

# **Euler Hermes Ré SA**

# Solvency and Financial Condition Report (SFCR) Fiscal Year 2016



# **DOCUMENT SUMMARY**

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# Summary

The Solvency and Financial Condition Report (SFCR) is a reporting requirement implemented as part of Solvency II. This 2016 report is the first SFCR to be submitted by Euler Hermes Ré SA (EH Ré SA) to its regulator, the Commissariat Aux Assurances (CAA).

The scope of this report covers the following topics in relation to EH Ré SA's business: business and performance, system of governance, risk profile, valuation for solvency purposes and capital management.

# **Business and performance**

#### **Business**

EH Ré SA is a reinsurance company based in Luxemburg that is 100% owned by Euler Hermes Ré AG (EH Ré AG). The business is focused on one Solvency II lines of business: 9. Credit and surety-ship insurance.

EH Ré SA operates mainly in Europe by assuming Euler Hermes Group (EH Group) business but also assumes some business in emerging countries. The material geographical regions are the Northern Europe region, the Mediterranean countries, Middle East and Africa region (MMEA) and the Asia and Pacific region (APAC).

The credit insurance market has been characterized over the last couple of years by a low claims environment, driven by a declining trend in companies' insolvencies.

#### Performance

At the end of December 2016 EH Ré SA's gross earned premiums were at 645M€ and decreased by 17.5% compared to 2015. Some material European businesses are now reinsured directly by EH Ré AG explaining this significant decrease. Also, growth in Europe keeps on following an atonic trend, suffering from both a high pressure on prices and a lack of dynamism on the turnover volumes insured and emerging markets slow down.

Low claims frequency brought the claims level to 282M€ down by 24.9% in 2016 compared to 2015.

The investment result has decreased from 3.2M€ to 1.7M€ mainly due to the impact of foreign exchange losses. Within the volatile environment of the financial markets and the low interest rate, the focus was to secure the capital base and diversify the investments.

# System of governance

For an adequate monitoring of the risks related to its activity, EH Ré SA management is organized around two management bodies, the Board of Directors (BoD) and the Board of Management (BoM).

One Critical or Important Function or Services (CIFS) has been outsourced to EH Ré AG. The outsourcing concerns Accounting and Reporting function, Compliance, Actuarial, Audit functions and Management tasks.

#### Own Risk and Solvency Assessment (ORSA) supervisory report

Based on its 2016 ORSA results, EH Ré SA deems its risk profile well monitored and under control, supported by reliable processes and an effective overarching risk management framework.

EH Ré SA's Risk Management team uses two primary methods to measure and assess its risks, the Top Risk Assessment (TRA) process for risks which cannot be modelled and the EH Ré SA's internal capital risk model for risks which can be modelled.

For each top risk identified during the Top Risk Assessment process, risk owners have set up both acceptable target risk ratings and appropriate risk mitigation plans. Consequently, no foreseeable additional risk capital need was identified based on this assessment.

Moreover, the internal model has been independently reviewed by the Independent Validation Unit (IVU) to ensure its compliance with Solvency II validation standards.

As a result, EH Ré SA is confident that the internal model truly reflects its risk profile and thus that the risk capital calculated as of 31.12.2016 fairly reflects the solvency situation. Although the payment of an exceptional dividend was decided by the board of directors, the Solvency ratio remained in line with the Solvency II (SII) ratio targets defined in the capital management strategy.

The forecast and stress simulations quarterly performed on solvency and liquidity demonstrate that EH Ré SA is able to preserve its solvency and liquidity ratios above the targets defined in the risk appetite, even if it were exposed to a large range of financial and business adverse scenarios.

As a result, EH Ré SA is confident in its capacity to sustain a healthy business in the years to come.

#### Risk profile

Information has been provided on EH Ré SA's risk profile in relation to underwriting, market, credit, liquidity and operational risk. In-line with the nature of EH Ré SA's business, credit risk is considered to be the most significant risks, which is reflected by the amount of related risk capital.

EH Ré SA diversifies its risk by using different diversification approaches: a strategic asset allocation for market risk and across investment styles and asset managers and by geography and industry for credit risk. Moreover, the use of the reinsurance is primary risk mitigation tool utilised. There is no foreseeable specific risk concentration over the business planning period.

Stress tests are performed using standard financial scenarios as well as several developed scenarios: 2008 financial crisis, hard landing in China and political risk in Italy.

#### Valuation for solvency purposes

Information on EH Ré SA's assets, technical provisions and other liabilities have been shared using Market Value Balance Sheet (MVBS) and local Luxembourg GAAP figures. Below is a description of key figures, changes and other relevant points that have occurred in 2016.

#### **Assets**

Total assets at the end of 2016 equalled 880M€ on an MVBS basis. There have not been any changes to the recognition and valuation of material classes of assets during the reporting period. Assets have been invested in alignment with the prudent person principle.

#### Technical provisions

Total technical provisions at the end of 2016 equalled 544M€ on an MVBS basis. Reinsurance recoverables of nearly 489M€ (MVBS) are primarily due to claims provisions. The volatility adjustment (VA) impact is negligible with only 0.12% deviation between the discounted reserves with VA and without VA.

# Other liabilities

Total other liabilities at the end of 2016 equalled 234M€ on an MVBS basis of which a subordinated debt provided by EH Ré AG recognized at an amount of 33.4M€.

#### Capital management

#### Own funds

EH Ré SA own funds are exclusively composed of basic own funds and they are foreseen to stay stable over the three-year planning horizon.

# Minimum capital ratio (MCR) and solvency capital ratio (SCR)

EH Ré SA is compliant with the minimum capital ratio (MCR) and solvency capital ratio (SCR) requirements. EH Ré SA's capital is rather stable between 2015 and 2016. Based on projections of assets and liabilities, the solvency ratio is expected to stay in line with targets, which means that no specific management actions would be required.

A material change in 2016 regarding capital management is the use of a range of management ratios as opposed to previously focusing on a single management ratio.

EH Ré SA has implemented an internal model approved by the EH Group's regulators at the end of 2015. Unlike the standard formula, the internal model covers business risk, which is composed of both lapse risk and cost risk. The largest driver of difference in the capital between the standard formula and EH Ré SA's internal model in 2016 was Non-Life risks (-103.4M€). This is due to the presence of recession risk and a different computation and classification for the premium risk. No material data quality deficiencies were identified in the data use for the internal model.

# A. Business and performance

#### A.1. Business

# A.1.1. Legal entity, auditor and supervisor

#### A.1.1.1. Name and legal form

Euler Hermes Ré SA (EH Ré SA) 534, rue de Neudorf L-2220 Luxembourg www.eurlerhermes.com

EH Ré SA is referred to as EH Ré SA throughout this document. EH Ré SA's legal company form is a limited company (société anonyme) with the registration number B 36134.

#### A.1.1.2. Supervisor

Commissariat aux Assurances (CAA) 7, boulevard Joseph II L - 1840 Luxembourg

#### **A.1.1.3.** Auditor

KPMG Luxembourg 39, avenue John F. Kennedy L-1855 Luxembourg

#### A.1.2. Group structure and qualified holdings

EH Ré SA is a fully owned subsidiary of Euler Hermes Ré AG (EH Ré AG), Switzerland, a 100% subsidiary of Euler Hermes Group (EH Group), the French holding company of the EH Group quoted at the French stock exchange. Below is a simplified group structure chart which also details the percent ownership and legal links to its parent entities and its material related undertakings.

EH Ré SA simplified group structure

# Allianz SE Fublic Allianz SE Fublic 63% Euler Hermes Group SA 100% Euler Hermes Re AG CH 100% Euler Hermes Ré SA LUX

EH Group has a 100% ownership interest in EH Ré AG which has a 100% ownership interest in EH Ré SA divided in 61.055.000 shares.

#### A.1.3. Material lines of business and geographical areas

EH Ré AG and EH Ré SA are the EH Group reinsurance companies providing reinsurance solutions and capacity to all EH Group companies. Also, it covers the related non-consolidated companies in Austria, Portugal, Israël and Solunion, the Euler Hermes' Joint Venture with Mapfre for the Spanish and Latin American countries.

Since beginning of 2014 EH Ré SA has started to assume not only trade credit insurance from EH Group companies, but also bonding and fidelity business from EH Group companies as well as from Allianz companies and part of the Mapfre Bonding business.

Mainly the business from the EH business units located in the European Union (EU) are ceding to EH Ré SA with the exception of the German and the French (only from underwriting year 2016 onwards) branch of Euler Hermes SA (EH SA) whereas the Asian Pacific branches of EH SA started to cede directly to EH Ré SA with underwriting year 2016.

#### A.1.3.1. Lines of Business

EH Ré SA has two main lines of business: credit insurance and bonding.

For the purposes of Solvency II reporting, the mapping of each of the EH Ré SA lines of business fits into one Solvency II line of business: 9. Credit and suretyship insurance

### A.1.4. Significant events

No significant event affected EH Ré SA during the year 2016.

#### A.2. Underwriting Performance

#### A.2.1. Aggregate underwriting performance

The following table summarizes EH Ré SA's underwriting performance at an aggregate level:

EH Ré SA aggregate Underwriting Performance (UW) performance (International Financial Reporting Standards (IFRS))

In k€		2016		2015		Δ	%
Gross Earned Premiums		645,407		782,326	-	136,919	-17.5%
Claims costs	-	281,611	-	375,025		93,414	-24.9%
Gross operating expenses	-	206,168	-	263,052		56,884	-21.6%
Gross technical result		157,628		144,249		13,379	9.3%
Outward result	-	147,409	-	137,933	-	9,476	6.9%
Technical result		10,219		6,316		3,903	61.8%

At the end of December 2016 EH Ré SA's Gross Earned Premiums was at 645M€ and decreased by 17.5% compared to 2015. The decrease is mainly due to the French business no longer ceded to EH Ré SA slightly compensated by the business from Asia Pacific.

