

# SOLVENCY AND FINANCIAL CONDITION REPORT

This report is the Solvency and Financial Condition Report (SFCR) of AXA Assurances Vie Luxembourg for the reporting period ended December 31, 2017, pursuant to article 51 of the Directive 2009/138/EC and articles 290 to 298 of the Delegated Regulation 2015/35.

## CERTAIN PRELIMINARY INFORMATION ABOUT THIS SFCR REPORT

### Presentation of the information

In this Report unless provided otherwise, (i) the “Company”, and/or “AXA Assurances Vie Luxembourg” refer to AXA Assurances Vie Luxembourg S.A., a “société anonyme” organized under the laws of Luxembourg, which is an indirect subsidiary of AXA SA, the publicly traded parent Company of the AXA Group, and (ii) “AXA Group” and/or the “Group” refer to AXA SA together with its direct and indirect consolidated subsidiaries.

## SUMMARY

In recent years, the European Union has developed a new regulatory regime for European insurers which finally became effective on January 1, 2016, following the adoption of the 2009 Solvency II Directive on the taking-up and pursuit of the business of insurance and reinsurance, as amended in 2014 by the 2014/51/EU Directive (“Omnibus II”). The regime is designed to implement solvency requirements that better reflect the risks that insurance companies face and deliver a supervisory system that is consistent across all European member States. The Solvency II framework is based on three main pillars: (1) Pillar 1 consists of the quantitative requirements around own funds, valuation rules for assets and liabilities and capital requirements, (2) Pillar 2 sets out qualitative requirements for the governance and risk management of insurers, as well as for the effective supervision of insurers including the requirement for insurers to submit an Own Risk and Solvency Assessment (ORSA) which will be used by the regulator as part of the supervisory review process; and (3) Pillar 3 focuses on enhanced reporting and disclosure requirements. The Solvency II framework covers, among other matters, valuation of assets and liabilities, the treatment of insurance groups, the definition of capital and the overall level of required capital.

### / Key Figures

<i>(In Euro million except solvency ratio data)</i>	2017	2016
<b>Income Statement Data</b>		
Total Revenues	116,0	99,1
Operating income	8,1	8,4
Net income	6,4	6,3
<b>Balance Sheet Data</b>		
Total assets	1 112,4	1 163,3
Available capital	98,4	98,7
<b>Capital Requirement Data</b>		
Solvency Capital Requirement (SCR)	47,7	43,9
<b>Solvency II ratio</b>	<b>206%</b>	<b>225%</b>

## / Key Highlights

<p style="text-align: center;"><b>ACTIVITY INDICATORS</b></p>	<p><b>Total Revenues</b> amounts to € 116.0 million increased by 17.1% mainly due to a good dynamism in Group lines (single premiums and portfolio transfers).</p> <p><b>Total operating income</b> amounts to € 8.1 million thanks to the net technical and investment margins and higher fees and revenues.</p> <p><b>Total net income</b> amounts to € 6.4 million (€ 6.3 million in 2016) mainly attributable to the lower taxes which were driven by a lower tax rate.</p> <p>In the statutory accounts, the net income of 2017 amounts to € 6.4 million. This net income and an additional amount of € 5.9 million from the other reserves will be entirely distributed thanks to the company's solid capital structure. Therefore, the dividends to be distributed in 2018 amounts to € 12.3 million.</p>
<p style="text-align: center;"><b>SYSTEM OF GOVERNANCE</b></p>	<p>The system of governance organized by the Board of Directors is supported by 3 committees: the executive committee chaired by the CEO, the audit committee and the remuneration committee.</p> <p>In addition, dedicated committees and key functions (compliance, risk management, audit &amp; actuarial functions) are supporting the governance of the company:</p> <ul style="list-style-type: none"> <li>▪ the risk committee including the executive committee members and the CRO, and</li> <li>▪ the ALM committee.</li> </ul>

**RISK PROFILE**

This section describes the elements of risk profile and the process allowing following and monitoring the risk profile. Cartography of risk was defined by Group AXA and is followed by AXA Assurances Vie Luxembourg. Financial and insurance risks are assessed on the basis of the Standard Formula which is globally in adequacy with the risk profile of AXA Assurances.

The main items concerning the risk profiles at AXA Assurances Vie Luxembourg are :

**Risks relating to the scope and nature of our business, the products we offer and our operations**

Insurance risks for Life and Saving businesses are covered through three major processes:

- risk controls on new product via the local Product Approval Process framework;
- optimizing of reinsurance strategies in order to cap AXA Assurances Vie Luxembourg's peak exposures thereby protecting its solvency by reducing volatility;
- reviewing technical reserves;

**Risks relating to the financial markets and financial position**

AXA is exposed to financial market risks through its core business of financial protection (i.e. insurance and asset management) and through the financing of its activities as part of its equity and debt management.

A variety of risk management techniques are used to control and mitigate the market risks to which AXA Assurances Vie Luxembourg is exposed. These techniques include: Asset & Liability Management (ALM), disciplined investment process, regular monitoring of the financial risks on the economic and solvency position.

**Risks relating to the Operational losses**

- A risk dashboard is updated each quarter and presented to the executive committee. It allows to define the priorities in terms of action plans to mitigate the operational risks of the company.

<b>VALUATION</b>	<p>AXA Assurances Vie Luxembourg's Solvency II balance sheet is prepared as of December 31. The balance sheet is prepared in compliance with the Solvency II Regulation.</p> <p>Assets and liabilities are valued based on the assumption that the Company will pursue its business as a going concern.</p> <p>The Solvency II balance sheet only includes the value of business in force and therefore only presents a partial view of the value of the Company.</p> <p>Technical provisions are recognized with respect to all of insurance and reinsurance obligations towards policyholders and beneficiaries of insurance or reinsurance contracts. The value of technical provisions corresponds to the current amount that the Company would have to pay if it was to transfer its insurance and reinsurance obligations immediately to another insurance or reinsurance undertaking.</p> <p>Other assets and liabilities are recognized in compliance with IFRS standards and interpretations of the IFRS Interpretations Committee that are endorsed by the European Union before the balance sheet date with a compulsory date of January 1, 2016, provided that those standards and interpretations include valuation methods that are in accordance with the following market consistent valuation approach set out in Article 75 of the Solvency II Directive 2009/138/EC:</p> <ul style="list-style-type: none"> <li>■ Assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction;</li> <li>■ Liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction (without adjustment to take account of the Company own credit standing).</li> </ul> <p>There are no material changes to the valuation for Solvency purposes over the reporting period.</p>
<b>SOLVENCY</b>	<p><b>Solvency II ratio</b> at December 31, 2017:</p> <p><b>Solvency II ratio</b> amounted to 206%, decreased by 18 points as compared to December 31, 2016.</p> <p><b>Available Financial Resources</b> decreased by € 0.3 million to € 98.4 million, during the reporting period.</p> <p><b>Solvency Capital Requirement</b> increased by € 3.8 million to € 47.7 million, during the reporting period.</p>

A

# BUSINESS AND PERFORMANCE

## A.1 Business

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Major Shareholders & related parties  
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Investments in securitization

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Leasing Arrangements

## A.5 Any other information

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# A.1 BUSINESS

## / General Information

AXA Assurances Vie Luxembourg was incorporated on 29 December 1995 as a result of the split of the company AXA Assurances Luxembourg into two companies: AXA Assurances Luxembourg and AXA Assurances Vie Luxembourg.

The company AXA Assurances Vie Luxembourg S.A. is owned by AXA Luxembourg S.A., a financial holding company (SOPARFI) in Luxembourg. The shareholder of this holding company is AXA Holdings Belgium, a Belgian company.

The Company belongs to the AXA Group, a worldwide leader in financial protection.

The financial statements of the Company are prepared and published in Local GAAP (Lux GAAP) and are also prepared in IFRS for the consolidated financial statements of the AXA Group, 25, Avenue Matignon, F-75008 Paris.

## / Information on the Company

AXA Assurances Vie Luxembourg is a Luxembourg société anonyme (a corporation) existing under the laws of Luxembourg. The Company's registered office is located at 1, place de l'Etoile, L-1479 Luxembourg, Luxembourg and its telephone number is +352 44 24 24 1.

## Supervisory authority

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The "Commissariat aux Assurances" is the Luxembourg official body of supervision of the insurance sector.

The legislature has entrusted to the "Commissariat aux Assurances" several missions, including the review of applications for approval of the business of insurance, reinsurance and insurance intermediaries (agents and brokers) ; prudential supervision of these same companies and people; assistance to international and European meetings for the development of common standards and the development of draft laws and regulations on the insurance industry and coordinate the efforts of the Government for orderly expansion of the activities of the insurance sector in the Grand-Duchy of Luxembourg.

The official organ has its offices at 7 Boulevard Joseph II, 1840 Luxembourg.

AXA Group is engaged in regulated business activities on a global basis through numerous operating subsidiaries and the Group's principal business activities of insurance and asset management are subject to comprehensive regulation and supervision in each of the various jurisdictions where the Group operates. Given that the AXA Group is headquartered in Paris, France, this supervision is based to a significant extent on European Union directives and on the French regulatory system. The AXA Group's principal supervisor is the French Autorité de Contrôle Prudentiel et de Résolution ("ACPR").

AUTORITE DE CONTROLE PRUDENTIEL ET DE RESOLUTION

61, rue Taitbout – 75436 Paris Cedex, 9.

## Statutory auditors

AXA Assurances Vie Luxembourg's accounts are audited by PricewaterhouseCoopers, cooperative society, 2, street Gerhard Mercator B.P. 1443 L-1014 Luxembourg, represented by Claude Jacoby, partner.

Membership in a professional body:

PricewaterhouseCoopers is registered as an independent auditor and their mission is carried out in accordance with the International Standards on Auditing ("ISA") as adopted for Luxembourg by the Commission of Supervision of the Financial Sector (the "CSSF") as well as the Luxembourg legislation, professional standards adopted by the CSSF and the professional standards issued by the IRE ("Institut des réviseurs d'entreprises").

## / Major Shareholders & related parties

### Capital ownership

The subscribed capital of the company AXA Assurances Vie Luxembourg S.A. amounts to € 28.5 million represented by 92.874 shares without par value and the amount of € 19.2 million is paid-up.

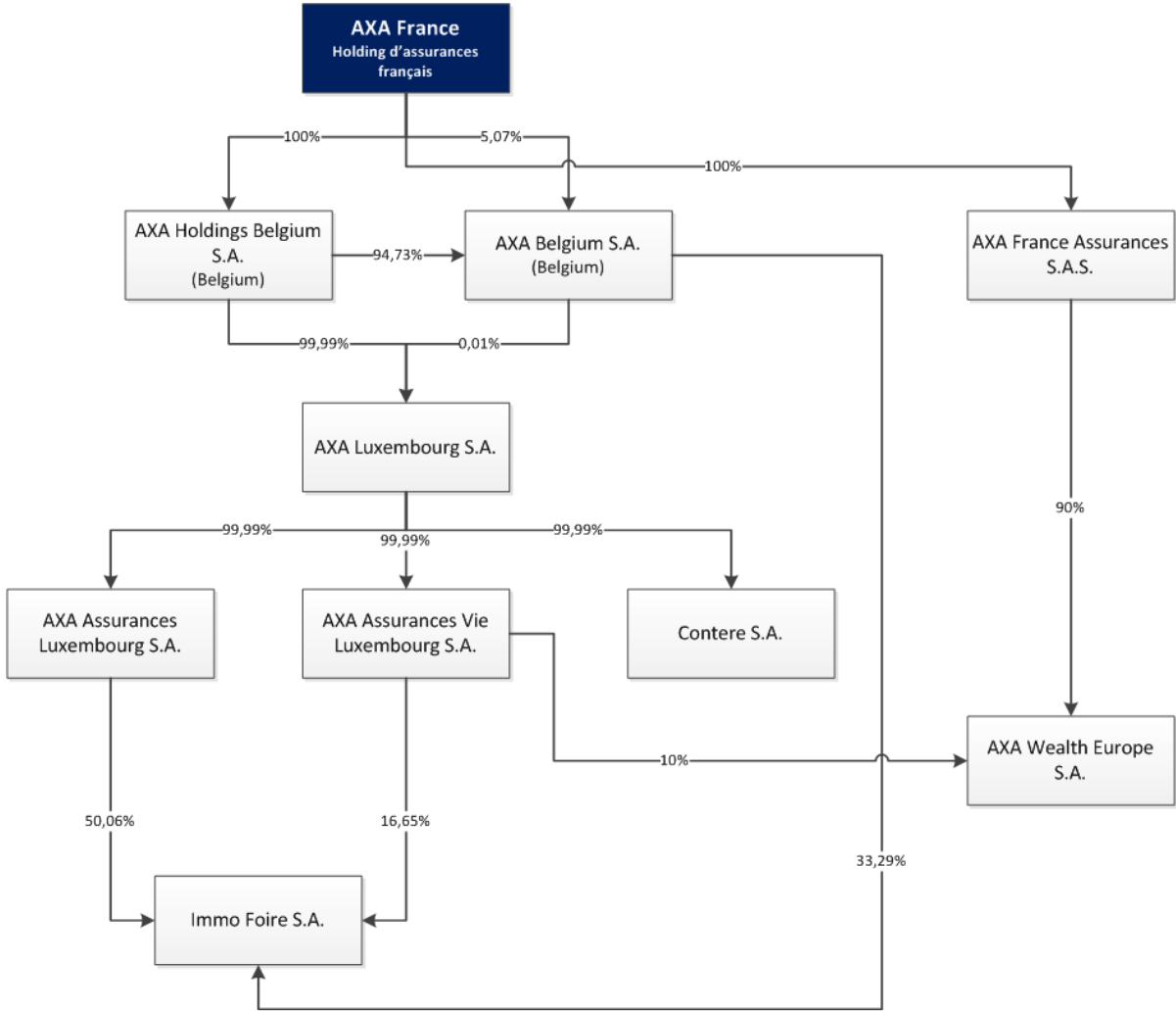
The table below summarizes the ownership of its issued outstanding ordinary shares on December 31, 2017:

	Number of shares	% of capital ownership	% of voting rights
AXA Luxembourg S.A.	92,873	99,99%	99,99%
AXA Assurances Luxembourg S.A.	1	0.01%	0.01%
<b>TOTAL</b>	<b>92,874</b>	<b>100%</b>	<b>100%</b>

### Material related companies

Parent and Holding Companies	Legal Form	Country	December 31, 2017		December 31, 2016	
			Voting rights percentage	Ownership Interests	Voting rights percentage	Ownership Interests
AXA Luxembourg S.A.	Société anonyme	Luxembourg	Parent Company		Parent Company	
Immo Foire S.A.	Société anonyme	Luxembourg	16.65	16.65	16.65	16.65
AXA Wealth Europe	Société anonyme	Luxembourg	10.00	10.00	10.00	10.00

Group structure



**/ Business Overview**

**MARKETS AND COMPETITION**

The company AXA Assurances Vie Luxembourg operates on the Luxembourg market and in the European countries.

Most of the products for individual clients are offered on the Luxembourg market but some saving products are also sold in neighboring countries.

On the international market, the company AXA Assurances Vie Luxembourg continues to develop the product "Joint Mobile Offer", offering retirement coverage and protection for mobile workers and expatriates of European based multinational companies. It is a development aligned with the strategy of the Group AXA on the expatriates market.



## **PRODUCTS AND SERVICES**

AXA Assurances Vie Luxembourg's products include a broad range of Investment & Savings products as well as Protection products marketed to individual and commercial clients. The Life & Savings products offered include Term life, Whole life, annuities and other investment-based products.

Suitable offers are provided for each segment with advice and tailored services.

## **DISTRIBUTION CHANNELS**

AXA Assurances Vie Luxembourg distributes its products through exclusive and nonexclusive channels. Proprietary channels include exclusive agents and direct sales. Non-proprietary channels include brokers, independent financial advisors and partnerships.

AXA's distribution strategy focuses on strengthening traditional channels and developing new ones, such as direct selling and partnerships. Staff hiring, retention of veteran staff, professionalism and commercial performance are the main initiatives to strengthen traditional distribution channels. To serve increasingly sophisticated and demanding customers, AXA believes that the diversification of its distribution channels through the development of new channels improves opportunities for increased penetration and more frequent contact with AXA's target customer base.

# **/ Significant Business and Other Events**

## **SIGNIFICANT ACQUISITIONS**

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The company AXA Assurances Vie Luxembourg has not acquired significant interests during the year ended December 31, 2017.

## **SIGNIFICANT DISPOSALS**

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The company AXA Assurances Vie Luxembourg has no significant disposals at 31 December 2017.

## **CAPITAL OPERATION**

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The company AXA Assurances Vie Luxembourg did not have any significant capital transactions in 2017.

# A.2 UNDERWRITING PERFORMANCE

## / Aggregate underwriting performance

### Operating income and expenses

<i>(in Euro million except percentages)</i>	December 31, 2017	December 31, 2016
<b>Gross revenues</b>	<b>132,9</b>	<b>118,2</b>
Investment margin	6,8	6,5
Fees & revenues	7,9	7,5
Net technical margin	9,3	6,7
Expenses	-15,8	-12,3
Other operating	-	-
<b>Operating income</b>	<b>8,1</b>	<b>8,4</b>

#### Investment margin

The Investment margin increased by € 0.3 million due to a good performance of the portfolio.

#### Fees & revenues

Fees & Revenues increased by € 0.4 million to € 7.9 million due to an increase in loadings on premiums and in risk premiums.

#### Net technical margin

Net technical margin improved to € 9.3 million, up by € 2.6 million due to the fact that 2016 included an additional provision for interest rate risk.

#### Expenses

Operating expenses increased by € 3.5 million mainly linked to a material increase of commissions paid due to additional new business.

## / Underwriting performance by geographical area

The table below summarizes AXA Assurances Vie Luxembourg's gross revenues by geographic region for the periods and at the dates indicated:

### Gross revenues by geographical area

<i>(in Euro million except percentages)</i>	2017		2016	
Luxembourg	57,7	43%	58,8	50%
Belgium	2,6	2%	2,3	2%
France	9,6	7%	23,5	20%
Other countries of the European Union	7,9	6%	6,2	5%
Others	55,1	41%	27,5	23%
<b>TOTAL</b>	<b>132,9</b>	<b>100%</b>	<b>118,2</b>	<b>100%</b>

## / Underwriting performance by product line

The table below presents gross revenues by major product line:

### Gross revenues by product line

<i>(in Euro million except percentages)</i>	2017		2016	
<b>Individual Life</b>				
Wealth Management	1,5	1%	17,4	15%
Investments	4,6	3%	15,2	13%
Savings	14,1	11%	11,3	10%
Savings & Protection	7,0	5%	6,8	6%
Protection	11,1	8%	9,4	8%
<b>Group Life</b>				
Savings	78,7	59%	43,3	37%
Protection	16,0	12%	14,8	12%
<b>TOTAL</b>	<b>132,9</b>	<b>100%</b>	<b>118,2</b>	<b>100%</b>

**Gross revenues** increased by € 14.7 million (+12.4%) to € 132.9 million.

■ *Personal lines* (29% of gross revenues) decrease by 36% to € 38.3 million:

The classic savings products grew by 24.6% compared to 2016 despite the low technical rate. Mixed products combining savings and protection slightly grew compared to 2016 and Protection products increased by 18.1%.

Investments products amounted to € 4.6 million (against € 15.2 million in 2016) mainly driven by Borea 30 Neo replacing the Borea 30 product since July 2016.

AXA Assurances Vie Luxembourg also issued € 1.5 million of premiums related to the Wealth Management activity that was transferred on July, 1<sup>st</sup> 2017.

■ *Commercial lines* (71% of gross revenues) were up 63.0% to € 94.7 million:

The Company is a key player in the local market with a 11.5% growth. On the international market, turnover grew by 95.0% as a result of the development of the product "Joint Mobile Offer" offering retirement coverage and protection for mobile workers and expatriates of European based multinational companies (single premiums, portfolio transfers and new business).

# A.3 INVESTMENT PERFORMANCE

## / Net investment result

Net investment result from the financial assets of the company AXA Assurances Vie Luxembourg before deduction of policyholders' crediting rates and participation was as follows:

<i>(In Euro million)</i>	December 31, 2017				
	Net investment income	Net realized gains and losses	Change in investments impairment	Net investment result	Investment management expenses
Investment in real estate properties	0,71			0,71	0,04
Debt instruments	21,66	0,10		21,76	1,10
Equity instruments	0,68	0,82	-0,05	1,46	0,03
Investment funds	0,18			0,18	0,01
Loans	0,99			0,99	0,05
Other	-1,64	-6,60		-8,24	-
Assets backing contracts where the financial risk is borne by policyholders				5,32	-
<b>TOTAL</b>	<b>22,58</b>	<b>-5,68</b>	<b>-0,05</b>	<b>22,16</b>	<b>1,23</b>

<i>(In Euro million)</i>	December 31, 2016				
	Net investment income	Net realized gains and losses	Change in investments impairment	Net investment result	Investment management expenses
Investment in real estate properties	0,60		-0,01	0,59	0,03
Debt instruments	22,46	-0,11		22,35	1,20
Equity instruments	0,73	0,92	-0,13	1,52	0,04
Investment funds	0,22			0,22	0,01
Loans	0,99			0,99	0,05
Other	-1,66	-0,22		-1,87	-
Assets backing contracts where the financial risk is borne by policyholders				1,71	-
<b>TOTAL</b>	<b>23,35</b>	<b>0,60</b>	<b>-0,14</b>	<b>25,51</b>	<b>1,34</b>

The net investment income decreased compared to 2016 due to the impact of the low rate environment partially compensated by the growth of the insurance portfolio.

