



# Solvency Financial Condition Report VIVAT 2016

Zwitserleven



actiam

VIVAT

# Contents

>	<b>1. Introduction</b>	4
	1.1. 2016 at a glance	5
	1.2. Summary	8
>	<b>2. Business and Performance</b>	9
	2.1. Business	9
	2.2. Performance from underwriting activities	12
	2.3. Performance from investment activities	17
	2.4. Performance of other activities	22
	2.5. Any other disclosures	22
>	<b>3. System of Governance</b>	23
	3.1. General governance arrangements	23
	3.2. Remuneration	29
	3.3. Fit and proper	32
	3.4. Risk management system	32
	3.5. ORSA	39
	3.6. Internal control system	39
	3.7. Internal audit	41
	3.8. Actuarial function	41
	3.9. Outsourcing	42
	3.10. Any other disclosures	42
>	<b>4. Risk profile</b>	43
	4.1. Risk classification	43
	4.2. Underwriting risk	45
	4.3. Market risk	55
	4.4. Counterparty default risk	63
	4.5. Liquidity risk	66
	4.6. Non-financial risk	68
	4.7. Other risks	71
>	<b>5. Valuation for Solvency purposes</b>	72
	5.1. Balance sheet	73
	5.2. Solvency II reporting framework	74



5.3. Assets	87
5.4. Technical provision	92
5.5. Liabilities	98
5.6. Any other disclosures	100
5.7. Off-balance sheet items	100
<b>➤ 6. Capital management</b>	<b>101</b>
6.1. General	101
6.2. Capital position	102
6.3. Solvency Capital Requirement and Minimum Capital Requirement	109
6.4. Any other disclosures	113
<b>ANNEX I</b>	<b>114</b>
Related subsidiaries VIVAT NV	114
Related subsidiaries SRLEV NV	114
Related subsidiaries Reaal Schadeverzekeringen NV	115
<b>ANNEX II</b>	<b>116</b>
Disclosure QRT's VIVAT NV	116
Disclosure QRT's SRLEV NV	116
Disclosure QRT's Reaal Schadeverzekeringen NV	117
Disclosure QRT's Proteq Levensverzekeringen NV	117



# 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 article 51 to 56 of the Solvency II directive and article 292 up to 298 of the Delegated Acts. Furthermore, the figures presented in this report are in line with the supervisor's reported Quantitative Reporting Templates. 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, Reaal 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, Reaal Schadeverzekeringen and Proteq Levensverzekeringen are unconsolidated figures, whereas the figures of VIVAT are consolidated figures.

The Quantitative Reporting Templates per legal entity to be disclosed are added in annex II. The figures presented in this report are in line with these templates. In this report 2015 figures are not presented, as Solvency II replaced Solvency I as at 1 January 2016, which makes a comparison of these two years not useful.

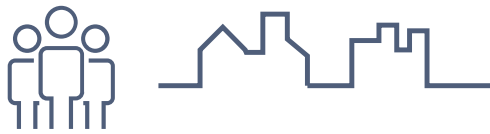


# 2016 at a glance

In 2016 VIVAT has implemented a new organisational structure. Various aspects of the strategy changes were accelerated, aimed at structurally improving VIVAT's foundations and creating a leading, customer-centric and innovation-driven insurance company that can respond to market developments effectively.

## About VIVAT

**3.5** million clients



**5** offices



**2,498** FTE



Alkmaar  
Amstelveen  
Assen  
Rotterdam  
Utrecht

## Our performance

<p>Net premium income</p> <p><b>2,447</b> mln EUR</p> <p>2015: 2,418 mln EUR</p>	<p>Net IFRS result</p> <p><b>159</b> mln EUR</p> <p>2015: 109 mln EUR</p>	<p>IFRS Equity</p> <p><b>3,698</b> mln EUR</p> <p>2015: 3,451 mln EUR</p>
<p>Solvency II ratio</p> <p><b>175%</b></p>	<p>Solvency II Own funds</p> <p><b>4,319</b> mln EUR</p>	<p>Solvency II Total assets</p> <p><b>59,484</b> mln EUR</p>

## Our main brands

**Zwitserleven**

**0.85** million participants

**7.0** client satisfaction

**Reaal** 

**2.63** million clients

**7.0** client satisfaction

**actiam**

**54.6** billion EUR  
assets under management

## Our highlights

### Product launches

-  Reaal re-introduces immediate annuities
-  Zwitserleven introduces Nu Pensioen Plus!
-  Reaal launches POT, a peer-to-peer insurance app
-  ACTIAM launches Responsible Index Fund Equity Emerging Markets

### Sustainability



**16%** Less use of paper

**5%** Less production of CO<sub>2</sub>

**16%** Reduction of waste


VIVAT uses 100% green gas and green electricity

ACTIAM funds on average were awarded 4 out of 5 stars by Morningstar

### Innovation

-  VIVAT sets up a new Digital unit for all digitisation-related activities
-  VIVAT invests in data science educations
-  VIVAT establishes relationships with more than 25 start-ups

### Awards

-  **Two Degrees Investing Initiative**  
ACTIAM wins the first International Award on Investor-Related Climate Disclosures
-  **World Finance Global Pension Funds Awards panel**  
Zwitserleven is elected 'Best Pension Provider Netherlands'
-  **Fair Insurance Guide**  
VIVAT achieves a top 3 position

## Our vision and mission

VIVAT is a leading, trusted and customer-centric financial service provider helping its corporate and individual customers to realize their dreams and insure their risks.



VIVAT will deliver a comprehensive product and service offering to our customers.

VIVAT will leveraging the most advanced technologies, resulting in long-term sustainable growth for customers, employees and society at large.

## 1.2. Summary

Early 2016, VIVAT communicated its new strategic course which included a restructuring of the organisation. Since then good progress has been made. The organisational structure changed and senior management is in place. The restructuring has been completed in 2016, which reduces the annual expense base of VIVAT going forward.

The net IFRS result of VIVAT increased to € 159 million in 2016 compared with € 109 million in 2015. Higher restructuring costs were offset by realized cost savings, improved technical results for Reaal Schadeverzekeringen and higher investment income for SRLEV and Proteq Levensverzekeringen. In total € 119 million restructuring costs were allocated to insurance entities. Gross premium income of VIVAT in 2016 was € 2,508 million, € 114 million lower than in 2015. The decrease in gross premiums in SRLEV is a result of the individual life market shrinking whereas the premiums for Life Corporate remained stable in a very competitive market. The premiums for Reaal Schadeverzekeringen and Proteq Levensverzekeringen also remained stable in 2016 compared to 2015.

The Solvency II ratio of VIVAT NV, based on the standard model, increased to 175% at year-end 2016 from 161% at year-end 2015. The ratio was positively impacted by a decrease in market risk (interest rate) thus decreasing the solvency capital requirements (SCR). In addition, VIVAT started re-risking its investments portfolio which on an overall basis provided higher returns compared to the increase in SCR. Another major development was the strong commitment of shareholder, evidenced by refinancing loans and providing additional subordinated loans to support growth initiatives. The ratio was negatively impacted mainly by the use of new mortality tables and restructuring costs causing the own funds of VIVAT to decrease.

The Solvency II ratio of SRLEV, based on the standard model, increased to 149% at year-end 2016 from 140% at year-end 2015. The ratio was positively impacted by a decrease in market risk (interest rate) thus decreasing the solvency capital requirements (SCR). In addition, VIVAT started re-risking its investments portfolio which on an overall basis provided higher returns compared to the increase in SCR. The ratio was negatively impacted mainly by the use of new mortality tables causing the own funds of SRLEV to decrease.

The Solvency II ratio of Reaal Schadeverzekeringen, based on the standard model, increased to 152% at year-end 2016 from 142% at year-end 2015. The ratio was positively impacted by a new subordinated Tier 2 loan provided by VIVAT. The own funds also increased as a result of a release of risk margin offset by higher SCR relating to health. The ratio was negatively impacted by the negative result of Reaal Schadeverzekeringen.

The Solvency II ratio of Proteq Levensverzekeringen decreased to 181% at year-end 2016 from 461% at year-end 2015. The two main drivers were a cost model update and a more than doubled Solvency Capital Requirement, mainly due to SCR interest rate risk.

The ratios for 2015 are based on our Day 1-reporting to the regulator and are unaudited. More information has been included in the Annual Report 2016 of VIVAT NV.

Amstelveen, 31 May 2017





## 2. Business and Performance

### 2.1. Business

#### 2.1.1. VIVAT NV

VIVAT is an innovative and leading financial service provider. Our customers are mainly individuals and small and medium enterprises (SMEs). The organisation of VIVAT has been restructured from a business unit model to a matrix model based on product lines. VIVAT has four product lines:

- > Non-Life: this product line offers property, casualty and disability insurance for retail and SME markets (Reaal Schadeverzekeringen).
- > Individual Life: the portfolio of this 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 (SRLEV and Proteq Levensverzekeringen).
- > Life Corporate: this product line offers pension solutions for business customers (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 (Other).

VIVAT serves the market of the Netherlands with her main and well-known consumer brands Reaal en Zwitserleven. VIVAT is also active on the Dutch asset management market with the brand ACTIAM.

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 (Reaal Schadeverzekeringen):

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

## 2.1.2. Name and contact details

### Business information

Reporting reference date:	December 31, 2016
Group undertaking name:	VIVAT NV
Solo undertaking name:	SRLEV NV Reaal Schadeverzekeringen NV Proteq Levensverzekeringen NV
Address	Burg. Rijnderslaan 7, Amstelveen
Contact:	Victor Zijlema +31(0) 205436053
Shareholder:	Anbang Group Holdings Co. Ltd. 1 Austin Road West, Level 67, International Commerce Centre, Kowloon, Hong Kong, China
Supervisor:	De Nederlandsche Bank Westeinde 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, Reaal Schadeverzekeringen NV and Proteq Levensverzekeringen NV and the prescribed subset of the Quantitative Reporting Templates.

## 2.1.3. Legal structure

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

- > SRLEV NV
- > Reaal Schadeverzekeringen NV
- > Proteq Levensverzekeringen NV
- > ACTIAM NV

See Annex I for a list of material related undertakings.

## 2.1.4. Developments

Stabilisation was the VIVAT's priority in 2016; the first full year following the acquisition by Anbang. Various measures aimed at structural improvement of VIVAT's foundation and consequently its insurance entities were taken. In 2016, a new Chief Executive Officer, a Chief Commercial Officer, and a Chief Operating Officer were appointed. The Executive Board now consists of seven members and is closely connected to the business operations. Furthermore, the organisation has been restructured from a business unit model to a matrix model based on product lines. All digitisation-related activities have been grouped to form a new unit under the name Digital. The members of the Executive Board of VIVAT are the same as the Executive

Board members of SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen (the insurance entities).

Each product line is represented in the Executive Board by the corresponding sponsor. Conversely, the members of the Executive Board are closely involved in the business processes of their designated product line. General managers have been appointed for each of the product lines. They are responsible for the results of their product line, with a focus on sales, operations and profitability. It is also their task to simplify and standardize the processes in their product line in a way that benefits the entire organisation.

Structural cost reductions, a lean organisation and streamlined business processes are the key stabilisation components. Due to the increase in our efforts in 2016, the reduction in the number of employees was accomplished significantly sooner than anticipated. The objective to reduce the workforce by a third before the end of 2018 was already achieved in 2016. Some 1,200 employees have left the workforce of the company, which means that VIVAT will continue its operations with a staff of around 2,500 people. Total severance costs amounted to € 119 million in 2016. However, future employee benefit expenses are reduced by €100 million per year.

Structural cost reductions have been achieved by means of process standardisation and centralisation. Moreover, the number of offices have been reduced and rationalisation of the IT landscape has resulted in lower IT-related costs. VIVAT and its insurance entities also strive to further digitize their processes. VIVAT started an extensive programme to reduce the combined ratio in Reaal Schadeverzekeringen (Property & Casualty product line). Much effort was put into refining the pricing and underwriting capabilities and loss-making portfolios were rationalized and converted. In spite of a large number of exceptional weather claims following severe hailstorms in June 2016, Reaal Schadeverzekeringen managed to improve the performance of its underlying portfolio, paving the road for a profitable future.

Measures aimed at structural improvement of profitability in other areas include changes in the asset mix to increase the return on the investment portfolio. The capital injection by Anbang enabled and will enable VIVAT and its insurance entities to optimise its investment portfolio. Good progress was made in this direction in 2016, as a result of which investment income is expected to increase.

On 31 December 2015 the subordinated private loans comprised two perpetual loans of € 207 million and € 95 million. Both loans were issued by SRH NV (former SNS REAAL NV) and had an average interest rate of 7.1%. At the beginning of 2016, the perpetual loan of € 95 million has been fully repaid while on the perpetual loan of € 207 million, € 63 million has been repaid. Two new subordinated private loans of € 95 million and € 63 million have been issued by Anbang Group Holdings Co. Limited.

In July 2016, the remaining subordinated loan of € 144 million issued by SRH NV has been fully repaid by VIVAT NV. For this repayment a new subordinated private loan of € 144 million has been issued to VIVAT by Anbang Group Holdings Co. Limited. The new subordinated private loans have an interest rate of 7.75% and the earliest repayment date is in 2026 (first callable after 5 years).

On 28 December 2016 Anbang Group Holdings Co. Ltd. issued a Solvency II Tier 2 Capital subordinated private loan of \$ 190 million to VIVAT NV. This subordinated private loan bears an interest of 6-months LIBOR plus 6.3% and its earliest year of repayment is 2026 (first callable after 5 years).

On 28 December 2016, VIVAT NV granted a loan to SRLEV NV in the amount of \$ 190 million. The loan is a 10-years senior loan in order to facilitate a foreign currency hedge with the possibility of early repayment. The loan bears an interest rate of 6-months LIBOR plus 6.3% annually.

On 29 December 2016, SRLEV NV granted a loan to VIVAT NV in the amount of € 183 million. The loan is a 10-years senior loan in order to facilitate a foreign currency hedge with the possibility of early repayment. The loan bears an interest rate of 6-months EURIBOR plus 5.545% annually.

On 29 December 2016, VIVAT NV granted a loan to Reaal Schadeverzekeringen in the amount of € 70 million. The loan is a 10-years Solvency II Tier 2 capital subordinated loan with the possibility of interest deferral, early repayment and variation. The loan bears an interest rate of 6-months EURIBOR plus 5.545% annually.

## **2.2. Performance from underwriting activities**

### **2.2.1. VIVAT**

The figures included are based on the reporting segments as presented in the consolidated financial statements of the Annual Report 2016 of VIVAT NV. Proteq Levensverzekeringen has been included in Individual Life.



## Statement of profit or loss by segment 2016

In € millions	Life Corporate	Individual Life	Non-Life	Other <sup>1</sup>	Total
<b>&gt; Income</b>					
Premium income	954	888	666	-	<b>2,508</b>
Less: Reinsurance premiums	2	14	45	-	<b>61</b>
<b>Net premium income</b>	<b>952</b>	<b>874</b>	<b>621</b>	-	<b>2,447</b>
Fee and commission income	21	41	-	74	<b>136</b>
Less: Fee and commission expense	4	-	-	28	<b>32</b>
<b>Net fee and commission income</b>	<b>17</b>	<b>41</b>	-	<b>46</b>	<b>104</b>
Share in result of associates	-	-	1	-	<b>1</b>
Investment income	1,983	779	19	-7	<b>2,774</b>
Investment income for account of policyholders	733	169	-	-	<b>902</b>
Result on derivatives	-317	66	18	-	<b>-233</b>
<b>Total income</b>	<b>3,368</b>	<b>1,929</b>	<b>659</b>	<b>39</b>	<b>5,995</b>
<b>Expenses</b>					
Technical claims and benefits	2,133	1,033	438	-	<b>3,604</b>
Charges for account of policyholders	931	418	-	-	<b>1,349</b>
Acquisition costs for insurance activities	3	21	129	-	<b>153</b>
Staff costs	142	130	110	44	<b>426</b>
Depreciation and amortisation of non-current assets	1	5	7	2	<b>15</b>
Other operating expenses	22	26	32	18	<b>98</b>
Impairment losses	-1	-	12	17	<b>28</b>
Other interest expenses	32	83	7	-18	<b>104</b>
Other expenses	-	1	-	-	<b>1</b>
<b>Total expenses</b>	<b>3,263</b>	<b>1,717</b>	<b>735</b>	<b>63</b>	<b>5,778</b>
<b>Result before taxation</b>	<b>105</b>	<b>212</b>	<b>-76</b>	<b>-24</b>	<b>217</b>
Taxation	26	53	-19	-2	<b>58</b>
<b>Net result continued operations</b>	<b>79</b>	<b>159</b>	<b>-57</b>	<b>-22</b>	<b>159</b>

<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitserleven PPI NV and of the subsidiaries of SRLEV - e.g. N.V. Pension ESC - and Reaal Schadeverzekeringen. For more details we refer to 2.1.3 Legal Structure.