In 2016, claims costs were at 282M€ improving compared to 2015 by 24.9%. This evolution is the combination of a low claims frequency on current attachment year, partly offset by lower run-offs levels.

Gross claims costs current year were at 364M€, lower by 16.8% compared to last year thanks to a lower claims activity.

Part of the decrease is due to the fact that 2015 included a reserve for a large potential claim.

Gross run-off was positive and amounted to 82.5M€ increasing by 32% compared to 2015.

In 2016, outward result was at -147M€ decreasing by 6.9% compared to 2015.

Thus, EH Ré SA's net technical result was at 10.2M€ increasing by 61.8% compared to 2015.

The table below summarizes the underwriting performance accounted in Luxembourg GAAP (LUXGAAP).

In k€		2016
Gross Earned Premiums		645,649
Claims costs	ŀ	282,679
Gross operating expenses	ŀ	203,676
Gross technical result		159,295
Outward result	<b>-</b>	147,409
Technical result		11,885

# A.2.2. Underwriting performance by material geographical area

The following table summarizes the underwriting performance split by material geographical areas.

[Per LOB]	All LOB's					Trade C	redit bus	iness						Bonding		Fidelity
Ceded Figures per BU - Q4 2016 in K€	TOTAL	Non conso Countries		Northern Europe	France	America's	APAC	Medite Italy (incl. GCC)	erranean R Greece, Turkey	egion Total	EH WA Total (incl. TCU)	Trade Credit TOTAL	Bonding TOTAL		AZ External + Cosec	
Earned Premiums QS	-631'270	-55'493			-619	0	-48'015	-135'089	-9'910	-144'998	-127'611	-589'755	-40'788	-36'524	-4'264	-109
Earned Premiums XoL	-14'137	-1'322		-6'189	-1	-1	-3'737	-1'991	-619	-2'610	-278	-14'136	0	0	0	0
Earned premiums after rebates	-645'407	-56'814	-28	-219'799	-619	-1	-51'753	-137'080		-147'608	-127'889	-604'511	-40'788	-36'524	-4'264	
us Q4 2015	-782326	-58877	542	-232164	-189834	0	O	-136722	-10'236	-146'358	-120'373	-747'465	-34'777	-33'849	-328	-83
CY Claims	364'124	23'316	0	125'015	0	6	33'944	84'108	4'355	88'463	85'379	356'122	7'942	7'829	112	60
CY QS Loss Ratio	-58%	-42%	0%	-59%	0%	N/A	-71%	-62%	-44%	-61%	-67%	-60%	-19%	-21%	-3%	-55%
PY Claims	-82'514	388	-104	-34'588	-2'417	0	0	-14'402	-2'839	-17'241	-22'536	-76'498	-6'002	-8'142	2'141	-14
PY QS Loss Ratio	13%	-1%	376%	16%	391%	N/A	0%	11%	29%	12%	18%	13%	15%	22%	-50%	13%
Total Claims	281'611	23'704	-104	90'427	-2'417	6	33'944	69'706	1'515	71'222	62'843	279'624	1'940	-313	2'253	
vs Q4 2015	375025	24'283	-22490	36500	78815	0	0	<i>35'556</i>	917	36473	32842	3641022	10879	10'739	80	123
Total QS Loss Ratio	-45%	-43%	376%	-42%	391%	N/A	-71%	-52%	-15%	-49%	-49%	-47%	-5%	1%	-53%	-43%
vs Q4 2015	-49%	-43%	-9142%	-43%	-42%	N/A	N/A	-7t%	-9%	-66%	-77%	-50%	-33%	-32%	7%	-148%
Long ratio OC	-45%	-43%	2700/	-42%	2040/	N/A	-71%	E20/	-15%	-49%	-49%	-47%	-5%	40/	520/	420/
Loss ratio QS					391% -18%	N/A N/A		-52% -27%		-49% -28%				1%		-43% -38%
Cost ratio QS	-32% - <b>77</b> %	-37% -80%		-34% - <b>76</b> %	-18% 372%	N/A N/A	-35% - <b>106</b> %	-21% - <b>79</b> %	-33% - <b>49</b> %	-28% - <b>77</b> %	-28% - <b>78</b> %	-32% - <b>79</b> %	-42% - <b>47</b> %	-43% - <b>42</b> %	-35% - <b>88</b> %	-38% -81%
Combined ratio QS	-11%	-00%	340%	-/6%	312%	n/A	-100%	-19%	-49%	-11%	-10%	-19%	-41%	-42%	-00%	-01%

IFRS figures

#### A.3. Investment Performance

# A.3.1. Income and expenses arising from investments

In k€	2016	2015	Δ	%
Current income from Bond	2,732	3,073	- 342	-11.1%
Current income from Cash and Other	38	28	9	33.9%
Current investment income	2,769	3,101	- 332	-10.7%
FX result (net)	- 954	515	- 1,470	-285.1%
Investment Expenses	- 201	- 263	62	-23.6%
Interest Expenses	- 390	- 371	- 19	5.1%
Real. G/L, imp. (net) fixd inc	537	251	286	114.3%
Realized gains/losses	537	251	286	114.3%
Total investment income (incl interest expenses)	1,761	3,234	- 1,473	-45.5%

IFRS figures

The investment result has decreased from 3.2M€ to 1.7M€ mainly due to the impact of foreign exchange losses. Within the volatile environment of the financial markets and the low interest rate, the focus was to secure the capital base and diversify the investments.

The table below summarizes the investment performance accounted in LUXGAAP.

In k€		2016
Current income from Bond		2,769
Current income from Cash and Other		-
Current investment income		2,769
FX result (net)		45
Investment Expenses		-
Interest Expenses	-	390
Real. G/L, imp. (net) fixd inc		537
Realized gains/losses		537
Total investment income (incl interest expenses)		2,961

#### A.3.2. Gains and losses recognized directly in equity

EH Ré SA does not recognize any gains and losses directly in equity.

#### A.3.3. Investments in securitization

EH Ré SA invested in covered and mortgages securities. The following table summarizes the details of those investments.

In M€	Exposure	Exposure as % of assets
Mortgages	14.26	8.22%
Covered	43.58	25.11%
Securitized	57.84	33.32%

IFRS figures

#### A.4. Performance of other activities

EH Ré SA does not have any other source of income and expenses over the reporting period.

# A.5. Any other information

There is no other material information regarding EH Ré SA's business and performance to be disclosed.

### B. System of governance

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

# B.1.1. Structure of the system of governance

For an adequate monitoring of the risks related to its activity, EH Ré SA's management is organised around two management bodies:

- The Board of Directors
- The Board of Management

There have not been any material changes in the system of governance over the reporting period.

#### **B.1.1.1.** The Board of Directors (BoD)

The role of the Board of Directors is to decide on the strategy of the company, the budget, appointment of the key managers (Board of Management), review the quarterly accounts, solvability as well as other topics of interests for the company. It defines the strategic objectives and oversees their implementation. Also, it determines the financial strategy.

The Board of Directors has to meet as often as necessary and at least 3 times per year.

- At the first board meeting of the year (taking place in March/April), the annual accounts of the previous year have to be presented and compared to the initial budget;
- At the second respectively third board meeting of the year (taking place in September/October), the half-year accounts have to be presented and compared to the budget;
- At the last board meeting of the year (taking place in November/December), the budget for the next year has to be presented;
- At each board meeting, a comparison between the budget and the actual activity must be presented.

In addition, any other topic in relation to the management and the interests of the company will be proposed at the agenda for discussion.

#### **B.1.1.1.1** The Audit Committee

The Board of Directors of EH Ré AG set up during one of its first meetings an Audit Committee which is common for reinsurance entities, EH Ré AG and EH Ré SA.

Since both companies are fully integrated from an administrative perspective and as well on business perspective, they are automatically within the scope of the Audit Committee which has a global view on both entities.

The Audit Committee is in charge of the following topics:

- Review that company's risks and internal controls are well managed and under control;
- Internal and external auditors follow up;
- Accounts (closing and quarterly accounts) and external auditors "management letter" review;
- Internal Audit activity review (annual report, specific review if requested);
- Annual Audit Program review (final validation has to be provided by the EH Group' Shareholder Audit Committee);
- If needed, audit program modification in coordination with the Group Audit Director;
- Review of Legal and Compliance report.

#### **B.1.1.1.2** The Financial Committee

The Financial Committee reviews the investment strategy of the company and gives advice to the management according to the guidelines defined by the Group Financial Committee and the strategy defined by the Board of Directors. It meets before or during each Board of Directors.

#### **B.1.1.1.2.1 The General Assembly**

An Ordinary General Assembly has to meet each year the 4<sup>th</sup> Wednesday of the month of April following the closing of the accounts of the company in order to approve the Annual Report, the annual Financial Statements and define the dividend to be paid.

#### **B.1.1.2.** The Board of Management

There is no specific Board of Management of EH Ré SA. However, EH Ré SA outsources the usual tasks of the Board of Management to the Board of Management of EH Ré AG.

Also, there is a management body made of the EH Ré management team and AON Insurance Managers (Luxembourg) S.A. empowered through a Mandate Agreement. The key decisions on the management of EH Ré SA are taken by at least two members of the Board of Directors and/or by the Board of Management of EH Ré AG duly empowered through the Service Level Agreement (SLA). The daily administrative management of the company as well as the contacts with the local authorities are outsourced to AON.

The main tasks and responsibilities of the Board of Management is the general daily management of the company within the scope of the strategy defined by the Board of Directors.

The Board of Management is a collective decision-making body exercising its power collectively. However, the duties and responsibilities for managing the company are allocated among its members with the Board of Directors approval.