On December 31st 2017, net realized losses and negative exchange rate differences amounted to € 5.68 million.

Net investment income is presented net of impairment charges on directly-owned investment properties, and net of amortization of debt instruments premiums/discounts.

All investment management fees are also included in the aggregate figure.

Net realized gains and losses and valuation of investments at market value through profit or loss consists mainly of adjustments relating to investments backing contracts where the financial risk

is borne by policyholders which are offset by an adjustment of related policyholders reserves, as there is a full pass through of the performance of held assets to the individual contract holder.

**The changes in investments impairment for financial assets** include impairment charges on investments, and releases of impairment only following revaluation of the recoverable amount. Write back of impairment following investment sales are included in the net realized capital gains or losses on investments aggregate.

## **/ Gains and losses directly recognized in Equity**

In the statutory accounts of AXA Assurances Vie Luxembourg no gains or losses were directly recognized in equity.

## **/ Investments in securitization**

AXA Assurances Vie Luxembourg has no investments in securitization.

# A.4 PERFORMANCE OF OTHER ACTIVITIES

## / Net income

The following tables present the net income of the Company for the periods indicated.

<i>(in Euro million)</i>	December 31, 2017	December 31, 2016
<b>Gross revenues</b>	<b>132,9</b>	<b>118,2</b>
Investment margin	6,8	6,5
Fees & revenues	7,9	7,5
Net technical margin	9,3	6,7
Expenses	-15,8	-12,3
Other operating	-	-
Income tax expenses/benefits	-1,7	-2,1
Other income / expenses	-	-
<b>NET INCOME</b>	<b>6,4</b>	<b>6,3</b>

**Income tax expenses** decreased by € 0.4 million (-20.0%) to € 1.7 million mainly due to a lower tax rate.

**Net income** increased by € 0.1 million to € 6.4 million mainly due to the increase in net technical margin, fees and revenues, mitigating higher expenses.

## / Leasing arrangements

The Company AXA Assurances Vie Luxembourg has one material leasing arrangement:

- Operational leasing of the building for its head office

## A.5 ANY OTHER INFORMATION

Not applicable



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# SYSTEM OF GOVERNANCE

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

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Governance  
Compensation policy  
Stock options  
International Performance Shares  
Commitments made to executive officers  
Material transactions with shareholders, persons who exercise a significant influence and corporate officers or executives  
Assessment of the adequacy of the system of governance

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## B.2 Fit and proper requirements

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Fit and Proper assessment process for the persons who effectively run the undertaking and heads of key functions

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## B.3 Risk management system including the own risk and solvency assessment

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Risk management system  
Own Risk and Solvency Assessment

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## B.4 Internal control system

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Internal control system

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## B.5 Internal audit function

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Internal audit function

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## B.6 Actuarial function

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Actuarial function

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## B.7 Outsourcing

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Outsourcing arrangements

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## B.8 Any other information

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# B1 - General information on the system of governance

## / Governance

### Board of Directors

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#### ROLE AND POWERS

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Since 31st of July 2007, AXA Assurances Vie Luxembourg has operated with a unitary Board of Directors with the roles of Management Board and a Supervisory Board.

The Board determines (under the Luxemburgish law of 10<sup>th</sup> of August 1915 in relation to commercial companies) the strategic orientations of the Company's activities and ensures their implementation. Subject to the power specifically reserved to the Shareholders' Meeting under Luxemburgish law and within the limit of the Company's purpose. The Board is responsible for considering all material questions and taking all material decisions related to the Company and its business.

It exercises the following powers in particular.

The Board reviews and approves the Company's financial statements.

The Board ensures the Company's compliance with the local law, the regulation, and the prudential regulations.

The Board has the ultimate responsibility for the Internal Control and Risk Management Systems, monitoring in time their comprehensiveness, functionality and efficiency, including outsourcing activities.

The Board ensures that the risk management framework allows the Company to identify, assess and monitor, in a forward-looking approach, the risks the Company is exposed to, in order to maintain an adequate level of its solvency in a medium-long term view. The Board takes also in account the Company's risks management policy during the decision process.

The Board is also required to approve certain types of material transactions including acquisitions and the decision to start doing business in a country where the Company does not currently have a license.

#### OPERATING PROCEDURES

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The guidelines governing the operation, organization and compensation of the Board of Directors and its Committees are set out in AXA Assurances Vie Luxembourg Articles of Association and the Board's Charter. The Articles of Association and the Board's Charter detail, in particular, the powers, missions and obligations of the Board of Directors and its Committees.

The Board meets as often as it deems necessary and at least every 3 months. 7 days prior to each meeting, the Board members receive documentation concerning matters to be reviewed.

#### COMPOSITION OF THE BOARD

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Pursuant to the Company's Articles of Association, the members of the Board of Directors are appointed by the Shareholders' Meeting which shall determines the number of members and the duration of their term of office. The Shareholders' Meeting may revoke the members' mandate.

On December 31, 2017, the Board of Directors was comprised of 5 members. 2 Board members were citizens of countries other than Luxembourg, and 2 of them were independent.

The composition of the board on December 31st, 2017 is: Jean Yves Le Berre (Director and Chairman), Jacques Lanners (Director), Marie-Hélène Massard (Director (“administratrice-déléguée”)), François Xavier Negri (Director), André Prüm (Director).

The Company has an Executive Committee and an Audit Committee which have the power to provide opinions, recommendations or propositions to the Board regarding important matters for the Company.

**BOARD OF DIRECTORS’ COMMITTEES**

The Board of Directors has 2 specialized Committees: an Audit Committee and a Compensation Committee.

The role, organization and operating procedures of each Committee are set forth in the Board of Directors’ Charter Rules of Procedure and in the Board’s Charter Committee Terms of Reference.

Each Committee issues opinions, proposals or recommendations to the Board of Directors on matters within the scope of its responsibilities. Nevertheless, under Luxemburgish law, Board Committees do not have any formal decision making power.

Each Committee is empowered to undertake or commission specific studies or reviews within the scope of its responsibilities. The Committees may request external consulting expertise if necessary. They may also invite external participants to attend their meetings.

Committee Chairman reports to the Board of Directors at the following Board meeting.

<b>Board of Directors’ Committees</b>	<b>Principal responsibilities</b>	<b>Principal activities in 2017</b>
<p><b>Audit Committee</b>  <i>Composition on December 31, 2017: According to the company’s statute, the Audit Committee is composed of 2 permanent members, members of the Board of Directors of the entity. One of these 2 members is the chairman of the Committee. The invitees to the Committee are: CEO, CFO, CRO, Compliance Officer, Internal Audit and External Audit.</i></p>	<p>The scope of the Audit Committee’s responsibilities is set out in its Terms of Reference which are reviewed and approved each year by the Board of Directors. The Audit Committee assists in the oversight of the:</p> <ul style="list-style-type: none"> <li>• Accomplishments of strategic plan objectives,</li> </ul> <p>Reliability and integrity of significant financial, managerial, and operating information, Compliance with policies, standards, procedures and applicable laws and regulations</p> <p>The Committee also examines compliance with the risk appetite limits.</p> <p>The Committee meets during specific sessions with the Statutory Auditors and the Head of Audit.</p> <p>The review of financial statements by the Audit Committee is accompanied by a presentation from the Statutory Auditors stressing the essential points of the results of the statutory audit and the accounting methods chosen.</p> <p>The Chief Financial Officer, the Head of Audit, the Chief Risk Officer, the Chief Accounting Officer as well as the Company’s Statutory Auditors attend each Audit Committee meeting.</p>	<p>The Audit Committee met 4 times in 2017. The average attendance rate was 100%. The Committee focused, in particular, on the following issues:</p> <ul style="list-style-type: none"> <li>• the full year financial statements for 2016;</li> <li>• the strategic plan 2017-2021;</li> <li>• the half-year financial statements for 2017;</li> <li>• internal control and Risk Management: reports from Internal Audit, from Compliance and Legal department, from Risk Management;</li> <li>• significant litigation cases;</li> <li>• Solvency II and ORSA (Own Risk and Solvency Assessment) report;</li> <li>• Risk Management Framework, Risk Appetite and Reporting;</li> <li>• the results of internal and external audit work; and</li> <li>• the internal and external audit plans and resources.</li> </ul>

<b>Board of Directors' Committees</b>	<b>Principal responsibilities</b>	<b>Principal activities in 2017</b>
<b>Compensation Committee</b> <i>Composition on December 31, 2017:</i> <i>The Remuneration Committee is composed of 3 permanent members. One is designated Chairman. Two members are AXA representative and one member is an independent director. The Human Resource Director is a permanent invited member.</i>	<ul style="list-style-type: none"> <li>- The Committee examines the appointments and remuneration of the main executives of the Company,</li> <li>- It reports to the Board on its activities on an annual basis.</li> </ul>	<p>The Compensation Committee met 1 time in 2017. The average attendance rate was 100%.</p> <p>The Committee focused, in particular, on the following issues:</p> <ol style="list-style-type: none"> <li>1. Review of compensation of Executives: perimeter, data in 2017;</li> <li>2. Review of AXA Assurances Vie Luxembourg events in 2017: newcomers, promotions, departures; and</li> <li>3. Recommendations for 2018.</li> </ol>

## **EXECUTIVE COMMITTEE**

AXA Assurances Vie Luxembourg Executive Management is constituted by the Chief Executive Officer and other persons who effectively run the Company. An Executive Committee also supports the operational management of the Company.

### **THE CHIEF EXECUTIVE OFFICER/**

Marie-Hélène MASSARD was appointed Chief Executive Officer by the Board of Directors on 1<sup>ST</sup> of September 2012.

AXA Assurances Vie Luxembourg is organised according to the principle of separation of the powers of Chairman of the Board of Directors and Chief Executive Officer.

The Chairman of the Board of Directors organises and directs the Board of Directors' work. He ensures the proper operation of the Company's bodies.

The General Management of the Company is the responsibility of the Chief Executive Officer, under the control of the Board of Directors and subject to the guidelines approved by the Board of Directors.

The Chief Executive Officer is appointed by the Board of Directors and is vested with full powers to act on behalf of the Company in all circumstances. He exercises his powers within the limits of the corporate purpose and subject to the powers that the law expressly assigns to the Shareholders' Meeting and the Board of Directors.

In addition, the Bylaws of the Board of Directors provide for specific limitations of the powers of the Chief Executive Officer and require prior Board approval for certain significant transactions (such as a sale of some or all of the ownership interests held by the Company, acquisitions, the decision to start doing business in a country where the Company does not currently have a license).

### **THE PERSONS WHO EFFECTIVELY RUN THE COMPANY**

Within AXA Assurances Vie Luxembourg, the person who effectively runs the Company is the Chief Executive Officer

The Company's person who effectively runs the Company must fulfill the requirements of a fit and proper assessment, as set forth in the Company's internal procedure, and such person's appointment must be notified to the Commissariat aux Assurances.

## **Main roles and responsibilities of key functions**

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The Solvency II regulations, which became effective on January 1, 2016, require AXA Assurances Vie Luxembourg to have in place a governance system designed to guarantee a sound and prudent management. This governance system is based on a clear separation of responsibilities and must be proportionate to the nature, extent and complexity of the Company's operations.

In addition to the persons who effectively run the Company, AXA Assurances Vie Luxembourg has defined 4 key functions in accordance with the Solvency II regulations:

- the risk-management function, which is responsible for the definition and the deployment of the Enterprise Risk Management (ERM) framework within AXA Assurances Vie Luxembourg;
- the compliance function, which is, in particular, responsible for advising on compliance with the laws, regulations and administrative provisions regarding insurance and reinsurance activities;
- the internal audit function, which is, in particular, responsible for performing an evaluation of the adequacy and effectiveness of AXA Assurances Vie Luxembourg's internal control system and other elements of the system of governance. The internal audit function must be objective and independent from the operational functions; and
- the actuarial function, which is, in particular, responsible for overseeing the calculation of technical provisions (including ensuring the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions), assessing the sufficiency and quality of the data used in the calculation of technical provisions and comparing best estimates against experience.

Within AXA Assurances Vie Luxembourg, the key function holders in accordance with the Solvency II regulations are:

- the Chief Risk Officer who has in charge the risk management
- the Chief Financial Officer who has in charge the actuarial function (since October 1<sup>st</sup>, 2017)
- the Head of Internal Audit
- the Head of Compliance

Each person in charge of a key function must, as for the persons who effectively run the Company fulfill the requirements of the fit and proper assessment mentioned hereinabove, as set forth in the Company's internal procedure, and each key function's appointment must also be notified to the Commissariat aux Assurances. As required by Solvency II regulations, AXA Assurances Vie Luxembourg has established procedures whereby the key function holders have direct access to the Board of Directors.

To secure the operational independence of the key functions, the key function holders also have a direct access to the Chief Executive Officer.

In order to ensure the necessary authority and resources to carry out their tasks, the key function holders have a right to report to the Board of Directors directly and at their own initiative when events of a nature to justify such report occur, and have the same direct access to the Executive Committee, the Audit Committee and the Compensation Committee. In addition, the key functions have available dedicated staffs and other resources appropriate to their tasks.

## **Material changes in the system of governance in 2017**

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Since October 2017, the Chief Financial Officer is in charge of the actuarial function and the Chief Risk Officer is in charge of the risk management function. Before this date, the Chief Risk officer was in charge of both risk management function and actuarial function.

## / Compensation policy

AXA Assurances Vie Luxembourg applies the AXA Group Remuneration policy.

AXA's global executive compensation policy is designed to align the interests of the Company's executives with those of its shareholders while establishing a clear and straightforward link between performance and compensation. In this context, its main objective is to encourage the achievement of ambitious objectives and the creation of long-term value by setting challenging performance criteria.

AXA's executive compensation structure is based on an in-depth analysis of market practices in France and abroad, within the financial services sector (insurance companies, banks, asset managers, etc.) and compared to the compensation practices of other international groups.

AXA's overall policy on executive compensation focuses on the variable part of the compensation package, which is the compensation at risk for beneficiaries. The structure of AXA's executive compensation is composed of a variable portion which represents a significant portion of the aggregate remuneration. This is designed to align executive compensation more directly with the operational strategy of the Group and the interests of the shareholders while encouraging performance:

- both on an individual and collective level; and
- over the short, medium and long term.

## Remuneration policy

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The AXA Group Remuneration policy became applicable to all AXA Group companies and their employees as of January 1, 2016.

This compensation policy is designed to support the Group's long-term business strategy and to align the interests of its employees with those of the shareholders by (i) establishing a clear link between performance and remuneration over the short, medium and long term, (ii) ensuring that the Group can offer competitive compensation arrangements across the multiple markets in which it operates while avoiding potential conflicts of interest that may lead to undue risk taking for short-term gain, and (iii) ensuring compliance with Solvency II regulations and any other applicable regulatory requirement.

The AXA Group compensation policy is designed to:

- attract, develop, retain and motivate critical skills and best talents;
- drive superior performance;
- align compensation levels with business performance;
- ensure that employees are not incentivised to take inappropriate and/or excessive risks and that they operate within AXA's overall risk framework; and
- ensure compliance of our practices with all applicable regulatory requirements.

It follows three guiding principles:

- competitiveness and market consistency of the remuneration practices;
- internal equity, based on individual and collective performance, in order to ensure fair and balanced compensation reflecting employee's individual quantitative and qualitative achievements and impact; and
- achievement of the Group's overall financial and operational objectives over the short, medium and long term as well as execution of medium and long term strategic objectives as a prerequisite to fund any mid-to-long term award.

The requirements set out in the Group Remuneration policy may be supplemented where necessary in order to comply with local regulatory requirements or identified best practices.

## COMPENSATION OF THE EXECUTIVE OFFICERS

### Compensation structure

AXA broadly applies a “pay-for-performance” approach which (i) recognizes achievement of defined financial and operational targets aligned with AXA’s business plan (ii) promotes long-term sustainable performance by incorporating risk adjustment measures in performance metrics (such as cash Return-On-Equity which takes into account the capital required to deliver performance) and (iii) determines individual compensation amounts on the basis of both financial results and demonstrated individual leadership and behaviors.

The overall remuneration structure is based on the following components, which are designed to provide balance and avoid excessive risk taking for short term financial gain:

- a fixed component which comprises guaranteed elements, such as base salary and any other fixed allowances. It takes into account the position, responsibilities, experience, market practices, technical skills and leadership competences, and also sustained individual performance and criticality or scarcity of skills;
- a variable component which comprises an upfront cash element (Short Term Incentive) and a deferred element which is awarded through equity based instruments or equivalents such as stock options and/or performance shares (Long Term Incentive). This variable component depends on the AXA Group’s global performance, on the Assurances Vie Luxembourg performance, and on the achievement of the executive’s individual objectives including demonstrated abilities for leadership.

AXA endeavors to ensure a suitable balance between fixed and variable components so that the fixed component represents a sufficiently high proportion of the total remuneration to avoid employees being overly dependent on the variable components and to allow AXA to operate a fully flexible bonus policy, including the possibility of paying no variable compensation. All variable remuneration amounts are awarded in accordance with performance and there is no minimum payment guaranteed.

The target level of the executives’ compensation and the structure of the elements which compose such compensation are based on a detailed analysis of market practices as well as potentially applicable national and international regulations, and also take into consideration various other factors including the Group’s internal equity principles and the previous compensation level of executives.

### Long Term Incentive (LTI) annual allotment

Each year, LTI is granted to the AXA Group executives.

AXA recognises the importance of aligning remuneration over long term value creation by deferring a substantial portion of the individual’s total variable compensation (i.e. Short Term Incentive (STI) plus LTI). Two main deferred LTI instruments are currently used: Performance Shares and Stock Options.

These LTIs are subject to performance conditions and therefore do not guarantee any grant or minimum gain for the beneficiaries.

## / LTI

### Performance Shares

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Performance Shares are designed to recognize and retain the Group’s best talents and critical skills by aligning the individuals’ interests with the overall performance of the Group, and the corresponding operational Entity/Business Unit, as well as with the Group’s stock performance over the medium-term (3-5 years).

Performance shares are subject to a minimum deferral period ranging from 4 to 5 years<sup>1</sup>.

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<sup>1</sup> Participants can receive AXA shares after a 3-year acquisition period (4-year acquisition period outside of France) depending on performance achievement. Under French law, once the shares are acquired, an additional holding period of 2 years is required.

In addition Performance Shares are subject to performance conditions over a period of 3 years. The performance indicators measure both (i) the Group's overall financial and operational performance and (ii) the participant's operational Entity/Business Unit performance.

Under the terms of the plan, the initial number of performance shares granted is adjusted to reflect achievement against the defined performance conditions. Final individual pay-outs range from 0% to 130% of the initial grant amount depending on the level of achievement against the performance conditions<sup>2</sup>.

In the event that no dividend payment is proposed by the Board of Directors with respect to any year during the three year performance period, a malus provision applies and automatically reduces by 50% the number of performance shares that would have otherwise been acquired by the beneficiary at the end of the three year performance period<sup>3</sup>.

## **Stock Options**

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Stock Options are designed to align long term interests of Group Senior Executives with shareholders through the performance of AXA's share price.

Stock options are valid for a maximum period of 10 years. They are granted at market value, with no discount, and become exercisable by tranches between 3 and 5 years following the grant date.

Stock Options granted to members of the Executive Committee as well as the last third of all other grants are subject to performance conditions. In the event the performance condition is not met during the performance period, all the corresponding Stock Options will be forfeited.

An additional performance condition has been validated by the Remuneration Committee in December 2016 and is effective as from grants in 2017, pursuant to which beneficiaries would not be able to exercise their stock options in the event the Net Income of the Group is negative, and for as long as it remains.

### **ADDITIONAL PROVISION ON PERFORMANCE CONDITIONS**

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In addition to the conditions noted above, under the terms of the plans, all unvested Performance Shares and all unexercised Stock Options (both vested and unvested) are automatically forfeited in the event a participant's employment is terminated for any reason including, without limitation:

- Where an employee has materially violated AXA's Code of Conduct or other key Risk and Compliance policies; or
- There is evidence of serious misconduct or misbehaviour and/or the employee causes material detriment to the business or reputation of AXA or one of its subsidiaries.

### **LTI GRANT PROCEDURE**

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Within the global cap authorized by Group shareholders, AXA Board of Directors approves LTI programs prior to their implementation.

Each year, AXA Board of Directors, acting upon recommendation of its Compensation & Governance Committee, approves a global LTI pool to be granted.