## Main developments in 2016

The net IFRS result of VIVAT increased to € 159 million in 2016 compared with € 109 million in 2015. Higher restructuring costs were offset by realised cost savings, improved technical results Non-Life and higher investment income for the product lines Individual Life and Life Corporate. In total € 119 million restructuring costs were allocated to the product lines. Gross premium income of VIVAT in 2016 was € 2,508 million, € 114 million lower than in 2015.

## Statement of profit or loss by segment 2015

In € millions	Life Corporate	Individual Life	Non-Life	Other <sup>1</sup>	Total
<b>&gt; Income</b>					
Premium income	950	986	686	-	<b>2,622</b>
Less: Reinsurance premiums	3	155	46	-	<b>204</b>
<b>Net premium income</b>	<b>947</b>	<b>831</b>	<b>640</b>	-	<b>2,418</b>
Fee and commission income	22	47	-	78	<b>147</b>
Less: Fee and commission expense	-	1	-	29	<b>30</b>
<b>Net fee and commission income</b>	<b>22</b>	<b>46</b>	-	<b>49</b>	<b>117</b>
Share in result of associates	-	-	1	-	<b>1</b>
Investment income	541	769	23	-14	<b>1,319</b>
Investment income for account of policyholders	256	392	-	-	<b>648</b>
Result on derivatives	-73	-56	1	-	<b>-128</b>
<b>Total income</b>	<b>1,693</b>	<b>1,982</b>	<b>665</b>	<b>35</b>	<b>4,375</b>
<b>Expenses</b>					
Technical claims and benefits	989	701	444	-	<b>2,134</b>
Charges for account of policyholders	445	682	-	-	<b>1,127</b>
Acquisition costs for insurance activities	5	30	142	-	<b>177</b>
Staff costs	114	146	120	30	<b>410</b>
Depreciation and amortisation of non-current assets	1	1	6	12	<b>20</b>
Other operating expenses	27	17	24	6	<b>74</b>
Impairment losses	-2	26	32	-	<b>56</b>
Other interest expenses	22	215	4	-7	<b>234</b>
Other expenses	-	1	-	1	<b>2</b>
<b>Total expenses</b>	<b>1,601</b>	<b>1,819</b>	<b>772</b>	<b>42</b>	<b>4,234</b>
<b>Result before taxation</b>	<b>92</b>	<b>163</b>	<b>-107</b>	<b>-7</b>	<b>141</b>
Taxation	23	43	-28	-6	<b>32</b>
<b>Net result continued operations</b>	<b>69</b>	<b>120</b>	<b>-79</b>	<b>-1</b>	<b>109</b>

<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitserleven PPI NV and of the subsidiaries of SRLEV - e.g. N.V. Pension ESC - and Reaal Schadeverzekeringen. For more details we refer to 2.1.3 Legal Structure.

The table below shows the Net IFRS result per legal entity. The reconciliation with the Statement of profit or loss by segment can be explained as follows:

> The segment Life Corporate doesn't include the shadow accounting movements (€ 14 million).

### Net IFRS result VIVAT

In € millions	2016	2015
Individual Life	159	122
Life Corporate	93	71
<b>SRLEV</b>	<b>252</b>	<b>193</b>
Reaal Schadeverzekeringen (Non-Life)	-57	-79
Proteq Levensverzekeringen (Individual Life)	0	5
Other (holding, Asset Management and other consolidated subsidiaries)	-36	-10
<b>Net IFRS result VIVAT</b>	<b>159</b>	<b>109</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 or loss SRLEV

In € millions	2016	2015
<b>&gt; Income</b>		
Premium income	1,830	1,923
Less: Reinsurance premiums	16	158
<b>Net premium income</b>	<b>1,814</b>	<b>1,765</b>
Fee and commission income	62	69
Share in result of associates	9	15
Investment income	2,721	1,258
Investment income for account of policyholders	895	643
Result on derivatives	-265	-126
Other operating income	1	-
<b>Total income</b>	<b>5,236</b>	<b>3,623</b>
<b>&gt; Expenses</b>		
Technical claims and benefits	3,119	1,677
Charges for account of policyholders	1,339	1,119
Acquisition costs for insurance activities	24	35
Staff costs	265	258
Depreciation and amortisation of non-current assets	6	1
Other operating expenses	48	43
Impairment losses	-2	24
Other interest expenses	103	209
Other expenses	1	2
<b>Total expenses</b>	<b>4,903</b>	<b>3,368</b>
<b>Result before taxation</b>	<b>333</b>	<b>255</b>
Taxation	-81	-62
<b>Net result continued operations for the period</b>	<b>252</b>	<b>193</b>

### 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 Zwitterleven.

Gross premium income of product line Life Corporate has increased marginally from € 945 million in 2015 to € 950 million in 2016. Decline in premium income for the accumulation phase was more than offset by growth in sales single premium direct pension annuities. Net result of Life Corporate improved to € 93 million, a € 22 million increase compared to 2015 driven by an improved result on interest. Higher restructuring costs were largely offset by a positive impact of the change LAT-shortfall recorded in Life Corporate.

In 2016, Life Corporate recorded substantial realised gains on fixed income investments (€ 1.4 billion) as a result of the re-risking strategy. These gains are added to insurance liabilities. Therefore these realised gains do not have an impact on net IFRS result.

## 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 of Individual Life decreased in 2016 with € 98 million to € 880 million mainly caused by a shrinking individual life market. Net premium income was up as a result of higher own retention due to the optimisation of its reinsurance program.

Individual Life increased its result from € 122 million in 2015 to € 159 million in 2016 mainly due to an improved result on interest and the result on re-insurance. The improved result on interest was driven by lower impairments and a higher investment income.

### 2.2.3. Reaal Schadeverzekeringen

The figures shown in the table below are unconsolidated figures.

#### Statement of profit or loss Reaal Schadeverzekeringen (Non-Life)

In € millions	2016	2015
<b>&gt; Income</b>		
Premium income	666	686
Less: Reinsurance premiums	45	46
<b>Net premium income</b>	<b>621</b>	<b>640</b>
Share in result of associates	1	1
Investment income	19	23
Result on derivatives	18	1
<b>Total income</b>	<b>659</b>	<b>665</b>
<b>&gt; Expenses</b>		
Technical claims and benefits	438	444
Acquisition costs for insurance activities	129	143
Staff costs	110	120
Depreciation and amortisation of non-current assets	7	6
Other operating expenses	31	24
Impairment losses	12	32
Other interest expenses	7	1
<b>Total expenses</b>	<b>734</b>	<b>770</b>
<b>Result before taxation</b>	<b>-75</b>	<b>-105</b>
Taxation	18	26
<b>Net result continued operations for the period</b>	<b>-57</b>	<b>-79</b>

Premium income declined from € 686 million in 2015 to € 666 million in 2016 as a result of stricter acceptance policy, pricing adjustments and the discontinuation of portfolios with adverse claim ratios. The decline of premium income in 2016 (€ 20 million) was substantially lower compared to the decline in 2015.



Reaal Schadeverzekeringen improved its result from a loss of € 79 million in 2015 to a loss of € 57 million in 2016. This is mainly attributable to improved technical results (€ 13 million) and lower impairments on the disability portfolio (€ 15 million). The improved technical results after reinsurance and after tax were achieved despite the negative impact of claims from the Hail storm in June 2016 (€ 15 million). The Combined Ratio decreased in 2016 from 109.3% to 104.9% (101.9% excluding severe weather claims). Much effort was put into refining the pricing and underwriting capabilities and loss-making portfolios were rationalised and converted.

## 2.2.4. Proteq Levensverzekeringen

The figures shown in the table below are unconsolidated figures.

### Statement of profit or loss Proteq Levensverzekeringen

In € millions	2016	2015
<b>&gt; Income</b>		
Premium income	7	8
Less: Reinsurance premiums	-	-
<b>Net premium income</b>	<b>7</b>	<b>8</b>
Investment income	14	13
Result on derivatives	14	-2
<b>Total income</b>	<b>35</b>	<b>19</b>
<b>&gt; Expenses</b>		
Technical claims and benefits	29	11
Staff costs	5	1
Other operating expenses	1	1
<b>Total expenses</b>	<b>35</b>	<b>13</b>
<b>Result before taxation</b>	<b>-</b>	<b>6</b>
Taxation	-	-1
<b>Net result continued operations for the period</b>	<b>-</b>	<b>5</b>

The net IFRS result decreased from € 4 million in 2015 to nil in 2016 mainly due at a balance to higher staff expenses.

## 2.3. Performance from investment activities

In the next section in the tables IFRS figures are shown, allowing a comparison with 2015.

### 2.3.1. VIVAT

The following tables show a breakdown of the investment income in the P&L of VIVAT:

#### Breakdown investment income in P&L 2016

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Investment income	2,721	19	14	20	<b>2,774</b>
Result on derivatives	-265	18	14	-	<b>-233</b>
<b>Total</b>	<b>2,456</b>	<b>37</b>	<b>28</b>	<b>20</b>	<b>2,541</b>

## Breakdown investment income in P&L 2015

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Investment income	1,258	23	13	25	<b>1,319</b>
Result on derivatives	-127	1	-2	-	<b>-128</b>
<b>Total</b>	<b>1,131</b>	<b>24</b>	<b>11</b>	<b>25</b>	<b>1,191</b>

## Result on investment income

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

## Breakdown of investment income 2016

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Interest	1,041	19	13	2	<b>1,075</b>
Dividend	39	-	-	-1	<b>38</b>
Rental income	10	-	-	12	<b>22</b>
Rental expense	-2	-	-	-3	<b>-5</b>
<b>Total interest dividend and rental income</b>	<b>1,088</b>	<b>19</b>	<b>13</b>	<b>10</b>	<b>1,130</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>2,721</b>	<b>19</b>	<b>14</b>	<b>20</b>	<b>2,774</b>

## Breakdown of investment income 2015

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Interest	1,076	21	12	12	<b>1,121</b>
Dividend	14	1	-	-1	<b>14</b>
Rental income	10	-	-	13	<b>23</b>
Rental expense	-4	-	-	-3	<b>-7</b>
<b>Total interest dividend and rental income</b>	<b>1,096</b>	<b>22</b>	<b>12</b>	<b>21</b>	<b>1,151</b>
Realised revaluations	155	1	1	-1	<b>156</b>
Unrealised revaluations	7	-	-	5	<b>12</b>
<b>Total revaluations through P&amp;L</b>	<b>162</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>168</b>
<b>Total investment income</b>	<b>1,258</b>	<b>23</b>	<b>13</b>	<b>25</b>	<b>1,319</b>

The investment income of VIVAT primarily consist of interest income and realised revaluations. Investment income consist for the most part of interest of Government bonds and interest from saving mortgages. In 2016 Government bonds from Germany and the Netherlands have been sold, which led to a substantial amount of realised revaluations in SRLEV.

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 € 10 million compared to 2015 as a result of interest result that relate to collateralised securities (€ -17 million) and the elimination of the notes issued by the SPV (Share Debt Programme 1 B.V.) to finance a portfolio of mortgages (€ 21 million). REAAL Hypotheken BV merged with SRLEV. As a result of this the interest income of Reaal Hypotheken (2015: € 17 million) is no longer included in the segment "Other".

## Result on derivatives

### Breakdown of result on derivatives 2016

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Result on derivatives held for cash flow hedge accounting	1	-	-	1
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	-261	18	14	-229
<b>Total</b>	<b>-265</b>	<b>18</b>	<b>14</b>	<b>-233</b>

### Breakdown of result on derivatives 2015

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Result on derivatives held for cash flow hedge accounting	15	-	-	15
Market value movements in derivatives held for fair value hedge accounting	-7	-	-	-7
Market value movements of derivatives held for ALM not classified for hedge accounting	-135	1	-2	-136
<b>Total</b>	<b>-127</b>	<b>1</b>	<b>-2</b>	<b>-128</b>

The result on derivatives in 2016 is primarily caused by the sell of futures. These derivatives are held for matching the duration of the liabilities.

### 2.3.2. SRLEV

## Investment income

### Breakdown of investment income 2016

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Investment property	Total
Interest	93	530	418	-	1,041
Dividend	-	39	-	-	39
Rental income	-	-	-	10	10
Rental expense	-	-	-	-2	-2
<b>Total interest dividend and rental income</b>	<b>93</b>	<b>569</b>	<b>418</b>	<b>8</b>	<b>1,088</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>2,192</b>	<b>421</b>	<b>17</b>	<b>2,721</b>

## Breakdown of investment income 2015

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Investment property	Total
Interest	57	557	462	-	1,076
Dividend	-	14	-	-	14
Rental income	-	-	-	10	10
Rental expense	-	-	-	-4	-4
<b>Total interest dividend and rental income</b>	<b>57</b>	<b>571</b>	<b>462</b>	<b>6</b>	<b>1,096</b>
Realised revaluations	-	149	3	3	155
Unrealised revaluations	4	-	-	3	7
<b>Total revaluations through P&amp;L</b>	<b>4</b>	<b>149</b>	<b>3</b>	<b>6</b>	<b>162</b>
<b>Total investment income</b>	<b>61</b>	<b>720</b>	<b>465</b>	<b>12</b>	<b>1,258</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. In 2016 Government bonds from Germany and the Netherlands were sold, which led to a substantial amount of realised revaluations. Dividend was received from equity investments.

### Loans and receivables

The investment income of Loans and receivables relates to loans and saving mortgages. Saving mortgages investment income was € 254 million in 2016.

## 2.3.3. Reaal Schadeverzekeringen

### Investment income

#### Breakdown of investment income 2016

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Total
Interest	2	16	1	19
Dividend	-	-	-	-
<b>Total interest dividend and rental income</b>	<b>2</b>	<b>16</b>	<b>1</b>	<b>19</b>
Realised revaluations	-	-	-	-
<b>Total revaluations through P&amp;L</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total investment income</b>	<b>2</b>	<b>16</b>	<b>1</b>	<b>19</b>



## Breakdown of investment income 2015

In € millions	Fair value through profit or loss	Available for sale	Loans and receivables	Total
Interest	1	19	1	21
Dividend	-	1	-	1
<b>Total interest dividend and rental income</b>	<b>1</b>	<b>20</b>	<b>1</b>	<b>22</b>
Realised revaluations	-	1	-	1
<b>Total revaluations through P&amp;L</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>1</b>
<b>Total investment income</b>	<b>1</b>	<b>21</b>	<b>1</b>	<b>23</b>

Reaal 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 of € 18 million is due to market value movements of derivatives for hedging interest rate sensitivities.

## 2.3.4. Proteq Levensverzekeringen

### Investment income

#### 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>

#### Breakdown of investment income 2015

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

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

### Result on derivatives

The results on derivatives of € 14 million 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, Zwitterleven PPI NV and of the subsidiaries of SRLEV - e.g. N.V. Pension ESC - and Reaal Schadeverzekeringen. For more details we refer to 2.1.3 Legal Structure.

### Asset Management

Net Result of Asset Management declined from € 6 million (profit) in 2015 to € 2 million (loss) in 2016. Main driver for this decrease were higher allocated overhead costs.

Net fee and commission income of Asset Management decreased modestly in 2016 by € 3 million to € 46 million. Assets under management of ACTIAM increased by € 2.5 billion, as a result of third party inflow and market developments.

### Holding and other

Net result of Holding and other decreased as a result of the impairment of the goodwill of ACTIAM NV (€ 17 million).

## 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 and is not listed. 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). The members of the Executive Board of VIVAT are the same as the Executive Board members of SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen (the insurance entities). This also applies to the Supervisory Board members.

In 2016, VIVAT has transformed itself into a matrix organisation including both product and functional lines focusing on profitable growth. The governance model of VIVAT also 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 which allows the product lines, risk and finance to work together at this level. At the level of the board, sponsorship of the EB of product line and functional lines by EB members ensure that EB members are closely involved in the business of the company. The governance of VIVAT reflects this matrix organisation.

### 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 2016 consists of the following members:

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



Figure 1: The Executive Board of VIVAT. From left to right: Feng Zhang, Yinhua Cao, Ron van Oijen, Lan Tang, Wendy de Ruiter-Lörx, Xiao Wei Wu and Jeroen Potjes.

**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 program at the Wharton Business School. Van Oijen started his career at Aegon and ING in the Netherlands. He subsequently worked as CEO 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 CEO. After which he was appointed as CEO of AIA Thailand, whose four million customers make it the largest insurance company in the country.

*Other positions*

Member of the Board Association of Insurers

**F. (Feng) Zhang** (1979) is Chief Of Staff. He has a master's degree in Business Administration, obtained from University of Northumbria at Newcastle, and a bachelor's degree in Literature, obtained from Wuhan University, China. Zhang joined Anbang since 2005, worked as director of claims, underwriting, sale and marketing, human resource. In 2011 he commenced as Deputy General Manager of Anbang Property and Casualty Insurance, His last positions were that of General Manager of 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.

*Other positions*

Non-executive Director Anbang Belgium Holding NV



**L. (Lan) Tang** (1974) is Chief Risk Officer. He has a bachelor degree in Engineering, obtained 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 a Big 4 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.