The members represent the key functions of the company: General Management, Finance, Operations, Compliance and Underwriting. The Board of Management shares the supervision of the activities and functions within the Company. Each member has to inform the other members about his areas of responsibilities and actions implemented in the scope of these responsibilities. Also, each member informs the other in case of any change in processes and/or operational methods in his area of responsibilities impacting or not the other functions.

#### B.1.1.2.1 The Risk Committee

Since both companies EH Ré AG and EH Ré SA, referred as Euler Hermes Reinsurance (EH Ré), are fully integrated from an administrative perspective and as well on business perspective, they are automatically within the scope of the Risk Committee which has a global view on both entities.

The EH Ré' Risk Committee has a specific and key role within the EH Ré (including both EH Ré AG and EH Ré SA) risk management system along with the other Committees (i.e. the investment strategy and underwriting strategy).

It ensures transparency on EH Ré capitalization and risk profile, the monitoring of the implementation of the Solvency II directives within EH Ré, establishing a comprehensive risk culture and processes within the Company by means of open communication and a common understanding of the risk profile.

#### **B.1.1.2.2** The Loss Reserve Committee

Since both companies are fully integrated from an administrative perspective and as well on business perspective, they are automatically within the scope of the Loss Reserve Committee which has a global view on both entities.

The role of the EH Ré Loss Reserve Committee (LRC) is to validate the level of the IFRS technical reserves for loss payments and salvages & subrogations of EH Ré (including both EH Ré AG and EH Ré SA) to be booked in the EH Ré AG and EH Ré SA financial statements at the end of each quarter. The objectives are:

- To maintain adequate technical reserves within EH Ré AG and EH Ré SA Balance Sheet ensuring the companies have at any time sufficient reserves to face its operational commitments;
- To monitor the claims' developments of the ceding EH Group and affiliated companies and eventually propose additional reserve depending on the economic environment and/or the closest claims development situation;
- To monitor and reconcile the estimated cessions of the ceding EH and affiliated companies with the reserve booking information as per date of the EH Ré Loss Reserve Committee;
- To ensure the consistency of EH Ré reserving with the EH Group & Allianz booking rules and guidelines.

#### **B.1.1.2.3** The Underwriting Committee

Since both companies are fully integrated from an administrative perspective and as well on business perspective, there are automatically within the scope of the Underwriting Committee which has a global view on both entities.

The role of the EH Ré (including both EH Ré AG and EH Ré SA) Underwriting Committee is to review the business placed within EH Ré's Treaties across all lines of business and from all cedents (EH Group, Allianz and Non Allianz Group) to ensure Reinsurance coverage and profitability across the portfolio.

The objectives are:

- To review the performance of business lines being written...
- To review the aggregation of risks being underwritten...
- To review the products that are being placed within the treaties
- To review all special acceptances that fall outside of the standard coverage
- To review and update on actual and potential large claims
- To review the monitoring and reporting of exposures across business lines

#### **B.1.1.2.4** The Integrity Committee

Since both companies are fully integrated from an administrative perspective and as well on business perspective, they are automatically within the scope of the Integrity Committee which has a global view on both entities.

The EH Ré (including EH Ré AG and EH Ré SA) Integrity Committee is a governance body that aims to provide oversight over the prevention and detection of fraud, corruption and corporate wrong-doing, including the handling of whistleblower cases. The objectives are:

- To establish a corporate sense of integrity standards:
- Coordinate among various functions (Compliance, Legal, Audit, Risk, Communications and Human Resources) and monitor jointly activities in the field of corruption, fraud and whistleblowing:
- Instil a corporate sense on integrity risks, support and validate Compliance Risk Assessments (e.g. corruption and fraud);
- Ensure transparency and reporting to EH Ré Compliance and/or EH Group Compliance, coordinate actions about cases including whistleblowing
- To ensure appropriate and consistent responses to misconduct

#### B.1.1.3. Key functions

EH Ré SA has the following independent key functions:

- Head of internal audit
- Head of compliance
- Head of risk management
- Head of actuarial function

Regarding Solvency II regulation, compliance, actuarial function and internal audit operate within the risk management framework which is composed of three lines of defense. The first line of defense is composed of risk taking units and involves the Risk Underwriting Function, the Reinsurance Function,

the Investment Function and the Market Management, Marketing, Commercial and Distribution Function (MMCD). The second line of defense involves the Compliance Function, the Risk Management Function and the Actuarial Function. Finally the third line of defense involves the Internal Audit Function. A chart disclosed in Section B.3.1.5 discloses further details on the objectives of the three lines of function governance.

Thanks to the implementation of the Risk Management framework, policies, processes in place, the key functions as well as the outsourced key functions are deemed as well-defined and appropriate on having the necessary authority, resources and operational independence to carry out their tasks.

# B.1.1.3.1 Internal audit

Internal audit function of EH Ré SA is outsourced to EH Group.

#### Independence

Auditors are hierarchically and organisationally segregated from operating activities they are in charge to control. Once a year the head of internal audit establishes a declaration of independence in which he testifies that he performs his activity independently and does not report to any operating function but exclusively and directly to the chairman of EH Ré SA Board of Management.

Audit missions results are validated by auditees and sent to the chairman of the Board of Directors, to the director of the department to which the mission was assigned, and to the Audit, Risk and Compliance Committee.

#### Roles and responsibilities

Internal audit service is competent to investigate and assess the appropriateness and effectiveness of both the internal control and the way the responsibilities assigned are assumed. In particular, he checks:

- · policies respect,
- risks control.
- the reliability of financial information
- Information Technology (IT) systems continuity and reliability,
- The working of different services.

In general, EH internal audit team acts on five kinds of audit which cover all of the activity fields and IT of EH:

- Local audits: Limited to audit required by local regulation
- Transversal audits: audit missions on one process for different entities
- Sovereign audits: audits which cover all of the processes of one entity
- Ad hoc audits: Non-scheduled audits asked by Board of Directors
- Vertical audits: audits of all processes of one function within one entity

# B.1.1.3.2 Compliance

# Independence

Compliance officers are chosen regarding their skills and their experience. For this purpose, they regularly assist to trainings certified or organized by the department. They are also chosen regarding their integrity for which an examination of their background is performed.

Moreover, in accordance with operational and functional structure of EH Ré SA, compliance falls within the area of expertise of the Board of Directors member in charge of the function related to finance, capital management, risk controlling, legal monitoring and compliance. EH Ré SA Compliance Officer hierarchically report to Chief Financial Officer from who they depend and functionally to the regional compliance officer.

Internal audit function independently and objectively checks the appropriateness and effectiveness of the compliance.

Compliance policy guarantees the compliance team, in the application of their function, with the ability to express their recommendations within EH Ré SA, without causing injury to compliance officers or its associates.

#### Roles

The compliance function ensures that EH Ré SA and its employees conduct their business activity with complete integrity and in compliance with the professional, legal and regulatory rules for the insurance profession in general and in particular credit insurer.

Thus, its mission is to assist in warning EH Ré SA and its employees against risks resulting from violation of the laws, circulars issued by the prudential authorities, rules of EH Ré SA as well as ethical standards in use in the insurance profession.

With respect to the scope of application defined above, the Compliance Officer is responsible for the following:

Transversal management:

- Manage and organize EH Ré SA compliance network within headquarters, its lines of business and subsidiaries (with the assistance of regional and EH Ré SA Compliance Officer),
- Provide a report on compliance risks and implement appropriate procedures;

Prevention, advice and support:

- Monitors and assesses risks at the level of the compliance procedures in force within EH Ré SA,
- Designs new procedures,
- Defines and establish quality standards,
- Ensures the analysis, the response and the non-retribution of whistle-blowers

Awareness and communication of compliance rules and standards:

- Monitors compliance standards respect in order to detect potential violations
- Increases awareness at EH Ré SA, its branches and subsidiaries of compliance procedures in force through communications and training.

Following areas, while managed and implemented by other departments (such as Risk & Capital Management, Human Resources, Purchasing, and Market Management, Commercial & Distribution departments), are also reviewed by the compliance function:

- Outsourcing
- Incompatibility of offices, Fit & Proper;
- Laws on market practices and consumer protection;
- · Laws on insurance intermediation;
- Solvency II policies for the subsidiaries in question.

Thus, the scope of the Compliance function at EH Ré SA is focused, but not only, on following areas:

- Data privacy;
- Respect of laws on privacy protection
- Prevention of insider trading and market manipulation;
- Prevention of money laundering and the financing of terrorism;
- · Adherence to economic sanctions rules;
- Prevention of fraud and corruption;
- Antitrust; and
- Identification and management of conflicts of interest.

#### B.1.1.3.3 Risk management

#### Independence

The Risk Management Function falls within the competence field of the Board of Directors member in charge of functions related to Actuarial function, Risk Management, Compliance.

The Risk Management Function is a key function which has the main objectives of supporting the first line-of-defense by:

- Helping ensure employees at all levels of the company are aware of the risks related to their business activities and how to properly respond to them;
- Supporting the Board of Management with development of a risk strategy and risk appetite;
- Monitoring of the risk profile to ensure it remains within the approved risk appetite and following up on instances of any risk appetite breaches.

The Risk Management Function has a standing within the EH Ré SA's organisational structure that ensures to maintain the necessary independence from first line of defense functions. Necessary independence means that no undue influence is exercised over the Risk Management Function, for instance in terms of reporting, objectives, target setting, compensation or by any other means.

The Risk Management Function shall have the right to communicate with any employee and obtain access to any information, records or data necessary to carry out its responsibilities, to the extent legally permitted. Notwithstanding, information access can be restricted to dedicated risk personnel contingent upon prior agreement with the Chief Risk Officer.

The Chief Risk Officer possesses the qualification, experience and knowledge required to manage the risks relative to the responsibilities of its role.