The recommendations for individual grants (Performance Shares and Stock-Options) are made by the beneficiary's Entity-level management. These recommendations are reviewed by AXA Executive

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<sup>2</sup> The threshold which currently applies is respectively 65% for Group and 60% for Entity performance.

<sup>3</sup> A performance score ranging from 0%-130% is divided by two in the event no dividend has been proposed by the Board of Directors during any of the 3 year performance period, providing the beneficiary with only 50% of the adjusted number of Performance Shares.



Management to ensure global coherence and respect of the Group's internal equity principles. Individual grants of Performance Shares are then decided by AXA Board of Directors.

## **/ Directors' fees**

### **Directors' fees**

During the fiscal year 2017, none of the members of the Board of Directors, except for its CEO, received compensation from the Company, with the exception of directors' fees (*tantièmes*).

No directors' fees are paid by the Company to directors exercising executive functions at AXA Assurances Vie Luxembourg S.A. (*i.e.* CEO and AXA Group internal member).

## **/ Commitments made to executive officers**

### **PENSION**

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The Executive Committee Members of the Company participate, as all other employees of the Company, in a mandatory and collective supplementary pension scheme with defined contributions on the condition that they terminate their career in the Company, in accordance with the provisions of the Act of June 8<sup>th</sup>, 1999 on the *Régimes Complémentaires de Pension*. This scheme is outsourced to an insurer.

There are today 2 supplementary pension schemes, both were implemented in 2009:

- One benefits to the employees of the Company falling entirely within the scope of the Collective Bargain Agreement of the Insurance Sector.
- The other benefits to the employees of the Company falling out of the remuneration structure defined by the Collective Bargain Agreement of the Insurance Sector.

## **/ Material transactions with shareholders, persons who exercise a significant influence and corporate officers or executives**

In 2017, the Company was party to the following transactions with related parties which may be deemed to have been material to AXA or the related party in question or unusual in their nature or conditions.

### **RELATIONSHIPS AXA ASSURANCES VIE LUXEMBOURG SA**

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AXA Assurances Vie Luxembourg SA is an insurance company in Luxembourg. On December 31<sup>st</sup>, 2017, AXA Luxembourg SA (a financial holding company in Luxembourg) owned 99.99% of the Company's outstanding ordinary shares.

AXA Holding Belgium is a financial holding company in Belgium. On December 31<sup>st</sup>, 2017, AXA Holding Belgium owned 99.99% of AXA Luxembourg SA.

AXA SA is a financial holding company in France. On December 31<sup>st</sup>, 2017, AXA SA owned 100% of AXA Holding Belgium.

## **KEY MANAGEMENT AND DIRECTORS**

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To the best of the Company's knowledge, based on information reported to it:

- on December 31, 2017, there were no loans outstanding from the Company's its ExCom Members or to any member of the Company's Board of Directors;
- various members of the Company's Board of Directors as well as various other executive officers and directors of other AXA Group companies may, from time to time, purchase insurance, wealth management or other products or services offered by the Company in the ordinary course of its business. The terms and conditions of these transactions are substantially similar to the terms and conditions generally available to the public or to AXA employees in general.

### **/ Assessment of the adequacy of the system of governance**

The Company believes that its system of governance described herein is adequate in light of the nature, scale and complexity of the risks inherent in the Company's business.

Detailed information on the internal control mechanisms and procedures implemented by the Company is provided in section B.4.

## B2 – Fit and proper requirements

Within the Company, the person who effectively runs the undertaking is the Chief Executive Officer, who is also the “*Administrateur Délégué*” within the Board of Directors.

Within the Company, the fit and proper requirements apply to the following key functions:

- the Chief Financial Officer,
- the Chief Risk Officer,
- the Head of Audit ,
- the Head of Compliance,
- the Head of the Actuarial Function.

### **/ Fit and Proper assessment process for the persons who effectively run the undertaking and heads of key functions –**

Any person who establishes, administers or manages an insurance or reinsurance undertaking or is head of a key function must meet the associated fit, proper, expertise and experience requirements and comply with the rules on professional incapacity.

The Solvency II rules broaden fit and proper requirements applicable to persons who effectively run the undertaking or are responsible for other key functions. Insurance or reinsurance undertakings must notify their nominations to the regulator, the *Commissariat Aux Assurances*.

The AXA Group therefore put in place practical guidance on what AXA entities need to do in order to meet its Fit and Proper Standards, adopted in compliance with the requirements of Solvency II.

According to these guidelines, the Company is required to implement appropriate and regular assessments to ensure that the persons who effectively run the undertaking or are heads of key functions meet the following requirements both at appointment stage and on an on-going basis:

- Appropriate competence and capability, taking into account professional qualifications, training, knowledge and relevant experience including understanding of regulatory requirements to enable sound and prudent management (fit); and
- Propriety, taking into account reputation, financial soundness and personal characteristics such as integrity and transparency (proper).

Furthermore, the persons who effectively run the Company and the Company key functions were required to notify their designation as such to the *Commissariat Aux Assurances*, through a formal process including a detailed questionnaire with several questions on the fitness and propriety of each person, to which were attached several documents such as a copy of the passport, a resume, a check of public records, a declaration of absence of criminal convictions.

# B3 - Risk management system including the own risk and solvency assessment

## / Risk management system

### Risk management missions

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As an integrated part of all business processes, Risk Management is responsible for the definition and the deployment of the Enterprise Risk Management (ERM) framework within AXA Assurances Vie Luxembourg.

This framework is based on the following pillars, cemented by a strong risk culture:

1. Risk Management independence and comprehensiveness:

Chief Risk Officer is independent from operations (“first line of defense”) and Internal Audit Departments (“third line of defense”). Risk Management Department, together with Compliance, constitutes the “second line of defense” which objective is to develop, coordinate and monitor a consistent risk framework across AXA Assurances Vie Luxembourg.

2. Shared risk appetite framework: Chief Risk Officers is responsible for ensuring that the top management reviews and approves the risks they carry in their company, understand the consequences of an adverse development of these risks, and have action plans that can be implemented in case of unfavorable developments.

3. Systematic second opinion on key processes: Chief Risk Officer ensures a systematic and independent second opinion, on AXA Assurances Vie Luxembourg material decision processes, like Life & Savings (L&S) new product characteristics (risk-adjusted pricing and profitability), Life Economic reserves, Asset and Liability Management studies, Asset allocation and new investments, and Reinsurance.

4. Robust economic capital model: The economic capital model of AXA Assurances Vie Luxembourg allows the company to measure its exposure to risks, compliant with the Solvency II framework.

5. Proactive Risk Management: Chief Risk Officer is responsible for early detection of risks. This is promoted through challenge of and constant dialogue with the business and supported by the emerging risks management framework.”

### AXA Assurances Vie Luxembourg

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Risk Management is a local responsibility, in accordance with GRM (Group Risk Management) standards and guidelines.

The roles and responsibilities of Risk Management are validated jointly by the Executive Committee of the Company and the Group Chief Risk Officer to ensure a better alignment of central and local interests.

The minimum missions required for local Risk Management team are:

- coordinating the second line of defence locally (which covers notably Compliance and IT Departments) through specific governance;
- implementing risk appetite on all risks consistently with Group’s risk appetite, with strengthened reporting, risk limits and decision processes;
- performing a second opinion on key processes, such as technical reserves, Assets & Liabilities Management (ALM) studies & asset allocation, and reinsurance strategy;

- coordinating pre-launch product approval procedures and regular pricing reviews after launch;
- on the capital model, Risk Management is responsible for checking the adequacy of the risk profile, implement, test and validate the model.

AXA Assurances Vie Luxembourg's Chief Risk Officer heads the local Risk Management team and reports both to the CEO of the Company and to the INM CRO. Chief Risk Officer is independent from operations and Internal Audit Departments.

AXA Assurances Vie Luxembourg's Chief Risk Officer has a regular reporting to the Audit Committee and to the Executive Committee on risk management matters.

The risk management team is responsible for controlling and managing risks within Group / local policies and limits, validating investment or underwriting decisions through Local Risk Committees.

## Other functions

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Business Line management and staff are responsible for day to day risk management and decision making and therefore have primary responsibility for establishing and maintaining an effective control environment (first line of defense).

Compliance is responsible for developing, facilitating and monitoring effective risk and control framework and strategy (second line of defense), in coordination with Risk Management. Internal Audit performs, as part of its role, an assessment of risks and governance processes on a periodic basis to provide independent opinion on the effectiveness of the system of internal control (third line of defense).

## Risk governance within AXA Assurances Vie Luxembourg

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In order to efficiently manage local and global risks, the decision process within the risk governance structure is explained below:

The **Risk Committee** defines business objectives and capital allocation with respect to investment return and risk. It also defines the Company appetite for risks in terms of impact on its key financial indicators. The Risk Appetite is endorsed by the Board of Directors upon review by its Risk Committee with the Audit Committee considering the effectiveness of the Company's internal control and risk management frameworks supporting it. A report on the Company's performance against the key financial indicators is presented on a regular basis to the Risk Committee, to the Audit Committee and to the Board of Directors. The overall risk framework is governed by the Risk Committee, co-chaired by the CEO and CRO of AXA Assurances Vie Luxembourg. The members of the Risk Committee are the members of the Executive Committee, the CRO and the Head of Actuarial Function.

For Life insurance risks and Operational risks

- The decision process relating to the management of insurance and operational risk is governed within the **Risk Committee**. The Committee mainly analyses and monitors the insurance SCR risk profile, its components and the related changes towards risk appetite limits defined; validates all launches or portfolio reviews of products or lines of businesses.

For Financial risks:

The **Asset & Liability & Investment Management Committee** is primarily responsible for the management of Assets & Liabilities. It specifically includes members of the Executive Committee (the CEO and the CFO), the CRO and the Chief Investment Officer (CIO). The Committee approves the strategic asset allocations and the interest-rate hedging programmes. This committee determines the ALM policies and ensures that the Company exposures are within the risks limits defined. The committee also defines the implementation of investment strategy, steers tactical asset allocation, evaluates new investment opportunities and monitors the Company's investment performance. The committee approves the tactical aspects of investment decisions. It manages the Risk Appetite and IAP processes. The organisation and main assignments of the ALM & Investment Committee are described in the General Risk Management Policy.

## Risk Management

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Risk Management is responsible for developing the Enterprise Risk Management framework in terms of limits/thresholds (covering Financial, Insurance and Operational risks), policies, guidelines and monitoring of the risk exposure, subject to Group standards and within a clearly defined Risk Appetite consistent with the Group's Risk Appetite.

Risk Management oversees the various Luxembourg's branches and affiliates' adherence to the framework, developing risk culture throughout the Company.

The CRO co-chairs the AXA Assurances Vie Luxembourg's Risk Committee, defining risk standards, controlling Risk Appetite limits and recommending actions to mitigate risks. The CRO reports key risk matters directly to the Risk Committee, which establishes the risk control framework by validating both Risk policy and risk strategy.

## / Own Risk and Solvency Assessment

The Own Risk & Solvency Assessment (ORSA) encompasses processes to identify, assess, monitor, manage and report the short to medium term risks of AXA Assurances Vie Luxembourg and to ensure the level of own funds adequacy with AXA Assurances Vie Luxembourg solvency targets, taking into account the risk profile, approved risk tolerance limits and business strategy. As an important component of the risk management system, it is intended to give a comprehensive and complete vision of the risks embedded in the businesses of AXA Assurances Vie Luxembourg.

ORSA mainly encompasses risk management and financial activities, which are organized around the following processes:

- Solvency Capital Requirements (SCR based on standard formula framework) & Available Financial Resources (AFR) quarterly calculation,
- Liquidity risk reporting,
- Strategic planning and financial projections,
- Risk appetite process,
- Stress and scenario testing analysis and monitoring (Transversal stress scenario and Reverse stress test),
- Reputation and strategic risk assessment and review

The Group has established a policy on the Own Risk and Solvency Assessment (ORSA) to set and describe the common framework and rules to consistently run and report on the ORSA across the Group.

Chief Risk Officer of AXA Assurances Vie Luxembourg is responsible for developing the ORSA Policy, implementing ORSA process and coordinating ORSA reporting.

Executive Management approves the policy, ensures that procedures are in place to implement and monitor ORSA process and approves the ORSA report.

Board of Directors is presented annually with the results and conclusions of the ORSA for approval.

## Board of Directors

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ORSA is a top-down process reviewed by the Board. The AXA Assurances Vie Luxembourg ORSA report is presented to the Risk Committee and the Audit Committee to prepare the approval by the Board of Directors. The Board of Directors grants the Management the authorization to file the ORSA report to the supervisor, Commissariat aux Assurances.

This review encompasses Solvency II coverage ratio results at end of year and targets, risk and solvency management internal best practices and conclusions on management actions for material risks assessed out of the economic capital requirement.

The risk appetite framework developed by the Management is reviewed by the Risk Committee, the Audit Committee and endorsed by the Board of Directors.

## **Executive Committee – Risk Committee**

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The Risk Committee, which members are the Executive Committee members, the CRO and Head of Actuarial Function, has ownership of the ORSA process and validates ORSA conclusive report. The Risk Committee is also involved in the validation of some inputs (e.g. strategic plan hypotheses, risk appetite and tolerance, risk grid, reputation risks assessment).

Based on previous review of AXA Assurances Vie Luxembourg ORSA report by all key contributors of the ORSA process defined, the Risk Committee is responsible for reviewing qualitative and quantitative ORSA results and conclusions.

Beyond the annual ORSA report, an annual assessment is performed to update the risk profile and adapt management actions accordingly. This information is reported to the Risk Committee.

The ORSA report provides assessment on:

- a) The overall solvency needs through the assessment using the standard formula framework for quantifiable risks considering risk mitigation actions implemented in current economic context and approved business strategy and within approved risk appetite limits. Stress scenario analyses are performed to ensure adequacy of the economic capital assessed. This is supported by enterprise risk management including the identification and monitoring of non-quantifiable risks.
- b) The compliance, on a continuous basis, with the regulatory capital requirements, through the assessment of the ability to meet capital requirements over the strategic plan horizon, both for the initial base case and for stressed scenarios.
- c) The extent to which the risk profile of AXA Assurances Vie Luxembourg deviates from the assumptions underlying the Solvency Capital Requirement calculated with the standard formula. Extensive validation tests are performed to assess the relevance of the standard formula and its assumptions including stress and scenario testing. Limitations of the standard formula and evolution plan resulting from the validation activities are presented. Also, the extensive use of the standard formula outputs for key decision making processes provides a feedback loop for improving the modelling according to the evolution of the risk profile.

# B4 – Internal control system

## / Internal control system

### **INTERNAL CONTROL AND RISK MANAGEMENT: OBJECTIVES**

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AXA Assurances Vie Luxembourg is engaged in the financial protection and wealth management business on a global scale. As such, it is exposed to a very wide variety of risks – insurance risks, financial market risks and other types of risks.

In order to manage these risks, AXA Assurances Vie Luxembourg has put in place a comprehensive system of internal controls designed to ensure that executives are informed of significant risks on a timely and continuing basis, have the necessary information and tools to appropriately analyse and manage these risks, and that Company and Group's financial statements and other market disclosures are timely and accurate.

These mechanisms and procedures principally include:

- the Company's corporate governance structures which are designed to ensure appropriate supervision and management of AXA Assurances Vie Luxembourg's business as well as clear allocation of roles and responsibilities at the highest level;
- management structures and control mechanisms designed to ensure that the AXA Assurances Vie Luxembourg executives have a clear view on the principal risks the Company faces and the tools necessary to analyze and manage these risks;
- disclosure controls and procedures designed to ensure that executives have the necessary information to make fully informed disclosure decisions on a timely basis and that the Company's disclosures on material information (both financial and non-financial) to the markets are timely, accurate and complete.

These mechanisms and procedures, taken together, constitute a comprehensive control environment that executives believe is appropriate and well adapted to AXA Assurances Vie Luxembourg's business.

The internal control process at AXA Assurances Vie Luxembourg primarily relies on:

- The Company's general operating and organisational principles;
- Controls implemented within each operating, functional and financial department, which contribute to the effectiveness of the permanent control system;
- Control functions that enable an independent and objective assessment of the Company's security and operating quality to be provided to management.

### **CORPORATE GOVERNANCE STRUCTURES**

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AXA has taken steps designed to harmonize corporate governance standards throughout the Group. This effort is focused, among other matters, on standardizing, to the extent practicable, principles relating to various corporate governance matters including board composition and size, directors' independence criteria, board committees and their roles, and directors' fees.

The Group Governance Standards are part of a larger set of Group standards that apply to all AXA Group companies (the Group Standards Handbook). These Group Standards are designed to ensure that all the companies of the Group have effective Risk Management processes and appropriate governance structures, and meet the Group's minimum control requirements. The Chief Executive Officer is therefore required to annually certify that AXA Assurances Vie Luxembourg is in compliance with the Group Standards.



## **EXECUTIVE MANAGEMENT**

Executive Management oversees implementation of the internal control system and the existence and appropriateness of internal control and Risk Management monitoring systems within AXA Assurances Vie Luxembourg.

## **BOARD OF DIRECTORS**

The Board of Directors determines the Company's business strategy and oversees its implementation. The Board considers all material questions related to the proper functioning of the Company and takes decisions it deems appropriate for the Company's business. The Board of Directors also undertakes all controls and verifications as it deems appropriate from time to time.

The Board of Directors has established two Committees to assist it in fulfilling its responsibilities: an Audit Committee and a Remuneration Committee. These Committees exercise their activities under the responsibility of the Board of Directors and report regularly to the Board of Directors on matters within the scope of their respective responsibilities.

## **AUDIT COMMITTEE**

All the Board Committees constitute an important part of AXA Assurances Vie Luxembourg's overall internal control environment and plays a particularly important role in reviewing internal control and risk related issues.

The audit committee has a critical role in reviewing financial results and other financial information prepared by the management, financial reporting and control processes, critical accounting policies, particular accounting issues, key risks and systems of internal control, fraud and similar issues.

The scope of the Audit Committee's responsibilities is set forth in the Audit Committee Terms of Reference, approved by the Board of Directors.

Based on AXA Group corporate governance standards, AXA Assurances Vie Luxembourg general organisational principles contributing to the management of the internal control system are primarily based on:

- An organisational structure that respects the segregation of duties;
- AXA Assurances Vie Luxembourg's compliance with AXA Group standards, included in the Group Standards Handbook (GSH) and in the Professional Family Policy Manuals (PFPMs). These standards are applied via:
  - the risk management policies, which specify the procedures to be implemented in order to identify, assess, monitor and manage all the risks included in Assurances Vie Luxembourg' risk profile (financial risk, insurance risk, operational risk, liquidity risk, emerging risks and reputational risk)
  - the compliance policy, which specifies the role and assignments of the Compliance Function
- Familiarity with the processes in place through an on-going improvement of operating processes;
- And the introduction of preventive measures such as the promotion of corporate ethics, which aims to encourage all employees to abide by the principles of professional ethics, integrity and fairness.

## **MANAGEMENT STRUCTURES AND CONTROLS**

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The Board of Directors is responsible of the internal control framework, ensuring their implementation, maintenance and continuous improvements in order to achieve the business objectives, managing the risks that can affect the key business processes.

With this purpose, a control framework with three lines of defense has been designed and the boundaries between them are clearly defined. The objective is to ensure that this framework is in place to systematically identify measure, manage, and control all the risks that AXA Assurances Vie Luxembourg may face.

The control framework with the three lines of defense is illustrated below being the Internal Audit (level 3) the line that provides independent assurance on the effectiveness of the system of internal control.

There are three levels of responsibility in the internal control framework:

- 1st Line of Defense owns and manages the risks. Line Management and staff are responsible for day to day risk-taking management and decision-making according to prior defined risk-appetite at the Executive Committee level. This 1<sup>st</sup> line of defense has a primary responsibility for establishing and maintaining an effective control environment. The 1<sup>st</sup> line of defense is the one responsible for identifying and managing the risks inherent in the products, services and activities for which they are responsible.

Management, as the primary risk owner, should as first line of defense design, implement, maintain, monitor, evaluate, and report to the 2<sup>nd</sup> line of defense on the organization's internal control system in accordance with risk strategy and policies on internal control as approved by the governing body.

Each person within the organization – management and other employees alike – should be held accountable for proper understanding and execution of risk management and internal control within his or her span of authority.

- 2<sup>nd</sup> Line of Defense: Risk Management, Compliance, and Internal Control are set as functions of second level control, independent of business. The 2<sup>nd</sup> line of defense is responsible for developing an internal control framework and for monitoring 1<sup>st</sup> line internal controls and for reporting their results to their respective reporting lines.

- 3rd Line of Defense: Internal Audit provides independent assurance on the effectiveness of the internal control system. Internal Audit supports the Board and Executive Committee to protect the reputation and sustainability of the organization by providing an independent and objective assurance activity designed to add value and improve the organization's operations.

Management, as the primary risk owner, should as first line of defense design, implement, maintain, monitor, evaluate, and report on the organization's internal control system in accordance with risk strategy and policies on internal control as approved by the governing body.

Each person within the organization – management and other employees alike – should be held accountable for proper understanding and execution of risk management and internal control within his or her span of authority.