*Other positions*

Chairman of Fidea NV

Non-executive Director of Bank Nagelmackers NV

Member of the Supervisory Board of ACTIAM Beleggingsfondsen NV

Member of the Supervisory Board of SNS Beleggingsfondsen NV

**X.W. (Xiao Wei) Wu** (1980) is Chief Transformation Officer. She has a bachelor's degree in International Finance from the University in Fudan, China, and a master's degree in Business Administration obtained at the China Europe International Business School (CEIBS) in Shanghai. She worked as Associate Principal at McKinsey Shanghai, for the insurance sector in Asia. In 2012, Wu commenced at the Anbang Group and subsequently worked as Director of Strategy, Director of IT and Director of Risk. She also was Director at Hexie Health, and Anbang Annuity Insurance, both part of Anbang.

*Other positions*

Chairwoman Anbang Belgium Holding NV

**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. Mr. Cao started his career in financial service sector at PwC 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 PwC was the Partner of the Financial Service Group. At Anbang, Mr. Cao commenced as managing director of Anbang Asset Management Hong Kong and Finance Director of the Anbang Insurance Group.

*Other positions*

Member Financial and Economic Committee Association of Insurers

**W.M.A. (Wendy) de Ruiter-Lörx** (1973) is Chief Commercial Officer. 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 NN, 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 NN was that of director of retail clients. Ms 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.

*Other positions*

Member Distribution Committee Association of Insurers

**J.C.A (Jeroen) Potjes** (1965) is Chief Operating Officer. He earned a Master's degree in Econometrics from Erasmus University Rotterdam as well as a doctorate in Economics from the same university. Mr 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 CFO 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, Mr Potjes also sat on the Supervisory Board of ING Re, ING's reinsurance business. Mr Potjes joined Anbang in 2015, one of his roles being that of non-executive on the Managing Board of Anbang Belgium Holdings NV.

#### *Other positions*

Non-executive Director Anbang Belgium Holding NV  
 Member committee Life insurance Association of Insurers  
 Member of the board SIVI

On 14 March 2016, Albert Bakker stepped down as COO and acting CEO of VIVAT.

VIVAT has implemented all procedural and operational matters regarding the code of conduct of insurers 2015 together with the VIVAT Code of Conduct. VIVAT adheres to these.

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 formal 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 the shareholder and/or the Supervisory Board of the relevant company or companies. The members of the Executive Board of VIVAT are the same as the management board members of SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen. This means that the shared management principle has been implemented at all management levels.

As part of the continuing education program 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 program this year included sessions such as Asset Management, Privacy regulations, Treating Customers Fairly, Solvency II and In Control Framework. In addition the Executive Board attended an Executive program at Harvard University.

### 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

J.J. (Jan) Nooitgedagt stepped down as chairman of the Supervisory Board as of 1 December 2016

**M.W. (Maarten) Dijkshoorn** has worked in the financial services industry for more than 40 years. From 2002 to 2009, he was CEO and COO of Eureko BV (Achmea). Prior to this, Mr. Dijkshoorn held various management function within NN for 25 years. M.W. (Maarten) Dijkshoorn was appointed as a member and as chairman of the Supervisory Board on 23 December 2016. He is member of the Remuneration and Nomination Committee and member of the Risk Committee.

*Other positions*

Chairman of the Supervisory Board of de Goudse Verzekeringen NV  
Supervisory Board Member of Monuta and MediRisk (until 1 May 2017). Mr. Dijkshoorn was member of the Supervisory Board of PGGM until 31 December 2016.

**M.R. (Miriam) van Dongen** has over 20 years experience in corporate finance, business strategy and in the financial services industry. In 2007 Miriam van Dongen joined Achmea BV/Eureko BV as CFO of the Health division. She now holds various supervisory boards positions and is the chair of the audit committees of these supervisory boards. Miriam van Dongen was appointed as delegated Supervisory Board member in October 2015 and this ended on 23 May 2016. The function of a Supervisory Board member delegate comprises intensified supervision of and advice to the Executive Board. Miriam van Dongen was appointed as member of the Supervisory Board on 26 July 2015. She is chairman of the Audit Committee and member of Risk Committee and Remuneration and Nomination Committee.

*Other positions*

Supervisory Board member and chair of the audit committee of PGGM NV  
Supervisory Board member and chair of the audit committee of CB Logistics  
Supervisory Board member of Optiver  
Member of the board of trustees of Dutch Kidney Foundation (until August 2016)

**M. (Ming) He** studied at Bowling Green State University in the United States and earned a master's degree in geology and environmental science in 1992. Ming earned a second master's degree in International Financial Management at the America International Management Business School in 1998. He started his career at the International Investment Department of Parker Hannifin, where he served as General Manager in 2009. He joined Anbang Insurance Group Co., Ltd. as Investment Director of Anbang Property & Casualty Insurance Co., Ltd. As of 2012, he was appointed as Director and General Manager of Anbang Asset Management. M. (Ming) He also serves as non-executive director and general manager of Fidea NV. He was appointed as member of the Supervisory Board on 26 July 2015. He is member of the Audit Committee.

*Other positions*

Director and General Manager of Anbang Asset Management  
Non-executive Director of Fidea NV  
CEO Anbang Belgium Holding NV  
Chairman Bank Nagelmackers NV

**K.C.K. (Kevin) Shum** joined Anbang Insurance Group in March 2014. He currently serves as the General Counsel for Anbang Group Holdings Co. Limited, overseeing its legal and compliance functions in respect of the Group's direct investments, investment funds, private equity funds and general asset management activities. In addition, Mr. Shum serves as a Supervisory Board Director of VIVAT NV (being the Chairman

of the Remuneration and Nomination Committee), as a non-executive Director of Bank Nagelmackers NV (being Chairman of the Nomination Committee), as a non-executive Director of Fidea NV (being Chairman of the Nomination and Governance Committee).

With over 20 years' experience in the legal and financial sectors, Mr. Shum has extensive experience in advising multinational corporations, funds and investment banks on legal issues relating to securities, investments, derivatives, financing, acquisitions, mergers, restructurings, liquidation and corporate governance. Mr. Shum also regularly advises on regulatory matters pertaining to the HK Securities and Futures Commission, the HK Takeovers Code and the HK Listing Rules.

Prior to joining Anbang, Mr. Shum worked as a private practitioner at Coudert Brothers LLP and at Jun He Law Offices, as counsel for private equity firm Alliance Capital Asia Limited and a hedge fund under CCIB Asset Management Co. Limited. Mr. Shum received his Master of Science in Financial Analysis from the Hong Kong University of Science and Technology, attended Guildford College of Law, UK and received his Bachelor of Laws from the University of Southampton, UK. He is a qualified Solicitor of England & Wales, a Solicitor of Hong Kong, a Member of the Chartered Institute of Arbitrators and is a Chartered Financial Analyst.

*Other positions*

Chief Legal Officer of Anbang Group Holdings Co. Limited  
Non-executive Director of Bank Nagelmackers NV  
Non-executive Director of Fidea NV

**P.P.J.L.M.G. (Pierre) Lefèvre** studied Mechanical Engineering and Industrial Administration, as an Internal Auditor at Unilever before joining AXA Belgium NV in Belgium as a Financial Controller. He continued his career with AXA Belgium in the role of General Manager of Individual Life and, later on, as General Manager of the Non-Life Personal Lines. In 1994, he moved on to AXA UK plc. as CEO of the Non-Life insurance business and was subsequently appointed as Chairman of the Management Board. In 1998 he was appointed as CEO of AXA Netherlands. Between 2002 and 2013, Pierre Lefèvre fulfilled various CEO roles in subsidiaries of Groupama SA. Since 2013, Pierre has acted as independent non-executive director 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. 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.

*Other positions*

Independent non-executive Director and Chair of the Risk Committee of Hastings Group Holdings PLC  
Independent non-executive Director and Chair of the Risk Committee of Advantage Insurance Company Limited  
Independent non-executive Director of Anbang Belgium Holding NV  
Senior Advisor at Eurohold Corporate Finance

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.

The Supervisory Board has three committees; Audit Committee, Risk Committee and Remuneration and Nomination Committee.

### **Composition and 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, as mentioned. 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 customers of the company, shareholder and employees.

### **Self-assessment**

Facilitated by an external assessor the Supervisory Board assessed its functioning in order to evaluate the functioning of the Supervisory Board as a whole, the functioning of the individual committees, the individual supervisory directors, the relationship with the Executive Board and the effectiveness of continuing education. The evaluation found that the Supervisory Board has performed according to what can be expected, with sufficient expertise and involvement from the individual members. The Supervisory Board has played a constructive role in building the foundation for future progress.

### **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, towards customers in relation to the duty of care, integrity, risk management, financial reporting and audit. The participation of the members of the Supervisory Board in the program was monitored.

These continuing education sessions included – amongst others – topics on Solvency II, Internal Control Framework, Tax Recoverability, Shadow accounting and Treating Customers Fairly.

## **3.2. Remuneration**

### **3.2.1. Remuneration policy VIVAT in general**

For the 'Remuneration policy VIVAT in general' we refer to paragraph 4.4.1 of the Annual Report VIVAT NV 2016.

### 3.2.2. Actual remuneration (former)members of the Executive Board

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

#### Breakdown of remuneration key management personnel

In € thousands	2016
Short-term employee benefits	4,419
Post-employment benefits	125
Other long-term benefits	-
Termination benefits	695
Share-based payment	-
<b>Total</b>	<b>5,239</b>

#### Loans

There are no loans outstanding on 31 December 2016 and/or granted to members of the Executive Board during 2016.

### 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 (excluding 21% VAT).

#### Breakdown of remuneration (former) members of the Supervisory Board

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

#### Loans

There are no loans outstanding on 31 December 2016 and/or granted to members of the Supervisory Board during 2016.

### 3.2.4. Transactions shareholders and key function holders

#### 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, VIVAT's 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 between VIVAT, Anbang and affiliates**

The intra-group balances and transactions between VIVAT, Anbang and affiliates in 2016 were:

- > On 29 December 2015, VIVAT granted a loan to SRLEV in the amount of € 140 million. The loan is a 10-years Solvency II Tier 2 capital subordinated loan with the possibility of interest deferral, early repayment and variation. The loan bears an interest fixed rate of 7.75% annually;
- > On 29 December 2015, VIVAT granted a loan to Reaal Schadeverzekeringen in the amount of € 80 million. The loan is a 10-years Solvency II Tier 2 capital subordinated loan with the possibility of interest deferral, early repayment and variation. The loan bears an interest fixed rate of 7.75% annually;
- > On 31 December 2015 the subordinated private loans comprised two perpetual loans of € 207 million and € 95 million. Both loans were issued by SRH NV (former name SNS REAAL NV) and had an average interest rate of 7.1%. At the beginning of 2016, the perpetual loan of € 95 million was fully repaid while on the perpetual loan of € 207 million, € 63 million had repaid. Two new subordinated private loans of € 95 million and € 63 million have been issued by Anbang Group Holdings Co. Limited;
- > In July 2016 the remaining subordinated loan of € 144 million issued by SRH NV has been fully repaid by VIVAT NV. For this repayment a new subordinated private loan of € 144 million has been issued to VIVAT by Anbang Group Holdings Co. Limited. The new subordinated private loans have an interest rate of 7.75% and the earliest repayment date is in 2026 (first callable after 5 years). The repayment to SRH had been included in the arrangement between VIVAT, SRH and Anbang Group Holdings Co. Limited about the transfer of pension obligations;
- > On 28 December 2016 Anbang Group Holdings Co. Ltd. granted a Solvency II Tier 2 Capital subordinated private loan to VIVAT of US\$ 190 million. This subordinated private loan bears an interest of 6-months LIBOR plus 6.3% and its earliest year of repayment is 2026 (first callable after 5 years);
- > On 28 December 2016, VIVAT granted a loan to SRLEV in the amount of US\$ 190 million. The loan is a 10-years senior loan in order to facilitate a foreign currency hedge with the possibility of early repayment. The loan bears an interest rate of 6-months LIBOR plus 6.3% annually;
- > On 29 December 2016, SRLEV granted a loan to VIVAT in the amount of € 183 million. The loan is a 10-years senior loan in order to facilitate a foreign currency hedge with the possibility of early repayment. The loan bears an interest rate of 6-months EURIBOR plus 5.545% annually;
- > On 29 December 2016, VIVAT granted a loan to Reaal Schadeverzekeringen in the amount of € 70 million. The loan is a 10-years Solvency II Tier 2 capital subordinated loan with the possibility of interest deferral, early repayment and variation. The loan bears an interest rate of 6-months EURIBOR plus 5.545% annually;
- > A reimbursement right exist of VIVAT at SRLEV in the amount of € 343 million, as a result of VIVAT's defined benefit pension liabilities, largely reinsured at SRLEV;
- > A reimbursement right exist of VIVAT at Reaal Schadeverzekeringen in the amount of € 26 million, as a result of VIVAT's defined benefit pension liabilities, largely reinsured at SRLEV.

## **Intra-group balances with key management personnel**

The transfer of shares of VIVAT to Anbang and changes in the composition of management boards during 2015 led to changes in the composition of key management personnel in 2015. As a result, the key management personnel from the end of 2015 and the year 2016 consists exclusively of the members of the Executive Board.

On 23 October 2015, responsibility under the Articles of Association for SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen was also transferred to the members of the Executive Board.



Ron van Oijen, the new CEO, took office on 14 March 2016, after which Albert Bakker relinquished his role as Acting CEO and also as a member of the Executive Board. On 24 May 2016, Wendy de Ruiter-Lörx and Jeroen Potjes were appointed as members of the Executive Board of SRLEV.

The Executive Board comprised 7 employees as at 31 December 2016 (31 December 2015: 5).

### 3.3. Fit and proper

The requirements on suitability for employees who effectively run VIVAT and its insurance entities or have other key functions has been extensively described in specific job profiles. The job profiles reflect the required experience and expertise of the (key)functions. The job profiles are reviewed on a regular basis. As part of its legal duties the Dutch Central Bank (DNB) assesses whether prospective directors are suitable for their position and whether their integrity is beyond doubt. The suitability and integrity of prospective second tier senior managers are assessed within VIVAT. The internal assessment is subject to approval by the DNB. Employees with intended key functions are assessed on suitability and integrity within VIVAT. VIVAT has a pre-employment (key functions) screening policy and second tier screening policy in place which covers both the integrity and suitability pre-employment screening.

All employees are obliged to take the oath financial sector within three months of their appointment. The oath reflects the required suitability and integrity of the (key)function. Within VIVAT are several instruments in place to assess and direct employees, on a regular base, 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 bear the responsibility to detect signals of unreliable behavior of employees. If the conduct of employees harms their integrity, those employees 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. The insurance entities SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen are required to operate with the VIVAT Risk Management System. 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 organisational, 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 Internal 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 are including the minimum requirements. All components are periodically scored and made visible in the ICF-scorecard. The outcomes are discussed in the Operational Risk Committees (ORC's) and the VRC and are the basis for improvement plans.

### 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 exposed to.

The core of the VIVAT Risk Management System consists of a strategic part Governance 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 all second line Solvency II Key Functions use the same risk classification, all 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 the core a control cycle of risk identification-measurement-mitigation and continuous monitoring and reporting, supported by the ICF. The ICF plays a key role in eventually creating a solid foundation for an increase in maturity level of control and the ongoing professionalisation of demonstrable, effective risk management throughout the organisation.

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). ORSA is incorporated in the VIVAT Risk Management System and is performed at least annually.

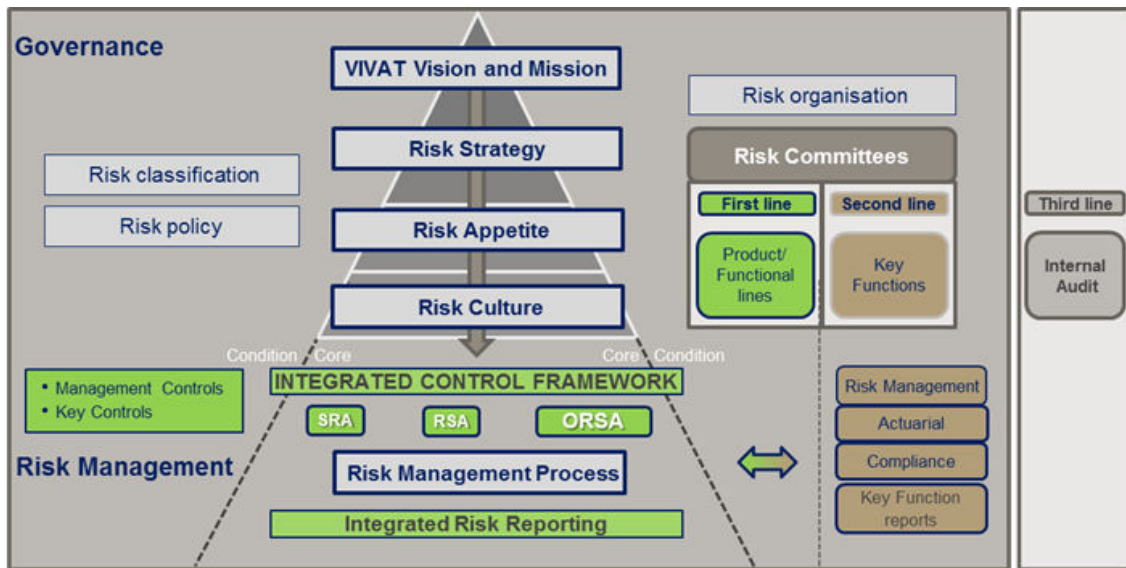


Figure 2: Risk Management

### 3.4.2. Risk management governance

#### 3.4.2.1. Mission and vision

The Vision of VIVAT to be a leading, trusted and customer-centric financial service provider results in a two pillar mission, focusing on comprehensive products and services leveraging the most advanced technologies. From this starting point, the Risk Strategy contributes to a sustainable growth of VIVAT, for the benefit of all its stakeholders.

