec
VIVAT NV	EUR	6 months EURIBOR plus 5.545%	72	70	2016-dec	2021-dec	2026-dec
<b>Total</b>			<b>157</b>	<b>150</b>			
Other (elimination)			-666	-635			
<b>Total</b>			<b>1,049</b>	<b>969</b>			

#### Tier 1

In July 2011, SRLEV NV issued CHF 105 million in perpetual subordinated bonds. The CHF bond has a first redemption date on 19 December 2016. SRLEV decided not to exercise its redemption option to redeem the CHF bond in December 2016 and 2017. Under the Solvency II transitional measures the CHF bond qualifies in full as Restricted Tier 1 own funds in the calculation of Solvency II own funds for ten years after 1 January 2016. At this specific time, it has been determined that it is currently in the interests of SRLEV not to exercise the redemption option to redeem the CHF Bond. The interest rate on the CHF bond has been reset to 5-year CHF mid-swap plus 5.625%.

In June 2017 SRLEV agreed a Capital Subordinated Loan for an amount of € 250 million. The Capital Subordinated Loan is a tier 1 perpetual loan issued by VIVAT NV with a fixed interest rate of 7.75%.

## Tier 2

In April 2011, SRLEV NV issued € 400 million in subordinated bonds maturing in 2041.

In November 2017, VIVAT NV issued \$ 575 million (€ 476 million) in subordinated notes. The notes are first callable after 5 years and each fifth anniversary thereafter, subject to conditions to redemption. The coupon is fixed at 6.25% per annum until the first call date. The notes qualify as Tier 2 regulatory capital under Solvency II. The proceeds of the issuance were used to redeem the subordinated loans issued by Anbang Group Holdings Co. Limited. A new subordinated private loans of € 95 million is issued by VIVAT NV.

## Breakdown of subordinated liabilities at 31 December 2016

In € millions	Currency	Interest	SII Value (EUR)	Nominal amount (EUR)	Issue date	First call date	Expiration date
<b>&gt; VIVAT</b>							
<i>Tier 2</i>							
Anbang Group Holdings Co. Limited	EUR	7.750%	69	63	2016-feb	2021-feb	2026-feb
Anbang Group Holdings Co. Limited	EUR	7.750%	153	144	2016-jul	2021-jul	2026-jul
Anbang Group Holdings Co. Limited (US\$ 190 million)	USD	6 months LIBOR plus 6.30%	189	180	2016-dec	2021-dec	2026-dec
<b>Total</b>			<b>411</b>	<b>387</b>			
<b>&gt; SRLEV</b>							
<i>Tier 1</i>							
SRLEV NV	CHF	mid-swap plus 5.625%	100	98	2011-jul	2017-dec	perpetual
			<b>100</b>	<b>98</b>			
<i>Tier 2</i>							
SRLEV NV	EUR	9.000%	480	400	2011-apr	2021-apr	2041-apr
VIVAT NV	EUR	7.750%	151	140	2015-dec	2025-dec	2025-dec
Anbang Group Holdings Co. Limited	EUR	7.750%	104	95	2016-feb	2021-feb	2026-feb
			<b>735</b>	<b>635</b>			
<b>Total</b>			<b>834</b>	<b>733</b>			
<b>&gt; VIVAT Schade</b>							
<i>Tier 2</i>							
VIVAT NV	EUR	7.750%	86	80	2015-dec	2025-dec	2025-dec
VIVAT NV	EUR	6 months EURIBOR plus 5.545%	72	70	2016-dec	2021-dec	2026-dec
<b>Total</b>			<b>158</b>	<b>150</b>			
Other (elimination)			-309	-290			
<b>Total</b>			<b>1,094</b>	<b>980</b>			

## 6.2.2. Tiering

### Tiering

The Own Funds are classified in three tiering categories (Tier 1, Tier 2, and Tier 3 with Tier 1 being the highest quality of Own Funds). This tiering concept is based on the extent to which own-fund items are considered to hold the characteristics of permanent availability and subordination.