## **GOVERNANCE**

In order to manage the various risks to which it is exposed, AXA Assurances Vie Luxembourg has a management structure and control mechanisms designed to ensure that executives have a clear and timely view of the principal risks facing the Company and the tools necessary to analyze and manage these risks.

These management structures and controls include the following:

## **A chief Executive Officer and other persons who effectively run the Company**

See section B1

### **Executive Committee**

On December 31<sup>st</sup> 2017, AXA Assurances Vie Luxembourg had a 5-member Executive Committee composed of the Chief Executive Officer (Marie-Hélène Massard), the Chief Financial Officer (Philippe Golinvaux), the Chief Information Officer (Olivier Vansteelandt), the Distribution Director (Magali Zuber) and the Life & Health Director (Georges Biver). The Chief Human Resources Officer (Carole Prigent-Maury) is the secretary of the Executive Committee..

This committee plays an important role in managing the operating businesses, considers strategic initiatives, addresses compliance and legal topics and other subjects the Board Management deems appropriate from time to time. The Executive Committee usually meets on a weekly basis.

During the fourth quarter, AXA Assurances Vie Luxembourg presents its strategic plan to the Group. The strategic plan is reviewed by the Executive Committee before being presented to the Board of Directors.

### **Departments focused principally on internal control and risk related matters**

Such departments are responsible for managing and/or monitoring some aspects of internal control and/or risk related matters. However, they are primarily focused on these matters as part of their principal day-to-day management responsibilities:

#### **RISK MANAGEMENT DEPARTMENT**

The role of Risk Management (RM) is to identify, quantify and manage the main risks to which the Company is exposed. To this end, Group Risk Management (GRM) develops and deploys a number of risk measurements, monitoring instruments and methods, including a standardized methodology and framework including the ORSA (Own Risk & Solvency Assessment) required under Solvency II. Such framework is deployed within AXA Assurances Vie Luxembourg by Risk Management department.

The Risk Management activities aim to create and maintain an appropriate risk management system in order to identify, assess, monitor and mitigate the most significant risks to which AXA Assurances Vie Luxembourg is exposed, and which could jeopardise its solvency, in accordance with the AXA Group's "Risk Management" standards.

To that end, all the Company's operating technical and cross-divisional functions contribute to this system depending on their expertise and business sector.

When appropriate, this work leads to the implementation of decisions that affect the Company's risk profile, helping to monitor the solvency position and manage the volatility of AXA's earnings through improved understanding of the risks taken and optimization of capital allocation.

The types of risks covered include risks coming from the invested assets, from the insurance liabilities, asset/liability mismatch risks and operational risks. Under the Solvency II regulation, AXA Assurances Vie Luxembourg is required to produce an ORSA Report which is filed with the regulator. GRM has defined and implemented a set of policies and procedures to ensure that all risks embedded in the business processes are appropriately reviewed on a yearly basis.

The AXA Assurances Vie Luxembourg ORSA Report is reviewed by the Risk Committee and then presented to the Audit Committee of the Board of Directors and the Board of Directors which approves the conclusions of the Company ORSA Report and authorizes the filing of the ORSA Report to the Commissariat aux Assurances.

#### **FINANCE DIVISION**

The Finance Division's role of AXA Assurances Vie Luxembourg encompasses the following principal activities:

- development of both accounting and reporting standards;
- managing the Group's financial consolidation and reporting systems;

- producing the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) and analyzing key performance indicators;
- producing the economic balance sheet;
- developing and using management control tools;
- strategy and budget planning and monitoring of targets;
- coordinating the production of reports filed with the Commissariat aux Assurances related to Solvency;
- liaising with the Statutory Auditors and contributing to Audit Committee meetings as required;
- Valuation of Assets and Liabilities; and
- Assets & Liabilities Management including the Strategic Assets Allocation.

These missions are performed for regular closings, forecasts and strategic plan exercises.

Based on group standards, the Finance Division has defined and implemented a set of policies and procedures to ensure that the consolidation process leading to the consolidated financial statements is timely and accurate. This consolidation process is based on the following:

#### **Definition of standards and maintenance of an information system**

Group accounting standards, which are consistent with accounting and regulatory principles, are set forth in the “AXA Group Accounting Manual” and updated regularly by PBRC experts. These guidelines are submitted to AXA’s Statutory Auditors for review before being made available to AXA subsidiaries.

The information system is based on “Magnitude”, a consolidation tool managed and updated by a dedicated team. This system is also used to deliver management reporting information used to produce an economic perspective on the consolidated financial statements and the economic balance sheet. The process through which this management reporting information and the economic balance sheet are produced and validated is the same as the one used to prepare consolidated financial information.

#### **Operating control mechanisms**

At entity level, AXA Assurances Vie Luxembourg is responsible for entering and controlling accounting and financial data that comply with the “AXA Group Accounting Manual” and reflect consolidation rules under IFRS accounting standards. In this respect, the Chief Financial Officer of the Company signs off on the accuracy of its respective contribution to the consolidated figures reported through Magnitude and their compliance with both the Group accounting manual and instructions in all frameworks produced (IFRS, AFR, actuarial indicators and economic balance sheet).

At PBRC level, accounting, financial and economic information reported by entities are analyzed by teams that liaise with subsidiaries on a full-time basis. In particular, these teams analyze the compliance with the “AXA Group Accounting Manual” and Group actuarial standards.

#### **LEGAL & COMPLIANCE**

The Legal Department and Compliance Department are responsible for identifying and managing the significant legal, regulatory and compliance risks to which AXA Assurances Vie Luxembourg is exposed. It provides expertise and advice on all significant corporate legal matters at AXA Assurances Vie Luxembourg and manages the legal aspects of transactions undertaken by the Company as well as significant litigation, regulatory, and compliance matters. It provides support and expertise to various departments of the Company to assess situations, analyze legal risk and contribute to design of solutions that mitigate those risks.

The Legal Function reports the litigation to the Audit Committee, which report to the Board of Directors.

The AXA Assurances Vie Luxembourg’s Legal Department and Compliance Department report to the Chief Financial Officer. The Head of Compliance Department is responsible for the Compliance Function. To achieve this aim, he is assisted by a Compliance Officer who ensures that the compliance systems are implemented. As part of its Compliance responsibilities, the Compliance Department manages a wide range of compliance related matters including (i) regular reporting from Luxembourg on significant compliance, litigation and regulatory matters, (ii) and (ii) financial crime

matters including, the AXA Assurances Vie Luxembourg's anti-corruption/bribery program, anti-money laundering and the Company's Standard on business with countries and/or individuals subject to international sanctions. (iii) Data privacy, and (iv) more broadly with the monitoring of compliance and regulatory risks.

The Compliance Function undertakes an annual Compliance Risk Assessment to identify the major compliance risks to which the business is exposed. Based on the Compliance Risk Assessment, an Annual Compliance action plan is developed at the end of each year for the following year.

The compliance activities within AXA Assurances Vie Luxembourg are articulated around a number of Group Standards and Policies which set the minimum requirements expected to be covered by AXA Assurances Vie Luxembourg. The Compliance Group Standards Handbook (GSH) and the Compliance Professional Family Policy Manual (PFPM) contain standards and policies on significant risks affecting the compliance activities as well as the high level control and monitoring principles to which AXA Assurances Vie Luxembourg must adhere. Both the standards and policies contained in the GSH and PFPM (e.g. Anti-Money Laundering, Sanctions, Anti-Bribery...) are mandatory. In addition, the compliance function has adapted the Group requirements and developed local policies to align with the relevant laws and regulations in the jurisdiction in which AXA Assurances Vie Luxembourg operates and conducts business. These local policies are reviewed every year by the Chief Compliance Officer.

The Compliance Function directly reports on a regular basis to senior management (Executive Committee) and the Audit Committee, on significant compliance matters, including key compliance risks, major regulatory changes that have compliance implications, the Annual Compliance Plan, outstanding Compliance Support and Development Program (CSDP) remediation plan and any other significant issues that require escalation.

The Compliance Function reports to the AXA Assurances Vie Luxembourg's Risk Committee and to the Audit Committee.

## **INTERNAL AUDIT**

The AXA Assurances Vie Luxembourg's Internal Audit provides support to the Board of Directors and the Management Committee to protect the entity's assets, reputation and long-term future by issuing an independent and objective opinion that enables value creation and improvements in the running of operations. The division assists the entity to achieve its goals via a structured and systematic approach:

- By assessing the effectiveness of its governance system and risk management and control processes;
- By challenging the management teams.

AXA Assurances Vie Luxembourg's Head of Internal Audit has direct access and an unwavering reporting line to the Chairman of the Company's Audit Committee.

AXA Assurances Vie Luxembourg's Internal Audit reports to the Group Head of Internal Audit from a functional standpoint; the latter reports directly to the Chairman of the Group Audit Committee.

## **RISK MANAGEMENT COMMITTEE**

In 2013, AXA Assurances Vie Luxembourg Management established a Risk Committee to ensure that the Company has: (i) a comprehensive view of the various risks facing it on a continuing basis, (ii) a dedicated forum for reviewing, analyzing and prioritizing these risks, (iii) defined action plan to manage these risks and (iv) optimal coordination and communication between the different departments managing these risks.

The Risk Committee is co-chaired by the CEO and CRO. The Risk Committee is comprised of the members of the Executive Committee, the Chief Risk Officer and the Head of Actuarial Function, and meets every 1,5 months (between 8 and 10 times on a yearly basis).

Its specific purpose is to:

- determine the “risk appetite” system, including the limits for financial and insurance risk, and the operational risk tolerance limit that will be presented to the Board of Directors;
- ensure that exposure to risk is aligned with these limits and determine any mitigation measures to be implemented;
- check the consistency of the Company’s risk profile, obtained via the adoption of a risk quantification model, with its operations, in order to facilitate the Board of Directors’ task of approving the instruments used;
- monitor the changes to reputational, strategic, emerging and compliance risk;
- approve the launch of new products;
- approve the reinsurance plans;
- guarantee the existence of an effective second line of defense;
- is responsible for monitoring operational risks, compliance risks, regulatory risks, country risks and reputation risks. The committee challenges the risk assessments performed by control functions and proposed action plan; and
- performs a review of internal and external fraud, customer disputes and complaints, progress towards implementing recommendations arising from independent reviews.

This Committee reports to the Board of Directors via the Audit Committee.

## **DISCLOSURE CONTROLS AND PROCEDURES**

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AXA SA has implemented a formal internal review and sign-off process pursuant to which all Executive Committee members, CFOs and certain other senior executives are required to certify various matters covered in AXA’s Annual Report.

This process is based on the following 3 pillars:

1. CFO Sign-Off Certificates required to be submitted by all local CFOs to Group PBRC, together with the required subsidiary financial reporting & consolidation information;
2. Disclosure Controls & Procedures Certificates required to be submitted by AXA’s Executive Committee members, regional CFOs and certain other senior executives (including heads of General Management Services Departments) pursuant to which each of these executives is required to review the Group’s Annual Report and formally certify (i) the accuracy and completeness of the information in the Annual Report with respect to the companies under his/her responsibility, and (ii) the effectiveness of disclosure controls and procedures. In addition, as part of this “sub-certification” process, these executives are required to review and comment on a number of transversal disclosures in the Annual Report relating to risk and other matters;
3. CFO Sign-Off on notes to the Consolidated Financial Statements: PBRC provided regional CFOs with the contribution of the companies under their responsibility to the consolidated financial statements in order to facilitate their certification on the accuracy and completeness of the information in the Annual Report of the Group.

The AXA Group and AXA Assurances Vie Luxembourg believe they have put in place a comprehensive system of internal control procedures and mechanisms that is appropriate and well adapted to their business and the global scale of their operations.

However, all internal control systems, no matter how well designed, have inherent limitations and do not constitute a guaranty or provide absolute certainty. Even systems determined to be effective by executives may not prevent or detect all human errors, all system malfunctions, all fraud or all misstatements and can provide only reasonable assurance. In addition, effective controls may become inadequate over time because of changes in conditions, deterioration of compliance with procedures or other factors.

# B5 – Internal audit function

## / Internal audit function

The Group's Internal Audit function provides the Group Audit Committee and the Group's Management Committee with independent and objective assurance on the effectiveness of internal control and risk management across the Group.

The Group's Global Head of Audit reports to the Chairman of the AXA Group Audit Committee with an administrative reporting line to the Group's Chief Executive Officer.

All internal audit teams across the Group report to the Group's Global Head of Audit whilst also having a direct and unfettered reporting line to their local Audit Committee Chairman and an administrative reporting line within their local management structure.

AXA Assurances Vie Luxembourg Internal Audit exists to help the Board and Executive Management protect the assets, reputation and sustainability of the organisation by providing an independent and objective assurance activity designed to add value and improve the organisation's operations. It helps the organisation meet its objectives by bringing a systematic, disciplined approach to challenge Executive Management and evaluate the effectiveness of risk management, control and governance processes.

The head of AXA Assurances Vie Luxembourg's internal audit function has a direct and unfettered reporting line directly to his/her respective Audit Committee Chairman.

AXA Assurances Vie Luxembourg Internal Audit functionally reports through to the Global Head of Audit who reports to the Group Audit Committee Chairman.

AXA Assurances Vie Luxembourg Internal Audit annually sets up an internal audit plan of work, based on an assessment of both the inherent risk and the adequacy of controls. Its performance is formally monitored and reported to the Audit Committee.

Over a five year period, all applicable Common Audit Universe categories for each entity are expected to be audited. Any exceptions identified are notified to the Audit Committee for ratification.

A report is issued at the conclusion of each audit assignment to the relevant senior management. The results of the audits and resolution status of internal audit issues are presented to the Audit Committee and Executive Management on a regular basis.

The Audit Committee must have at least three, but no more than seven, members with one filling the role of Chairman. The Chair and members of the Audit Committee are nominated and appointed by the Board. Members must not be appointed for a period of more than 5 years. Members may have their appointment renewed subject to serving a maximum period of 12 years on the Audit Committee.

The Audit Committee fulfils its duties according to the AXA Group Terms of Reference for Audit Committees.

# B6 – Actuarial function

## / Actuarial function

To comply with Solvency II regulation, an effective Actuarial Function has been set up with the specific role of performing the following tasks:

- a) coordinate the calculation of technical provisions;
- b) ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
- c) assess the sufficiency and quality of the data used in the calculation of technical provisions;
- d) compare best estimates against experience;
- e) inform the management and the Board of the reliability and adequacy of the calculation of technical provisions;
- f) oversee the calculation of technical provisions;
- g) express an opinion on the overall underwriting policy;
- h) express an opinion on the adequacy of reinsurance arrangements; and
- i) 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.

AXA Assurances Vie Luxembourg's Head of Actuarial Function, who is also Chief Financial Officer, directly reports to AXA Assurances Vie Luxembourg CEO. In addition, as defined in AXA Group Actuarial Framework, his nomination is subject to Group Head of Actuarial Function agreement to whom he indirectly reports any major problem related to actuarial function responsibilities.

AXA Assurances Vie Luxembourg's Head of Actuarial Function:

- is a permanent member of the Risk Committee (emanation of Executive Committee members) and is presenting the actuarial function report to this instance;
- is an occasional member of the Audit and Board Committees through which he is informing the Board about his conclusions and potential concerns on the tasks undertaken by the actuarial function.

AXA Assurances Vie Luxembourg's Head of Actuarial Function is preparing the actuarial function report to inform the Management and the Board on its conclusions about the reliability and adequacy of the calculation of technical provisions. This report also provides an overview of the activities undertaken by the actuarial function in each of its areas of responsibility during the reporting period, with the exception of the contribution to the implementation of the risk-management system which is described in separate documents. This actuarial function report is also communicated to the Group Actuarial Function Holder.



# B7 – Outsourcing

## / Outsourcing arrangements

Outsourcing by AXA refers to delegation to a third party of the execution of certain ongoing activities pursuant to a service agreement. The AXA outsourcing policy describes the mandatory Group requirements to comply with Solvency II directives and requires that material relationships with third party providers are subjected to appropriate due diligence, approval and on-going monitoring. The objective of the policy is to ensure that “AXA does not abdicate responsibility” for the functions delegated to an AXA internal subsidiary or external third party, and that risks inherent in the outsourcing of material relationships (i.e. those deemed critical to the principal activities to the business) are identified, monitored and appropriately mitigated.

AXA Assurances Vie Luxembourg has entered into contractual outsourcing arrangements with third-party service providers for services required in connection with the day-to-day operation of businesses. Thorough due diligence is conducted regularly to ensure the Company maintains full responsibility over the outsourced functions and activities.

Based on a self-assessment conducted as of year-end 2017, AXA Assurances Vie Luxembourg’s most significant outsourced activities relate to: (i) Data center services, (ii) IT Operation and Maintenance (and (iii) investment activities (France). These outsourced activities are operated in the following locations and jurisdictions:

More specifically, some of the following outsourced activities are operated by AXA Group Companies:

- Data Center Services : located in Luxembourg, under the Luxembourgish jurisdiction and supervised by the local regulator (CSSF – Commissions de Surveillance du Secteur Financier)
- IT Platforms Operation and Maintenance – Part 1 (GED, EBASYS) : located in Luxembourg and operated in our offices, under the Luxembourgish jurisdiction
- IT Platforms Operation and Maintenance – Part 2 (AML, International Claims, HR, CMS, SHIP and My AXA) : performed by AXA Group Solutions, located in different countries (mainly France and Spain), under the French Jurisdiction
- Investment services : provided by AXA Investment managers, located in France, under the French Jurisdiction

## B8 – Any other information

Not applicable.

**C****RISK PROFILE**

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**C.1 Underwriting risk**

Insurance risks

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**C.2 Market risk**

Risks: definition, exposures and risk management

Governance of Investment strategy and asset & liability management (ALM)

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**C.3 Credit risk**

Invested Assets

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**C.4 Liquidity risk**

Liquidity position and risk management framework

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**C.5 Operational risk**

General principles

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**C.6 Other material risks**

Strategic risk

Reputation risk

Emerging risks

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**C.7 Any other information**

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## / Foreword

This section describes the main risks to which the AXA Assurances Vie Luxembourg is exposed through its business.

AXA's business is to provide protection to its clients ranging from the protection of their properties to the individual or group protection (i.e. individual or group's physical integrity, health or life coverage), protection against liability and asset protection. As an insurer AXA's production cycle is reversed: premiums precede pay-outs. AXA collects premiums from its policyholders and invests the collected premiums for the period between collection and the event that generates a claim or the expiration of the policy.

- **AXA's individual and group life insurance policies** encompass both savings and retirement products, on the one hand, and protection products, on the other hand. Savings and retirement products meet the need to set aside capital to finance the future, a special project or retirement. Personal protection covers risks related to an individual's physical integrity or life.

AXA's expertise lies in its ability to assess, mutualise or transfer individual or business risk. In this context, AXA has developed consistent and comprehensive tools to measure and control its main risks as detailed in the below sections.

## / Solvency II capital position

### SOLVENCY II CAPITAL REQUIREMENT

The Solvency II regime introduces a risk based capital requirement which can be assessed either using an internal model or a standard formula.

Axa Assurances Vie Luxembourg is using the standard formula to quantify its Solvency Capital Requirements (SCR).

The table below details the Solvency Capital requirement at AXA Assurances Vie Luxembourg level and per risk category.

(in euros)

#### Solvency Capital Requirement - for undertakings on Standard Formula

S.25.01.01

Article 112*	Z0010	2	* 1 - Article 112(7) reporting (output: x1) 2 - Regular reporting (output: x0)
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#### Basic Solvency Capital Requirement

		Net solvency capital requirement	Gross solvency capital requirement	Allocation from adjustments due to RFF and Matching adjustments portfolios
		C0030	C0040	C0050
Market risk	R0010	45,912,066.00	54,761,526.52	0.00
Counterparty default risk	R0020	2,959,391.12	2,959,391.12	0.00
Life underwriting risk	R0030	29,415,364.62	35,181,305.87	0.00
Health underwriting risk	R0040	0.00	0.00	0.00
Non-life underwriting risk	R0050	0.00	0.00	0.00
Diversification	R0060	-16,897,399.02	-19,815,384.19	
Intangible asset risk	R0070	0.00	0.00	
<b>Basic Solvency Capital Requirement</b>	<b>R0100</b>	<b>61,389,422.71</b>	<b>73,086,839.32</b>	

#### Calculation of Solvency Capital Requirement

		Value	
		C0100	
Adjustment due to RFF/MAP nSCR aggregation	R0120	0.00	
Operational risk	R0130	4,032,674.03	
Loss-absorbing capacity of technical provisions	R0140	-11,697,416.61	
Loss-absorbing capacity of deferred taxes	R0150	-17,716,357.96	
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	0.00	
<b>Solvency Capital Requirement excluding capital add-on</b>	<b>R0200</b>	<b>47,705,938.78</b>	
Capital add-on already set	R0210	0.00	
<b>Solvency capital requirement</b>	<b>R0220</b>	<b>47,705,938.78</b>	
<b>Other information on SCR</b>			
Capital requirement for duration-based equity risk sub-module	R0400	0.00	
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	0.00	
Total amount of Notional Solvency Capital Requirements for ring fenced funds	R0420	0.00	
Total amount of Notional Solvency Capital Requirements for matching adjustment	R0430	0.00	
Diversification effects due to RFF nSCR aggregation for article 304	R0440	0.00	
Method used to calculate the adjustment due to RFF/MAP nSCR aggregation (*)	R0450	4	* 1 - Full recalculation 2 - Simplification at risk sub-module level 3 - Simplification at risk module level 4 - No adjustment
Net future discretionary benefits	R0460	15,082,133.20	

### AXA's Luxembourg Target Capital and risk sensitivity

Under Solvency II regime, AXA Assurances Vie Luxembourg is required to hold eligible own funds that cover its Solvency Capital Requirement to absorb significant losses and to be compliant with regulatory requirements. AXA Assurances Vie Luxembourg' Solvency Capital Requirement is

calibrated so as to ensure that all quantifiable risks to which AXA Assurances Vie Luxembourg is exposed are taken into account.<sup>4</sup>

Under normal conditions, AXA Assurances Vie Luxembourg should maintain solvency II regulatory ratio above 100%, allowing AXA Assurances Vie Luxembourg to have sufficient eligible own funds to sustain a 1 in 200 years shock.