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. VIVAT takes its role in society seriously. Corporate responsibility (CR) follows from the mission and vision, and 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 Zwitserleven 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. 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, through its insurance entities, provides guarantees for future payments to its customer and therefore VIVAT needs a strong capital position. The well capitalised shareholder has the intention to invest in the growth of the business. The Executive Board would like to hold a buffer above regulatory capital requirement to absorb temporary volatility and to 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 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.

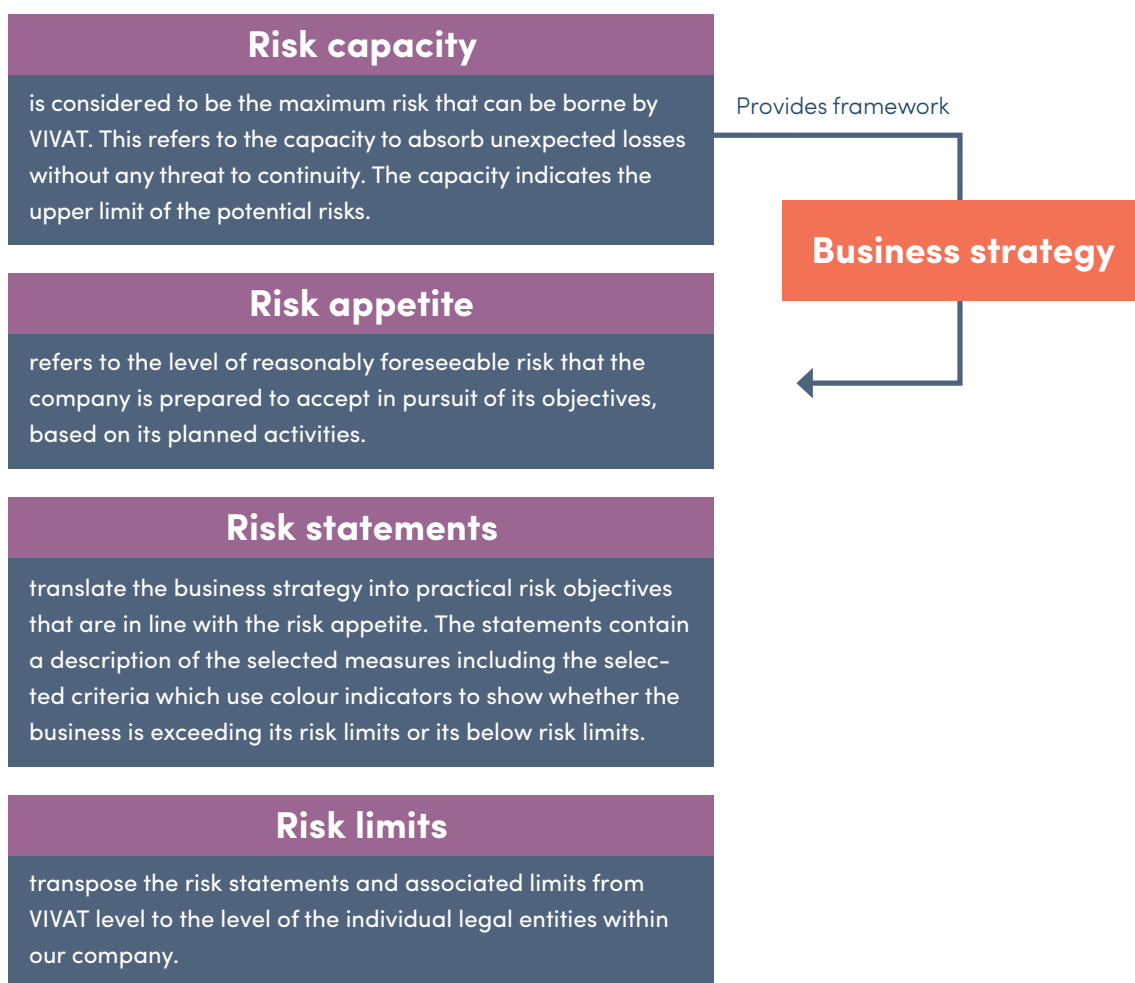


Figure 3: Risk Appetite framework

Risk Appetite is defined at VIVAT level. Subsequently it is developed in more detail on the individual legal entity level 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 Product Lines or legal entities are able to select the best possible products and services, although their selection must be in line with the strategy of VIVAT.

The Risk Appetite control procedure, 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 controlling 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 behaviors: Focus on Customers, 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 organisational processes and decision making of VIVAT. The management teams of the Product Lines and Functional Lines promote awareness of risks and are supported by the second line. 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 at all times are fit and proper to fulfil their job. Finally, the Remuneration Policy of VIVAT discourages taking undesired and irresponsible risks focused on short-term profit and personal gain.

#### 3.4.2.5. Risk Organisation

VIVAT has established 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 optimisation and integration of the risk management.

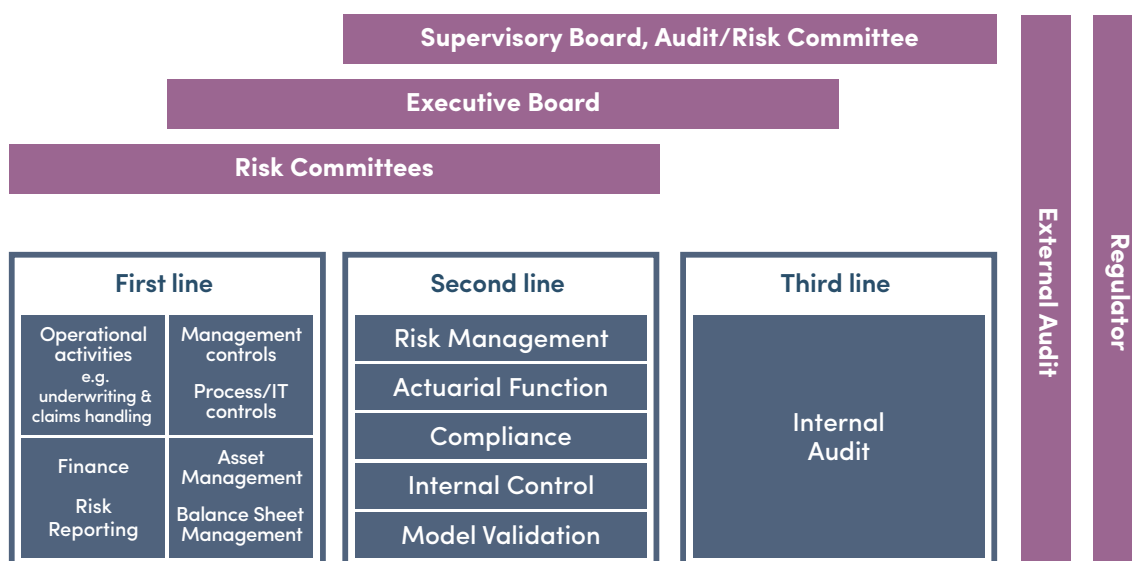


Figure 4: Three lines of defence

### 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 between risk and 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, the control framework and supports central decision-making bodies. The data used, including models, assumptions and techniques, are validated periodically. Furthermore the second line provides specialist advice to the first line.

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

### Third line = 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). For a further explanation of Internal audit see section 3.7.

### Risk management 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 recognises 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 at Group level and carry out activities on behalf of all insurance activities 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 third line Audit Function Holder.

The Risk Function Report (RFR) is an integrated report on all financial and non-financial risks with potential (material) financial impact. The RFR includes a summary of the major risks. Looking back, the RFR describes developments in risk areas compared to the previous reporting period. Looking forward, the RFR shows the uncertainty or expectations that (may) impact the future financial position of VIVAT Group. Furthermore, the RFR contains an option drafted by the second line (FR and NFR), drafted and endorsed by the CRO on the development of the various risks, the dependency, and the impact on OP, solvency and strategy. The RFR opinion is discussed in the risk committees and in VRC and Supervisory Board.

The Actuarial Function opines on the adequacy of the Technical Provision used for IFRS-LAT and Solvency II purposes. It furthermore opines on the quality of Underwriting and Reinsurance programs. The Actuarial Function Report (AFR) is submitted to the VRC, Audit Committee and the Risk Committee of the Supervisory Board.

The Compliance Function provides at least twice a year a report on the most important Compliance Risk 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 work-place 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**

With the implementation of Solvency II on 1 January 2016, it has become mandatory for insurance companies to draft and submit to the Dutch Central Bank (DNB) an own-risk and solvency assessment (ORSA) at least on an annual basis. In 2016, VIVAT performed an ORSA. which was the basis for the Operational Plan and Capital Management.

The management of VIVAT uses the ORSA to verify the amount of capital required and this may result in management actions to bring the capital in line with the risk profile and risk appetite. The extent to which VIVAT's capitalisation, given the identified risks, is sufficiently robust to be able to absorb remaining risks in existing and future circumstances is determined on the basis of scenario analyses and stress tests. The ORSA covers VIVAT NV and all underlying regulated insurance entities. The internal evaluation of the ORSA is performed at least once a year. The ORSA contains "appropriateness testings" to assess whether the SCR standard formula is appropriate for VIVAT given its risk profile. This integral risk assessment is not limited to the risk categories that are explicitly included in the SCR standard formula, and includes a broader range of risks (e.g. Model risk).

The combination of the business strategy, risk appetite, solvency position and constant evaluation produces input for management's discussion on the amount of capital required. The outcome of this discussion is the ORSA capital, i.e. the minimum amount of capital required, given the current business, in order that any risks over a particular horizon can be absorbed. In the 2016 ORSA exercise, it was concluded that deviations exist on single risk level where some risks in the SCR standard model are understated or overstated, or even not at all taken into account. However in aggregate, VIVAT concluded that the standard formula SCR calculation is prudent, but appropriate for the risk profile of VIVAT. The ORSA is approved by the Executive Board and discussed with the Supervisory Board.

### **3.6. Internal control system**

#### **3.6.1. Integrated Control Framework**

The ICF is used for the improved management of all identified risk categories within VIVAT. As part of this, VIVAT has specifically opted for an integrated risk approach based on its risk classification.

Management uses the ICF to direct and manage the control and integrity of its business processes, following strategic objectives and VIVAT's risk appetite. Management furthermore aims at the ICF helping to promote risk awareness among all employees.

The ICF contains core components that together form the basis for sound and controlled business operations within VIVAT, and supports being in control. It measures the maturity of risk management and ensures steering on correct and complete risk reports. The ICF monitors Process Controls and Management Controls. Important components, and conditions for performing adequate risk management, are Process management, Data, Infrastructure, Models and (behaviour of) People.

The ICF provides a framework which incorporates Management Controls and Process Controls in such a way that it is possible to state with a reasonable level of assurance, that the internal control system is operating effectively. VIVAT has set itself a maturity ambition and will continue to work on fine tuning of control objectives and a further involvement of the second line risk departments in the self-assessments of the first line departments in 2017.

### 3.6.2. Process Controls and Management Controls

During 2016, the implementation of ICF was finalized. Management Controls (or Entity level Controls) give insight into 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.

Process controls have to be executed and documented within the processes in the first line (product and functional lines). These key controls are also independently tested on effectiveness within the first line and reviewed or re-performed by the second or third line of defense.

In 2017 new tooling will further support and optimize monitoring and reporting on process and management controls. Necessary improvements will be implemented in 2017. The completeness and design of both process and management controls is re-evaluated continuously in order to optimize the quality within ICF.

### 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 monitoring the Product Lines and Functional Lines in adhering to relevant laws and regulations, codes of conduct, policies and (internal) standards, within VIVAT legislation on progress and monitoring of design, implementation and operation of the first line implementation responsibility. 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 2<sup>nd</sup> 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.

The VIVAT organisation faced a period of transition during 2016. Although this will bring new opportunities and sustainability, this transition period challenged and stretched the organisation and our people and increased the risk of the materialisation of non-financial risks.

Implementing the new operating model and governance structure, strong focus on cost reduction and earnings models, job uncertainty, changes in products, methodologies and processes, the speed of required changes and cultural changes had a strong impact and influenced operational and compliance risks. These risks are addressed, managed and monitored within VIVAT 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.

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 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

As a result of the acquisition by Anbang and the associated strategic review the VIVAT organisation faced a period of transition during 2016. Implementing the new operating model and governance structure, strong focus on cost reduction and earnings models, job uncertainty, changes in products, methodologies and processes, the speed of required changes and cultural changes increased the chance that operational- and compliance risk would materialise. Although these risks are addressed, managed and monitored during 2016, managing the impact of these developments remains a challenge looking forward to 2017. VIVAT continued to invest in the development of the control environment by the strategic programmes Solvency II, Data management and Integrated Control Framework, resulting in the improvement of process controls, management information, risk management policies and first line risk maturity. These improvements contribute to managing the increased pressure on the organisation. Rationalisation of the model landscape, in which the number of models is further reduced, is a strategic programme executing in 2017. It contributes to a more efficient and reliable valuation of underwriting and market risks and the solvency, and leads to further reduction of model risk. Given the validation of a number of models in several segments the model risk has been further reduced in 2016.

Following from the capital injection in 2015 and the strategic review evolving in a new Operational Plan, VIVAT is currently changing its risk profile taking into account its Risk Appetite. Supported by ORSA outcomes, VIVAT aims to work towards a new Strategic Asset Allocation which leads to more expected return. The methods and assumptions underlying the ORSA can be found in the ORSA report, which was sent to the Dutch regulator. Also a description of the (stressed) scenario's is part of this report. In order to mitigate underwriting risks, VIVAT has entered into a mass lapse risk transfer agreement which has not yet been included in our Solvency II ratio. Furthermore, VIVAT reduced the spread mismatch between assets (mainly German and Dutch government bonds) and liabilities (mainly swap plus Solvency II Volatility Adjustment) significantly in the second half of 2016 by selling € 4.5 billion in German and Dutch government long term bonds and plans to sell more.

The table below shows the movement of the SCR of VIVAT and its solo entities in 2016:

### Solvency Capital Requirement

In € millions	December 2016	January 2016 <sup>1</sup>
VIVAT	2,466	2,584
SRLEV	2,295	2,363
Reaal Schadeverzekeringen	365	357
Proteq Levensverzekeringen	61	28

<sup>1</sup> As reported at Januari 1, 2016

In the following sections the individual SCR components are explained in more detail.

### 4.1. Risk classification

VIVAT provides insight into the risks for the business itself and for its stakeholders in order 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 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. The risk classification is structured in main risk types and corresponding sub risk types.

Strategic developments (governance, positioning, external developments) relate to future business developments and may eventually emerge as one of the main or sub risk types. Several internal and external scenarios are taken in to account, which arise from a Strategic Risk Assessment (SRA).

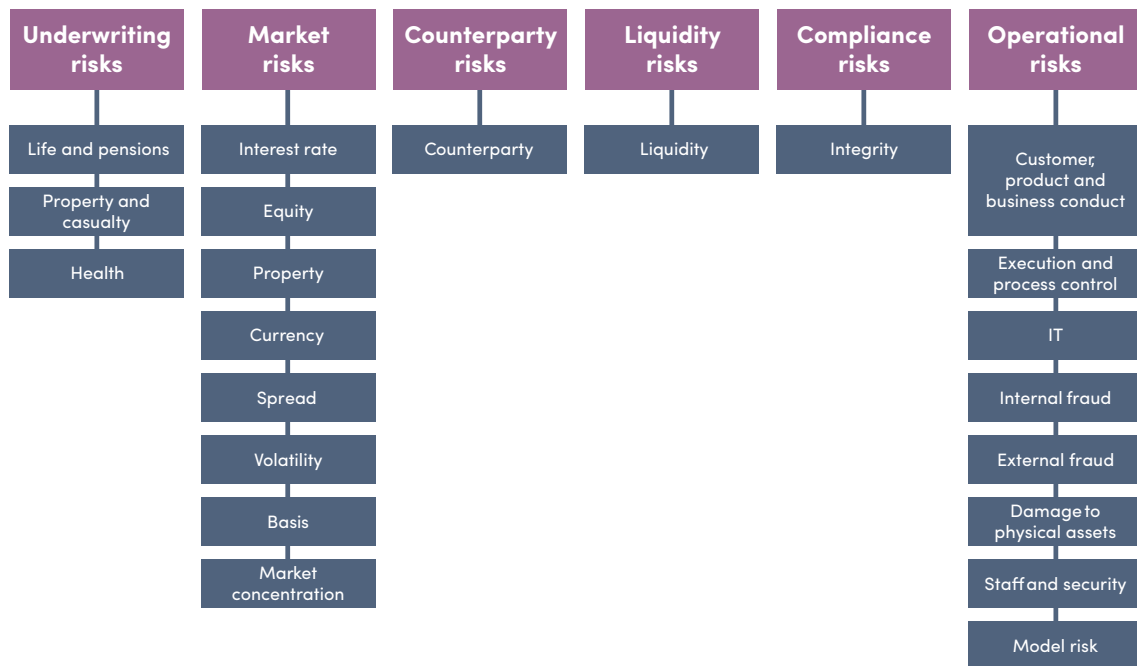


Figure 5: Risk classification

Not all of the risk categories are part of the SCR calculation. The SCR calculation contains Liquidity and Compliance Risk. The table below shows a breakdown of the SCR of VIVAT and of its solo entities:

## Solvency Capital Requirement

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Life underwriting risk	1,616	-	19	1,630
Underwriting risk Non-Life	-	215	-	279
Underwriting risk Health	-	279	-	215
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>

Interest rate shocks has also impact on the loss absorbing capacity of technical provision (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 of future discretionary benefits in technical provisions and this LAC TP impact is reported separately.