The tiering classification is prescribed, as not all own-fund items are considered to be able to fully absorb losses in the event of winding-up proceedings. Tier 1 own-fund items are the highest grade capital (e.g. paid-in ordinary share capital) and Tier 3 items are the lowest grade capital.

### Breakdown of tiering VIVAT

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the Group SCR 2017	2,538	91	958	193	3,780
Eligible own funds to meet the Group SCR 2016	2,985	100	995	239	4,319

### Breakdown of tiering SRLEV

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR 2017	1,870	354	713	309	3,246
Eligible own funds to meet the SCR 2016	2,246	100	734	344	3,424

### Breakdown of tiering VIVAT Schadeverzekeringen

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR 2017	414	-	156	-	570
Eligible own funds to meet the SCR 2016	396	-	158	-	554

### Breakdown of tiering Proteq Levensverzekeringen

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR 2017	88	-	-	4	92
Eligible own funds to meet the SCR 2016	110	-	-	-	110

The main changes in 2017 in respect to reconciliation and tiering restrictions relate to changes in the VA and the impact of the decreased SCR on the tiering restrictions.

### Tiering restriction

The use of own funds of different tiers is subject to certain limits under Solvency II. These limits are related to the required capital or Tier 1 capital, and is applied to define the Eligible Own Funds. These limits cause a difference between the Available Own Funds and the Eligible Own Funds.

## Eligible own funds at 31 December 2017

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
<b>Available own funds to meet the Group SCR</b>	<b>3,562</b>	<b>570</b>	<b>92</b>	<b>-50</b>	<b>4,174</b>
Own funds of other financial sectors	-	-	-	34	34
Tiering restriction SCR	-316	-	-	-112	-428
<b>Eligible own funds to meet the Group SCR</b>	<b>3,246</b>	<b>570</b>	<b>92</b>	<b>-128</b>	<b>3,780</b>
Own funds of other financial sectors	-	-	-	-34	-34
Tier 3 capital	-309	-	-4	120	-193
Tiering restriction MCR	-528	-134	-	-85	-747
<b>Total eligible own funds to meet the Group MCR</b>	<b>2,409</b>	<b>436</b>	<b>88</b>	<b>-127</b>	<b>2,806</b>

## Eligible own funds at 31 December 2016

In € millions	SRLEV	VIVAT Schade	Proteq	Other	VIVAT
<b>Available own funds to meet the Group SCR</b>	<b>3,615</b>	<b>554</b>	<b>110</b>	<b>272</b>	<b>4,551</b>
Own funds of other financial sectors	-	-	-	27	27
Tiering restriction SCR	-191	-	-	-68	-259
<b>Eligible own funds to meet the Group SCR</b>	<b>3,424</b>	<b>554</b>	<b>110</b>	<b>231</b>	<b>4,319</b>
Own funds of other financial sectors	-	-	-	-27	-27
Tier 3 capital	-344	-	-	105	-239
Tiering restriction MCR	-528	-135	-	-99	-762
<b>Total eligible own funds to meet the Group MCR</b>	<b>2,552</b>	<b>419</b>	<b>110</b>	<b>210</b>	<b>3,291</b>

The following limits are applicable so far as compliance with the SCR is concerned:

- The eligible amount of Tier 1 items should be at least 50% of the SCR;
- No more than 20% of those Tier 1 items may be restricted instruments (i.e. preference shares, subordinated liabilities or subordinated mutual member accounts) or items included under the transitional arrangements as discussed in section 6.2.1;
- Where an instrument meeting the restricted Tier 1 requirements is excluded from Tier 1 as a result of the mentioned limits, it may be included within Tier 2 Basic Own Funds;
- The sum of the eligible amounts of Tier 2 and 3 items should not exceed 50% of the SCR;
- The eligible amount of Tier 3 items should be less than 15% of the SCR. This restriction applies to VIVAT due to its net DTA position as Tier 3 capital.