The head of the Risk management department (Chief Risk Officer) to which the Risk Management Function has been assigned is the relevant key function holder.

# Risk principles

# (a) Board of Management is responsible for the Risk strategy and appetite

The Risk strategy reflects the general approach towards the management of all material risks arising from the conduct of business and the pursuit of business objectives. The Risk appetite elaborates on the Risk strategy through the establishment of the specific level of Risk tolerance for all material quantified and non-quantified Risks, and thereby the desired level of confidence, in relation to clearly defined Risk and performance criteria, taking into account shareholders' expectations and requirements imposed by regulators and rating agencies. The Risk strategy and appetite are reviewed at least once a year and, if deemed necessary, adjusted and communicated to all impacted parties.

#### (b) Risk Capital as a key Risk indicator

The Risk Capital is the central parameter used to define Risk appetite as part of the Solvency Assessment. It serves as key indicator in the decision-making and Risk management process with respect to Capital allocation and limits. Capital is to be understood as Risk-bearing capacity or available financial resources.

Additional stress testing and scenario analyses are performed as part of the Solvency Assessment in order to ensure that adequate Capital exists to protect against unexpected, extreme economic losses.

#### (c) Clear definition of the organisational structure and Risk process

An organisational structure is established, inclusive of the roles and responsibilities of all persons involved in the Risk process, which is clearly defined and which covers all Risk Categories. The structure is documented and communicated in a clear and complete manner to all relevant addresses.

#### (d) Measurement and evaluation of Risks

All material Risks, including both single Risks and Risk Concentrations across one or more Risk Categories, are measured using consistent quantitative and qualitative methods. Quantified Risks are covered within the scope of the Risk Capital framework, which applies consistent quantitative methods which are based on its Internal Model.

#### (e) Development of limit systems

A consistent limit system is in place to support adherence to the Risk appetite and to manage concentration Risk exposure and, where appropriate, assist with Capital allocation. The limit system is based on relevant Risk measures where applicable and further complemented by steering limits based on accounting or position information, and is regularly reviewed by the Board of Management against the background of the defined Risk strategy.

#### (f) Mitigation of risks exceeding the Risk appetite

Appropriate Risk mitigation techniques are employed to address instances where identified Risks exceed, or otherwise breach, the established Risk appetite (e.g. limit breaches). Where such cases occur, clear courses of action designed to resolve the breach are initiated, such as the adjustment of the Risk appetite following a business review, the purchase of (re-)insurance, the strengthening of the control environment, or a reduction in, or hedging against, the underlying asset or liability giving rise to the risk.

Risk mitigation techniques are only considered in the Risk capital calculation to the extent they lead to an economically and legally effective transfer of risks.

# (g) Consistent and efficient monitoring

The Risk strategy and corresponding Risk appetite are transferred into standardised limit management processes covering all quantified Risks and taking into account the effects of Risk diversification and Risk Concentration. A clearly defined and strict limit breach reporting and escalation process ensures that Risk tolerance limits and target ratings for top Risks are adhered to and that, as appropriate, remediation activities are taken immediately if limits are exceeded.

#### (h) Consistent Risk reporting and Risk communication

The Risk Management Function generates internal Risk reports at both predefined regular intervals and on an ad hoc basis that contain relevant, Risk-related information in a clear and concise form.

# (i) Integration of Risk management into business processes

Risk management processes are embedded wherever possible directly within business processes, including processes involving strategic and tactical decisions as well as day to day business processes that impact the Risk profile. This approach ensures that Risk management exists foremost as a forward looking mechanism to steer Risk and only secondarily as a reactionary process.

(j) Comprehensive and timely documentation of risk related decisions

All business decisions with potential to materially impact the risk profile, including both regularly recurring and ad-hoc decisions and all decisions taken by the Board of Management, are documented timely and in a manner that clearly reflects consideration of all material risk implications.

#### **B.1.1.3.4** Actuarial function

In accordance with operational and governance structure of EH Ré SA, Actuary falls within the competence field of the Board of Directors member in charge of functions related to Actuarial function, Risk Management, Compliance. Persons responsible for actuarial function hierarchically report to EH Ré SA Chief Financial Officer (CFO).

Persons responsible for the actuarial function possess an actuarial knowledge as well as financial mathematics.

Actuarial function ensures, but not only, an EH Ré SA independent oversight by performing the following tasks:

- Monitors the appropriate setup, by EH Ré SA, of minimal standards regarding data quality, actuarial assumptions, methodologies and processes for the calculation of technical provisions and make sure of the overall level of EH Ré SA technical provisions. Moreover, it reports quarterly about technical provisions level to the Loss Reserve Committee, statues on its appropriateness, and gets boards of director approval regarding the level of those technical provisions.
- It monitors the setup, by regions, of the reserve risk model and validates the capital level related to EH Ré SA technical provisions. It also contributes to the setup of an effective risk management system.
- It is implied in the overall underwriting and pricing policy as well as in the set of reinsurance agreements.

Once a year or for the modification or launching of one production, the Responsible Actuary establishes:

- An actuarial function report which testifies the appropriateness of EH Ré SA technical provisions
- A report on reserving risk in which he testifies the appropriateness of risk capital amount related to EH Ré SA technical provisions
- An opinion on underwriting policy and reinsurance agreements

When he establishes a report, the Responsible Actuary produces and signs an independent opinion on the actuarial processes and on the calculation stemmed from them.

EH Ré SA's system of governance remained stable over the reporting period.

#### **B.1.2.** Remuneration policy

# **B.1.2.1.** Definitions

Senior Management is defined as the members of the Board of Management

#### **Risk Takers**

A Risk Taker is defined as a person whose actions may have a significant impact on the entity's risk profile. These are typically employees with a profit and loss responsibility and the respective authority to assume risks, including strategic risks, on behalf of the entity.

EH Ré SA has identified the following non key functions which typically involve high risk taking subject to an assessment based on local regulatory requirements:

- · Heads of risk underwriting, investment, treasury, sales and distribution and finance
- Committee chair of relevant committees such as the investment committee or product committee provided the committee has decision making power similar to the Board.

c) All direct reports to the Board of Management and direct reports to typical risk taking positions shall be reviewed and may be included based on a further risk assessment.

#### **Key Function Members**

For purposes of the Remuneration Policy, Key Functions are:

- The Actuarial function:
- The Risk & Capital Management function;
- The Compliance function; and
- The Internal Audit function.

#### **Key Function Staff**

Key Function Staff comprises the further persons working within Key Functions (i) with a direct reporting line to the Key Function Holders and independent decision rights, or, (ii) being experts with independent decision rights.

#### **B.1.2.2.** Principles for Remuneration

# **B.1.2.2.1 General Remuneration Principles**

#### **Remuneration Appropriateness**

To ensure the appropriateness of the remuneration of individuals and general pay levels, vertical and horizontal benchmarking is performed.

#### **Target Setting Principles**

According to a business specific strategy, a three-year plan is prepared and aggregated to form the financial plans for EH Ré SA.

Selected key performance indicators from the financial plans form the basis for the financial and operational targets which reflect the strategy of EH Ré SA are designed to:

- Avoid excessive risk taking,
- · Avoid conflicts of interest,
- Avoid encouraging risk-taking that exceeds the risk tolerance limits of the EH Ré SA,
- Reflect appropriately the material risks and their time horizon and
- Take into account the overall success of EH Ré SA.

#### **Principles for Board of Directors Remuneration**

To avoid a conflict of interest, members of Board of Directors only receive a fixed remuneration subject to attendance. Mandates carried by members of the Board of Management of EH Group in Board of Directors of EH Ré SA are not compensated at all.

For compensated members of Board of Directors the total remuneration is set at a level consistent with the scale and scope of the Board of Directors' duties. It takes into account the company's activities, business and financial situation. The remuneration structure also takes into account the individual

functions and responsibilities of Board of Directors members, such as chair, vice-chair or committee mandates.

# **B.1.2.2.2 General Compensation Principles**

The following general principles relate to Compensation components of all staff.

#### **Fixed Compensation**

Base salary is the fixed Remuneration component and rewards the role and responsibilities taking account of market conditions and providing for a stable source of income. The fixed component represents a sufficiently high proportion of the total Remuneration to avoid the Employees being overly dependent on the variable components.

Employees may also receive Benefits and Allowances subject to local rules and conditions.

#### **Variable Compensation**

Variable Compensation components shall be designed to incentivise performance but at the same time it shall not provide incentives for risks which might be incompatible with the risk profile of EH Ré SA, including risk limits. Therefore, subject to local labour law, variable Compensation components may not be paid, or payment may be restricted in the case of a breach of risk limits or a compliance breach, such as e.g. the Code of Conduct or other compliance requirements. Furthermore, variable Compensation may be deferred or fully or partially cancelled by the competent supervisory authority in case that the applicable solvency capital requirements are not met. Where relevant, employment agreements need to take account of such deferral or cancellation rights.

The volume and relative weighting of the variable component shall depend on the level of seniority and the position, i.e. higher percentages of variable Compensation relative to fixed Compensation shall typically apply to more senior positions. Variable components typically consist of annual bonus (short term incentive) and mid-/long-term incentives either granted in cash, equity or other instruments.

#### One-time payments

One-time payments such as guaranteed, Sign-on, Buy-out, Retention, severance or ex-gratia bonus are granted only if justified by business or market reasons and upon approval of the relevant approval body. All one-time Compensation arrangements and Severance payments have to include a cap in accordance with legal requirements and are subject to fulfilment criteria.

Severance payments must not reward failure. Therefore, unless otherwise required by law or prevailing market practice, Severance payments shall take the performance achieved over the whole period of activity into account. No Severance payment is to be paid in case of a termination for cause or if the employment has ended upon own initiative of the Employee.