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.

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), 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.



## Capital requirement

The expected capital needs are based on the Capital and Funding plan. The Capital and Funding plan describes the funding needs for maintaining and growing the insurance business and investments for VIVAT. The Capital and Funding plan is taken into account in the Operational Plan (OP). The OP describes the planned development of the portfolio for the next three years, based on the strategy of VIVAT. 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) 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, if applicable, 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. VIVAT performs product reviews following a risk based product review calendar.

## Technical provisions

When a claim is submitted, the product terms and conditions form the starting point for determining the payment. In the case of Non-Life insurance policies, the submission of a claim leads to the creation of a standard claims reserve. For complicated (large, bodily injury or foreign) claims the reserve is set by claim handlers with specific expertise. For Disability, the customer follows a reintegration process. At the Motor Insurance business, the cost of claims are mitigated by promoting the use of preferred repair centers. 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. At least once a year, the Actuarial Function assesses and expresses an opinion on the Solvency II Technical Provision.

## 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 twice 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 businesses includes the significant sub-risk categories of mortality risk, longevity risk, catastrophe risk, early surrender risk and expense risk. It can also include disability and recovery risk to a limited degree.

#### 4.2.3.2. Life insurance portfolio

The Life insurance portfolio contains individual (Life Individual) and Group insurance (Corporate Life) 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 the a fixed period or the remainder of the holder's life.

The Corporate Life 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 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 Zwitterleven by intermediaries and through direct channels. Furthermore, annuities, mortgage-related capital insurance and funeral insurance are sold. The Individual Life insurance is aimed at private households.

VIVAT's strategy for Corporate Life policies for the next few years is to share longevity risk and market risk more broadly with the customer. VIVAT's Corporate Life insurance portfolio focuses on the entire corporate market in the Netherlands.

The next table provides an overview of the product portfolio.

Product	Product features		Risks per product				
	Guarantee	Profit-Sharing	Mortality	Longevity	Catastrophe	Lapse	Expense
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>2</sup>		√		√		√
Group insurance policies with separate accounts	Regular payment / Insured capital <sup>3</sup>			√	√		√

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

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

<sup>3</sup> End of contract date contract contributory is not mandatory

### 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. If a co-insurer withdraws, its insurance liabilities will be transferred to the remaining co-insurers. 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. VIVAT intends to reduce co-insurance, considering the costs related to the limited size of the portfolio and potential data issues.

#### 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 2016 the retention of life and disability corresponded to € 1.5 million sum at risk per insured, for both Individual and Group risks. The retention of the catastrophe cover amounts to € 15 million. The two quota share contracts that were in place in respect of the Individual Life portfolio have been cancelled as per January 1 2016. For 2017, the retention of life and disability for Group risks decreased from € 1.5 to € 1.0 million sum at risk per insured.

To prevent VIVAT for the risk of a mass lapse event, VIVAT has placed a non-proportional mass lapse reinsurance contract (indemnity based) with an effective date of December 31, 2016. The impact has currently not been reflected in the SCR calculations.

#### 4.2.3.4. SCR Underwriting risk Life

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. In these calculations only the policies which are negatively affected by these sensitivities are taken into account. The most material items have been disclosed.

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 longevity risk can be substantial.

The key sensitivities of own funds to changes in the underwriting parameters are the sensitivities to longevity risk and expenses.

The table below shows the SCR of the underwriting risk Life:

#### SCR underwriting risk Life

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
Revision risk	-	-	-
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>

#### 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.

## 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% in the option exercise rates of the relevant options (including conversion to paid-up status), in so far as they have a negative effect on the technical provision and where the absolute chance of exercise of the option does not exceed 100%.
- > 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 reinsurers that would result from an instantaneous permanent decrease of 50% in the option exercise rates of the relevant options (including conversion to paid-up status), in so far as they have a positive effect on the technical provision and where the absolute chance of lapse does not exceed 20%.
- > The capital requirement for mass lapse risk.  
This is equal to the loss in basic own funds that would result from a combination of the following instantaneous events:
  - > discontinuance of 70% of the insurance policies where:
    - > the policyholder is not a natural person;
    - > discontinuance of the policy is not subject to approval by the beneficiaries of the pension fund; and
    - > the discontinuance would result in an increase in the technical provision without the risk margin;
  - > the discontinuance of 40% of the other policies for which surrender or conversion to paid-up status would result in an increase of technical provisions without the risk margin.  
For VIVAT, the insurance contracts fall within the 40% category. 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 permanent 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 (expressed as percentages) in the following 12 months for the purpose of calculating the technical provisions. It follows that a mortality rate of 2% is increased to 2.15% and a mortality rate of 0.8% to 0.95% for the first year.

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 materialise at the same time and at their full magnitude resulting in diversification between different risk types.

### 4.2.4. Non-Life

For the subdivision of risks into sub-risks in the Non-Life insurance portfolio, VIVAT makes a distinction between Health underwriting risk and Non-Life underwriting risk as shown in the diagram below. These two risks together with the market and default risk determine the basic SCR for Reaal Schadeverzekeringen.

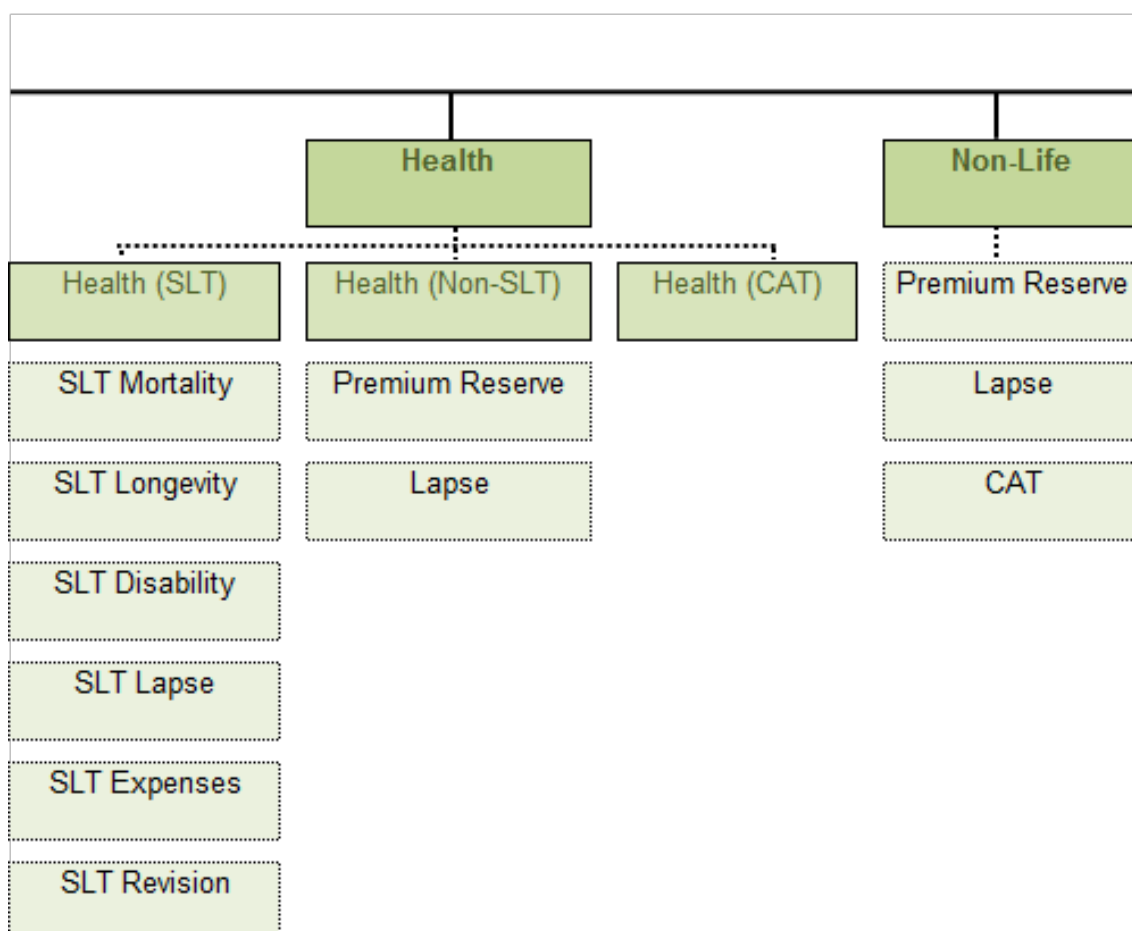


Figure 6: Non-Life insurance portfolio

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 4.2.4.1 and 4.2.4.2 the Non-Life underwriting risk and the health underwriting risks are assessed. In the third subparagraph 4.2.4.3. the important role reinsurance has on the risk profile of Reaal Schadeverzekeringen N.V. is mentioned.

#### 4.2.4.1. SCR Underwriting risk Non-Life

Most important selling lines of business are Fire, Motor and General Liability. The insurance policies are mostly sold through authorized agents and distribution partners to retail and SME customers. With respect to Co-insurance VIVAT 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.

One of these direct channels is the label Zelf which exclusively offers insurance products over the internet. Special products in this distribution channel are Route Mobiel and Dier & Zorg which is a product designed to cover health expenses for pets.

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	Net SCR
Non-Life premium and reserve risk	190
Non-Life lapse risk	4
Non-Life catastrophe risk	63
Diversification	-42
<b>SCR Non-Life underwriting risk</b>	<b>215</b>

#### Non-Life premium and reserve risk

Setting the right premiums & managing the claims are at the core of the business model and are crucial for being successful. 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

The catastrophe risk is a relevant risk for Non-Life. In 2016 further looked at ways to migrate the associated risk. Due to a favorable reinsurance agreement, the exposure to the cat risk has been reduced.

#### 4.2.4.2. SCR Underwriting risk 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), and
- > 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).

The health SLT underwriting risk applies to occupational disability policies. Virtually the same sub-modules as defined for the Life underwriting risk (see Chapter 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 SLT health underwriting risk

In € millions	Net SCR
SLT Mortality risk	-
SLT Longevity risk	4
SLT Disability-morbidity risk	245
SLT Lapse risk	77
SLT Expense risk	20
SLT Revision risk	16
Diversification	-91
<b>SCR Health SLT underwriting risk</b>	<b>271</b>

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

In the following paragraphs the most lower level risks are commented on.

#### 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.

In 2016 the exposure to this risk has increased due to the low interest environment. To reduce the exposure VIVAT is looking for solutions in reinsurance and/or other meaningful actions.

### **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 “revalideren”.

### **SLT Expense risk**

The disability portfolio is relatively limited in impact by exposure shock.

### **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.

### **Non-SLT scr's**

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

## **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, Reaal

Schadverzekeringen has concluded a contract for covered natural perils (storm, hail) and the accumulation of losses due to one event within the fire portfolio.

The 2016 reinsurance program was largely a continuation of the program for 2015. From capital management considerations, the capacity of the catastrophe programme is aligned with the Risk Appetite of VIVAT.

The impact of the hailstorm of June 2016 was gross € 24.9 million, but capped to € 20 million due to the catastrophe cover with the reduced aforementioned priority of € 20 million.

## Non-Life insurance retention

In € thousands		2017	2016	2015
Coverage:				
Fire	per risk	2,000	2,000	1,000
Motor third-party liability	per risk	2,500	2,500	2,500
General liability	per risk	1,500	1,000	1,000
Accidents	per risk	750	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	25,000

## 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. Unfavorable changes in the market 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, in particular with respect to the duration thereof.

The following eight sub-market risks have been defined: interest rate risk, equity risk, property risk, currency risk, spread risk, volatility risk and market risk concentrations. 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. The sensitivities of the IFRS Equity movement are of similar magnitude and direction as the own funds movement under Solvency II.

The Balance Sheet Management department (BSM) aims to stabilize solvency and manage capital of VIVAT and its subsidiaries. BSM monitors and mitigates market risk in close cooperation with ACTIAM, the asset manager of VIVAT. For mitigation instruments such as interest rate swaps, interest rate swaptions and fixed income investments are used.

### **Re-risking**

Due to the capital injection provided by Anbang the first steps in re-risking or opting for higher-yielding investments were taken in 2016. The execution is handled by ACTIAM and is monitored closely by VIVAT's Investment Committee.

## **4.3.2. Risk management process ALM**

The ALM-policy covers the management of market risk, credit 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, and is performed at the end of the year. 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 diversify the risk, the risk budget is spread across a range of risk drivers, asset classes and sectors and names. When finalizing the SAA, specific attention is paid to the availability of sufficient expertise in the segments in which investments are held. Through ACTIAM, investments are monitored by means of reports on performance and capital.

Investments are made in accordance with the prudent person principle and in the interests 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 market risk. These risks are quantified (and monitored) separately.

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.

Stress scenarios are monitored and reported once a month and also on an ad hoc basis if movements in the market (and in particular the yield curve) if warranted to do so.

Furthermore, monthly single-shock sensitivity analyses are performed, which combine a top-down and bottom-up approach. For each product group, the products and models are analyzed, following which the best form of hedge for the product group is considered. The bottom-up process involves analyzing the effectiveness of the hedge with respect to the embedded options at product level.

The top-down 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**

Market risk is the risk of potential losses due to adverse financial market movements. 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 Dutch Central Bank prescribes to report the solo entities SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen on a unconsolidated basis. This means that subsidiaries of these solo entities are recognized as equity. From a risk perspective it makes more sense to report solo entities on a consolidated basis, as this improves the representation of the underlying risks. Conversely, VIVAT is reported on a consolidated basis.

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

## Market risk

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Interest rate risk	247	15	51	257
Equity risk	248	10	0	242
Property risk	67	0	0	103
Spread risk	515	22	3	509
Concentration risk	-	1	1	0
Currency risk	10	1	0	11
Diversification	-163	-16	-4	-300
<b>SCR market risk</b>	<b>924</b>	<b>33</b>	<b>51</b>	<b>822</b>

The SCR Market Risk of VIVAT is not necessarily equal to the sum of it's subsidiaries due to differences in consolidated versus unconsolidated calculation, eliminations of intra-group transactions and a limited amount of short term investments (liquidity buffer) held at a VIVAT N.V. level.

### 4.3.3.1. Interest rate risk

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 interest rate scenario used for the up and down Solvency II shocks are prescribed; being in effect a parallel up shock of 1% and a non-parallel down shock increasing from 0 to minus 0.7%, both without re-applying the UFR.

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.

The table below shows the interest rate risk:

## Interest rate risk

In € millions	SRLEV	Reaal Schade <sup>1</sup>	Proteq <sup>1</sup>	VIVAT
Impact own funds interest up shock	-183	-15	-51	-257
Impact own funds 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

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 enjoy 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. Due to not re-applying the UFR and the non-parallel nature of the prescribed down scenario for calculating the SCR interest rate risk, the own funds are negatively impacted. For SRLEV the down shock is leading, whereas for VIVAT, Reaal Schadeverzekeringen and Proteq Levensverzekeringen the up shock is leading.

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 solvency is the principal factor in managing market risks.

The tables below show the sensitivity of the own funds to changes in interest rates as a result of a decrease or an increase by 1% of the interest rates, maintaining the UFR at 4.2%.

## Sensitivity own funds

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Basis +1% SII curve	-312	3	-51	-410
Basis -1% SII curve	407	-4	58	574

The tables below show the sensitivity of the Solvency II ratio to changes in interest rates as a result of a decrease or an increase by 1% of the interest rates, maintaining the UFR at 4.2%.

## Sensitivity Solvency II ratio

In %	SRLEV	Reaal Schade	Proteq	VIVAT
Basis SII curve	149%	152%	181%	175%
Basis +1% SII curve	152%	164%	115%	173%
Basis -1% SII curve	146%	139%	296%	177%

## Risk identification

The SRLEV interest rate hedging policy focuses on forms of the interest rate risk (interest rate level and interest rate volatility) that manifest themselves in the liabilities of SRLEV. SRLEV differentiates between

linear and non-linear interest rate risk. Linear interest rate risk arises when the interest rate level (parallel and non-parallel movements) changes. Non-linear interest rate risk arises from changes in interest rate level and interest rate volatility. A residual interest rate risk with respect to the SII ratio is caused by, among other things, applying the UFR methodology, the interest rate sensitivity of the SCR and the Risk Margin.