The following limits are applicable so far as compliance with the MCR is concerned:

- Only Tier 1 and Tier 2 basic own-fund items can be used to cover the MCR. Ancillary Own Funds and Tier 3 Basic Own Funds are therefore not eligible to cover the MCR;
- At least 80% of the MCR should be met by eligible Tier 1 own funds. No more than 20% of those Tier 1 Own Funds may be restricted Tier 1 instruments (i.e. preference shares, subordinated liabilities and subordinated mutual member accounts) or items included under the transitional arrangements. The effect of this is that Tier 2 Basic Own Funds are eligible as long as they are less than 20% of the MCR;

- Where an instrument meeting the restricted Tier 1 requirements is excluded from Tier 1 as a result of the mentioned limits, it may be included within Tier 2 Basic Own Funds.

### 6.2.3. Other assumptions

#### Loss Absorbing Capacity of Deferred Taxes (LACDT)

Under Solvency II, the Solvency Capital Requirement (SCR) may be determined taking into account the extent to which the tax losses which occur under the described shock can be settled with the tax authorities.

The LACDT has to be calculated taking into account the following:

- The adjustment for the loss-absorbing capacity of deferred taxes shall be equal to the change in the value of deferred taxes of insurance and reinsurance undertakings that would result from an instantaneous loss of an amount that is equal to the sum of the following:
  - The Basic Solvency Capital Requirement referred to in Article 103(a) of Directive 2009/138/EC;
  - The adjustment for the loss-absorbing capacity of technical provisions referred to in Article 206 of this Regulation;
  - The capital requirement for operational risk referred to in Article 103(b) of Directive 2009/138/EC .
- A decrease in the value of deferred tax liabilities or an increase in the value of deferred tax assets will result in a negative adjustment to the SCR.
- If the calculation results in a positive change in deferred tax assets, this should only be considered if it can be shown that future taxable profits will be available.

The Dutch Central Bank (DNB) issued new guidance on the LACDT by means of a Q&A on 3 February 2017. Based on this new guidance the LACDT resulting from a net DTA position is for this report set to zero as per 31 December 2017.

## 6.3. Solvency Capital Requirement and Minimum Capital Requirement

The final amount of the Solvency Capital Requirement is still subject to the opinion of the supervisory authority

The SCR is a risk-based measure and reflects VIVAT's risk profile. The measure is based on a 1-in-200 year stress scenario over a one-year period. Comparison of the SCR with the Eligible Own Funds shows to what extent VIVAT is able to absorb the aforementioned 1-in-200 year losses. VIVAT calculates the SCR with the Solvency II standard model, which is based on the following criteria:

- It is calculated on a going-concern basis.
- It aims to capture the material quantifiable risks that most undertakings are exposed to. The standard formula might however not cover all material risks a specific undertaking is exposed to. If an insurer still has material additional quantifiable risks, then these risks must be assessed in the Own risk and Solvency Assessment (ORSA).
- Both existing business and new business in the next 12 months are covered (in the case of existing activities, it covers only unexpected losses).
- It is calibrated with a 99.5% confidence level over a 12-month period.
- The effects of risk-mitigation techniques are considered, but allowance should then be made for any newly introduced risk (e.g. counterparty default risk of the derivative).
- The SCR must be consistent with the SCR on the baseline date used for calculating the risk margin.

- Where the SCR is determined using scenarios, the risk margin can be kept constant. This also applies to the value of discretionary bonuses and deferred taxes. If the scenario allows the own funds to increase, the SCR is set at zero.
- Diversification is assumed to exist between the modules and sub-modules.

The SCR is equal to the sum of the Basic SCR (BSCR), the capital requirement for operational risk (Op) and an adjustment for the loss-absorbing capacity of the technical provisions and any deferred taxes (Adj).

These sections briefly describe the method used by VIVAT in calculating the Solvency Capital Requirement (SCR). VIVAT calculates the SCR by making use of the standard formula.