In addition, to ensure a comfort level over a 100% Solvency II regulatory ratio, AXA Assurances Vie Luxembourg monitors its ability to absorb possible severe financial or technical shocks. In this context, AXA Assurances Vie Luxembourg assess the sensitivities of its Solvency II regulatory ratio to financial shocks on corporate bond spreads, on interest rates, and on equity. These sensitivity analyses do not take into account preemptive management actions that might be taken by the management to mitigate the effects of the defined shocks, but, allow to ensure through the risk appetite framework that local executive management reviews and approves the risk carried by the company, understand the consequences of and adverse development of these risks, and have action plans that can be implemented in case of unfavorable developments

It is also worth mentioning that AXA Assurances Vie Luxembourg is a subsidiary of the AXA Group which under the solvency II regime has defined a clear capital management framework with 170-230% as central target range of Solvency II ratio. AXA's consolidated Solvency Capital Requirement is taking into account the global diversification of risks that exist across all its insurance and reinsurance undertakings, reflecting properly the AXA Group risk exposure. AXA Group performs also on regular basis sensitivity analyses of its Solvency II regulatory ratio to material risks and events, demonstrating that its Solvency ratio is resilient to a wide range of shocks ( similar to past major observed events such 2008/2009 financial crisis, 2011 financial crisis, Lothar & Martin storm).

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<sup>4</sup> In order to ensure the robustness of the economic capital model, reverse stress tests are performed at the Company level. Reverse stress scenarios exhibit combinations of Market, Credit, Life, P&C and Operational events (occurring simultaneously) that would lead to a loss amount equal to the Solvency Capital Requirement. These scenarios consist in a back-testing for the correlation coefficients' accuracy. Indeed, performing such scenarios permits highlighting potential cross and non-linearity effects and thus adjusting the correlations to take into account such impacts. It results in conservative correlation coefficients. These stress tests are complemented by Transversal Stress scenarios which bring to light appropriate measures that may be taken in order to mitigate their effects under the stress scenarios including, if relevant, activating the crisis management governance of the Company.

# C1. Underwriting risk

## / Insurance Risk Exposure

AXA Assurances Vie Luxembourg is primarily responsible for managing its insurance risks linked to underwriting, pricing and reserving. It is also responsible for taking appropriate actions in response to changes in insurance cycles and to the political and economic environments in which it operates.

In the context of the business performed, as described in section A1(3) (and in the beginning of section C) of this report, AXA Assurances Vie Luxembourg is exposed to the following main risks: Lapse risk due to lapses higher than planned, mortality risk due to deaths higher than planned for protection business or to longevity risk due to an increase of life expectancy higher than expected.

AXA Assurances Vie Luxembourg' overall exposure to underwriting risks is covered by AXA's Solvency Capital Requirement metric, as detailed in the above Section "Solvency II capital position", and taken into account in AXA's liquidity risk management framework (see Section C4). Sensitivity analyses of its Solvency II ratio to material risk events are detailed in the above Section "AXA's Luxembourg Target Capital and risk sensitivity".

AXA's asset management policies and investment strategy, which covers investments of assets to address underwriting risks, are addressed in the Section "AXA's Investment Strategy and Asset & Liability Management (ALM)."

## / Risk Control and Risk Mitigation

Insurance risks are covered through major processes, defined at Group level and managed locally. These processes cover amongst others:

- risk controls on new products that complement underwriting rules and product profitability analyses (Product Approval Process);
- optimizing of reinsurance strategies in order to limit the peak exposures of the Company thereby protecting its solvency by reducing volatility;
- reviewing technical reserves including a roll forward analysis;
- monitoring emerging risks to share expertise within the underwriting and risk communities.

Controlling if risk appetite is respected

## PRODUCT APPROVAL

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Group Risk Management (GRM) has defined a set of procedures to approve new products launches. These procedures, adapted and implemented locally, foster product innovation across the Group while maintaining risks under control.

This validation framework notably relies on the results of the economic capital calculation of AXA Assurances Vie Luxembourg and ensures that any new products undergo a thorough approval process before they are put to market.

Methods are adapted to the underwriting of risks, while maintaining the principle of local decision making based on a documented approval procedure and using the output of the economic capital model. The aim is twofold:

- for pre-launch business, the aim is to ensure that new risks underwritten have been scrutinized before proposing them to customers;
- for post-launch business, appropriate profitability and risk control analyses are performed to check that the business remains in line with the Company's risk framework.

This framework complements underwriting rules by ensuring that no risks are taken outside pre-defined tolerance levels and that value is created by adequate risk pricing.

## REINSURANCE

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Together with the business lines, Risk Management contributes to the elaboration of AXA Assurances Vie Luxembourg reinsurance cover. In alignment with Group Standards, AXA Assurances Vie Luxembourg reinsurance treaties are placed through the Global lines, unless a documented approval to place the treaty outside the Group is obtained.

Reinsurance programs are set up as follows:

- risks are modeled through in-depth actuarial analyses conducted on each portfolio and protected with reinsurance cover adequate to the risk appetite limits set at Group and AXA Assurances Vie Luxembourg level.

## TECHNICAL RESERVES

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AXA Assurances Vie Luxembourg specifically monitors its reserve risks. If necessary, additional reserves are also booked by the reserving actuaries using various statistical and actuarial methods. These calculations are initially carried out by the actuarial department in charge, and are then reviewed for a second opinion by risk management team. Actuaries are in charge of assessing reserves, notably ensuring that:

- The technical assumptions and actuarial methodologies are in line with professional practices and sensitivity analyses are performed at least for the most significant ones;
- A roll-forward analysis of reserves has been performed, the regulatory and economic context references are taken into account and material deviations are explained;
- The operational losses relating to the reserving process have been adequately quantified;
- The Best Estimate Liabilities have been calculated in accordance with Articles 75 to 86 of the Solvency II Directive and Group guidelines.

As part of the Solvency II framework, the local Actuarial Function Holder (AFH) for AXA Assurances Vie Luxembourg coordinates the calculation of technical provisions ensuring the appropriateness of the methodologies and underlying models used. As part of his annual report, the AFH also gives an opinion on the overall underwriting policy and on the adequacy of reinsurance arrangements.



## C2. Market Risk

### / Market Risk Exposure

AXA Assurances Vie Luxembourg is exposed to financial market risks through its core business of financial protection (i.e. insurance) and through the financing of its activities as part of its equity and debt management.

#### **Description of market risks**

The market risks arise from a variety of factors including:

- a rise in yields on fixed-income investments (linked to interest rates or in spreads) reduces the market value of fixed-income investments and could impact adversely the solvency margin;
- a decline in asset market value (equity, real estate, alternatives, etc.) could adversely impact the solvency margin, as well as available surplus;
- a change in foreign-exchange rates would have limited impact for the operating units since foreign-currency commitments are matched to a large extent by assets in the same currency or covered by hedges, but it could affect the earnings contribution in euros.

Regarding foreign exchange risk, the implemented policy's objective is to limit variations in net foreign currency-denominated assets resulting from movements in exchange rates. The purpose of the policy is therefore to protect partially or in full the value of AXA Assurances Vie Luxembourg' net foreign-currency investments in its subsidiaries and thus reduce the variability of Company's consolidated shareholders' equity against currency fluctuations, but also of other key indicators such as liquidity, gearing and solvency ratios at Company level.

AXA regularly monitors its exchange rate hedging strategy and will continue to review its effectiveness and the potential need to adapt it taking into account impacts on earnings, value, solvency, gearing ratio and liquidity.

AXA Assurances Vie Luxembourg' overall exposure to market risks is covered by AXA's Solvency Capital Requirement metric, as detailed in the above Section "Solvency II capital position", and taken into account in AXA's liquidity risk management framework (see Section C4). Sensitivity analyses of its Solvency II ratio to material market risk events are detailed in the above Section "AXA's Luxembourg Target Capital and risk sensitivity".

AXA's asset management policies and investment strategy, which covers investments of assets to address market risks, are addressed in the above Section "AXA's Investment Strategy and Asset & Liability Management (ALM)."

### / Risk Control and Risk Mitigation

AXA Assurances Vie Luxembourg is primarily responsible for managing its financial risks (market risk, credit risk, liquidity risk), while abiding by the risk framework defined at Group level, in terms of limits/thresholds and standards. This approach aims to allow reacting swiftly in an accurate and targeted manner to changes in financial markets, political and economic environments in which the Company operates.

A wide variety of risk management techniques are used to control and mitigate the market risks to which the Company is exposed. These techniques include:

- Asset Liability Management (ALM), i.e. defining an optimal strategic asset allocation with respect to the liabilities' structure, to reduce the risk to a desired level;
- a disciplined investment process, requiring for any sophisticated investment a formal thorough analysis by the Investment Department, and a second opinion by Risk Management;

- hedging of financial risks when they exceed the tolerance levels set by AXA Assurances Vie Luxembourg or by the Group. Operational management of derivatives is based on stringent rules and is mainly performed by Group asset managers, AXA Investment Managers and AB;
- a regular monitoring of the financial risks on the economic and solvency position of the Company; and
- reinsurance which also offers solutions to mitigate certain financial risks;

## **/ Governance of Investment strategy and asset & liability management (ALM)**

### **Group and Local Guidance on Investments**

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Investment activities are steered by AXA Investment Management through a delegation given by AXA Assurances Vie Luxembourg. AXA Investment Management manages local fixed-income and equity portfolios, aiming at an optimized risk-return ratio, maintains reporting lines to the Group, and manages close relationships with CIO, CFO and CRO of AXA Assurances Vie Luxembourg. Moreover, they are responsible for the investment performance. ALM activities are performed by AXA Assurances Vie Luxembourg Chief Investment Officer (CIO).

### **Group and Local Governance Bodies**

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In order to efficiently coordinate local and global investment processes, decisions within the investment community are taken by two main governance bodies:

- the Group Investment Committee which is chaired by the Group Chief Financial Officer . This committee defines investment strategies, steers tactical asset allocation, evaluates new investment opportunities and monitors the Group's investment performance;
- the Group Asset Liability Management Supervisory Committee for which the Group Investment and ALM Management Department is an important member is co-chaired by the Group Chief Financial Officer and the Group Chief Risk Officer.

AXA Assurances Vie Luxembourg has a local Investment and ALM committee whose terms of reference are approved by the local Executive committee.

This committee is responsible for, inter alia, defining the entity's Strategic Asset Allocation, approving and monitoring investments, meeting local compliance obligations and reviewing the participation to investment proposals syndicated by the Group, as well as local investment proposals.

### **ALM Studies and Strategic Asset Allocation**

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ALM aims at matching assets with the liabilities generated by the sale of insurance policies. The objective is to define the optimal asset allocation so that all liabilities can be met with the highest degree of confidence while maximizing the expected investment return.

ALM studies are performed by AXA Assurances Vie Luxembourg ALM & Investment Department with the support of internal asset managers when appropriate and a second opinion provided by the Risk Management Department. They use methodologies and modelling tools that develop deterministic scenarios, embedding policyholders' behaviour considerations for the liabilities, financial market evolution for the assets and taking into account existing interaction between the two.

This process aims at maximizing expected returns given a defined level of risk. Furthermore, a series of additional constraints are taken into account, such as Solvency II economic capital model considerations, earnings stability, protection of the solvency margin, preservation of liquidity, as well as local and consolidated capital adequacy and requirement.

At AXA Assurances Vie Luxembourg level, the strategic asset allocation issued from the ALM study must be reviewed by the local risk management, and approved with regards to predefined risk appetite limits, before being fully endorsed by the local Investment and ALM committee. The strategic asset allocation allows for taking a tactical stance within a given leeway.

## Investment Approval Process

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Investment opportunities, like non-standard investments, new strategies or new structures, are subject to an Investment Approval Process (IAP). The IAP ensures key characteristics of the investment are analysed, such as risk and return expectations, experience and expertise of the investment management teams, as well as accounting, tax, legal and reputational issues.

The IAP is completed at Group level for any significant investment, notably if several local entities are participating in the same investment. In that case, the successful completion of an IAP is done after the production of a second independent opinion by GRM.

The IAP is used and completed at local level to cover local characteristics (tax, statutory accounting, etc.).

Local IAP is also run for investments in new asset classes for local entities under the same principles.

## Governance Framework for Derivatives

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Products involving hedging programs based on derivative instruments are designed with the support of dedicated teams at AXA Bank Europe, AXA Investment Managers, AB, AXA US and AXA SA. In a similar way, this set-up ensures all entities benefit from technical expertise, legal protection and good execution of such transactions within the following governance framework for derivatives.

Derivative strategies are systematically reviewed and validated by local Investment and ALM committees. In addition, there is a segregation of duties between those responsible for making investment decisions, executing transactions, processing trades and instructing the custodian. This segregation of duties aims in particular at avoiding conflicts of interest.

The market risks arising from derivatives are regularly monitored taking into account the Group's various constraints (Risk appetite, Economic capital model, etc.). Such monitoring is designed to ensure market risks, coming either from cash or derivative instruments, are properly controlled and remain within approved limits.

Legal risk is addressed by defining a standardized master agreement. AXA Assurances Vie Luxembourg may trade derivatives only if they are covered by legal documentation which complies with the requirements set out in the Group standard. Any change to certain mandatory provisions defined in the Group standards must be approved by GRM.

Additionally, there is a centralized counterparty risk policy. GRM has established rules on authorized counterparties, minimum requirements regarding collateral and counterparty exposure limits.

The operational risk related to derivatives is measured and managed in the context of AXA's global operational risk framework. Furthermore, execution and management of derivatives are centralized within dedicated teams, reducing AXA Group's and AXA Assurances Vie Luxembourg operational risk.

Valuation Risk is addressed through the use of expert teams. They independently counter-valuate the derivatives positions so as to get appropriate accounting, payment and collateral management. They also challenge the prices proposed by counterparties in case AXA Assurances Vie Luxembourg wishes to initiate, early terminate or restructure derivatives. Such capacity in pricing requires high-level expertise, which relies on rigorous market analysis and the ability to follow the most up-to-date market developments for new derivatives instruments.

## Investment and Asset Management

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For a large proportion of its assets, AXA Assurances Vie Luxembourg utilizes the services of asset managers to invest in the market. AXA Assurances Vie Luxembourg mandates the day-to-day management of its asset portfolios primarily to AXA's asset management subsidiaries, i.e. AXA Investment Managers and AB. AXA Assurances Vie Luxembourg CIO continuously monitors, analyzes, and challenges asset managers' performances for AXA Assurances Vie Luxembourg portfolio.

## C3. Credit Risk

Counterparty credit risk is defined as the risk that a third party in a transaction will default on its commitments. Given the nature of its core business activities, AXA Assurances Vie Luxembourg monitors all types of counterparties, using methods suitable to each type:

- investment portfolios held by its insurance operations (excluding assets backing separate-account products where the financial risk is borne by policyholders);
- ceded risks to reinsurers resulting from reinsurance directly ceded by AXA Assurances Vie Luxembourg;
- receivables deriving from direct insurance operations, including policyholders and brokers.

AXA Assurances Vie Luxembourg' overall exposure to credit risks is covered by AXA's Solvency Capital Requirement metric, as detailed in the above Section "Solvency II capital position", and taken into account in AXA's liquidity risk management framework (see Section C4). Sensitivity analyses of its Solvency II ratio to material credit risk events are detailed in the above Section "AXA's Luxembourg Target Capital and risk sensitivity".

AXA's asset management policies and investment strategy, which covers investments of assets to address credit risks, are addressed in the above Section "AXA's Investment Strategy and Asset & Liability Management (ALM)."

## / Risk Control and mitigation

### / Invested Assets

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Concentration risk is monitored by different analyses performed at Group level by issuer, sector and geographic region, in addition to local procedures and by a set of Group and local issuer limits.

These limits aim at managing the default risk of a given issuer, depending on its rating and on the maturity and seniority of all bonds issued by the issuer and held by AXA Assurances Vie Luxembourg (corporate, Government agency and sub sovereign).

The limits also take into account all exposure on issuers through debt securities, equity, derivatives and reinsurance counterparty risk.

For Sovereign exposures, specific limits have also been defined on government bonds and government-guaranteed bonds and are monitored at Group and local levels.

Compliance with the limits is ensured through defined governance processes. The Financial Risk Management and the Investment Department handles, on a monthly basis, any issuer exposure breaches to the Group's limit tolerances and determines coordinated actions for excessive credit concentrations. Also, a Group Credit Team reporting to the Group CIO provides credit analysis independently from Group asset managers, in addition to local CIO teams. The ALM Supervisory Committee is regularly kept informed of the work performed. At AXA Assurances Vie Luxembourg level, any breach of limits is presented for remediation at the local Investment and ALM committee.

### Credit Derivatives

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AXA Assurances Vie Luxembourg has no derivatives at December, 31 2017.

### Receivables from Reinsurers: Rating Processes and Factors

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At Group level, to manage the risk of reinsurers' insolvency, a Security Committee is in charge of assessing reinsurers' quality and acceptable commitments. This risk is monitored to avoid any excessive exposure to any specific reinsurer. The Group Security Committee meets monthly – and more frequently during renewal periods – and decides on any action to be taken with the aim of limiting AXA's exposure to the risk of default by any of its reinsurers.

## **Other receivables**

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Receivables risk arises from to the risk of default of counterparties related to insurance operations. The exposures are monitored by the accounting department by nature of counterparties (policyholders, intermediaries, intragroup, taxes, others, etc.) and are actively managed to ensure the correct representation of the risk in the balance sheet on a quarterly basis.

The Risk Management team assesses on an annual basis the capital charge for each type of counterparty, using internal risk factors or standard factors.

## C4. Liquidity risk

### **/ Liquidity position and risk management framework**

Liquidity risk is the uncertainty, emanating from business operations, investments or financing activities, that AXA Assurances Vie Luxembourg will have the ability to meet payment obligations in a full and timely manner, in current or stressed environments. Liquidity risk concerns assets and liabilities as well as their interplay.

At AXA Assurances Vie Luxembourg level, the liquidity risk is measured by the “Excess Liquidity” metric, which is defined as the worst liquidity position, measured over four different time horizons: 1 week, 1 month, 3 months and 12 months.

For each time horizon, the post-stress liquidity resources available and the post-stress liquidity needs (i.e. net outflows) to be paid are projected over the time-horizon allowing an estimation of the excess liquidity (i.e. the amount of available post-stress liquidity resources minus the post-stress outflows projected over a defined time horizon).

The stressed conditions are calibrated so as to reflect extreme circumstances, and include:

- Distressed financial markets (in terms of asset prices, liquidity and access to funding through capital markets);
- Confidence crisis towards AXA (increase in lapses, decrease of premiums received, no new business);

In addition, all these events are considered to occur simultaneously. Therefore, the calibration of the liquidity stress is a very prudent metric.

The entity shows significant positive excess liquidity which is monitored on a quarterly basis,

The main liquidity resources are the assets mainly cash, government bonds, corporate bonds & equities and the main needs are coming from life lapses or deaths.

The liquidity position remains relatively stable over time.

As of December 31, 2017 the expected profit included in future premiums as calculated in accordance with Article 260(2) of the Solvency II Regulation totaled € 61.5 million.

## C5. Operational risk

AXA has defined a framework to identify and measure its operational risks that may arise from a failure in its organization, systems and resources or from external events. Ensuring an adequate mitigation of these risks across the Group is a key pillar of the Risk Management functions.

### / General principles

One objective of the AXA Assurances Vie Luxembourg's operational risk economic capital model is to understand and reduce losses resulting from operational failures and to define an appropriate risk response strategy for major Operational risk scenarios.

Based on the Solvency II definition, AXA Assurances Vie Luxembourg defines operational risk as the risk of loss arising from inadequate or failed internal processes, personnel or systems or from external events. Operational risk includes legal risks and excludes risks arising from strategic decisions, as well as reputation risks.