#### **Risk measurement**

The hedging policy of (legal entities of) VIVAT aims to protect the SII ratio. The extent to which the SII ratio is protected against interest rate changes is shown on the basis of metrics included in interest risk reporting (Risk Dashboard, Hedge effectiveness report). Limits have been set for a subset of these metrics. These limits specify the allowed ranges under specific scenarios that the underlying metrics may not exceed. Based on proposal from ALM&CCR the ALCO determines the required scenarios and metrics divided into triggers and indicators and the associated limits for these triggers and indicators. Limits should be submitted to the ALCO for approval. After approval, the limits are documented and will become part of the interest rate hedging policy in place. The Risk Dashboard provides an overview of all limits. These limits should comply with the established Risk Appetite framework (RAS). Based on the forms of interest rate risk, the interest rate policy is enforced by the use of derivatives and to buy assets in the investment portfolios that replicate the behavior of both the financial and insurance liabilities as closely as possible. The interest rate hedging policy of VIVAT is multi-layered approach consisting of hedging non-linear interest rate risks (bottom-up), hedging linear interest rate risks (top-down) and hedging residual interest rate risks (top-down).

#### **Risk mitigation**

The RAS provides together with the interest rate hedging policy implicitly a mandate for BSM. BSM manages interest rate risks with both top-down and bottom-up hedges. A distinction is made between two types of bottom-up hedges. The distinction is based on the fact whether ALCO approval is required or not. For top-down hedge, ALCO approval is required at all time.

#### **Risk monitoring**

The departments VR, BSM and ALM&CCR are responsible for monitoring of the interest rate risk. VR has the reporting responsibility. If changes in the interest rate risk position are required or desired, BSM has the responsibility to inform the ALCO and do a hedge proposal (which has been reviewed by ALM&CCR).

#### **Risk reporting**

A distinction is made between retrospective and prospective hedge-effectiveness. The retrospective analysis measures the effectiveness of the hedge in the reporting period. The prospective analysis measures the effectiveness of the hedge under predefined scenarios.

### **4.3.3.2. Equity risk**

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 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 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 table below shows the shock in equity value to determine the SCR:

### Shock in equity value

Type of equity	Symmetric Adjustments	Shock in equity value
SCR type 1 equity	No (strategic)	22%
	Yes	39% + symmetric adjustments
SCR type 2 equity	No (strategic)	22%
	Yes	49% + symmetric adjustments

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.

VIVAT applies the look-through approach (also known as the look-through principle in SII legislation) in determining the SCR for equity risk. The allocation to asset classes is requested for each investment fund. Investment funds for which the look-through approach is not possible should be classified as type 2 equities. This may represent no more than 20% of the total value of the assets.

The table below shows the SCR for equity risk:

### Equity risk

In € millions	SRLEV	Reaal Schade	Proteq	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>

SRLEV reports on unconsolidated basis, resulting into a reclassification 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

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.

The table below shows the SCR for property risk:

### Property risk

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Property risk SRLEV	67	-	-	103

The main difference between the 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 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.

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 and structured products. The capital requirement takes into account the market value, the modified duration and the credit quality category.

### Spread risk

In € millions	SRLEV	Reaal 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 is smaller than the SCR for spread risk of SRLEV, due to the elimination of intracompany loans. European sovereigns and sub-sovereigns are excluded from spread risk, whereas the remaining portfolio has an average credit quality step of 3 resulting in a prescribed shock comparable to a 2.5% interest rate shock.

While interest rate risk regarding the Solvency II ratio sheet is adequately matched, significant volatility remains as the credit risk profile of VIVAT differs from the profile implied by the Volatility Adjustment (VA). VIVAT has reduced the spread mismatch significantly in the second half of 2016 by selling €4.5 billion in German and Dutch government long term bonds and plans to sell more, reducing the swap spread risk (spread of government bonds versus swap). The risk is still material, in case of higher rates (spreads) for bonds, own funds are affected.

The table below shows the sensitivity of the own funds to an increase of credit spread by 0.5%, keeping the VA constant:

### Sensitivity own funds

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Credit spreads Corporate Bonds +0.5%	-86	-3	-1	-103
Credit spreads Sovereign Bonds +0.5%	-948	-13	-29	-1,004

It is important to bear in mind that the UFR of 4.2% prescribed by 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 currently evaluates the UFR and the outcome of this evaluation is uncertain. In case the regulator decides to decrease the UFR, and assuming VIVAT will not adjust its risk management, this will have a negative impact on net result, own funds and solvency position.

The table below shows the sensitivity of de Solvency II ratio to the UFR of a shock of minus 0.5%:

### Sensitivity Solvency II ratio

In %	SRLEV	Reaal Schade	Proteq	VIVAT
Basis SII curve	149%	152%	181%	175%
Impact transition to UFR minus 0.5%	135%	152%	178%	162%

#### 4.3.3.5. Concentration risk

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.

An additional 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 instrument. VIVAT and its insurance entities still holds substantial investments in German and Dutch government bonds which are excluded from concentration risk. As of 31 December 2016, the 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

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.

### Currency risk

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
Currency risk	10	1	-	11

With respect to fixed-income investments, VIVAT's policy is to permit only a very limited currency risk. As a result, the currency risk on fixed-income investments denominated in foreign currency is, in principle, hedged completely 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. Currency hedging occurs if the net exposure per currency without applying look through principle exceeds € 10 million.

The Solvency II currency exposure is determined using the look through principle regarding investment funds. This results in a slightly higher currency exposure than reported in the annual report.

#### 4.3.3.7. Diversification

Not all risks will materialise 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 2016, VIVAT, Reaal Schadeverzekeringen and Proteq Levensverzekeringen had a net balance sheet exposure to an upward interest rate shock, whereas SRLEV was exposed to a downward interest rate shock. This has led to significantly lower diversification benefits for SRLEV 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 counterparty default risk policy covers risk-mitigating contracts, such as reinsurance arrangements, securitisations and derivatives, and receivables from intermediaries, as well as any other credit exposures not covered by the definition of spread risk. It takes into account collateral or other security held by or for the account of the insurance or reinsurance undertaking and the risks associated therewith. For each counterparty, it takes into account the overall credit default risk exposure of the insurance or reinsurance undertaking concerned to that counterparty, irrespective of the legal form of its contractual obligations to that undertaking. The counterparty default risk is measured by measuring exposures on individual parties ("ultimate parent exposure") as well as on segments and countries.

#### 4.4.2. Risk management process

The Balance Sheet Management department (BSM) 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 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 2014-2016. The market price of the portfolio has increased due to declining interest rates and the purchase of a mortgage portfolio. The notional of the portfolio increased mainly due to the purchase of a mortgage portfolio, which was slightly offset due to scheduled amortisation and increasing prepayments. VIVAT has plans to originate new mortgages in 2017 which will likely increase the weighted average Loan to Value ratio.

### Mortgages by security type

In € millions <sup>1</sup>	2016
Mortgages < 75% of foreclosure value	569
Mortgages > 75% of foreclosure value	922
Mortgages with National Mortgage Guarantee	1,157
Fair value adjustment	251
<b>Total residential property in the Netherlands</b>	<b>2,899</b>

<sup>1</sup> Mortgages are recognised in the statement of financial position under investments in loans and receivables.

### 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. In 2016 the SCR CDR type 2 exposure increased mainly due to the purchase of a mortgage portfolio.

#### Counterparty default risk

In € millions	SRLEV	Reaal 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>

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. The LGD on the underlying exposures differs for the different recognised categories as listed below:

- > LGD on derivatives;
- > LGD on reinsurance policies and insurance securitisations;
- > LGD on cash at bank;
- > LGD on deposits with reinsurance undertakings;
- > LGD on legally binding commitments;
- > Citibank securities lending programme;

For a number of these categories, it is necessary to determine a risk-adjusted value of collateral which shows the post-stress market value of the collateral. The factor has been set by EIOPA at 0.85 or 0.75, depending on the conditions to be met by the collateral.

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 funds and is defined as the sum of:

- 90% of the LGD on receivables from intermediaries which have been due for more than three months;
- 15% of the LGD on the other type 2 exposures.

### **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 her 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. 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 investment 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 the indicator for the overall liquidity position of VIVAT and takes into account all available assets and the impact of an interest shock and a mass lapse. Monitoring of this buffer accounts for an important part of the daily activities of VIVAT.

## 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. The increase of the required liquidity is mainly due to the increase of derivatives to counterbalance the shortened duration of the (mainly Dutch and German government) bond portfolio. In total, the liquidity buffer is sufficient to cover a severe liquidity stress scenario.

The available assets consist of government bonds, corporate bonds and other investments (i.e. loans, deposits, equities and mortgages). The amount of available assets is adjusted (haircuts) based on eligible collateral, the level of the illiquidity of the assets and expert judgement. Utilized liquidity refers to transactions such as repurchase agreements or collateral posted.

## Liquidity buffer

In € millions	SRLEV	REAAL Schade	Proteq	VIVAT
Available assets	29,641	1,448	592	31,681
Total haircuts	-9,507	-325	-68	-9,900
Total utilized liquidity	-149	-	-	-149
<b>Available liquidity</b>	<b>19,985</b>	<b>1,123</b>	<b>524</b>	<b>21,632</b>
Required liquidity	-9,287	-137	-210	-9,635
<b>Liquidity buffer</b>	<b>10,698</b>	<b>986</b>	<b>313</b>	<b>11,997</b>

## 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	Total
SRLEV	1,639
Reaal Schadeverzekeringen	189
Proteq Levensverzekeringen	21
<b>VIVAT</b>	<b>1,849</b>

### 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 organisation 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 conviction of payment in fines, compensation, disciplinary action, imprisonment or exclusion proceedings.

Laws and regulations within scope consist a.o. 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 direct or indirect losses due to inadequate or deficient internal processes and systems, owing to inadequate action being taken, human error or external events. In this sense, operational risk is overarching in nature. It consist of Customer, Products and Business Conduct, Execution & Process Control, IT Risk, Fraud risk, Damage to physical assets, Staff & security and Model risk, monitored according to the Solvency II classification.

#### 4.6.2. Risk management process

In managing non-financial risks VIVAT follows the risk management process as set out in Section 3.4.

##### Risk identification

VIVAT systematically analyses integrity 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 consultation with the business NFR assesses the level of risk maturity (management controls), the structure and effectiveness of process controls and mitigating measures within the first line to manage the non-financial risks.

## 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 with risk reports such as an integrated incident report, the Non-Financial Risk Appetite report and the report on 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 integrity risks.

## Risk monitoring and reporting

NFR is represented in the Risk Committee Supervisory Board, the VRC, the PC and in the ORC and PMP MTs (see Section 3.4.2.5) of VIVAT. NFR monitors the implementation of laws and regulations on progress and also on design, existence and operation 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.

Each quarter NFR draws up a non-financial risk report, which provides a comprehensive overview of the major non-financial risks and incidents within VIVAT. A summary of the NFR report is included in the Risk management Function Report (RFR as mentioned in Section 3.4.2.5).

### 4.6.3. Developments

The VIVAT organisation faced a period of transition during 2016. Although this will bring new opportunities and sustainability this transition period challenged and stretched the organisation and our people and increased the risk of the materialisation of non-financial risks.

Implementing the new operating model and governance structure, strong focus on cost reduction and earnings models, job uncertainty, changes in products, methodologies and processes, the speed of required changes and cultural changes had a strong impact and influenced operational and compliance risks. These risks are addressed, managed and monitored within VIVAT to maintain a sound and controlled organisation.

### 4.6.4. Exposure to non-financial risks

During 2016 VIVAT faced challenges regarding managing and mitigating Compliance and Operational Risks. 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 effect of new policy contingents (pension and mortgage related policies) continuing media exposure, political opinion, court judgements, inaction on the part of customers and approaching deadlines. VIVAT achieved, in line with instructions from the AFM, 100% activation within the set target dates.

Owing to the great complexity of the legislation concerning Solvency II, IFRS, FATCA, ILM, Privacy 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.

Privacy risks are lurking due to new legislation both in the Netherlands and in the EU (General Data Protection Regulation) and special precautions need to be taken to avoid data breaches when personal data is transferred to third parties and especially to countries outside the EU that do not provide an adequate level of protection. 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

Based on strategic developments and choices VIVAT had chosen for an accelerated reorganisation resulting in a relatively large number of employees leaving the workforce of the company in 2016. Also in multiple parts of the organisation new (senior) management was introduced. Furthermore during 2016 VIVAT was running a number of complex projects such as Solvency II, system conversions and data management.

During 2016 VIVAT continued to invest in the development of the control environment by the strategic programmes Solvency II, Data management and ICF, resulting in improved process controls, management information, risk management policies and first line risk maturity. These improvements significantly contribute to managing the organisation.

Rationalisation of the model landscape, in which the number of models is further reduced and the reporting process is further automated, is a strategic programme executing in 2017. It contributes to a more efficient and reliable valuation of underwriting and market risks and the solvency, and leads to further reduction of model risk. Given the validation of a number of models in several segments the model risk has been further reduced in 2016. Uncertainty resulting from conversion projects has been mitigated by successful finalising or continuous monitoring, applying workarounds and a process for early provisioning in the accounts.

## Information Technology

To realise more efficiency VIVAT is busy rationalising the IT landscape. The target IT landscape has been defined, and non-target systems are being made obsolete. Beside this, the IT focus is on innovations like new and modern apps. The IT organisation is implementing the new Agile way of working, to improve on efficiency and to decrease time-to-market. VIVAT started the IT cooperation with the other European Anbang companies like Fidea and Nagelmackers to achieve synergy in IT. 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.

## 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 organisation like VIVAT. Cyber criminals are always trying to compromise financial companies, for example with ransomware. In 2016 no major incidents related to cybercrime occurred within VIVAT. Cybercrime will remain high on the agenda of the VIVAT management. Appropriate organisational and technological measures will be 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.

## Staff and security

Due to strategic developments and a new strategy a large number of employees left the workforce of the company in 2016 resulting in a relatively high staff turnover in 2016. VIVAT has been well aware of the risk involved in such a substantial change and closely monitored risks on sick leave, due to heavy workload, work-related stress and possible resistance to a changing corporate culture.

### 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. In 2016 the SCR operational risk increased, mainly due to industry wide change in calculation methodology of endowment mortgages. The technical provision for own risk is part of the calculation of the SCR operational risk.

## Operational risk

In € millions	SRLEV	Reaal Schade	Proteq	VIVAT
SCR operational risk	170	23	2	194

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.

## 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, Reaal 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 2016 of VIVAT.

## 5.1. Balance sheet

### Balance sheet at 31 December 2016

Assets	SRLEV		Reaal Schade		Proteq		Other <sup>1</sup>		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
In € millions										
Goodwill and intangible assets	-	-	-	4	-	-	-	-	-	4
Deferred tax assets	1,473	1,393	-	3	36	35	-23	-16	1,486	1,415
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>56,410</b>	<b>54,362</b>	<b>1,895</b>	<b>1,918</b>	<b>639</b>	<b>638</b>	<b>540</b>	<b>551</b>	<b>59,484</b>	<b>57,469</b>

Liabilities	SRLEV		Reaal Schade		Proteq		Other		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
In € millions										
Technical provisions	48,496	46,023	1,157	1,237	475	471	327	-114	50,455	47,617
Contingent liabilities	-	-	-	-	-	-	-	-	-	-
Provisions other than technical provisions	40	40	-	-	-	-	110	110	150	150
Pension benefit obligations	9	182	26	26	-	-	5	370	40	578
Deposits from reinsurers	96	96	23	23	-	-	-	-	119	119
Deferred tax liabilities	938	938	27	17	37	37	-13	-3	989	989
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>53,630</b>	<b>51,327</b>	<b>1,499</b>	<b>1,561</b>	<b>529</b>	<b>525</b>	<b>342</b>	<b>358</b>	<b>56,000</b>	<b>53,771</b>

**Excess of assets over liabilities<sup>3</sup>**      **2,780**    **3,035**    **396**    **357**    **110**    **113**    **198**    **193**    **3,484**    **3,698**

<sup>1</sup> This column contains eliminations due to consolidation as well as the balance sheets of VIVAT NV, Actiam NV, Zwitserleven PPI NV and of the subsidiaries of SRLEV - e.g. N.V. Pension ESC - and Reaal Schadeverzekeringen. For more details we refer to 2.1.3 Legal Structure.

<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, Reaal 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 and assumptions based on complex and subjective opinions and best estimates. 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 financial instruments is based on 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.

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.

## **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.

#### **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, fair value of which is determined based on quoted prices in an active market for the same assets.

### **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 valuation of the best estimate provision reinsurance takes into account the credit default risk. The credit default risk is based on the expected loss of reinsurance cover in case of bankruptcy of the reinsurer.