The MCR represents the minimum level of security below which the Eligible Own Funds may not fall. The MCR is calibrated on the basis of a confidence level of 85% over a one-year period. The MCR is calculated using a relatively simple linear formula, which includes both a floor and a cap (as a percentage of the SCR).

The MCR is determined using the prescribed calculation methods. Besides the percentage criterion, which is a percentage of the most recently calculated SCR including any capital add-on, the MCR should not fall below a certain minimum. This requirement is regarded as the absolute minimum capital requirement (also known as Absolute Minimum Capital Requirement, hereinafter AMCR). The AMCR is € 3,7 million per solo entity.

### 6.3.1. VIVAT

In 2017 the solvency II ratio decreased from 175% to 162%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Positive highlights:

- The mass lapse re-insurance contract improved our risk profile and is the main driver for the decrease in life underwriting risk, leading to a reduction in the Solvency Capital Requirement for underwriting risk, which in turn leads to an increase of the Solvency II ratio of 5%.
- The decrease of the Counterparty Default Risk due to ending the security lending program and contractually securing the savings amount of Savings Mortgages leads to an increase of the Solvency II ratio of 6%.

Negative highlights:

- The decrease of the Volatility Adjustment from 13 bp to 4 bp led to an increase of the value of the technical provisions (negatively impacting the S2 ratio by approximately 15%), that is only partially offset by an increase of the value of the spread sensitive assets, leading to a significant decrease of the Solvency II ratio.
- The increase of the currency risk, negatively impacting the Solvency II ratio with approximately 6%, was mainly due to the different treatment of previous issued subordinated debt in foreign currency and the new issuance of \$ 575 million of subordinated notes to institutional investors.



The table below shows a breakdown of the ratio of VIVAT.

## Ratio VIVAT

In € millions	2017	2016
SCR	2,327	2,466
MCR	1,055	1,163
Ratio of Eligible own funds to Group SCR	162%	175%
Ratio of Eligible own funds to Group MCR	266%	283%

For additional information we refer to chapter 4 Risk Profile.

### 6.3.2. SRLEV

In 2017 the solvency II ratio increased from 149% to 158%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

#### Positive highlights:

- The Own Funds of SRLEV N.V. increased due to the restricted tier 1 loan of € 250 million provided by VIVAT in June 2017, leading to an increase in the Solvency II ratio of 11%. The successful issuance by VIVAT of € 650 million senior notes to institutional investors enabled the capital injection into SRLEV N.V..
- The mass lapse re-insurance contract improved our risk profile and is the main driver for the decrease in life underwriting risk, leading to a reduction in the Solvency Capital Requirement for underwriting risk, which in turn leads to an increase of the Solvency II ratio of 6%.
- The decrease of the Counterparty Default Risk due to ending the security lending program and contractually securing the savings amount of Savings Mortgages leads to an increase of the Solvency II ratio of 7%.

#### Negative highlights:

- The decrease of the Volatility Adjustment from 13 bp to 4 bp led to an increase of the value of the technical provisions (negatively impacting the S2 ratio by approximately 15%), that is only partially offset by an increase of the value of the spread sensitive assets, leading to a significant decrease of the Solvency II ratio.
- Updated expense- and underwriting risk parameters for calculating the future expected cashflows for insurance liabilities in total account for an approximate 9% reduction of the Solvency II ratio.

The table below shows a breakdown of the ratio of SRLEV.

### Ratio SRLEV

In € millions	2017	2016
SCR	2,061	2,295
MCR	927	1,033
Ratio of Eligible own funds to SCR	158%	149%
Ratio of Eligible own funds to MCR	260%	247%

For additional information we refer to chapter 4 Risk Profile.

### 6.3.3. VIVAT Schadeverzekeringen

In 2017 the solvency II ratio increased from 152% to 162%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Positive highlights:

- The increase can be mainly explained by the parameter update for the disability portfolio resulting in lower disability rates and higher rehabilitation rates used for calculating the value of the liabilities, resulting in an increase of own funds and increase of the Solvency II ratio of approximately 15%.