AXA has defined a single Group framework for identifying, quantifying and monitoring the main operational risks, involving the deployment of a common system, dedicated operational risk teams and a common operational risk typology classifying operational risks into seven risk categories: internal fraud, external fraud, employment practices and workplace safety, clients, products and business practices, damages to physical assets, business disruption and system failures and execution, delivery and process management.

Both quantitative and qualitative requirements are defined.

- The most critical operational risks of AXA Assurances Vie Luxembourg and a set of stress scenarios are identified and assessed following a forward-looking and expert-opinion approach. These risk scenarios are then used to estimate the capital requirement needed to cover operational risks. The operational risk management process is embedded into local governance through senior management validation to ensure the adequacy, appropriateness and comprehensiveness of the risk assessment but also to ensure that adequate corrective and pre-emptive actions are defined and implemented in front of the main risks;
- In addition, a loss data collection process is progressively in place within AXA Assurances Vie Luxembourg in order to track and appropriately mitigate actual operational risk losses. This process is also used as a valuable source of information to back-test the assumptions taken in risk assessments.

In 2017, the Group Operational Risk Profile is reasonably well spread out with all seven operational risk categories covered and the main risks being related to processes execution.

AXA Assurances Vie Luxembourg' overall exposure to operational risks is covered by AXA's Solvency Capital Requirement metric, as detailed in the above Section "Solvency II capital position". Sensitivity analyses of its Solvency II ratio to material risk events are detailed in the above Section "AXA's Luxembourg Target Capital and risk sensitivity".



## C6. Other material risk

### / Strategic risk

A strategic risk is the risk that a negative impact (current or prospective) on earnings or capital, material at AXA Assurances Vie Luxembourg level, arises from a lack of responsiveness to industry changes or adverse business decisions regarding:

- Significant changes in footprint, including through mergers and acquisitions;
- Product offering and client segmentation;
- Distribution model (channel mix including alliances/partnerships, multi-access and digital distribution).

Given the nature of strategic risks, there is no capital charge assessment but rather a strong strategic risk management framework in place in order to assess, anticipate and mitigate these risks.

### / Reputation risk

Reputation risk is the risk that an event, internal or external, will negatively influence stakeholders' perceptions of the Company or where there is a gap between stakeholders' expectation and the Company's behaviors, attitudes, values, actions, or inactions.

AXA has defined a global framework with a two-fold approach to reactively protect and proactively monitor, manage and mitigate reputational issues in order to minimize value destruction, and build and maintain brand equity and trust among stakeholders.

AXA Group created a Global Reputation Network whose purpose is to implement locally a reputation risk management framework. The objectives of the reputation risk management approach are in line with AXA's overall enterprise risk management approach, which aim to develop a reputation risk culture across the enterprise.

Three main objectives drive the reputation risk management approach:

- proactively manage reputation risks, avoid or minimize negative issues impacting the reputation of AXA and build trust among all AXA stakeholders;
- define accountability for reputation risks across the organization (Marketing, HR, Finance / Investors Relations, etc.), at Group and local levels;
- implement a common reputation risk management framework throughout the organization.

The implementation of the reputation risk framework encompasses all AXA activities including insurance, asset management, banking as well as internal service providers.

### / Emerging risks

Emerging risks are risks which may develop or which already exist and are continuously evolving. Emerging risks are marked by a high degree of uncertainty; as some of them may never emerge.

AXA has established processes to qualify and quantify emerging risks which could develop over-time and become significant.

Emerging risks surveillance is organized through a detection process including monitoring scientific publications, court decisions, etc. Risks are monitored and classified within a risk mapping constituted of six sub-groups (regulatory & legal, environmental, socio & political, economic & financial, medical and technological). After prioritization of the monitored risks or after a warning from an entity, a working group is launched on a yearly basis by GRM to review a specific risk and its potential impact in terms of insurance.

By developing relationships with researchers and supporting innovative projects in environmental, socio-economic and life risks, the AXA Research Fund is a key contributor to AXA's commitment to better understand the evolution of these risks.

By seeking to develop new solutions, acting as an advisor on risk management and actively contributing to the overall debate about the issues involved, along with other major market players,



AXA intends to promote a better understanding and better forecasting of emerging risks and to support sustainable development.

## C7. Any other information

Not applicable

**D**

# VALUATION FOR SOLVENCY PURPOSES

## Basis for preparation

### D.1 Assets

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- Fair Value Measurement
- Intangible Assets
- Property, Plant & Equipment held for own use
- Investments and loans
- Derivative instruments
- Deferred taxes
- Leasing arrangements
- Assets held for index-linked and unit-linked funds
- Other assets

### D.2 Technical provisions

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- General principles
- Best Estimate Liabilities
- Risk Margin
- Reinsurance

### D.3 Other liabilities

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- Contingent liabilities
- Provisions other than technical provisions
- Pension benefit obligations
- Deferred taxes
- Financial liabilities
- Leasing arrangements
- Other liabilities

### D.4 Alternative methods for valuation

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### D.5 Any other information

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## / Basis for preparation

AXA Assurances Vie Luxembourg's Solvency II balance sheet is prepared as of December 31. The balance sheet is prepared in compliance with the Solvency II Regulation.

Assets and liabilities are valued based on the assumption that the Company will pursue its business as a going concern.

The Solvency II balance sheet only includes the value of business in force and therefore only presents a partial view of the value of the Company.

Technical provisions are recognized with respect to all of insurance and reinsurance obligations towards policyholders and beneficiaries of insurance or reinsurance contracts. The value of technical provisions corresponds to the current amount that the Company would have to pay if it was to transfer its insurance and reinsurance obligations immediately to another insurance or reinsurance undertaking.

Other assets and liabilities are recognized in compliance with IFRS standards and interpretations of the IFRS Interpretations Committee that are endorsed by the European Union before the balance sheet date with a compulsory date of January 1, 2016, provided that those standards and interpretations include valuation methods that are in accordance with the following market consistent valuation approach set out in Article 75 of the Solvency II Directive 2009/138/EC:

- Assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction;
- Liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction (without adjustment to take account of the Company own credit standing).

The main adjustments between local statutory GAAP and Solvency II assets and liabilities relate to:

- Elimination of the intangible assets
- Re-measurement to fair value of real estate properties and participations in real estate companies
- Valuation at fair value of the financial assets
- Valuation at fair value of the part of the reinsurer in technical provisions (reinsurance recoverables)
- Valuation at fair value of the reinsurance deposits
- Valuation at fair value of the technical provisions (BEL, discount margin, risk margin)

These adjustments are detailed hereafter in this section.

The preparation of the balance sheet in accordance with Solvency II requires the use of estimates and assumptions. It requires a degree of judgment in the application of Solvency II principles described below. The main balance sheet captions concerned are assets accounted at fair value, deferred tax assets, assets and liabilities relating to the insurance business, pension benefit obligations and balances related to share-based compensation. The principles set out below specify the measurement methods used for these items.

Unless otherwise stated, AXA's valuation principles have been consistently applied to all the periods presented.

The Solvency II balance sheet is presented in Euro, the Euro being the Company's presentational currency. Assets and liabilities resulting from transactions denominated in foreign currencies are translated at the local closing exchange rate.

# D1 - Assets

## / Fair value measurement

The table below summarizes for each material class of assets, the value of the assets of the company AXA Assurances Vie Luxembourg according to Solvency II provisions together with the values of the assets recognized and valued on a statutory accounting basis as at December 31, 2017:

<i>(in Euro million)</i>	Fair Value (Solvency II)	Carrying Value (Local GAAP)	% (value Balance Sheet)
Goodwill	-	-	0,0%
Deferred acquisition costs	-	-	0,0%
Intangible assets	-	-	0,0%
Deferred tax assets	-	-	0,0%
Pension benefit surplus	-	-	0,0%
Property, plant & equipment held for own use	0,3	0,3	0,0%
<b>Investments (other than assets held for index-linked and unit-linked contracts)</b>	<b>901,0</b>	<b>764,5</b>	<b>81,0%</b>
Investment in real estate properties	1,5	0,1	0,1%
Holdings in related undertakings, including participations	18,5	14,5	1,7%
Equities	47,7	34,2	4,3%
Debt Instruments	810,9	693,2	72,9%
Investment funds	22,4	22,5	2,0%
Derivatives	-	-	0,0%
Other investments	-	-	0,0%
<b>Assets held for index-linked and unit-linked contracts</b>	<b>76,0</b>	<b>75,8</b>	<b>6,8%</b>
<b>Loans and mortgages</b>	<b>19,3</b>	<b>19,3</b>	<b>1,7%</b>
<b>Reinsurance recoverables</b>	<b>66,6</b>	<b>87,7</b>	<b>6,0%</b>
<b>Receivables</b>	<b>14,3</b>	<b>14,3</b>	<b>1,3%</b>
<b>Cash and cash equivalents</b>	<b>34,6</b>	<b>34,6</b>	<b>3,1%</b>
Other	0,1	0,1	0,0%
<b>Total Assets</b>	<b>1 112,4</b>	<b>996,6</b>	<b>100,0%</b>

The Company applies the IFRS 13 fair value hierarchy as described below for all assets and liabilities (excluding technical provisions). This fair value hierarchy is consistent with the one defined in the Solvency II regulation.

### a) Active market: quoted price

Fair values of assets and liabilities traded on active markets are determined using quoted market prices when available. An instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis between a willing seller and a willing buyer. For financial instruments traded in active markets, quotes received from external pricing services represent consensus prices, i.e. using similar models and inputs resulting in a very limited dispersion.

### b) Active versus inactive markets – financial instruments

Equity instruments quoted on exchange traded markets and bonds actively traded on liquid markets for which prices are regularly provided by external pricing services that represent consensus with limited dispersion and for which quotes are readily available are generally considered as being quoted in an active market. Liquidity may be defined as the possibility to sell or dispose of the asset in the ordinary course of business within a certain limited time period at approximately the price at which the investment is valued. Liquidity for debt instruments is assessed using a multi criteria approach including the number of quotes available, the place of issuance and the evolution of the widening of bid ask spreads.

A financial instrument is regarded as not quoted in an active market if there is little observation of transaction prices as an inherent characteristic of the instrument, when there is a significant decline in

the volume and level of trading activity, in case of significant illiquidity or if observable prices cannot be considered as representing fair value because of dislocated market conditions. Characteristics of inactive markets can therefore be very different in nature, inherent to the instrument or indicative of a change in the conditions prevailing in certain markets.

### **c) Assets and liabilities not quoted in an active market**

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The fair values of assets and liabilities that are not traded in an active market are estimated:

- Using external and independent pricing services; or
- Using valuation techniques
- No active market: use of external pricing services

External pricing services may be used by fund asset managers in the case of investments in funds. To the extent possible, the Company collects quotes from external pricing providers as inputs to measure fair value. Prices received may form tight clusters or dispersed quotes which may then lead to the use of valuation techniques. The dispersion of quotes received may be an indication of the large range of assumptions used by external pricing providers given the limited number of transactions to be observed or reflect the existence of distress transactions. In addition, given current market conditions since the financial crisis and the persistency of complete inactivity of some markets since then, many financial institutions closed their desks dedicated to structured assets deals and are no longer in a position of delivering meaningful quotes.

- No active market: use of valuation techniques

The objective of valuation techniques is to arrive at the price at which an orderly transaction would take place between market participants (a willing buyer and a willing seller) at the measurement date. Valuation technique models include:

- Market approach: The consideration of recent prices and other relevant information generated by market transactions involving substantially similar assets or liabilities.
- Income approach: Use of discounted cash flow analysis, option pricing models, and other present value techniques to convert future amounts to a single current (i.e. discounted) amount.
- Cost approach: The consideration of amounts that would currently be required to construct or replace the service capacity of an asset.

Valuation techniques are subjective in nature and significant judgment is involved in establishing fair values. They include recent arm's length transactions between knowledgeable willing parties on similar assets if available and representative of fair value and involve various assumptions regarding the underlying price, yield curve, correlations, volatility, default rates and other factors. Unlisted equity instruments are based on cross checks using different methodologies such as discounted cash flows techniques, price earnings ratios multiples, adjusted net asset values, taking into account recent transactions on instruments which are substantially the same if concluded at arm's length between knowledgeable willing parties, if any. The use of valuation techniques and assumptions could produce different estimates of fair value. However, valuations are determined using generally accepted models (discounted cash flows, Black & Scholes models, etc.) based on quoted market prices for similar instruments or underlying (index, credit spread, etc.) whenever such directly observable data are available and valuations are adjusted for liquidity and credit risk.

Valuation techniques may be used when there is little observation of transaction prices as an inherent characteristic of the market, when quotes made available by external pricing providers are too dispersed or when market conditions are so dislocated that observed data cannot be used or need significant adjustments. Internal marks to model valuations are therefore normal market practices for certain assets and liabilities inherently scarcely traded or exceptional processes implemented due to specific market conditions.

#### ■ Use of valuation techniques in dislocated markets

The dislocation of certain markets may be evidenced by various factors, such as very large widening of bid ask spreads which may be helpful indicators in understanding whether market participants are willing to transact, wide dispersion in the prices of the small number of current transactions, varying prices over time or among market participants, inexistence of secondary markets, disappearance of primary markets, closing down of dedicated desks in financial institutions, distress and forced transactions motivated by strong needs of liquidity or other difficult financial conditions implying the necessity to dispose of assets immediately with insufficient time to market the assets to be sold, and large bulk sales to exit such markets at all costs that may involve side arrangements (such as sellers providing finance for a sale to a buyer). Primary transactions' prices in markets supported by government through specific measures following the financial crisis do not represent fair value.

In such cases, the Company uses valuation techniques including observable data whenever possible and relevant, adjusted if needed to develop the best estimate of fair value, including adequate risk premiums or develops a valuation model based on unobservable data representing estimates of assumptions that willing market participants would use when prices are not current, relevant or available without undue costs and efforts: in inactive markets, transactions may be inputs when measuring fair value, but would likely not be determinative and unobservable data may be more appropriate than observable inputs.

### **/ Intangible assets**

Under Solvency II, only intangible assets related to the in force, that are separable and for which there are evidence of exchange transactions for the same or similar assets, indicating they are saleable in the market place, are recognized. As a result of Solvency II principles, goodwill and other intangible assets recognized under Local GAAP have no value in the Solvency II consolidated balance sheet.

### **/ Property, Plant & Equipment held for own use**

Under Solvency II, property, plant & equipment held for own use is recognized at fair value whereas under Local GAAP, it is recognized at cost. Assets components are depreciated over their estimated useful lives and reversible impairment is recognized if conditions are met. When an asset is intended to be sold within twelve months, it is measured at the lower of net carrying value and fair value net of selling costs.

### **/ Investments and loans**

The investments aggregate on the Solvency II balance sheet include investment in real estate properties (other than for own use), participations (including entities other than investment funds that are accounted for under the equity method), equity instruments, bonds, investment funds, derivatives and deposits other than cash equivalents.

### **Property**

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Under Solvency II, investment in real estate properties is recognized at fair value. Under Local GAAP, it is recognized at cost excluding investment in real estate properties totally or partially backing liabilities arising from contracts where the financial risk is borne by policyholders that is accounted for at fair value. Properties components are depreciated over their estimated useful lives and reversible impairment is recognized if conditions are met. When a property is intended to be sold within twelve months, it is measured at the lower of net carrying value and fair value net of selling costs.

## **Financial assets including loans**

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Under Solvency II, financial assets are recognized at fair value.

Under Local GAAP, financial assets are recognized at amortized cost.

## **/ Derivative instruments**

The Company has no derivatives at 31 December 2017.

## **/ Deferred taxes**

Under local statutory GAAP, no deferred taxes are recognised.

Deferred tax assets and liabilities emerge from temporary differences with tax values of assets and liabilities, and when applicable from tax loss carry forwards. Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available to offset the temporary differences, taking into account the existence of tax groups and any legal or regulatory requirements on the limits (in terms of amounts or timing) relating to the carry forward of unused tax losses or the carry forward of unused tax credits. The recoverability of deferred tax assets recognized in previous periods is re-assessed at each closing.

The measurement of deferred tax liabilities and deferred tax assets reflects the expected tax impact, at the balance sheet date that would follow the way the Company expects to recover or settle the carrying amount of its assets and liabilities. When income taxes are calculated at a different rate if dividends are paid, deferred taxes are measured at the tax rate applicable to undistributed profits. The income tax consequences of dividends are only accounted when a liability to pay the dividend is recognized.

For presentation purpose of the balance sheet, deferred tax assets are offset with deferred tax liabilities at fiscal entity (or tax group if any) level.

As of December 31, 2017 no DTA (Deferred Tax Assets) position has been recognized in the Solvency II Balance Sheet.

## **/Leasing arrangements**

The Company AXA Assurances Vie Luxembourg has one material leasing arrangement:

- Operational leasing of the building for its head office

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

Under Local GAAP and Solvency II, assets backing liabilities arising from contracts where the financial risk is borne by policyholders are presented in a separate aggregate of the balance sheet so that they are shown in a symmetrical manner to the corresponding liabilities. The same valuation approach prevails under Local GAAP and Solvency II frameworks.

## **/ Other assets**

Under Solvency II, reinsurance receivables are adjusted from their Local GAAP value to take into account the expected losses due to the probability of default of the counterparty.

All other assets (tangibles assets and other long term assets) are also recorded at fair value under Solvency II but by default, the Local GAAP value is kept.



## D2 - Valuation of technical provisions and reinsurance recoverables

### / General principles

Technical provisions are split between Life (excluding health and unit-linked) and unit-linked.

Technical provisions are measured using a two “building blocks” approach:

- Best Estimate Liabilities (BEL), and
- Risk margin for non-hedgeable risks that is added to the best estimate liabilities.

The best estimate liability corresponds to the probability-weighted average of future cash flows, including policyholder’s benefit payments, expenses, taxes, premiums related to existing insurance and reinsurance contracts taking into account the time value of money (i.e. by discounting these future cash flows to present value). The calculation of the best estimate liability is based upon up-to-date reliable information and realistic assumptions. The cash-flow projection used in the calculation includes all the cash in- and out-flows required to settle the insurance and reinsurance obligations over their lifetime.

The best estimate liability is recognized on a gross of reinsurance basis, without deduction of amounts recoverable from reinsurance contracts. The latter are recognized separately.

The risk margin is defined as the cost of non-hedgeable risk, i.e. a margin in addition to the expected present value of liability cash flows required to manage the business on an on-going basis. It is deemed to be the present value of the cost of future economic capital requirements for non-hedgeable risks.

This valuation requires deep analysis of the underlying obligations, collection of qualitative and quantitative information, projection tools and models, and expert judgment in a number of areas.

The table below summarizes AXA Assurances Vie Luxembourg’s technical provisions under Solvency II at 31/12/17 together with a comparison on a local statutory accounting basis (Lux GAAP).

<i>(in Euro million)</i>	<b>Fair Value (Solvency II)</b>	<b>Carrying Value (Local GAAP)</b>
<b>Technical provisions - life (excluding index-linked and unit-linked)</b>	<b>769,7</b>	<b>761,1</b>
Technical provisions - (excluding health and index-linked and unit-linked)	769,7	761,1
Best Estimate	747,9	
risk margin	21,8	
<b>Technical provisions - index-linked and unit-linked</b>	<b>76,1</b>	<b>75,8</b>
Best Estimate	75,6	
risk margin	0,5	

### / Best Estimate Liabilities

A best estimate assumption is defined as one where there is as much probability that the actual experience develops over the assumption as below it. It is neither a prudent nor an optimistic assumption. It is set at a level that is neither deliberately overstated nor deliberately understated.

#### Assumptions and framework

Assumptions regarding future experience should be reasonable, and, to the extent possible, should take into account the actual historical and current experience of the Company, adjusted to reflect known changes in the environment and identifiable trends. Experience studies should be reviewed. If experience studies are not available, they should be developed where appropriate and practical. In some instances, data may not be available or may be insufficient to provide a credible basis on which to develop assumptions. Consequently, it may be necessary to rely more on judgment, taking into

consideration the Company's pricing and/or reserving assumptions and the experience of other companies with comparable products, markets, and operating procedures.

It is important to recognize that the assumptions will be used to project future cash flows, and should therefore be selected with due regard to the future context or expected future operating environment of the Company. Thus, they may or may not be consistent with past experience.

The development of future experience will depend on the context and the risk characteristics of the products analysed. The impact of the external environment on the future cash flows and financial statements must also be recognised. Setting corresponding assumptions requires sound knowledge of the current and projected policies of management in charge of investment, underwriting, reinsurance, claim settlement, marketing, pricing, policyholder dividend/bonus declaration and administration. Specific considerations include economic factors such as inflation, or risk free rates term structure.

Assumptions in respect of best estimate metrics should be derived consistently over time and within homogeneous risk groups and lines of business without arbitrary changes. The assumptions should adequately reflect any uncertainty underlying the cash flows.

Non market assumptions, based on latest best estimate assumptions (historical data and expert judgment), include the following:

- Best estimate claims payment;
- Best estimate schedule of lapses;
- Management actions (discretionary benefits distribution policy...).

The market parameters below are considered:

- Risk neutral interest rates curve;
- Assets values are spot ones at the time of calculation;
- Spot market data are input of the economic scenarios.