#### **Life**

The insurance risks corporate life contracts are primarily mitigated on the basis of excess-of-loss reinsurance with a retention limit. The duration of excess-of-loss reinsurance contracts is one year. According to this contracts the compensation is received if the claims exceed the retention limit. The best estimate for excess-of-loss reinsurance takes into account that VIVAT does not expect to benefit from the reinsurer. The fair value calculation of the best estimate for excess-of-loss reinsured liabilities results therefore in nihil.

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.

#### **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 receivables from reinsurance companies. 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.

#### **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 Zwitterleven 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 Zwitterleven 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 has to be 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 the most realistic estimates of the current and future developments relating to the underwriting parameters such as mortality, disability, policyholders' behavior, claims handling and all expenses (including investment costs) arising from the settlement of the insurance contracts.

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 collective Life contracts. The Individual Life contracts include savings mortgage insurance, annuities, saving 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 factors such as risk arising from mortality, longevity, costs or lapse, the best 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 six 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. Determination takes place based on the assumption that the value of the entire insurance portfolio is determined as the amount, for which an independent and well-informed third party (reference company) is willing to take over the portfolio for that value at the reporting date.

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. The rules for setting and changing these parameters are in accordance with VIVAT parameter governance.

### Non-economic

The cash flows are based on best estimate assumptions. Life underwriting parameters are mainly mortality, surrenders and disability. 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 studies must be repeated at least annually. In the assumptions no implicit margins are taken into account.

### Economic

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**

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 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. Bearing in mind short-term character of these assets, they are measured at their nominal value, since it is assumed to equal their fair value.

### **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 assets 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 strong and sustainable financial relationships 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 Reaal Schadeverzekeringen are wholly owned subsidiaries of VIVAT, VIVAT can indirectly exercise the influence on all participations of SRLEV and Reaal 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.

### **5.2.3. Subsequent events**

VIVAT is further standardizing and simplifying the organisation and business processes following the strategy. As part of this, VIVAT has decided to outsource certain of its mid and back offices services relating to asset management to a third party in the course of 2017.

VIVAT NV has priced € 650 million of senior notes in May 2017. The € 650 million senior notes have a fixed coupon at 2.375% per annum and a maturity of seven years.

VIVAT has entered into a mass lapse risk transfer agreement with an effective date of December 31, 2016. The impact has not been reflected in the SCR calculations as of year-end 2016. In May 2017 VIVAT decided on the methodology how to reflect the risk mitigating impact of this reinsurance treaty into its SCR calculations. Applying this methodology, the Solvency II ratio would have been 4%-points higher for both VIVAT and SRLEV as of year-end 2016.

## **5.3. Assets**

In case the Solvency II measurement is equal to the IFRS measurement we refer to the Annual Report of VIVAT NV.

### **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.

The following table shows a breakdown of the DTA and DTL of VIVAT:

### Breakdown of deferred tax assets and liabilities

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Deferred tax assets	1,473	-	36	-23	1,486
Deferred tax liabilities	938	27	37	-13	989
<b>Total</b>	<b>535</b>	<b>-27</b>	<b>-1</b>	<b>-10</b>	<b>497</b>

VIVAT is with her subsidiaries, SRLEV, Reaal Schadeverzekeringen, Proteq Levensverzekeringen, Zwitserleven PPI and ACTIAM are 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

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	-42	2	-	-112	-152
<b>SII tax position</b>	<b>535</b>	<b>-27</b>	<b>-1</b>	<b>-10</b>	<b>497</b>

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

In € millions	SRLEV		Reaal Schade		Proteq		Other		VIVAT	
	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS	SII	IFRS
Property (other than for own use)	142	142	-	-	-	-	132	132	<b>274</b>	<b>274</b>
Holdings in related undertakings, including participations	74	86	8	8	-	-	-75	-87	<b>7</b>	<b>7</b>
Equities	104	104	36	36	-	-	1	1	<b>141</b>	<b>141</b>
Bonds	26,290	26,269	1,403	1,403	596	596	-984	-963	<b>27,305</b>	<b>27,305</b>
Collective Investments Undertakings	1,586	1,586	195	195	-	-	315	315	<b>2,096</b>	<b>2,096</b>
Derivatives	1,061	1,061	30	30	-	-	-	-	<b>1,091</b>	<b>1,091</b>
Deposits other than cash equivalents	157	128	1	1	-	-	-	-	<b>158</b>	<b>129</b>
<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>

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.

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.

#### 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's share capital is comprised entirely of ordinary shares and Reaal Schadeverzekeringen holds an interest in those shares. CED is a claims specialist. The shares of the associate are not listed. CED is strategic to VIVAT as it helps VIVAT gain access to experience in efficient claims handling. The holdings in related undertaking, including participations are attributable to SRLEV € 74 million, Reaal Schadeverzekeringen € 8 million and Other € -75 million.

For a detailed overview of the related subsidiaries of VIVAT, SRLEV, Reaal 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 SRLEV € 104 million, Reaal Schadeverzekeringen € 36 million and € 1 million Other.

## Bonds

The table below provides a breakdown of bonds:

### Breakdown of bonds

In € millions	SRLEV	Reaal Schade	Proteq	Other	Total
Government Bonds	20,354	1,092	542	30	<b>22,018</b>
Corporate Bonds	3,640	288	54	-	<b>3,982</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>

The column 'Other' (€ -984 million) concern government bonds of ACTIAM NV (€ 30 million) and the elimination of collateralised securities (€ 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

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT	Percentage
Sovereign	20,354	1,092	542	30	22,018	81%
Corporate bonds - financial sector	2,631	188	24	-	2,843	10%
Corporate bonds - non financial sector	1,511	103	30	-	1,644	6%
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>

Government Bonds consists of bonds issued by European governments. The vast majority of the governments bond are Dutch, German Austria and France. Only a small part of the portfolio consists of bonds issued by Italy, Spain and Ireland.

Corporate Bonds consists of bonds issued by European companies which are active in different sectors (e.g. financial services, transport).

The table below provides a breakdown of bonds by rating:

### Breakdown of bonds by rating

In € millions	SRLEV	Reaal 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>

### Collective Investments Undertakings

The Collective Investments Undertakings amount to € 2,096 million and are largely consisting different investment funds among others money market funds (€ 1,311 million) and debt funds (€ 590 million). The Collective Investments Undertakings are attributable to SRLEV € 1,586 million, Reaal Schadeverzekeringen € 195 million and Other € 315 million.

### Derivatives

The table below provides a breakdown of derivatives:

### Breakdown of derivatives

In € millions	SRLEV	Reaal Schade	Proteq	Total
Call Options	174	-	-	<b>174</b>
Put Options	82	-	-	<b>82</b>
Swaps	803	30	-	<b>833</b>
Forwards	2	-	-	<b>2</b>
<b>Derivatives</b>	<b>1,061</b>	<b>30</b>	<b>-</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 € 158 million. The difference of € 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 € 14,351 million and include investments under unit-linked policies and separate investment deposits for corporate pension contracts.

The main differences of € 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 € 11,429 million. The difference of € 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 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 on 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

In € millions	SII	IFRS
Mortgages to individuals	2,899	2,648
Private loans linked to savings mortgages	6,620	5,294
Other loans and mortgages	1,906	1,660
Loans on policies	4	4
<b>Total</b>	<b>11,429</b>	<b>9,606</b>

### 5.3.6. Reinsurance recoverables

The difference of € -4 million in the reinsurance recoverables is caused by the adjustment to market value 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 Zwitterleven PPI (€ 67 million).

## 5.4. Technical provision

#### Breakdown of technical provisions

In € millions	SRLEV	Reaal Schade	Proteq	Other	Total
Beste estimate (Gross)	46,705	974	440	327	<b>48,446</b>
Risk Margin	1,791	183	35	-	<b>2,009</b>
<b>Total technical provisions (Gross)</b>	<b>48,496</b>	<b>1,157</b>	<b>475</b>	<b>327</b>	<b>50,455</b>

## 5.4.1. Technical provisions SRLEV

The table below provides an overview of the technical provisions of SRLEV.

The technical provisions of SRLEV includes a release of € 97 million from the Liability Adequacy Test. The technical provisions also include the effect of assumption adjustments, that took place in 2016 and caused an increase in insurance liabilities amounting to € 139 million. The most significant amounts correspond to the experience adjustments of mortality parameters (increase in the insurance liabilities of € 146 million), the adjustments in the parameters resulting from alignment of assumptions for miscellaneous life and disability portfolios (decrease of € 101 million), the refinements in assumptions for measurement of fair value of mortgages (increase of € 46 million) and miscellaneous adjustments in the models, mostly as a result of refinements in cost allocation model (increase of € 38 million) and projections of management fees (increase of € 26 million).

### Breakdown technical provisions Life SRLEV (Net)

In € millions	Insurance with profit participation	Index-linked and unit-linked	Other life insurance	Total
Beste 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)	15,786	14,951	15,861	<b>46,598</b>
<b>Differences</b>	<b>-4</b>	<b>256</b>	<b>1,528</b>	<b>1,780</b>

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)

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net
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	15,062
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>46,598</b>

### 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.

### Differences valuation Solvency II and IFRS

As per year-end 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 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 mortgages endowment which is at nominal value	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 Cost of Capital (CoC) is 4%	3. According to SII-requirements the CoC is 6%
	4. Risk margin based on SII-SCR, except for CAT Lapse which is as a result of internal research 37,5% lower	4. Risk margin based on SII-SCR

### 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

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

SRLEV does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

For a further explanation of Life reinsurance see section 4.2.3.3.

## 5.4.2. Technical provisions Reaal Schadeverzekeringen

Non-Life insurance contracts will compensate the insured or a third party in the event of damage caused by an uncertain event. These contracts mainly have a period of one year of coverage. The Non-Life insurance portfolio is split in three segments: Non-Life, Health non-SLT and Health SLT. The products Motor,

Transport, Fire, Liability and Others are covered within Non-Life. Income protection due to Accidents as well as Medical expenses are covered within Health Non-SLT. Disability insurance (AOV) is covered within Health SLT.

Payments to be made after the occurrence of the insured event are either fixed (eg 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 segments are measured separately and technical provisions are calculated for each homogeneous risk group. A division was made, depending on the Line of business, product and distribution channel.

### Breakdown technical provisions Non-Life (Net)

In € millions	Non-Life	Health (similar to Non-Life)	Health (similar to Life)	Total
Beste estimate (Gross)	705	18	251	974
Best estimate (Recoverable from reinsurance)	-57	-	-44	-101
<b>Best estimate (net)</b>	<b>648</b>	<b>18</b>	<b>207</b>	<b>873</b>
Risk Margin	42	2	139	183
<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	1,120
<b>Differences</b>	<b>-30</b>	<b>-</b>	<b>-34</b>	<b>-64</b>

### Breakdown technical provisions Non-Life per Line of Business (Net)

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net
Motor insurance	395	376	23	399	407
Marine, aviation and transport insurance	36	35	2	37	41
Fire and other damage to property insurance	118	107	6	113	120
General liability insurance	146	120	10	130	142
Other	10	11	1	12	10
<b>Technical provision Non-Life (excluding health)</b>	<b>705</b>	<b>649</b>	<b>42</b>	<b>691</b>	<b>720</b>
Health Non SLT	18	18	2	20	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	206	139	345	380
<b>Technical provision Health (similar to Life)</b>	<b>251</b>	<b>206</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>

## Level of Uncertainty

Uncertainty arises from risks Reaal Schadeverzekeringen is exposed to. Reaal 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.

## 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

## Impact volatility adjustment

Reaal 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 Reaal Schadeverzekeringen:

## Impact of applying volatility adjustment

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	-



Reaal Schadeverzekeringen does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

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)

In € millions	Insurance with profit-sharing	Other life insurance	Total
Beste 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>

The table below shows a breakdown of the technical provisions of Proteq Levensverzekeringen per Line of Business.

#### Breakdown technical provisions Life Proteq Levensverzekeringen per Line of Business (Net)

In € millions	Best estimate		Risk Margin	SII	IFRS
	Gross	Net	Net	Net	Net
Funeral insurance	440	440	35	475	471
<b>Total</b>	<b>440</b>	<b>440</b>	<b>35</b>	<b>475</b>	<b>471</b>

#### 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%
	4. Risk margin based on SII-SCR, except for CAT Lapse which is as a result of internal research 37,5% lower	4. Risk margin based on SII-SCR

### 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

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	-

Proteq Levensverzekeringen does not apply a risk-free yield curve and transition deductions as referred to in Article 308 of Directive 2009/138/EC.

For a further explanation of Life reinsurance see section 4.2.3.3.

## 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 2016. For further information about off-balance sheet items, see section 5.7.

Under Solvency II, VIVAT has not measured the contingent liability relating to unit-linked policies in calculating the SCR as no reliable estimate can be made of the outcome. This is consistent with measurement under IFRS.

## 5.5.2. Pension benefit obligations

### Breakdown of pension benefit obligations

In € millions	SRLEV	Reaal Schade	Other	VIVAT
Present value of defined benefit obligations	203	29	399	<b>631</b>
Fair value of plan assets	21	3	41	<b>65</b>
<b>Present value of the net liabilities</b>	<b>182</b>	<b>26</b>	<b>358</b>	<b>566</b>
Pension commitments under Technical Provisions	173	-	365	<b>538</b>
<b>IAS 19 surplus</b>	<b>9</b>	<b>26</b>	<b>-7</b>	<b>28</b>
Other employee benefit commitments	-	-	12	<b>12</b>
<b>Total</b>	<b>9</b>	<b>26</b>	<b>5</b>	<b>40</b>

### Pension benefit obligations

The net present value of the defined benefit obligations (€ 631 million) is calculated on basis of the prescribed IFRS discount rate. This differs from the Solvency II valuation. In accordance with the Solvency II valuation the insured party rights (€ 538 million) are measured against the EIOPA curve and classified under the Technical Provisions. The insured party rights are taken into account in the SCR calculation.

In the Solvency II balance sheet the present value of the total benefit obligation less the value of the insured rights and less the "plan assets", are classified under "pension benefit obligations". This is called the "IAS 19 surplus".

The table below shows the main actuarial parameters at year-end.

### The main actuarial parameters at year-end

In percentages	2016
Discount rate	1.7%
Expected salary increase	1.8%
Price inflation	1.8%

The table below shows the sensitivity of the value of the pension benefit obligation to changes in interest rates as a result of a decrease by 1% or an increase by 1%:

### Sensitivity present value of pension benefit obligations

In € millions	31 December 2016	
	Change in € millions	Change in %
Discount rate 0.7% (-1.0%)	139	22%
Discount rate 2.7% (+1.0%)	-105	-17%

### 5.5.3. Other liabilities

Within the column 'Other' under IFRS the surplus assets of ESC Pensioen N.V. (€ 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 19 Guarantees and commitments in the Annual Report VIVAT NV 2016.



## 6. Capital management

### 6.1. General

#### 6.1.1. Definition

Capitalisation refers to the extent to which VIVAT and its underlying legal entities have enough capital necessary to cover unforeseen losses and/or 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.

#### 6.1.2. Capital policy

The objective of VIVAT's 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 flexible 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 status of VIVAT in its current form. In its Risk Appetite Statements, VIVAT has defined specific triggers that determine whether a contingency situation exists. Risk Appetite Statements also exist at the level of the insurance entities. Some of these triggers relate to capital metrics and these are linked to governance and management measures. VIVAT's Capital Policy forms the basis for translating policy into lower level policy, process descriptions, procedures and the like.

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 plans 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 and supplementary information if appropriate and therefore also covers SRLEV, Reaal Schadeverzekeringen and Proteq Levensverzekeringen.

#### 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 under 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 a process under which the insurer has to evaluate its capitalisation periodically: the ORSA. A fixed part of the ORSA involves determining whether the standard model is appropriate for the needs of the insurer in question. If the standard model is not appropriate, the insurer has to develop its own models and methodologies in order to determine for itself whether its level of capitalisation is adequate. Based on the ORSA, a dialogue will take place between the insurer and the Dutch Central Bank (DNB) (in its capacity as regulator) in the context of the Supervisory Review Process (SRP). In the SRP, DNB assesses the ORSA outcomes of an insurer.

The way in which insurers have to report their 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.

## 6.2. Capital position

The supervisory authorities European Insurance and Occupational Pensions Authority (EIOPA) and the Dutch Central Bank (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 both on the consolidated level and at entity level. 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 available capital (own funds) and required capital under Solvency II are determined on the basis of information at year-end 2016. The yield curve as used at 31 December 2016, 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 Required Capital (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. This has led to the decision that 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 (DTL). In these cases tax offsetting equals the net DTL-position. The net Deferred Tax Asset on the balance sheet of VIVAT and SRLEV as at 31 December 2016 is valued at 100%. Reaal Schadeverzekeringen and Proteq Levensverzekeringen had a net Deferred Tax Liability .

The classification of the hybrid capital of VIVAT and SRLEV (outstanding on 31 December 2016) into Tier 1 and Tier 2 capital is based on the transitional measures contained in the level 1 regulations, and aligned with DNB.