Negative highlights:

- Capital Generation was negative due to a negative technical result partly offset by the expected economic returns on assets.
- Other parameter updates had a negative impact on the Solvency II ratio.

The table below shows a breakdown of the ratio of VIVAT Schadeverzekeringen.

### Ratio VIVAT Schadeverzekeringen

In € millions	2017	2016
SCR	351	365
MCR	114	116
Ratio of Eligible own funds to SCR	162%	152%
Ratio of Eligible own funds to MCR	384%	362%

For additional information we refer to chapter 4 Risk Profile.

### 6.3.4. Proteq Levensverzekeringen

The Solvency II ratio of Proteq Levensverzekeringen increased from 181% to 263%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Capital Generation was negative due to a negative technical result partly offset by the expected economic returns on assets. Other parameter updates had a negative impact on the Solvency II ratio.

Positive highlights:

- The SCR market risk decreases significantly due to the re-balancing of the interest rate risk to a Solvency II basis. The reduction of the SCR has a positive impact on the Solvency II ratio of 215%.
- The mass lapse re-insurance contract improved our risk profile and is the main driver for the decrease in life underwriting risk, leading to a reduction in the Solvency Capital Requirement for underwriting risk, which in turn leads to an increase of the Solvency II ratio of 35%.

Negative highlights:

- Updated expense- and underwriting risk parameters account for an approximate 158% reduction of the Solvency II ratio.

The table below shows a breakdown of the ratio of Proteq Levensverzekeringen.

### Ratio Proteq Levensverzekeringen

In € millions	2017	2016
SCR	35	61
MCR	14	15
Ratio of Eligible own funds to SCR	263%	181%
Ratio of Eligible own funds to MCR	640%	725%

For additional information we refer to chapter 4 Risk Profile.

## 6.4. Any other disclosures

Regarding The SCR calculation we have used simplification methods for calculating the risk mitigating effect for reinsurance arrangements or securitization, the calculation of the risk mitigating effect and for the calculation of the risk adjusted value of collateral.

### Contingent liabilities

Under Solvency II, VIVAT has not measured the contingent liability relating to unitlinked policies in calculating the own funds as no reliable estimate can be made of the outcome. This is consistent with the measurement under IFRS.

# ANNEX I

## Related subsidiaries VIVAT NV

VIVAT NV owns the following material related undertakings:

### Related subsidiaries

In € millions	Country	Legal form	% capital share	Treatment of the undertaking	Excess of assets over liabilities
SRLEV NV	NL	NV	100%	Full consolidation	3,217
VIVAT Schadeverzekeringen NV	NL	NV	100%	Full consolidation	344
Proteq Levensverzekeringen NV	NL	NV	100%	Full consolidation	98
Zwitserleven PPI NV	NL	NV	100%	Sectoral rules	2
ACTIAM NV	NL	NV	100%	Sectoral rules	32
Fniidsen Beheer BV	NL	BV	100%	Full consolidation	1
Bemiddelingskantoor Nederland BV <sup>1</sup>	NL	BV	100%	Full consolidation	1
Holding and elimination					-148
					<b>3,547</b>

<sup>1</sup> Bemiddelingskantoor Nederland B.V. is a subsidiary of Fniidsen Beheer B.V.

## Related subsidiaries SRLEV NV

SRLEV NV owns the following material related undertakings:

### Related subsidiaries

In € millions	Country	Legal form	% capital share	Treatment of the undertaking	Excess of assets over liabilities
Empresa BV	NL	BV	100%	Adjusted equity method	-4
GVR 500 Building BV	NL	BV	100%	Adjusted equity method	27
GVR 500 Parking BV	NL	BV	100%	Adjusted equity method	1
NV Pensioen ESC	CW	NV	100%	Adjusted equity method	-
REAAL DeRuyterkade BV	NL	BV	100%	Adjusted equity method	19
REAAL Kantoren I BV	NL	BV	100%	Adjusted equity method	3
REAAL Landbouw I BV	NL	BV	100%	Adjusted equity method	5
REAAL Winkels I BV	NL	BV	100%	Adjusted equity method	10
REAAL Winkels II BV	NL	BV	100%	Adjusted equity method	9
REAAL Wognumsebuurt BV	NL	BV	100%	Adjusted equity method	8
REAAL Woningen I BV	NL	BV	100%	Adjusted equity method	6
					<b>84</b>
Princenhof Staete Driebergen BV	NL	NV	100%	Adjusted equity method	2
REAAL Landbouw II BV	NL	BV	100%	Adjusted equity method	5
REAAL Landbouw III BV	NL	BV	100%	Adjusted equity method	5
					<b>12</b>
					<b>96</b>

## Related subsidiaries VIVAT Schadeverzekeringen NV

VIVAT Schadeverzekeringen NV owns the following material related undertakings:

### Related subsidiaries

In € millions	Country	Legal form	% capital share	Treatment of the undertaking	Excess of assets over liabilities
CED Holding BV	NL	BV	23%	Adjusted equity method	7
W. Haagman & Co BV	NL	BV	100%	Adjusted equity method	1
Nieuw Rotterdam Knight Schippers	NL	BV	100%	Adjusted equity method	-
Volmachtkantoor Nederland BV	NL	BV	100%	Adjusted equity method	4
					<b>12</b>

# ANNEX II

## Disclosure QRT's VIVAT NV

### Table of content Disclosure QRT's VIVAT

1	S.02.01 - Balance Sheet
2	S.05.01 - Premiums, claims and expenses by line of business
3	S.05.02 - Premiums, claims and expenses by country
4	S.22.01 - Impact of long term guarantees measures and transitionals
5	S.23.01 - Own Funds
6	S.25.01 - Solvency Capital Requirement - for groups on Standard Formula
7	S.32.01 - Undertakings in the scope of the group

The disclosure QRT's of VIVAT NV are publised separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's SRLEV NV

### Table of content Disclosure QRT's SRLEV NV

1	S.02.01 - Balance Sheet
2	S.05.01 - Premiums, claims and expenses by line of business
3	S.05.02 - Premiums, claims and expenses by country
4	S.12.01 - Life and Health SLT Technical Provisions - Best Estimate by country
5	S.22.01 - Impact of long term guarantees measures and transitionals
6	S.23.01 - Own Funds
7	S.25.01 - Solvency Capital Requirement - for undertakings on Standard Formula
8	S.25.01 - Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of SRLEV NV are publised separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's VIVAT Schadeverzekeringen NV

### Table of content Disclosure QRT's VIVAT Schadeverzekeringen NV

1	S.02.01 - Balance Sheet
2	S.05.01 - Premiums, claims and expenses by line of business
3	S.05.02 - Premiums, claims and expenses by country
4	S.12.01 - Life and Health SLT Technical Provisions - Best Estimate by country
5	S.17.01 - Non - life Technical Provisions
6	S.19.01 - Non-life Insurance Claims Information
7	S.22.01 - Impact of long term guarantees measures and transitionals
8	S.23.01 - Own Funds
9	S.25.01 - Solvency Capital Requirement - for undertakings on Standard Formula
10	S.25.01 - Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of VIVAT Schadeverzekeringen NV are publised separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's Proteq Levensverzekeringen NV

### Table of content Disclosure QRT's Proteq Levensverzekeringen NV

1	S.02.01 - Balance Sheet
2	S.05.01 - Premiums, claims and expenses by line of business
3	S.05.02 - Premiums, claims and expenses by country
4	S.12.01 - Life and Health SLT Technical Provisions - Best Estimate by country
5	S.22.01 - Impact of long term guarantees measures and transitionals
6	S.23.01 - Own Funds
7	S.25.01 - Solvency Capital Requirement - for undertakings on Standard Formula
8	S.25.01 - Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of Proteq Levensverzekeringen NV are publised separately on <https://vivat.nl/investors/financial-reports>.