## **Specificities of some assumptions**

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### **Mortality and Morbidity**

Mortality and morbidity assumptions are based on published tables, adjusted for industry experience and for the Company's actual experience where its experience is significant.

Back-testing on these assumptions is monitored annually.

### **Expenses**

Expenses include administrative expenses, investment management expenses, claims management expenses which relate to recognized insurance and reinsurance obligations. All the expenses of the company are considered, except depreciations.

The allocation of expenses between the Life and Non-Life entities is based on distribution keys applied according the nature of the expenses and the cross-sectional nature of the expenses.

The assumptions underlying expenses projections are consistent with the strategy of the Company.

Expenses are inflated over the duration of the projection. The inflation assumption is assessed on the basis of the economic environment and the specifics of the Company.

Back-testing on these assumptions is monitored annually.

### **Boundary of an insurance or reinsurance contract**

The Solvency II balance sheet excludes all premiums expected from new business not yet written and some future premiums expected from existing contracts if the Company has the power to either reject them or fully re-price them.

### **Lapse rates**

Lapse rates come directly from observations of life undertaking on its own products. The lapses probabilities are determined by type of contract; based on internal observations (real lapses) and are reviewed annually.

Back-testing on these assumptions is monitored annually.

### **Management actions**

Management actions are taken into account. They include, but are not limited to:

- Change in strategic asset allocation;
- Crediting rates in participating business;
- Products re-pricing;

Management actions should be consistent with business practice, the Company strategy and policyholders' obligations.

### **Reference rate curve**

Discount rates used for life reserves are basic risk free rates adjusted to mitigate the effect of exaggeration of bonds spread by a volatility adjustment.

## **/ Statement on the use of the volatility adjustment**

The volatility adjustment is an adjustment to the basic risk free rate term-structure that prevents pro-cyclical investment behavior in mitigating the volatility of asset spreads (mainly corporate and government bonds) on the liabilities valuation. The volatility adjustment is applied to all businesses (AXA Assurances Vie Luxembourg has few unit linked and no variable annuities as seen at the beginning of D2-section). The volatility adjustment is added to the zero-coupon spot rates of the basic risk-free interest rate term structure obtained after using the Smith-Wilson method until the last liquid point observable in the market.

A macroeconomic approach is used to derive the reference rate structure beyond the last available data point. This approach requires the following:

1. Determination of the ultimate forward rate (UFR)
2. Interpolation method between the last observable liquid forward rate and the ultimate forward rate.

The ultimate forward rate is a macroeconomic rate specified as the sum of long-term inflation and the expected real rate of interest.

AXA Assurances Vie Luxembourg's solvency ratio calculated without applying the volatility adjustment amounted to 202% at December 31, 2017 compared to 206% with the volatility adjustment.

The ratio without volatility adjustment is based on AFR calculated without volatility adjustment while the SCR is calculated with volatility adjustment. The total SCR of this exercise has not been calculated without volatility adjustment (similar for MCR). However, this is scheduled in the near future. The basic own funds without considering the volatility adjustment decrease by € 2.2 million to € 96.2 million, reflecting the increase in best estimate liabilities due to lower discount rate.

This calculation is performed to address a specific regulatory requirement. However, the results obtained through this approach are not considered to provide conclusions economically in line with the nature of the business underwritten and the related asset allocation strategy implemented within the Company.

## **/ Statement on the use of the transitional measures for technical provisions**

AXA Assurances Vie Luxembourg did not apply the transitional risk-free interest rate-term structure referred to in Article 308c of Directive 2009/138/EC nor the transitional deduction referred to in Article 308d of the same Directive.

### **Life & Savings Best Estimate Liabilities**

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The calculation of BEL reserving process is based on cash flow projections, including the significant impact of assets related flows in the estimation of amounts to be paid to policyholders (profit sharing).

The framework is based on projections of the key components of the statutory balance sheet i.e. policyholder liabilities, expenses and the assets backing those liabilities.

It is essential that the framework is underpinned by modelling of the statutory balance sheet for the following reasons:

- **Policyholder bonuses:** Bonuses on participating contracts are based on the current statutory balance sheet calculations
- **Timing of the distribution of cash flows:** The timing is driven by statutory regulation
- **Taxation:** AXA taxation is calculated using liabilities based on statutory accounts and is needed in calculating the impact of loss absorbency of deferred taxes to be allowed for in calculating the SCR
- **Dividend policy:** This is set based primarily on statutory accounts.

### **Valuation of contractual options and financial guarantees**

The options and guarantees (O&G) valued in best estimate cash flow projections cover all material O&G embedded in AXA's Life and Savings business. The key options and guarantees considered are:

- the interest rate guarantees on traditional products such as guaranteed cash values;
- the profit sharing rules (such as bonus rates, credited interest rates, policyholders' dividends), which, when combined with guarantees, can create asymmetric returns for shareholders.

For Local GAAP, technical provisions are valued through the discount of guarantees. This discount uses the guarantee interest rate of the policy. An additional bonus rate is given to the policyholder depending on the annual results of the Company. This bonus rate is applied to the mean of annual technical provisions and gives the amount of Profit Participation.

## **/ Risk margin**

In addition to the best estimate liabilities (BEL), a risk margin is recognized to obtain values consistent with the determination of market prices when there are no deep and liquid markets. The risk margin is defined as the cost of non-hedgeable risk, i.e. a margin in addition to the expected present value of liability cash flows required to manage the business on an ongoing basis. In general, most insurance risks (e.g. mortality or property risks) are deemed to be non-hedgeable risks.

The non-hedgeable risks comprise:

- Life insurance risks,
- Reinsurance default risks and
- Operational risks.

The Solvency Capital Requirement (SCR) for the non-hedgeable risks is projected for the future years until the run-off of the portfolio.

The risk margin is determined as the present value at the basic risk free interest rate structure of the future capital charges using a 6% cost of capital for all lines of business.

The cost of capital is a premium over the risk free rate that represents the reduction in economic "value" (cost) linked to the risks considered.

## **/ Reinsurance**

As technical provisions are reported gross of reinsurance, a reinsurance asset is identified separately. Transactions related to reinsurance assumed and ceded are accounted for in the balance sheet in a similar way to direct business transactions in agreement with contractual clauses. Indeed, the methods used to value reinsurance balances depend on the type of reinsurance contracts (e.g. treaties / facultatives, proportional/non-proportional), the nature of the business and the ceded portion.

Reinsurance treaties are applied and reviewed according to their respective description. The Local GAAP valuation for reinsurance technical provisions is carried out according to the identification and analysis of the claims for which there is an intervention of the reinsurer.

## D3 - Valuation of other liabilities

The table below summarizes AXA Assurances Vie Luxembourg's liabilities other than technical provisions under Solvency II together with a comparison on a local statutory account basis (Lux GAAP) as at December 31, 2017.

<i>(in Euro million)</i>	Fair Value (Solvency II)	Carrying Value (Local GAAP)
Contingent liabilities	-	-
Provisions other than technical provisions	1,3	1,3
Pension benefit obligations	-	-
Deposits from reinsurers	93,7	85,2
Deferred tax liabilities	26,1	-
Derivatives	-	-
Debts owed to credit institutions	-	-
Financial liabilities other than debts owed to credit institutions	-	-
Payables	19,5	19,6
Subordinated liabilities	-	-
Other	15,2	15,2

### / Contingent liabilities

Contingent liabilities are:

- Possible obligation that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity or
- A present obligation that arises from past events but it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation.

Under Solvency II, contingent liabilities that are material are recognized as liabilities, *unlike IFRS where they are only disclosed*. Contingent liabilities are material where information about the current or potential size or nature of those liabilities could influence the decision-making or judgment of the intended user of that information, including the supervisory authorities.

The value of contingent liabilities is equal to the expected present value of future cash flows required to settle the contingent liability over the lifetime of that contingent liability, using the basic risk-free interest rate term structure.

At 31 December 2017, the Company has no Contingent liabilities.

### / Provisions other than technical provisions

The same approach prevails under both Local GAAP and Solvency II frameworks. Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of past events, when it is probable that an outflow of resources will be required to settle the obligation, and when the provision can be reliably estimated. Provisions are not recognized for future operating losses. Provisions are measured at management's best estimate, at the balance sheet date

### / Pension benefit obligations

The same approach prevails under both Local GAAP and Solvency II frameworks.

Pension benefit obligations include the benefits payable to employees after they retire.

The Company has no "Pension benefit obligations" at the balance sheet at 31 December 2017.

## **/ Deferred taxes**

Please refer to section D.1.

As of December 31, 2017 a net deferred tax liability position of € 26.1 million has been recognized in the Solvency II Balance Sheet.

## **/ Financial liabilities**

Under Local GAAP, financial liabilities, including financing debts issued to finance the solvency requirements of operational entities or to acquire a portfolio of contracts, are accounted for at amortized cost.

Under Solvency II, financial liabilities are re-measured at fair value except for some financing debts that are reclassified in own funds. However, financial liabilities are not subsequently adjusted to take account of the change in own credit standing of the issuer AXA Assurances Vie Luxembourg after initial recognition (frozen credit risk). A similar treatment is applied to the derivatives related to those debts.

The Company has no “Financial liabilities” at 31 December 2017.

## **/Leasing arrangements**

The Company AXA Assurances Vie Luxembourg has one material leasing arrangement:

- Operational leasing of the building for its head office

## **/ Other liabilities**

With regard to share-based compensation plans, the following approach prevails under both local and Solvency II frameworks: the Company’s share-based compensation plans are predominantly settled in equities. These plans, by nature, do not have an impact on assets and liabilities except for the related tax effect; cash-settled share-based compensation plans are recognized at fair value, which is re-measured at each balance sheet date.

All other debts are also recorded at fair value under Solvency II but by default, the Local GAAP value is kept.

## D4 – Alternative methods for valuation

For detailed information on alternative methods used for valuation of assets and other liabilities, please refer to the subsection Fair Value Measurement in section D1.

For detailed information on alternative methods used for valuation of liabilities other than technical provisions, please refer to the section D3.



## D5 – Any other material information

Not applicable

# **E CAPITAL MANAGEMENT**

## **E.1 Own funds**

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Capital Management Objectives  
Information on Capital structure  
Change in Capital resources in 2017  
Tiering Analysis of capital  
Reconciliation to local shareholders' equity

## **E.2 Solvency capital requirement and minimum capital requirement**

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General principles  
Solvency Capital Requirement  
Minimum Capital Requirement

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

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## **E.4 Differences between the standard formula and any internal model used**

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## **E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement**

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## **E.6 Any other information**

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## E.1 Own funds

### / Capital Management Objectives

AXA Assurances Vie Luxembourg has reviewed its capital resources and requirements on an economic basis as at the end of 2017. In performing this review, both the regulatory requirements and Management's internal objective - including ability to meet key shareholder's requirements - have been considered.

The Management Committee regularly reviews the adequacy of the risk management system and processes and has regular processes in place to identify and prioritize opportunities for further developing the risk management capabilities.

Management monitors the Company's solvency margin and the regulatory capital requirements on an on-going basis, both for regulatory compliance purposes and to ensure that the company is appropriately positioned from a competitive point of view.

### / Information on the Capital Structure

The capital resources at December 31, 2017 and December 31, 2016 are presented in the table below:

<i>(in Euro million)</i>	At December 31, 2017	At December 31, 2016	Evolution
Share capital	20,122	20,122	0,000
Reconciliation reserve	78,301	78,588	-0,287
<b>Available Financial Resources</b>	<b>98,423</b>	<b>98,710</b>	<b>-0,287</b>

Reconciliation reserve represents the excess of asset over liabilities from the Solvency II balance sheet, reduced by capital items in the financial statements (share capital, capital in excess of nominal value...) and net of foreseen dividend to be paid in 2018.

### / Change in capital resources in 2017

#### Available Financial Resources

<i>€ million</i>	Available financial resources
<b>AFR FY16</b>	<b>98,710</b>
Modelling changes & opening adjustments	-
Total Return	12,018
Dividends to be paid in year N+1	-12,305
<b>AFR FY17</b>	<b>98,423</b>

AXA Assurances Vie Luxembourg's Available Financial Resources decreased by € 0.3 million to € 98.4 million as a result of:

- A positive total return, mainly driven by financial factors coming from the performance on Equity Market and the decrease of the spreads but also with the contribution of new premiums;
- A € 12.3 million explained by dividends to be paid in 2018 to the shareholders.

## / Tiering analysis of capital

### Repartition of capital by tier

Solvency II available Own funds represent Available Financial Resources (AFR) available to the undertaking before any consideration for tiering eligibility restriction and after limitation over the potential non-availability of certain elements of capital.

Available own funds are split into tiers (this analysis is only done for the purpose of calculating the Solvency ratio), i.e. three different buckets of capital determined according to the quality of such components as defined in the Solvency II Regulation. Eligibility limits apply to those available elements to cover respectively the Solvency Capital Requirement (SCR) or the Minimum Capital Requirement (MCR).

As far as compliance with the Solvency Capital Requirement is concerned, the following quantitative limits shall apply: (a) the eligible amount of Tier 1 items shall be at least one half of the Solvency Capital Requirement; (b) the eligible amount of Tier 3 items shall be less than 15 % of the Solvency Capital Requirement; (c) the sum of the eligible amounts of Tier 2 and Tier 3 items shall not exceed 50 % of the Solvency Capital Requirement.

AFR is the eligible own fund amount after the tiering limits are applied. The structure of tiering is presented in the table below:

<i>(in Euro million)</i>	Total	Unrestricted Tier 1	Restricted Tier 1	Tier 2	Tier3
<b>AFR (Eligible own fund) At December 31, 2017</b>	<b>98,423</b>	<b>98,423</b>	<b>0</b>	<b>0</b>	<b>0</b>
Of which ancillary	0	0	0	0	0
Of which subject to transitional measures	0	0	0	0	0

<i>(in Euro million)</i>	Total	Unrestricted Tier 1	Restricted Tier 1	Tier 2	Tier3
<b>AFR (Eligible own fund) At December 31, 2016</b>	<b>98,710</b>	<b>98,710</b>	<b>0</b>	<b>0</b>	<b>0</b>
Of which ancillary	0	0	0	0	0
Of which subject to transitional measures	0	0	0	0	0

The various components of what AXA Assurances Vie Luxembourg considers as eligible capital are determined in accordance with Solvency II regulatory requirements. At December 31, 2017, eligible capital amounted to € 98.4 million of which:

- unrestricted Tier 1 capital after dividend proposal: € 98.4 million, only made by shares (€ 20.1 million) and a reconciliation reserve corresponding to € 78.3 million;
- no restricted Tier 1 capital;
- no Tier 2; and
- no Tier 3

The Company has no ancillary own funds.

As far as compliance with the Minimum Capital Requirements is concerned, the following quantitative limits shall apply: (a) the eligible amount of Tier 1 items shall be at least 80 % of the Minimum Capital Requirement; (b) the eligible amounts of Tier 2 items shall not exceed 20 % of the Minimum Capital Requirement.

In accordance with the methods of calculation implemented by AXA in line with existing regulations, AXA Assurances Vie Luxembourg's eligible financial resources to cover its minimum capital requirement under the current Solvency II regime amounted to 459% at December 31, 2017 compared to 499% at the end of 2016.

## / Reconciliation to Local GAAP Shareholders' equity

The reconciliation movements in capital resources between the Local GAAP Shareholders' equity and the Solvency II Available Financial Resources are presented in the table below:

<i>€ million</i>	At December 31, 2017
<b>Local GAAP Shareholders' Equity</b>	<b>25,558</b>
Full market value of assets	85,680
Intangible assets	-
Best Estimate Liabilities	-12,815
Subordinated debt	-
Other	-
<b>Available Financial Resources (AFR)</b>	<b>98,423</b>

The key differences between the Local GAAP and the Solvency II frameworks are further explained below:

- Intangibles elimination relates to the removal of intangible assets and DAC that are re-measured through the Best Estimate Liabilities calculation.
- The adjustment of the market value of assets is related to the recognition of unrealized gain and losses of assets (loans and real estate) recognized at cost in the Local GAAP Balance Sheet.
- Best Estimate Liabilities and Market Value Margin is related to the re-measurement in the Solvency II framework of policyholder's reserves as compared to those of the Local GAAP.

# E.2 Solvency Capital Requirement and Minimum Capital Requirement

AXA Assurances Vie Luxembourg uses the Standard Formula to calculate the Minimum Capital Requirement (MCR) and the Solvency Capital Requirement (SCR).

## / General principles

The Solvency II directive provides for two separate levels of solvency margin: (i) the Minimum Capital Requirement (MCR), which is the amount of own funds below which policy holders and beneficiaries are exposed to an unacceptable level of risk should the Company be allowed to continue its operations, and (ii) the Solvency Capital Requirement (SCR), which corresponds to a level of eligible own funds that enables insurance and reinsurance companies to absorb significant losses and that gives reasonable assurance to policyholders and beneficiaries that payments will be made.

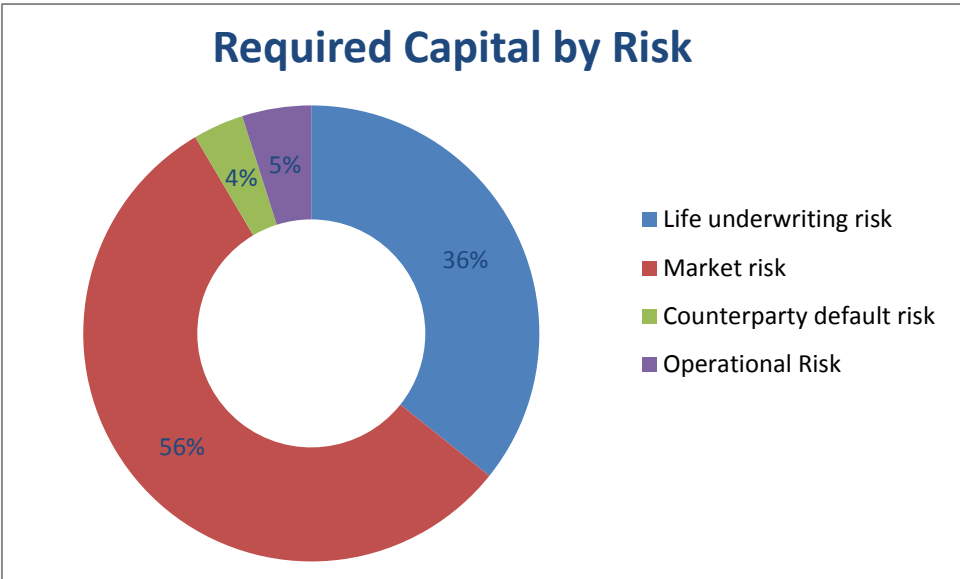
The Luxembourg regulation has not made use of the option not to disclose any capital add-on during a transitional period ending no later than December 31, 2020.

## / Solvency Capital Requirement (SCR)

On November 17, 2015, AXA received approval from the ACPR to use its internal model to calculate its regulatory capital under Solvency II and published, on February 22, 2018, its Solvency II capital ratio at 205% as of December 31, 2017. The solvency II capital ratio of AXA Assurances Vie Luxembourg assessed through the standard formula is equal to 206% as of December 31, 2017.

On December 31, 2017, the Company's solvency capital requirement was € 47.7 million after full diversification, split as follows by risk module: L&S risk € 29.4 million, Market risk € 45.9 million, Counterparty default risk € 3.0 million, Operational Risk € 4.0 million.

At December 31, 2017, the breakdown of the Solvency II required capital (€ 47.7 million) by risk categories was: 56% in Market risk, 36% in Life risk, 4% in Counterparty default risk and 5% in Operational risk.



Total Solvency Capital Requirement (SCR) increased from € 43.9 million to € 47.7 million from FY 2016 to FY 2017, mainly due to an increase of the SCR Market for Equity (higher market value and change of the symmetric adjustment) and Property risk (new investment).

## **/ Minimum Capital Requirement**

The Minimum Capital Requirement is meant to ensure a minimum level below which the amount of financial resources should not fall. That amount is calculated in accordance with a simple formula, which is subject to a defined floor and cap based on the Solvency Capital Requirement of the Company in order to allow for an escalating ladder of supervisory intervention, and that it is based on the data which can be audited.

In accordance with the methods of calculation implemented by AXA Assurances Vie Luxembourg in line with existing regulations, AXA Assurances Vie Luxembourg's Minimum Capital Requirement amounted to € 21.5 million at December 31, 2017 (up +8.6% or € +1.7 million) mainly driven by the increase of the SCR (MCR is bounded between 25% and 45% of SCR).

The Minimum Capital Requirement is founded over a factor-based formula taking into consideration the amounts of Best Estimate Liabilities net of the amounts recoverable from reinsurance contracts and special purpose vehicles, and written premiums for each segment of business. Different factors are applied to those amounts according to each relevant segment.

### E.3 Use of the duration-based equity risk sub-module in the calculation of the Solvency Capital Requirement

Not applicable.

### E.4 Differences between the standard formula and any internal model used

Not applicable.