#### **B.1.2.2.3** Specific Compensation Principles

For Senior Management, Key Function Holders and Risk Takers, specific compensation principles apply with regard to performance measurement as well as deferral and downward adjustments (referred to as "malus" clause) of variable Compensation.

# **Principles for Performance Related Variable Compensation**

Where variable Compensation is performance-related, it is based on a combination of assessments of the performance of the individual and of the business concerned and of the overall results of EH Ré SA, specifically:

- Individual performance considers relevant quantitative and qualitative aspects which includes behaviours and the quality of people management; results are assessed in an annual performance management process.
- EH Ré SA performance is measured through specific financial targets and key performance indicators or the performance of certain long term instruments issued by the company – as applicable.
- For those Employees who receive Restricted Stock Units (RSU) compensation, performance is further reflected in EH Group and Allianz share price developments.

Variable Compensation can vary from year to year depending on market development and performance. It considers negative performance in the same way as positive performance. This could result overall in lower year-on-year variable Compensation.

#### Deferral

A substantial portion of the variable Compensation but at least 20%3, irrespective of the form in which it is to be paid, contains a flexible, deferred component. The deferral period depends on the respective Compensation program, is correctly aligned with the nature of the business, its risks, and the activities of the persons in question, and shall not be less than three years.

#### Malus

Variable Compensation shall be subject to a downwards adjustment to reflect exposure to current and future risks, taking into account the relevant risk profile and cost of capital.

# **Allianz Sustained Performance Plan (ASPP)**

The ASPP balances fixed and variable Compensation. The relative weighting of fixed versus variable Compensation is regularly reviewed against applicable regulation and market trends. The grant of variable elements is capped at 165%4 of target variable Compensation. The ASPP consists of the following variable Compensation components5:

- Annual Bonus: A portion of the variable Compensation, the annual bonus, rewards the
  achievement of EH Ré SA and individual priorities for the respective performance year as
  agreed and recorded with the ASPP participant. The annual bonus is paid in cash following
  the annual performance assessment. Depending on the performance assessment, the pay-out
  may be less than 100% of the target bonus (=malus).
- Allianz Equity Incentive (AEI): All ASPP plan participants receive a proportion of their Actual
  Total Direct Compensation as a virtual share award, the Allianz Equity Incentive (AEI) which is
  linked to the Allianz share price development. To avoid extreme pay-outs the AEI pay-out is
  limited to an increase of the grant price by 200%. The AEI award is subject to a four year vesting period from grant date and depends on continuing employment with the Allianz / EH
  Group. Once vested, the award is automatically settled at a pre-defined date.
- Mid Term Bonus (MTB): Executives receive a portion of their Actual Total Direct Compensation in form of the Mid-term bonus (MTB): A deferred award which reflects the achievement of the annual targets by accruing an amount identical to the annual bonus. The actual award is subject to a three-year sustainability assessment and is paid at the end of a three-year performance cycle subject to adjustments. The sustainability criteria assessed for the MTB provides for ex post risk adjustment (malus). Specifically, the MTB 2016 2018 comprises sustainability (performance and health) indicators, which are aligned with the EH Group's external targets.

#### **Other Variable Compensation Schemes**

To ensure business-tailored Remuneration or to comply with the specific compensation components principles for non-ASPP participants or to align with local regulation, other variable Compensation plans may be provided, subject to a vesting period including bad leaver conditions, aligned and reconciled with EH Group plans, compliant with local legal and regulatory requirements and Allianz Group Human Resource (HR), as necessary.

#### **Principles for Key Function Remuneration**

The variable compensation shall be independent from the performance of the operational units and areas that are submitted to their control. Their targets will only be measured against their individual goals and not against company performance / financial targets.

#### **B.1.2.3.** Processes

#### **Remuneration System**

The Remuneration system is reviewed annually by the Board of Management, which, in turn, informs the Board of Directors of its assessment of the appropriateness of the Remuneration system and plans as well as the alignment with legal and regulatory requirements.

# **Compensation Plans**

 As part of Allianz Group, EH Ré SA benefits from Allianz Group-wide Compensation plans, such as the Allianz Sustained Performance Plan (ASPP), the Allianz Equity Incentive Plan (AEI), the Mid Term Bonus (MTB) and the voluntary Employee Stock Purchase Plan (ESPP), which are regularly reviewed by Group HR, the CoCo and the respective stakeholders. Mate-

- rial changes to the Remuneration system and plans involving EH Group equity are approved by the EH Group Board of Management.
- Compensation plans are benchmarked regularly and reviewed together with the relevant local
  or EH Group stakeholders and the local CoCo or local Board of Management. Material changes or new plans or the termination of plans require EH Group HR approval, which reviews the
  key design features of all major Compensation plans annually and reports to the EH Group
  Board of Management to ensure they are reconciled with the EH Group Remuneration systems and the business strategy.

# **Year-End Process**

Compensation budgets and bonus pools are reviewed by the relevant CoCo annually during the yearend process. Specifically:

- The review covers the pay-out of variable Compensation for a respective performance year (usually the fiscal year) as well as for the following year's Compensation planning.
- The review of the overall pay-out is based on either the Target Total Direct Compensation or
  on multiple aspects such as the comparison with previous year's variable Compensation pool,
  the overall profitability of the business as well as further quantitative and qualitative Key Performance Indicators (KPIs) and may include a risk assessment.
- The grant of awards subject to EH Group plans and the pay-out thereof are administered by EH Group HR which ensures a consistent application of grant or pay-out conditions as set out in the relevant plan rules.

#### **B.1.3.** Material transactions

There has not been any transaction with shareholders or members of the Administrative Management or Supervisory Board (AMSB) during the year 2016.

#### B.2. Fit and proper requirements

#### B.2.1. Description of requirements for « fit & proper »

The application of the Solvency 2 directive requires a high Fit and Proper standard for Senior Management and Key Function Holders across the company. For these positions, a policy establishes the core principles (general principles, fitness and propriety) and processes necessary to ensure sufficient knowledge, experience and professional qualifications as well as the necessary integrity and soundness of judgment.

#### **B.2.1.1.** Scope

Senior Management is defined as the persons effectively running the undertaking i.e.:

- Members of the Board of Management (or corresponding executive body), which is defined as the collective body responsible for the steering of EH Ré SA's business and handling of the day-to-day business;
- The Key Function Holders are the persons responsible for carrying out the independent the following key control functions, "Key Functions":
  - o Compliance;
  - o Risk Management;
  - o Actuarial
  - o Internal Audit

They are the heads of the respective departments with a direct reporting line to the Board of Management. For each Key Function there is one Key Function Holder. The Key Function Staff com-prises further persons working within Key Functions, including those with a direct reporting line to the Key Function Holders and, in addition, experts with independent decision rights.

#### **B.2.1.2.** Definitions

#### Fitness

A person is considered fit (Fitness) if their professional qualifications, knowledge and experience are adequate to enable sound and prudent fulfilment of his role. This includes leadership experience and management skills, as well as the relevant qualifications, knowledge and experience for the specific role.

The qualifications, knowledge and experience required depend on the position.

The members of the Board of Management shall collectively possess qualification, knowledge and expertise about:

- Credit Insurance, asset management and financial markets, i.e. an understanding of the business, economic and market environment in which EH Ré SA operates;
- The business strategy and business model of EH Ré SA;
- EH Ré SA 's system of governance, i.e. an understanding of the risks EH Ré SA is facing and the capability of managing them and of assessing the capacity of EH Ré SA to deliver effective governance, oversight and controls;
- Financial and actuarial analysis, i.e. the ability to interpret EH Ré SA's financial and actuarial information, identify key issues, put in place appropriate controls and take necessary measures based on this information; and
- Regulatory framework and requirements, i.e. an understanding of the regulatory frame-work in which EH Ré SA operates and the capacity to adapt to changes to it.

Appropriate diversity of qualifications, knowledge and experience within the Management Commit-tee shall be ensured and the collective fitness shall be maintained at all times when changes occur within the Board of Management.

While each individual member of the Board of Management is not expected to possess expert knowledge, competence and experience within all areas of EH, he must possess the qualification, experience and knowledge which is necessary for carrying out the specific responsibilities within the Board of Management assigned to him.

Members of the Senior Management other than members of the Board of Management must possess the qualification, experience and knowledge as outlined with regard to the Board of Management to the extent they are relevant for their responsibility. This depends on the degree of autonomy within the overall organization of EH Ré SA which the branch, organizational unit or regional business division has for the business.

Each Key Function Holder must possess the Fitness required to fulfil the tasks assigned to him by the policy of the respective Key Function, if any, and applicable law. In cases where a Key Function is outsourced according to the EH Ré SA Outsourcing policy, the Fitness requirements for the person are identical to those applying to the respective Key Function Holder himself.

#### **Propriety**

A person is considered proper (Propriety) if he is of good repute and integrity, depending on his character, personal behaviour and business conduct, including criminal, financial and supervisory aspects. A proper person is able to provide for the honesty and financial soundness required for him to fulfil his position in a sound and prudent manner.

Whereas certain requirements must be positively fulfilled for a person to be considered Fit, in respect of Propriety there are no such positive criteria, but rather negative circumstances, which are hints that a person may not be Proper. Thus the Propriety assessment does not consist, like the Fit-ness assessment, in the verification that requirements are fulfilled, but in the consideration of any hint which may cast a doubt on a person's Propriety.

#### Such hints are:

 Any previous conviction, or current procedure possibly leading to a conviction, of a criminal offence, in particular offences under any financial services legislation (e.g. laws on money laun-

- dering, market manipulation or insider dealing, fraud and financial crime), breaches of companies, insolvency and consumer protection laws;
- Any previous conviction, or current procedure possibly leading to a conviction, of a relevant disciplinary or administrative offence;
- Any administrative sanctions for non-compliance with any financial services legislation and any current investigation or enforcement action by any regulatory or professional body;
- Any relevant inconsistency with regard to a candidate's education or professional experience;
- Any further circumstance resulting in the risk of financial crime, non-compliance with law or the jeopardizing of the sound and prudent management of EH Ré SA business.