## 6.2.1. Own funds

Capital requirements should be covered by own funds, irrespective of whether they are on or off balance-sheet items. It should be recognised that financial resources vary in their ability to absorb losses both in the normal course of business and more importantly in times of stress. Such resources are therefore graded into tiers that reflect that ability, with Tier 1 being the highest quality and Tier 3 the lowest. Different characteristic and features are evaluated to determine the tiering classification within own funds. With this classification depending upon whether these are basic own-fund or ancillary own-fund items.

The following table shows the breakdown of the available own funds, starting from shareholder's equity:

### Breakdown of eligible own funds

In € millions	SRLEV	Reaal 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	-57	-	-36	<b>159</b>
Other reserves	719	4	65	-1,558	<b>-770</b>
<b>Shareholders' equity</b>	<b>3,035</b>	<b>357</b>	<b>113</b>	<b>193</b>	<b>3,698</b>
Reconciliation IFRS-Solvency II	-254	39	-3	5	<b>-213</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>

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. Zwitterleven 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 2016.

#### Breakdown of issued shares

In numbers	SRLEV	Reaal Schade	Proteq	VIVAT
Authorised share capital	450	100,000	35,000	2,385
Share capital in portfolio	360	75,000	27,999	1,908
<b>Issued share capital as at December 31, 2016</b>	<b>90</b>	<b>25,000</b>	<b>7,001</b>	<b>477</b>

#### Breakdown of share capital

In € thousands	SRLEV	Reaal 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, 2016</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

In € millions	SRLEV	Reaal Schade	Proteq	Other	VIVAT
Other IFRS reserves	719	4	65	-1,558	-770
Retained earnings 2016	252	-57	-	-36	159
Reconciliation IFRS-Solvency II	-254	39	-3	5	-213
Transfer of net deferred tax assets from tier 1 to tier 3	-535	-	-	37	-498
<b>Total reconciliation reserve</b>	<b>182</b>	<b>-14</b>	<b>62</b>	<b>-1,552</b>	<b>-1,322</b>

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 Reaal Schadeverzekeringen and Proteq Levensverzekeringen.

#### Reconciliation IFRS-Solvency II

The reconciliation encompasses the following significant differences in measurement under Solvency II and under IFRS regarding own funds:



- > Intangible assets - under Solvency II goodwill is to be measured at zero. Other intangible assets can be recognised and measured at a value other than zero only if they can be sold separately and if there is a quoted market price in an active market for the same or similar intangible assets.
- > Investments - Under IFRS the deposits and loans & mortgages (including saving mortgages) are measured at amortized cost. Under Solvency II these items are measured at fair value.
- > Technical provisions - Under Solvency II the technical provisions (including provisions for saving mortgages) are measured at fair value, taking into account the current market conditions. Currently under IFRS, the technical provisions need to be presented at fair value only if the liability adequacy test results in a deficit or if the insurer chooses to measure (part of) its insurance liabilities on a fair value basis.

### 6.2.1.3. Subordinated liabilities

In Solvency II the available own funds include subordinated debt including accrued interest with regard to this debt.

#### Breakdown of subordinated liabilities

In € millions				Nominal amount (EUR)	SII Value (EUR)	First call date	Expiration date
	Issue date	Currency	Interest				
<b>&gt; VIVAT</b>							
Tier 2							
Anbang Group Holdings Co. Ltd.	2016-feb-01	EUR	7.750%	63	69	2021-feb	2026-feb
Anbang Group Holdings Co. Ltd.	2016-jul-07	EUR	7.750%	144	153	2021-jul	2026-jul
Anbang Group Holdings Co. Ltd. (US \$ 190 million)	2016-dec-28	USD	6 months LIBOR plus 6.30%	180	189	2021-dec	2026-dec
<b>Total</b>				<b>387</b>	<b>411</b>		
<b>&gt; SRLEV</b>							
Tier 1							
SRLEV NV	2011-jul-19	CHF	mid-swap plus 5.625%	98	100	2017-dec	perpetual
				<b>98</b>	<b>100</b>		
Tier 2							
SRLEV NV	2011-apr-15	EUR	9.000%	400	480	2021-apr	2041-apr
VIVAT NV	2015-dec-29	EUR	7.750%	140	151	2025-dec	2025-dec
Anbang Group Holdings Co. Ltd.	2016-feb-01	EUR	7.750%	95	104	2021-feb	2026-feb
				<b>635</b>	<b>734</b>		
<b>Total</b>				<b>733</b>	<b>834</b>		
<b>&gt; Reaal Schadeverzekeringen</b>							
Tier 2							
VIVAT NV	2015-dec-29	EUR	7.750%	80	86	2025-dec	2025-dec
VIVAT NV	2016-dec-29	EUR	6 months EURIBOR plus 5.545%	70	72	2026-dec	2026-dec
<b>Total</b>				<b>150</b>	<b>158</b>		
<b>&gt; Other (elimination)</b>							
<b>Total</b>				<b>-290</b>	<b>-309</b>		
<b>Total</b>				<b>980</b>	<b>1,094</b>		

#### Tier 1

In July 2011, SRLEV 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. 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 and its policyholders 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%.

## Tier 2

In April 2011, SRLEV issued € 400 million in subordinated bonds maturing in 2041.

On 31 December 2015 the subordinated private loans comprised two perpetual loans of € 207 million and € 95 million. Both loans were issued by SRH NV (former SNS REAAL NV) and had an average interest rate of 7.1%. At the beginning of 2016, the perpetual loan of € 95 million has been fully repaid while on the perpetual loan of € 207 million, € 63 million has been repaid. Two new subordinated private loans of € 95 million and € 63 million have been issued by Anbang Group Holdings Co. Limited.

In July 2016 the remaining subordinated loan of € 144 million issued by SRH NV has been fully repaid by VIVAT. For this repayment a new subordinated private loan of € 144 million has been issued to VIVAT by Anbang Group Holdings Co. Limited. The new subordinated private loans have an interest rate of 7.75% and the earliest repayment date is in 2026 (first callable after 5 years). This repayment had been included in the arrangement between VIVAT, SRH and Anbang Group Holdings Co. Limited about the transfer of pension obligations, see Note 20 Related parties (Transactions with former intra-group companies) of the Annual Report of VIVAT NV for details.

On 28 December 2016 Anbang Group Holdings Co. Ltd. issued a Solvency II Tier 2 Capital subordinated private loan of \$ 190 million. This subordinated private loan bears an interest of 6-months LIBOR plus 6.3% and its earliest year of repayment is 2026 (first callable after 5 years).

## 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	2,985	100	995	239	4,319
Eligible own funds to meet the Group MCR	2,958	100	233	-	3,291

## Breakdown of tiering SRLEV

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR	2,246	100	734	344	3,424
Eligible own funds to meet the MCR	2,246	100	206	-	2,552

## Breakdown of tiering Reaal Schadeverzekeringen

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR	396	-	158	-	554
Eligible own funds to meet the MCR	396	-	23	-	419

## Breakdown of tiering Proteq Levensverzekeringen

In € millions	Tier 1		Tier 2	Tier 3	Total
	Unrestricted	Restricted			
Eligible own funds to meet the SCR	110	-	-	-	110
Eligible own funds to meet the MCR	110	-	-	-	110

## Tiering restriction

The use of Own funds of different tiers is subject to certain limits (from EIOPA) 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 causes a difference between the Available Own Funds and the Eligible Own Funds.

## Eligible own funds

In € millions	SRLEV	Reaal 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 2.3;
- > 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) recently 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 2016.

### 6.3. Solvency Capital Requirement and Minimum Capital Requirement

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 2016 the solvency II ratio increased with 14% from 161% to 175%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Positive highlights:

- > Release of the risk margin of pension obligations.
- > A decrease of SCR mainly due to a decrease of the market risk (interest rate sensitivity changed from an interest rate down-shock to an interest rate up-shock per 31/12/16, this leads to a higher diversification effect).
- > Positive spread results on the majority of our bond portfolio.
- > Equity and mortgages provided excess returns.
- > In 2016, a subordinated loan was added at VIVAT level (nominal value 182 million). Additionally, taking the accrued interest into account caused an increase of the market value of the subordinated

loans. Part of the increase was offset by the tiering restrictions regarding subordinated loans. Re-risking will lead to a higher Solvency Capital Requirement and will loosen the tiering restrictions.

Negative highlights:

- > New mortality tables lead to lower predicted profits.
- > Restructuring costs.
- > Unwinding of the Ultimate forward rate.
- > Negative carry on high quality government bonds (NL and DE).
- > A decrease of the volatility adjustment from 22 to 13 bp.

Following from the capital injection in 2015 and the strategic review evolving in a new Operational Plan, Vivat is currently changing its risk profile taking into account its Risk Appetite. Supported by ORSA outcomes, Vivat aims to work towards a new Strategic Asset Allocation which leads to more expected return. In order to mitigate underwriting risks, VIVAT has entered into a mass lapse risk transfer agreement which has not yet been included in our Solvency II ratio. Furthermore, VIVAT reduced the spread mismatch between assets (mainly German and Dutch government bonds) and liabilities (mainly swap plus Solvency II Volatility Adjustment) significantly in the second half of 2016 by selling € 4.5 billion in German and Dutch government long term bonds and plans to sell more. At the end of 2016, Anbang provided VIVAT with a subordinated Tier 2 loan, Vivat provided Reaal Schadeverzekeringen with a subordinated Tier 2 loan.

The table below shows a breakdown of the ratio of VIVAT.

### Ratio VIVAT

In € millions	VIVAT
SCR	2,466
MCR	1,163
Ratio of Eligible own funds to Group SCR	175%
Ratio of Eligible own funds to Group MCR	283%

### 6.3.2. SRLEV

In 2016 the solvency II ratio increased with 9% from 140% to 149%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Positive highlights:

- > Release of the risk margin of pension obligations.
- > A slight decrease of SCR mainly due to a decrease of the market risk (interest rate risk decreased, slightly offset by an increase of spread risk), this was slightly offset by an increase of the SCR for Credit Default Risk.
- > Positive spread results on the majority of our bond portfolio.
- > Equity and mortgages provided excess returns.
- > Taking the accrued interest into account caused an increase of the market value of the subordinated loans

Negative highlights:

- > New mortality tables lead to lower predicted profits.
- > Restructuring costs.
- > Unwinding of the Ultimate forward rate.
- > Negative carry on high quality government bonds (NL and DE).
- > A decrease of the volatility adjustment from 22 to 13 bp.

The table below shows a breakdown of the ratio of SRLEV.

### Ratio SRLEV

In € millions	SRLEV
SCR	2,295
MCR	1,033
Ratio of Eligible own funds to Group SCR	149%
Ratio of Eligible own funds to Group MCR	247%

### 6.3.3. Reaal Schadeverzekeringen

In 2016 the solvency II ratio increased with 10% from 142% to 152%.

The most important highlights (both positive and negative) that explain the increase of the Solvency II ratio are:

Positive highlights:

- > Release of the risk margin.
- > Positive spread results on the majority of our bond portfolio.
- > Vivat provided Reaal Schadeverzekeringen NV with a subordinated Tier 2 loan.

Negative highlights:

- > Operational result.
- > Increase of the Solvency Capital Requirement mainly due to an increase of the SCR health.
- > Negative carry on high quality government bonds (NL and DE).
- > A decrease of the volatility adjustment from 22 to 13 bp.

The table below shows a breakdown of the ratio of Reaal Schadeverzekeringen.

### Ratio Reaal Schadeverzekeringen

In € millions	Reaal Schade
SCR	365
MCR	116
Ratio of Eligible own funds to Group SCR	152%
Ratio of Eligible own funds to Group MCR	362%



### 6.3.4. Proteq Levensverzekeringen

The Solvency II ratio of Proteq Levensverzekeringen decreased from 461% to 181%. The two main drivers were a cost model update and a more than doubled Solvency Capital Requirement, mainly due to SCR interest rate risk. The SCR interest rate sensitivity will be adapted by adjusting the underlying assetmix to increase the Solvency II ratio.

The table below shows a breakdown of the ratio of Proteq Levensverzekeringen.

#### Ratio Proteq Levensverzekeringen

In € millions	Proteq
SCR	61
MCR	15
Ratio of Eligible own funds to Group SCR	181%
Ratio of Eligible own funds to Group MCR	725%

### 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.

# 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	Total assets	Excess of assets over liabilities
SRLEV N.V.	NL	NV	100%	Full consolidation	57,872	2,781
Reaal Schadeverzekeringen N.V.	NL	NV	100%	Full consolidation	1,793	396
Proteq Levensverzekeringen N.V.	NL	NV	100%	Full consolidation	639	110
Zwitslerleven PPI N.V.	NL	NV	100%	Sectoral rules	71	2
ACTIAM N.V.	NL	NV	100%	Sectoral rules	59	26
Fnidsen Beheer B.V.	NL	BV	100%	Full consolidation	-4	-4
Bemiddelingskantoor Nederland B.V. <sup>1</sup>	NL	BV	100%	Full consolidation	4	-4
						<b>3,307</b>

<sup>1</sup> Bemiddelingskantoor Nederland B.V. is a subsidiary of Fnidsen 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	Total assets	Excess of assets over liabilities
Empresa B.V.	NL	BV	100%	Adjusted equity method	5	-4
GVR 500 Building B.V.	NL	BV	100%	Adjusted equity method	80	21
GVR 500 Parking B.V.	NL	BV	100%	Adjusted equity method	1	1
N.V. Pensioen ESC	CW	NV	100%	Adjusted equity method	330	0
REAAL DeRuyterkade B.V.	NL	BV	100%	Adjusted equity method	23	17
REAAL Kantoren I B.V.	NL	BV	100%	Adjusted equity method	3	1
REAAL Landbouw I B.V.	NL	BV	100%	Adjusted equity method	5	5
REAAL Winkels I B.V.	NL	BV	100%	Adjusted equity method	13	10
REAAL Winkels II B.V.	NL	BV	100%	Adjusted equity method	11	9
REAAL Wognumsebuurt B.V.	NL	BV	100%	Adjusted equity method	13	9
REAAL Woningen I B.V.	NL	BV	100%	Adjusted equity method	8	5
						<b>74</b>
Princenhof Staete Driebergen B.V.	NL	NV	100%	Adjusted equity method	2	1
REAAL Landbouw II B.V.	NL	BV	100%	Adjusted equity method	5	5
REAAL Landbouw III B.V.	NL	BV	100%	Adjusted equity method	5	5
						<b>11</b>
						<b>86</b>

## Related subsidiaries Reaal Schadeverzekeringen NV

Reaal Schadeverzekeringen NV owns the following material related undertakings:

### Related subsidiaries

In € millions	Country	Legal form	% capital share	Treatment of the undertaking	Total assets	Excess of assets over liabilities
CED Holding B.V.	NL	BV	23%	Adjusted equity method	18	7
W. Haagman & Co B.V.	NL	BV	100%	Adjusted equity method	1	1
Nieuw Rotterdam Knight Schippers	NL	BV	100%	Adjusted equity method	-	-
Volmachtkantoor Nederland B.V.	NL	BV	100%	Adjusted equity method	-	-
						<b>8</b>

# ANNEX II

## Disclosure QRT's VIVAT NV

### Table of content Disclosure QRT's VIVAT

1	Balance Sheet
2	Impact of long term guarantees measures and transitionals
3	Own Funds
4	Solvency Capital Requirement - for groups on Standard Formula
5	Undertakings in the scope of the group _deel I
6	Undertakings in the scope of the group _deel II

The disclosure QRT's of VIVAT NV are publiced separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's SRLEV NV

### Table of content Disclosure QRT's SRLEV NV

1	Balance Sheet
2	Premiums, claims and expenses by line of business
3	Premiums, claims and expenses by country
4	Life and Health SLT Technical Provisions - Best Estimate by country
5	Impact of long term guarantees measures and transitionals
6	Own Funds
7	Solvency Capital Requirement - for undertakings on Standard Formula
8	Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of SRLEV NV are publiced separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's Reaal Schadeverzekeringen NV

### Table of content Disclosure QRT's Reaal Schadeverzekeringen NV

1	Balance Sheet
2	Premiums, claims and expenses by line of business
3	Premiums, claims and expenses by country
4	Life and Health SLT Technical Provisions - Best Estimate by country
5	Non - life Technical Provisions
6	Non-life Insurance Claims Information
7	Impact of long term guarantees measures and transitionals
8	Own Funds
9	Solvency Capital Requirement - for undertakings on Standard Formula
10	Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of Reaal Schadeverzekeringen NV are publiced separately on <https://vivat.nl/investors/financial-reports>.

## Disclosure QRT's Proteq Levensverzekeringen NV

### Table of content Disclosure QRT's Proteq Levensverzekeringen NV

1	Balance Sheet
2	Premiums, claims and expenses by line of business
3	Premiums, claims and expenses by country
4	Life and Health SLT Technical Provisions - Best Estimate by country
5	Impact of long term guarantees measures and transitionals
6	Own Funds
7	Solvency Capital Requirement - for undertakings on Standard Formula
8	Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity

The disclosure QRT's of Proteq Levensverzekeringen NV are publiced separately on <https://vivat.nl/investors/financial-reports>.