### E.5 Non-compliance with the Minimum Capital Requirement and non-compliance with the Solvency Capital Requirement

Not applicable.

### E.6 Any other information

Not applicable.



# ATTACHMENT

## / Balance-sheet (S.02.01)

S.02.01.02

Balance sheet

in EUR

	Solvency II value	
	C0010	
<b>Assets</b>		
Intangible assets	R0030	-
Deferred tax assets	R0040	-
Pension benefit surplus	R0050	-
Property, plant & equipment held for own use	R0060	338 293.00
<b>Investments (other than assets held for index-linked and unit-linked contracts)</b>	<b>R0070</b>	<b>901 023 288.70</b>
Property (other than for own use)	R0080	1 524 000.00
Holdings in related undertakings, including participations	R0090	18 506 387.33
<b>Equities</b>	<b>R0100</b>	<b>47 691 655.91</b>
Equities - listed	R0110	45 646 522.90
Equities - unlisted	R0120	2 045 133.01
<b>Bonds</b>	<b>R0130</b>	<b>810 923 704.23</b>
Government Bonds	R0140	583 438 470.37
Corporate Bonds	R0150	227 485 233.86
Structured notes	R0160	-
Collateralised securities	R0170	-
Collective Investments Undertakings	R0180	22 377 541.23
Derivatives	R0190	-
Deposits other than cash equivalents	R0200	-
Other investments	R0210	-
Assets held for index-linked and unit-linked contracts	R0220	76 031 338.00
<b>Loans and mortgages</b>	<b>R0230</b>	<b>19 329 918.00</b>
Loans on policies	R0240	132 401.00
Loans and mortgages to individuals	R0250	-
Other loans and mortgages	R0260	19 197 517.00
<b>Reinsurance recoverables from:</b>	<b>R0270</b>	<b>66 628 548.00</b>
Non-life and health similar to non-life	R0280	-
Non-life excluding health	R0290	-
Health similar to non-life	R0300	-
Life and health similar to life, excluding health and index-linked and unit-linked	R0310	66 628 548.00
Health similar to life	R0320	-
Life excluding health and index-linked and unit-linked	R0330	66 628 548.00
Life index-linked and unit-linked	R0340	-
Deposits to cedants	R0350	2 124 919.00
Insurance and intermediaries receivables	R0360	6 484 037.53
Reinsurance receivables	R0370	5 433 031.19
Receivables (trade, not insurance)	R0380	257 786.62
Own shares (held directly)	R0390	-
Amounts due in respect of own fund items or initial fund called up but not yet paid	R0400	-
Cash and cash equivalents	R0410	34 579 942.30
Any other assets, not elsewhere shown	R0420	124 902.97
<b>Total assets</b>	<b>R0500</b>	<b>1 112 356 005.31</b>
	Solvency II value	
	C0010	
<b>Liabilities</b>		
<b>Technical provisions - life (excluding index-linked and unit-linked)</b>	<b>R0600</b>	<b>769 740 211.00</b>
<b>Technical provisions - health (similar to life)</b>	<b>R0610</b>	<b>-</b>
TP calculated as a whole	R0620	-
Best Estimate	R0630	-
Risk margin	R0640	-
<b>Technical provisions – life (excluding health and index-linked and unit-linked)</b>	<b>R0650</b>	<b>769 740 211.00</b>
TP calculated as a whole	R0660	-
Best Estimate	R0670	747 904 600.00
Risk margin	R0680	21 835 611.00
<b>Technical provisions – index-linked and unit-linked</b>	<b>R0690</b>	<b>76 109 753.00</b>
TP calculated as a whole	R0700	-
Best Estimate	R0710	75 618 353.00
Risk margin	R0720	491 400.00
Contingent liabilities	R0740	-
Provisions other than technical provisions	R0750	1 289 019.56
Pension benefit obligations	R0760	-
Deposits from reinsurers	R0770	93 708 484.00
Deferred tax liabilities	R0780	26 116 512.00
Derivatives	R0790	-
Debts owed to credit institutions	R0800	-
Financial liabilities other than debts owed to credit institutions	R0810	-
Insurance & intermediaries payables	R0820	5 222 999.80
Reinsurance payables	R0830	11 221 664.14
Payables (trade, not insurance)	R0840	3 039 545.53
<b>Subordinated liabilities</b>	<b>R0850</b>	<b>-</b>
Subordinated liabilities not in BOF	R0860	-
Subordinated liabilities in BOF	R0870	-
Any other liabilities, not elsewhere shown	R0880	15 180 028.28
<b>Total liabilities</b>	<b>R0900</b>	<b>1 001 628 217.31</b>
<b>Excess of assets over liabilities</b>	<b>R1000</b>	<b>110 727 788.00</b>

## / Premiums, claims and expenses by line of business (S.05.01)

S.05.01.02

Premiums, claims and expenses by line of business

in EUR		Line of Business for: life insurance obligations				Life reinsurance obligations		Total
		Health insurance	Insurance with profit participation	Index-linked and unit-linked insurance	Other life insurance	Health reinsurance	Life-reinsurance	
		C0210	C0220	C0230	C0240	C0270	C0280	C0300
<b>Premiums written</b>								
Gross	R1410	-	71 646 138.00	34 201 004.00	27 080 123.00	-	-	132 927 265.00
Reinsurers' share	R1420	-	6 461 912.00	-	10 458 913.00	-	-	16 920 825.00
Net	R1500	-	65 184 226.00	34 201 004.00	16 621 210.00	-	-	116 006 440.00
<b>Premiums earned</b>								
Gross	R1510	-	71 646 138.00	34 201 004.00	27 080 123.00	-	-	132 927 265.00
Reinsurers' share	R1520	-	6 461 912.00	-	10 458 913.00	-	-	16 920 825.00
Net	R1600	-	65 184 226.00	34 201 004.00	16 621 210.00	-	-	116 006 440.00
<b>Claims incurred</b>								
Gross	R1610	-	64 671 172.00	84 415 806.00	6 547 702.00	-	-	155 634 680.00
Reinsurers' share	R1620	-	2 546 463.00	-	4 965 443.00	-	-	7 511 906.00
Net	R1700	-	62 124 709.00	84 415 806.00	1 582 259.00	-	-	148 122 774.00
<b>Changes in other technical provisions</b>								
Gross	R1710	-	9 145 839.00	44 726 685.00	2 175 843.00	-	-	51 696 681.00
Reinsurers' share	R1720	-	20 885 428.00	-	1 321 206.00	-	-	19 564 222.00
Net	R1800	-	11 739 589.00	44 726 685.00	854 637.00	-	-	32 132 459.00
<b>Expenses incurred</b>	R1900	-	6 136 374.00	823 645.00	5 711 765.00	-	-	12 671 784.00
<b>Other expenses</b>	R2500	-	-	-	-	-	-	354 302.00
<b>Total expenses</b>	R2600	-	-	-	-	-	-	13 026 086.00

## / Premiums, claims and expenses by top 5 countries (S.05.02)

S.05.02.01

Premiums, claims and expenses by country

in EUR		Home Country	Top 5 countries (by amount of gross premiums written) - life obligations						Total Top 5 and home country
			C0150	C0160	C0170	C0180	C0190	C0200	C0210
		R1400	CH	FR	BE	DE	NL		
			C0220	C0230	C0240	C0250	C0260	C0270	C0280
<b>Premiums written</b>									
Gross	R1410	57 705 929.00	54 996 915.00	9 751 363.00	2 616 500.00	2 462 889.00	1 225 716.00	-	128 759 312.00
Reinsurers' share	R1420	4 204 336.00	4 512 004.00	3 612 203.00	42 584.00	56 133.00	617 375.00	-	13 044 635.00
Net	R1500	53 501 593.00	50 484 911.00	6 139 160.00	2 573 916.00	2 406 756.00	608 341.00	-	115 714 677.00
<b>Premiums earned</b>									
Gross	R1510	57 705 929.00	54 996 915.00	9 751 363.00	2 616 500.00	2 462 889.00	1 225 716.00	-	128 759 312.00
Reinsurers' share	R1520	4 204 336.00	4 512 004.00	3 612 203.00	42 584.00	56 133.00	617 375.00	-	13 044 635.00
Net	R1600	53 501 593.00	50 484 911.00	6 139 160.00	2 573 916.00	2 406 756.00	608 341.00	-	115 714 677.00
<b>Claims incurred</b>									
Gross	R1610	48 864 455.00	19 731 658.00	80 652 850.00	4 867 634.00	409 763.00	442 271.00	-	154 084 089.00
Reinsurers' share	R1620	1 123 343.00	771 172.00	5 597 438.00	-	-	550 705.00	-	6 941 248.00
Net	R1700	47 741 112.00	18 960 486.00	75 055 412.00	4 867 634.00	409 763.00	108 434.00	-	147 142 841.00
<b>Changes in other technical provisions</b>									
Gross	R1710	10 472 905.00	27 463 693.00	88 937 694.00	2 110 208.00	2 342 200.00	3 020.00	-	50 772 124.00
Reinsurers' share	R1720	417 934.00	2 095 237.00	20 626 093.00	-	4 845.00	516 236.00	-	19 460 181.00
Net	R1800	10 890 839.00	25 368 456.00	68 311 601.00	2 110 208.00	2 337 355.00	513 216.00	-	31 311 943.00
<b>Expenses incurred</b>	R1900	5 501 031.00	5 242 785.00	929 585.00	249 428.00	234 784.00	116 846.00	-	12 274 459.00
<b>Other expenses</b>	R2500	-	-	-	-	-	-	-	343 193.00
<b>Total expenses</b>	R2600	-	-	-	-	-	-	-	12 617 652.00

## / Life and Health Technical Provisions (S.12.01)

S.12.01.02

Life and Health SLT Technical Provisions

in EUR		Insurance with profit participation		Index-linked and unit-linked insurance		Other life insurance		Accepted reinsurance	Total (Life other than health insurance, incl. Unit-Linked)
		C0020	C0030	Contracts without options and guarantees	Contracts with options or guarantees	Contracts without options and guarantees	Contracts with options or guarantees		
		C0040	C0050	C0060	C0070	C0080			
	R0010	-	-	-	-	-	-	-	-
	R0020	-	-	-	-	-	-	-	-
<b>Best Estimate</b>									
Gross Best Estimate	R0030	729 799 214.00	-	75 618 354.00	-	-	16 903 665.00	1 201 721.00	823 522 954.00
Total Recoverables from reinsurance/SPV and Finite Re after the adjustment for expected losses due to counterparty default	R0080	79 926 796.00	-	-	-	-	11 933 165.00	1 365 083.00	66 628 548.00
Best estimate minus recoverables from reinsurance/SPV and Finite Re - total	R0090	649 872 418.00	-	75 618 354.00	-	-	28 836 830.00	2 566 804.00	756 894 406.00
<b>Risk Margin</b>	R0100	14 088 530.00	491 400.00	-	-	7 233 960.00	-	513 121.00	22 327 011.00
<b>Amount of the transitional on Technical Provisions</b>									
Technical Provisions calculated as a whole	R0110	-	-	-	-	-	-	-	-
Best estimate	R0120	-	-	-	-	-	-	-	-
Risk margin	R0130	-	-	-	-	-	-	-	-
<b>Technical provisions - total</b>	R0200	743 887 744.00	76 109 754.00	-	-	24 137 625.00	-	1 714 842.00	845 849 965.00

**/ Impact of long term guarantees and transitional measures on the amount of TP,  
OF, SCR and MCR (S.22.01)**

in EUR

S.22.01.21

Impact of long term guarantees and transitional measures

		Amount with Long Term Guarantee measures and transitionals	Impact of transitional on technical provisions	Impact of transitional on interest rate	Impact of volatility adjustment set to zero	Impact of matching adjustment set to zero
		C0010	C0030	C0050	C0070	C0090
Technical provisions	R0010	845 849 964.00	-	-	3 078 259.00	-
Basic own funds	R0020	98 422 832.00	-	-	2 008 540.00	-
Eligible own funds to meet Solvency Capital Requirement	R0050	98 422 832.00	-	-	2 008 540.00	-
Solvency Capital Requirement	R0090	47 705 939.00	-	-	-	-
Eligible own funds to meet Minimum Capital Requirement	R0100	98 422 832.00	-	-	2 008 540.00	-
Minimum Capital Requirement	R0110	21 467 672.00	-	-	-	-

## / Capital adequacy: OF, SCR and MCR (S.23, S.25 and S.28)

### Own funds

S.23.01.01

		Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
		C0010	C0020	C0030	C0040	C0050
<b>Basic own funds before deduction for participations in other financial sector as foreseen in article 68 of Delegated Regulation 2015/35</b>						
Ordinary share capital (gross of own shares)	R0010	19 203 993.00	19 203 993.00			
Share premium account related to ordinary share capital	R0030	918 222.00	918 222.00			
Initial funds, members' contributions or the equivalent basic own - fund item for mutual and mutual-type undertakings	R0040					
Subordinated mutual member accounts	R0050					
Surplus funds	R0070					
Preference shares	R0090					
Share premium account related to preference shares	R0110					
Reconciliation reserve	R0130	78 300 617.00	78 300 617.00			
Subordinated liabilities	R0140					
An amount equal to the value of net deferred tax assets	R0160					
Other own fund items approved by the supervisory authority as basic own funds not specified above	R0180					
<b>Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds</b>						
Own funds from the financial statements that should not be represented by the reconciliation reserve and do not meet the criteria to be classified as Solvency II own funds	R0220					
<b>Deductions</b>						
Deductions for participations in financial and credit institutions	R0230					
<b>Total basic own funds after deductions</b>	<b>R0290</b>	<b>98 422 832.00</b>	<b>98 422 832.00</b>			
<b>Ancillary own funds</b>						
Unpaid and uncalled ordinary share capital callable on demand	R0300					
Unpaid and uncalled initial funds, members' contributions or the equivalent basic own fund item for mutual and mutual -type undertakings - callable on demand	R0310					
Unpaid and uncalled preference shares callable on demand	R0320					
A legally binding commitment to subscribe and pay for subordinated liabilities on demand	R0330					
Letters of credit and guarantees under Article 96(2) of the Directive 2009/138/EC	R0340					
Letters of credit and guarantees other than under Article 96(2) of the Directive 2009/138/EC	R0350					
Supplementary members calls under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0360					
Supplementary members calls - other than under first subparagraph of Article 96(3) of the Directive 2009/138/EC	R0370					
Other ancillary own funds	R0390					
<b>Total ancillary own funds</b>	<b>R0400</b>					
<b>Available and eligible own funds</b>						
Total available own funds to meet the SCR	R0500	98 422 832.00	98 422 832.00			
Total available own funds to meet the MCR	R0510	98 422 832.00	98 422 832.00			
Total eligible own funds to meet the SCR	R0540	98 422 832.00	98 422 832.00	0.00	0.00	0.00
Total eligible own funds to meet the MCR	R0550	98 422 832.00	98 422 832.00	0.00	0.00	
<b>SCR</b>	<b>R0580</b>	<b>47 705 939.00</b>				
<b>MCR</b>	<b>R0600</b>	<b>21 467 672.00</b>				
<b>Ratio of Eligible own funds to SCR</b>	<b>R0620</b>	<b>2.063100000</b>				
<b>Ratio of Eligible own funds to MCR</b>	<b>R0640</b>	<b>4.584700000</b>				

### Reconciliation reserve

		C0060
<b>Reconciliation reserve</b>		
Excess of assets over liabilities	R0700	110 727 788.00
Own shares (held directly and indirectly)	R0710	
Foreseeable dividends, distributions and charges	R0720	12 304 956.00
Other basic own fund items	R0730	20 122 215.00
Adjustment for restricted own fund items in respect of matching adjustment portfolios and ring fenced funds	R0740	
<b>Reconciliation reserve</b>	<b>R0760</b>	<b>78 300 617.00</b>
<b>Expected profits</b>		
Expected profits included in future premiums (EPIFP) - Life business	R0770	61 502 167.00
Expected profits included in future premiums (EPIFP) - Non-life business	R0780	
<b>Total Expected profits included in future premiums (EPIFP)</b>	<b>R0790</b>	<b>61 502 167.00</b>

**Solvency Capital Requirement - for undertakings on Standard Formula**

S.25.01.01

Article 112*	Z0010	2	1- Article 112(7) reporting (output: x) 2 - Regular reporting (output: x0)
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**Basic Solvency Capital Requirement**

		Net solvency capital requirement	Gross solvency capital requirement	Allocation from adjustments due to RFF and Matching adjustments portfolios
		C0030	C0040	C0050
Market risk	R0010	45 912 066.00	54 761 526.52	0.00
Counterparty default risk	R0020	2 959 391.12	2 959 391.12	0.00
Life underwriting risk	R0030	29 415 364.62	35 181 305.87	0.00
Health underwriting risk	R0040	0.00	0.00	0.00
Non-life underwriting risk	R0050	0.00	0.00	0.00
Diversification	R0060	-16 897 399.02	-19 815 384.19	
Intangible asset risk	R0070	0.00	0.00	
<b>Basic Solvency Capital Requirement</b>	<b>R0100</b>	<b>61 389 422.71</b>	<b>73 086 839.32</b>	

**Calculation of Solvency Capital Requirement**

		Value	
		C0100	
Adjustment due to RFF/MAP nSCR aggregation	R0120	0.00	
Operational risk	R0130	4 032 874.03	
Loss-absorbing capacity of technical provisions	R0140	-11 697 416.61	
Loss-absorbing capacity of deferred taxes	R0150	-17 716 357.96	
Capital requirement for business operated in accordance with Art. 4 of Directive 2003/41/EC	R0160	0.00	
<b>Solvency Capital Requirement excluding capital add-on</b>	<b>R0200</b>	<b>47 705 938.78</b>	
Capital add-on already set	R0210	0.00	
Solvency capital requirement	R0220	47 705 938.78	
<b>Other information on SCR</b>			
Capital requirement for duration-based equity risk sub-module	R0400	0.00	
Total amount of Notional Solvency Capital Requirements for remaining part	R0410	0.00	
Total amount of Notional Solvency Capital Requirements for ring fenced funds	R0420	0.00	
Total amount of Notional Solvency Capital Requirements for matching adjustment portfolios	R0430	0.00	
Diversification effects due to RFF nSCR aggregation for article 304	R0440	0.00	
Method used to calculate the adjustment due to RFF/MAP nSCR aggregation (*)	R0450		4
Net future discretionary benefits	R0460	15 082 133.20	

1- Full recalculation  
2- Simplification at risk sub-module level  
3- Simplification at risk module level  
4- No adjustment

**Minimum Capital Requirement - Only life or only non-life insurance or reinsurance activity**

S.28.01.01

Linear formula component for non-life insurance and reinsurance obligations		MCR components	
		C0010	
MCRNL Result	R0010		0.00

Background information		Background information	
		Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance) written premiums in the last 12 months
		C0020	C0030
Medical expense insurance and proportional reinsurance	R0020	0.00	0.00
Income protection insurance and proportional reinsurance	R0030	0.00	0.00
Workers' compensation insurance and proportional reinsurance	R0040	0.00	0.00
Motor vehicle liability insurance and proportional reinsurance	R0050	0.00	0.00
Other motor insurance and proportional reinsurance	R0060	0.00	0.00
Marine, aviation and transport insurance and proportional reinsurance	R0070	0.00	0.00
Fire and other damage to property insurance and proportional reinsurance	R0080	0.00	0.00
General liability insurance and proportional reinsurance	R0090	0.00	0.00
Credit and suretyship insurance and proportional reinsurance	R0100	0.00	0.00
Legal expenses insurance and proportional reinsurance	R0110	0.00	0.00
Assistance and proportional reinsurance	R0120	0.00	0.00
Miscellaneous financial loss insurance and proportional reinsurance	R0130	0.00	0.00
Non-proportional health reinsurance	R0140	0.00	0.00
Non-proportional casualty reinsurance	R0150	0.00	0.00
Non-proportional marine, aviation and transport reinsurance	R0160	0.00	0.00
Non-proportional property reinsurance	R0170	0.00	0.00

Linear formula component for life insurance and reinsurance obligations		C0040	
MCRL Result	R0200		27 747 522.13

Total capital at risk for all life (re)insurance obligations		Net (of reinsurance/SPV) best estimate and TP calculated as a whole	Net (of reinsurance/SPV) total capital at risk
		C0050	C0060
Obligations with profit participation - guaranteed benefits	R0210	623 092 868.00	
Obligations with profit participation - future discretionary benefits	R0220	26 779 550.00	
Index-linked and unit-linked insurance obligations	R0230	75 618 354.00	
Other life (re)insurance and health (re)insurance obligations	R0240	31 403 634.00	
Total capital at risk for all life (re)insurance obligations	R0250		6 995 454 033.37

Overall MCR calculation		C0070	
Linear MCR	R0300		27 747 522.13
SCR	R0310		47 705 938.78
MCR cap	R0320		21 467 672.45
MCR floor	R0330		11 926 484.70
Combined MCR	R0340		21 467 672.45
Absolute floor of the MCR	R0350		3 700 000.00
<b>Minimum Capital Requirement</b>	<b>R0400</b>		<b>21 467 672.45</b>