# B.2.2. Description of processes and procedures in place

The Fit & Proper checklist was reviewed and communicated to every Heads of Human resources. It can be found in annex of the Fit & Proper policy and defined more precisely the controls to be performed for all employee levels and in all situations.

The human resources function strictly follows this guide to guarantee the reputation and professional expertise of each person coming within the scope of the Fit & Proper.

Besides, the process of the Bank's regulatory reporting and pre-approval obligations is detailed in the policy application note to EH Ré SA. This process is carried out in coordination between human resources and the leg al department.

At the same time, EH Group's Fit & Proper policy is applied to all legal entities within the scope of control of EH Group. As a result, the CEOs of the subsidiaries and sub-subsidiaries of EH Group are subject to Fit & Proper control. Thus the subsidiaries of EH Ré SA are also covered by this procedure.

#### B.2.2.1. Processes for ensuring Fitness and Propriety at recruitment

EH Ré SA ensures that, during the recruiting process of any member of the Senior Management or of a Key Function Member, whether internal or external to the EH Group, their Fitness and Propriety are assessed. An employment or service contract may only be entered into after the successful completion of a recruiting process as described below.

#### (a) Job descriptions / Fitness requirements for the position

Job descriptions are used to fill open positions for members of Senior Management other than members of the Board of Management and for Key Function Members, both internally and externally. The HR department ensures that the job descriptions for open positions are in place, in line with corporate communication requirements and local laws and regulations, including anti-discrimination regulations. Each job description specifies the job role and the tasks and key responsibilities associated with it, as well as the Fitness required to perform the job role in a sound and prudent manner.

As regards the members of the Board of Management, candidates are assessed in accordance with the Fitness requirements described above as well as further criteria defined by the Board of Di-rectors.

# (b) Curriculum vitae; background checks

# 1. External candidates

All candidates must submit current curriculum vitae at the beginning of the recruiting process. The final candidate for a position within the Senior Management or as Key Function Holder must be subject to a background check, comprising of:

- The submission by the candidate of copies of his required qualifications;
- The submission by the candidate of a proof of good reputation and of no previous bankruptcy, including a certificate of good conduct or adequate documents (e.g. criminal records check, police clearance certificate), presented not later than three months after the date of issue; and

• A reference check and a public media search conducted by the recruiting HR department, subject to applicable privacy laws and regulations.

Each respective Key Function Holder shall determine for which Key Function Staff positions the final candidates shall be subject to a (partial) background check. In doing so the Key Function Holder shall consider the positions' level of responsibility, e.g. direct reporting line to the Key Function Holder.

In the event that any of the documents to be submitted by the candidate for the background check is not available, the HR department, responsible for the recruitment, decides on the adequate measure (e.g. request for a statutory self-declaration to serve as proof).

#### 2. Internal candidates

When candidates have been employed by EH Ré SA for less than four years, or uncertain justified cases, it must be secured that their curriculum vitae is available. Besides they shall be subject to background checks as described above.

Irrespective of their tenure within EH Ré SA, internal candidates applying to assume an executive position for the first time must undertake a global assessment, including:

- An interview with a professional interviewer;
- References from the candidate's superiors, peers, direct reports and other stakeholders; and
- Psychometrics to assess the candidate's leadership styles and the organizational cli-mate he creates (optional).

#### (c) Interviews

For head positions the candidates have an interview with three members of the Board of Management and a HR professional.

All other candidates for Executives positions (including key function holders) have an interview with the responsible member of the Board of Management and, if applicable, with the functional member of the Board of Management as well as a HR professional.

# (d) Assessment by CAA

Prior to the nomination of the candidate to her/his role, the candidate must be vetted by CAA.

As a consequence, an assessment file is submitted to CAA and if necessary, an interview with CAA is organized.

#### B.2.2.2. Processes for ensuring ongoing Fitness and Propriety

A person's Fitness and Propriety shall be assessed on a regular basis, to ensure ongoing Fitness and Propriety of the person for his position, for instance, as part of annual performance reviews or Career Development Conferences.

Ad-hoc reviews are required in certain extraordinary situations which give rise to questions regarding a person's Fitness or Propriety, e.g. in case of:

- Relevant breach of the EH Ré SA Code of Conduct;
- Failure to submit required self-disclosure statements, e.g. statements of accountability or disclosure of security trading;
- Investigation or any other procedure possibly leading to a conviction of a criminal, disciplinary
  or administrative offence (in the case of an administrative or disciplinary offence, the relevance to the EH Ré SA business and the person's position shall be taken into account), or to
  administrative sanctions for non-compliance with any financial services legislation; and
- Substantiated complaint within the EH Ré SA (e.g. whistle-blowing) or from supervisors.

#### B.2.2.3. Outsourcing of a Key Function

In cases where a Key Function is outsourced according to the EH Ré SA Outsourcing Policy, the due diligence of the Provider by the Business Owner comprises a description of the process used by the Provider to ensure the Fitness and Propriety of its personal and a written confirmation that the Provider's personal working within the outsourced Key Function is Fit and Proper (Fit and Proper Test).

At the date of the writing of the narrative report, no key function is outsourced.

#### **B.2.2.4.** Assessment results

Based on the information gathered during recruiting, a regular or ad-hoc review or an outsourcing due diligence, each case must be assessed individually, considering the following:

- As regards Fitness, if it appears that a member of the Senior Management, a Key Function Member or a candidate to such a position suffers from a specific lack of knowledge, competencies or skills, it shall be considered whether this lack is curable through specific professional training and if so, the person must be provided with such training;
- Regarding Propriety, whereas any hint of a possible lack of Propriety must be taken into account for the assessment, factors such as the type of misconduct or conviction, the severity of the case, the level of appeal (definitive vs. non-definitive conviction), the lapse of time since and the person's subsequent conduct are also taken into account, as well as the person's level of responsibility within EH Ré SA and the relevance of the finding for the respective position (i.e. the position's exposure to integrity and fraud risks). Furthermore, any finding with respect to a person's Propriety must be shared with the compliance department, as well as the legal department where adequate. At the date of the writing of the narrative report, all members of senior management and all key function holders have been approved by CAA as fit and proper.

#### B.2.2.5. Training

EH Ré SA ensures that, on an on-going basis, relevant professional training, including eLearning, is available (internally or via external providers) to the Senior Management and Key Function Members, to enable them to constantly meet the Fitness requirements of their roles.

As regards Propriety, EH Ré SA's compliance department provides regular training on ethical business behaviour such as anti-fraud and anti-corruption topics, providing employees with clear rules for proper behaviour, both for themselves and their reports.

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

#### B.3.1. Description of risk management system

#### **B.3.1.1.** Risk management framework

Effective Risk management is based on a common understanding of Risks, clear organizational structures, and comprehensively defined Risk management processes. The following principles shall serve as a basic foundation upon which EH Ré SA risk management approach shall be implemented and conducted.

EH Ré SA Board of Management is responsible for the Risk strategy and appetite. The Risk strategy reflects the general approach towards the management of all material risks arising from the conduct of business and the pursuit of business objectives. The Risk appetite elaborates on the Risk strategy through the establishment of the specific level of Risk tolerance for all material quantified and non-quantified Risks, and thereby the desired level of confidence, in relation to clearly defined Risk and performance criteria, taking into account shareholders' expectations and requirements imposed by regulators and rating agencies. Five core elements define EH Ré SA risk appetite:

- Setting target ratings for top risks
- Monitoring the capitalization level and solvency ratios
- Managing liquidity to ensure flexibility

- Defining quantitative financial limits
- Defining policies, standards and functional rules

#### B.3.1.2. Risk management processes

EH Ré SA shall establish for all material quantified and non-quantified Risks a comprehensive Risk management process which incorporates (i) Risk identification, (ii) Risk assessment, (iii) Risk response and control activities, (iv) Risk monitoring, and (v) Risk reporting. The process should be implemented and conducted within the confines of a clearly defined Risk strategy and Risk appetite and periodically assessed for adequacy.

At a minimum, EH Ré SA follows to the hereunder quantitative and qualitative Risk management process requirements:

- Solvency Assessment, a comprehensive assessment of all risks inherent to the business in
  order to determine whether current and future capital will be sufficient to ensure on-going solvency against these risks. The Solvency Assessment constitutes the "Own Risk and Solvency
  Assessment (ORSA)". EH Ré SA Board of Management shall discuss the Solvency Assessment, take appropriate actions based on the findings and report the outcome to their local Supervisor
- Risk Capital calculation, EH Ré SA shall calculate their Risk Capital with respect to all material Risks of the Risk Categories Market, Credit, Business and Operational Risk, as well as Underwriting risk on a quarterly basis.
- Top Risk Assessment (TRA), a periodic analysis of all material quantified and non-quantified Risks to identify and remediate significant threats to financial results, operational viability or the delivery of key strategic objectives. The TRA shall cover the eight Risk Categories as well as Risk Concentrations. EH Ré SA shall perform a TRA on a regular, at least annual basis and report their results to Group Risk.
- Further Risk management processes, in addition to the TRA, EH Ré SA shall manage all material Risks of all Risk Categories through the application of specific Risk management processes.

#### B.3.1.3. Risk management implementation

**EH Ré SA Board of Management** is responsible for sound organizational and operational structures and procedures to ensure compliance with the risk management policy. More specifically, the responsibilities are:

- Implementing EH Ré SA Risk Policy into EH Ré SA system of governance and in particular EH Ré SA corporate rules as appropriate to EH Ré SA business and Risks.
- Developing and implementing EH Ré SA Risk strategy, appetite and limits in line with EH Ré SA business strategy and the Group Risk strategy;
- Establishing a Risk Management Function responsible for the independent Risk over-sight under the responsibility of EH Ré SA CFO;
- Implementing the Risk management process, including the Solvency Assessment; and
- Approving and adapting the Internal Model to ensure its adequateness for the use by EH Ré SA.

Risk Management Function responsibilities are the operational execution of:

- Proposing the Risk strategy and appetite to the Board of Management;
- Overseeing the execution of the Risk management processes;
- Monitoring and reporting EH Ré SA Risk profile including the calculation and reporting of the Risk Capital;
- Supporting the Board of Management through the analysis and communication of Risk management related information and by facilitating the communication and implementation of its decisions:
- Escalation to the Board of Management in case of material and unexpected in-creases of Risk exposure;
- Reporting the Solvency Assessment as well as any further material Risk management related information to Group Risk; and
- Developing and implementing the Internal Model, in particular its local components in cooperation with Group Risk, including validation and suitability assessments.

The Risk Committee (RiCo) is responsible for:

- Preparing and proposing to the Board of Management the Risk strategy, Risk appetite and limits:
- Operational execution of the Risk limit framework and overseeing the Risk management system:
- Preparing and proposing to the Board of Management the Solvency Assessment;
- Defining and operationalizing group-wide Risk standards (including the corporate rules of the Risk Policy Framework); and

**The Financial Committee (FiCo)** is responsible for approving individual Financing Transactions in line with Risk Capital considerations.

#### **B.3.1.4.** Three Lines of Defense

As required by Solvency II, EH adopted a "3 lines of defense" model for risk governance, with clear responsibilities between the different organizational functions as described hereafter:

#### **Board** Strategy, risk appetite and policy First line: Second line: Third line: Risk ownership Risk control and monitoring Independent assurance EH Risk management, Actuarial EH Risk taking business units **EH Internal Audit Functions** and Compliance functions supported by the management Delegated authority from the Board to: Provides objective oversight of the Provides independent and objective assurance over the effectiveness of management of risk. Key responsibilities corporate standards, including as-• develop and implement the internal include: surance that the risk management model: • design and deployment of overall process is functioning as described · measure and manage business perinternal model governance framework; and identifies improvement opportuformance; development and monitoring of polinities • develop and implement internal concies and procedures; trol and risk management framework; • monitoring adherence to framework • ensure that the business is managed and strategy; within the agreed risk appetite. · compliance rules.

#### B.3.2. Governance of the internal model

#### B.3.2.1. Governance of the internal model

**The Board of Management** is responsible for approving the application to use the internal model to calculate the Solvency Capital Requirement.

The approval is required within the scope of the initial Internal Model Approval Process (IMAP). In addition, the Board of Management is responsible for confirming the ongoing appropriateness of the internal model at least annually signing off the Annual Validation Report.

#### A. EH RÉ SA CRO

He is responsible for ensuring compliance with the Allianz Standards on Model Governance (ASMG). Responsibilities of EH Ré SA CRO include:

- Ensure model validation is performed and documented in accordance with the ASMG, i.e. adequate independence and skills of model reviewers
- Ensure that the persons providing expert judgment possess adequate skills and experience
- Ensure that all relevant documentation in the Model Inventory and the IMAP documentation repository is kept complete and up-to-date in particular after a model change and that the documentation standards are fulfilled

#### B. Specific roles

The following roles, consisting of either an individual or group of individuals, shall be established in order to facilitate adherence with the requirements of this Standard:

- 1. Model approvers are responsible for:
  - Initial approval of the models they are responsible for
  - Deciding on a remediation plan if the validation results for models they are responsible for indicate findings that have to be addressed
- 2. **Model owners** are responsible for:
  - Ensuring the existence of adequate model documentation
  - Model development in accordance with the established design requirements.
  - Overseeing the implementation of model controls
  - Carrying through activities to assess the appropriateness of the results produced by the model
  - Assess the data quality and define appropriate data update cycles
  - Sign-off of expert judgment

EH Ré SA model owners are responsible for local model components and for assessing the suitability of central model components for local application.

- Independent reviewers may be independent internal or external parties and are responsible for independent validation of models and reporting of the results according to the specifications in the Guideline for Model Validation.
- 4. The EH Ré SA model governance coordinator shall support the EH Ré SA CRO by:
  - Gaining approval of the validation plan by EH Ré SA RiCo
  - Coordinating the Annual Model Validation plan within the relevant legal entity
  - Collecting suitability assessment results from model owners and documenting these in the relevant template for EH Ré SA
  - Gathering independent validation results of local model components and documenting these in EH Ré SA Annual Validation Report
  - Following-up the status of the local remediation plans and disclose a status of open and closed findings in EH Ré SA Annual Validation Report
  - Regularly communicating the status of local validation plan to the model governance coordinator at Group level

In addition, EH Ré SA model governance coordinator is responsible for the preparation of the Annual Model Validation Report at EH Ré SA level.

# 5. EH Ré SA Actuarial function

The Actuarial Function is involved for risk modelling topics affecting their area of their expertise, including dependencies with other risks.

#### B.3.2.2. Governance of Trade credit insurance & surety model

As EH Ré SA core business is trade credit insurance and that a specific internal model has been developed dedicated to this risk, the following refers to the governance of this model.

EH Ré SA CRO is responsible for ensuring and supporting an adequate Trade Credit insurance and Surety risk capital process from the data collection to the review of results. It covers:

- Reliable and timely data input for the Credit Insurance Risk (CIR) model to meet deadlines
- High standard of quality level according to criteria mentioned in section 4 for each report
- Evidence of checks of data and data delivery sign off
- An audit track document covering the data preparation, storage of data and analysis of impact is an important component of the data input.
- The organization of a Parameters & Assumptions Approval committee (PAAC)

- At the end of the process, EH Ré SA CRO gives a statement of accountability to EH Risk & Capital Management (R&CM).
- EH Ré SA CRO ensures that all parameters changes are made according to expert judgment with measure for the impact of such change
- EH Ré SA CRO ensures that a proper validation process is in place in the Business Unit (BU)

If the requested scope of data requirements or data quality standards is not fulfilled in a certain delivery, EH Ré SA CRO is in charge of initiating issue fixing and tracking.

A PAAC is organized every quarter with the risk information and claims (RIC) teams in order to reinforce the expert judgment and validate the parameters.

The name of participants and the minutes of the committee must be addressed to EH R&CM with the data input. These minutes must include a presentation of the parameters and the expert judgment used to define them so they can be used for the EH Group PAAC to justify the entity position.

#### B.3.2.3. Material changes to the internal model governance

In 2016, four main updates of model governance have been achieved on group level.

**Update of model validation guidelines** to ensure alignment of this guideline with the validation results, the concept of model uncertainty and the corresponding thresholds

#### Process of minor and immaterial model changes

A new process for minor immaterial model changes was introduced which includes the Group eligibility approval, integrates the approval or decision of CRO and Chief Actuary (CA).

# Tiering concept and tiering results

An interpretation of the model tiering process including the tiering of the entire internal model has been provided to all entities in scope and to the central model owners.

#### Update of the Model Inventory

The minor and immaterial model change process and the tiering concept are currently being implemented. With respect to local model governance updates, EH Group has started to report, for EH Ré SA, on all model changes on a quarterly basis to CAA as requested.

No other changes in EH Ré SA model governance framework occurred during 2016.

#### B.3.2.4. Description of the validation process

#### Validation plan

The validation plan addresses the issue of sequencing the model validation activities and cycles as appropriate. The Validation Coordinator (VAC) together with the Model Owner (MO) will define as per ASMG requirements a validation plan.

#### Validation results

The validation report containing the findings and proposed recommendations is ultimately reviewed by the MAAC and signed-off by the Board of Management (BoM)

It lists and classifies the findings identified during the model review taking into account the materiality of the finding and/or potential misuses as well as the likelihood and the severity of the capital misstatement.

#### Validation recommendations follow-up

Planned remediation activities shall be regularly tracked by the independent validator in order to ensure their timely closure. A progress status report is presented to the MAAC on a quarterly basis. After the model owner submitted a closure report, the independent validator will review it.

Upon completion of its recommendations' validation, the independent validator will consolidate all recommendations statuses into one validation report.

The report will be shared with the model owner(s) and feedback collected within 5 working days. Subsequently, the independent validator will submit the validation report to the MAAC.

Finally, the independent validator will provide in the annual validation report for BoM approval, a status of all recommendations processed throughout the calendar year together with their impact assessment both on risk capital and model uses.

#### **Escalation Procedure**

The escalation procedure is necessary in case of disagreement on the validation outcome. In particular, it occurs in the two following situations.

The escalation procedure starts with a notice of escalation submitted by the MO to the Validation (VAL) with which there is a disagreement, along with the necessary documents and the Group CRO as well as the VAC are copied. The notice of escalation includes a concise summary of the concern/issue. The notice must be communicated as promptly as possible and substantiated with the necessary evidences against the validation outcome.

#### **B.3.3.** Description of ORSA process

The Own Risk and Solvency Assessment (ORSA) draws upon the whole risk management system in order to conclude on the risk profile adequacy over time and different scenarios, taking into account all kinds of risk (quantitative and qualitative).

Therefore, the ORSA has to be considered as being performed on an ongoing basis during normal execution of the risk management framework. This ongoing performance is complemented by a regular comprehensive annual assessment and report, as well as non-regular (i.e. ad-hoc) assessment following significant changes in the risk profile.

This report is dedicated to the Board of Directors of EH Ré SA and supports the decision making process.

#### B.3.3.1. Macro process ORSA

#### **ORSA Macro process**



The ORSA Process is driven through five main steps:



1. Update and alignment of the risk appetite and risk limits with the business strategy and check the alignment with EH Group requirements.



2. Identification of all risks and controls to be considered, by performing several approaches.



 Assessment of all risks based on the internal model and additional risk assessment methods for risks not covered by the internal model. Moreover, projections of own funds, risk capital and solvency ratio under base case and stress scenarios.



Steering of the risks in quantitative terms with a qualitative description of all material risks. Then, demonstration of the compliance of future business with the risk strategy.



5. Reporting of the performed results and analysis by filling the ORSA report and diffusing it to all relevant stakeholders. The report has then to be validated by EH Ré SA Board of Directors (BoD) before any official communication. Appropriate results are shared with relevant other reporting/ analysis processes

#### B.3.3.2. ORSA governance

#### B.3.3.2.1 Board of Directors (BoD)

The Board of Directors challenges and validates the ORSA report.

# **B.3.3.2.2** Board of Management (BoM)

EH Ré SA outsources its management including the BoM duties to the BoM of EH Ré AG through an SLA. Accordingly the Board of Management is actively:

- Ensuring proper implementation of its standard
- Challenging the outcome of the ORSA and signing-off the final report (up to now signed-off by BoD)
- Instructing on any follow-up actions to be taken

# B.3.3.2.3 Risk Committee

The risk committee is responsible for:

- Overseeing the ORSA process.
- Reviewing and pre-approving the ORSA results report prior to submission to the BoD.
- Monitoring the execution of any follow-up actions.
- Requesting performance of a non-regular ORSA if any events potentially altering the last overall ORSA conclusions occur.

#### B.3.3.2.4 Chief Risk Officer

The Chief Risk Officer is responsible for:

- Coordinating the ORSA process, the various contributors and preparing the ORSA Report.
- Annually assessing the compliance of the ORSA report/ process with regulatory requirements.
- Providing the risk committee with insight on the ORSA results and distributing them to all key stakeholders related to business strategy, risk strategy and risk and capital management.
- Advising the BoD regarding the ORSA results.
- · Communicating with supervisory authorities.

#### **B.3.3.3.** ORSA report review process

EH Ré SA's ORSA report is reviewed once a year.

This review process is the last step before the presentation of the ORSA report to the administrative management of EH Ré SA (Board of Management).

- Step 1 Review by R&CM
- Step 2 Review and approval by EH contributors and stakeholders (including Legal Entities (LEs))
- Step 3 Review and approval by AZ
- Step 4 Final review and approval by BoD

EH Ré SA determines its own solvency needs using both an Internal Model (IM) and a Top Risk Assessment (TRA) for non-modelled risks.

# **B.3.3.4.** Capital management strategy

To meet Solvency II requirements in an efficient manner, EH Ré SA has set in place target capitalization ratios and limits to fulfil any regulatory and financial obligations it could have.

In accordance with the standards and guidelines coming from EH Group, EH Ré SA updated its capital management policy in 2016, willing to have an even more precise capital management. EH Ré SA thereby put in place an additional set of limits, to supplement the previous minimum ratios and target ratios.

The current Capital Management strategy, Dividend policy and limits are defined as follows:

- EH Ré SA targets to stay within the Capital Management Range of the "Action Barrier" and the "Upper Bound" in the normal course of business.
- The bounds of the Capital Management Range are defined in line with the Capital Management Ratio as defined in the Group Risk Appetite. For 2016, the Capital Management Ratio of EH Ré SA was set at a level of 157%.
- In case of a breach of the Capital Management Range in any of the two dimensions, the BoD will evaluate the situation in their next regular board meeting and evaluate any potential countermeasures to get back within the Capital Management Range. In particular, any capital held in excess of the Upper Bound is deemed excess capital. This excess capital shall be made available to EH Group as early as possible over the plan horizon.
- If EH Ré SA falls below the Minimum Capital Ratio the BoD will take measures to re-establish the Minimum Capital Ratios in due time.
- If EH Ré SA falls below the Action Barrier during the course of the year but stays above the Minimum Capital Ratio, it is still expected to pay out the planned dividend while any adjustments will be considered to the planned dividends over the remaining plan horizon.
- If EH Ré SA drops below the Alert Barrier (which is equal to 75% of the distance between the Minimum Capital Ratio and the Management Ratio), it is expected to submit a contingency plan to the BoM within due time to conserve its solvency.

# B.4. Internal control system

#### B.4.1. Description of internal control system

# Internal control framework

The internal control framework is laid out in EH Ré SA's Governance and Controls Policy, as approved by the Management Committee.

The EH Ré SA internal control system has the following objectives:

 To safeguard EH Ré SA ability to operate as a going concern and the continuity of its business:

- To create a solid control environment, by ensuring that every member of personnel is aware of the importance of internal control and the role that they must play in the internal control system
- To perform control procedures that are commensurate with the risks carried by Euler Hermes' activities and processes;
- To provide relevant information to the management bodies as part of their decision-making processes;
- To ensure compliance with the applicable laws and regulations.

With respect to the areas of control, activities and reporting aspects, the controls are performed within EH Ré SA in accordance with requirements regarding independence.

They are incorporated into EH Ré SA operational and organisational configuration and subject to continual review. When needed, internationally recognised control frameworks such as the COSO framework (the Committee of Sponsoring Organisations of the Treadway Commission's Internal Control - Integrated Framework) and the COBIT framework (Control Objectives for Information and Related Technologies) may be used.

The internal controls hence describe all the activities undertaken by and within Euler Hermes to achieve specific control objectives, such that the controls are put in place and applied across all segments and sectors of activity. These controls ensure a permanent assessment of the effectiveness of relevant processes and procedures (including those pertaining to operations and reporting), their coherence and their proportional nature within Euler Hermes, as well as the potential actions that may be taken to rapidly address any deficiencies.

The EH Ré SA Internal Audit function is part of the Compliance function and works with Risk & Capital Management to identify any material errors in EH Ré SA consolidated financial statements and management reports.

The internal control system encompasses different control concepts.

In addition to general aspects related to control activities, specific controls are also performed, notably with respect to levels relating to legal entities, financial reporting, IT, venture capital calculation, underwriting (including products and distribution) and investments. Alongside these controls, reports are submitted to management.

#### General control elements

The following key principles govern the processes and the manner in which governance and controls are organised at EH Ré SA:

- Central, regional and local roles and responsibilities must be strictly defined.
- It is important to safeguard the separation of tasks to avoid excessive risk-taking and potential conflicts of interest.
- Important decisions must be taken by at least two representatives of the operational entity under review, even if, under local regulations, the company may be represented by a single person (four-eyes principle).
- In the interests of sound commercial judgement, the decision-making processes must be applied at all management levels that hold relevant information, notably through impartial access to necessary information.
- To facilitate communication throughout the company, English is the common language used at Euler Hermes.
- Steps must be taken to ensure that all members of personnel are aware of the importance of internal controls through the clear definition and communication of roles and responsibilities and the provision of suitable training
- It is important to maintain structured, documented processes for which key controls are in place and function effectively.
- The COSO framework and part of the COBIT model shall apply to the financial reporting process.
- According to the COSO description, there are five components of internal control:
- Control environment (awareness among personnel of the need for internal control);
- Risk assessment (factors that may have a bearing on the achievement of objectives);

- Control activities (notably the application of standards and procedures);
- Information and communication of data required to manage and control activity;
- Monitoring of control systems.

EH Ré SA applies the three-lines-of-defence internal control model, with graded control responsibilities:

The first line of defence is implicated in the day-to-day management of activities and in the management of risks and controls.

The second line of defence entails performing independent controls and challenging the day-to-day management of activities and controls carried out by the first line.

The third line of defence provides independent assurance with respect to the first and second lines of defence in the form of periodic assessments (internal audit).

The "Governance & Control" policy clearly states what is expected of each line of defence and each control function. It also determines how controls should be organised across the central, regional and local functions.

Each corporate rule must be approved as part of a documented procedure.

This rule framework is made available to all members of personnel via intranet and, where applicable, in the languages of all the countries in which the company operates. It must also comply with the applicable regulatory requirements.

## Specific elements

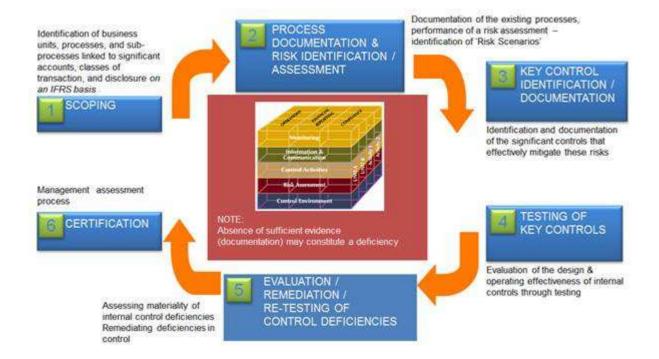
1. Internal Control Over Financial Reporting (ICOFR)

Euler Hermes has introduced controls over its financial reporting (ICOFR) in order to identify and mitigate the risk of material error in its consolidated financial statements and management reports.

These controls seek to encompass all relevant financial reporting components, notably:

- The processes relating to financial reporting;
- The policies, procedures and controls that need to be applied in order to prepare reliable financial statements;
- Accounting data that provides a true picture of the transactions entered into and the measures taken to prepare the financial statements;
- Assurance that income and expenses have been duly authorised;
- Assurance as to the prevention or timely detection of non-authorised transactions that might have a significant bearing on the financial statements.

The ICOFR process hinges on a structured approach, as shown in the following diagram:



#### 2. IT controls

The IT security and control framework is described in another section of this memorandum.

3. Controls over the Solvency Capital Requirement

Specific controls are also in place to gain assurance as to the relevance of the internal model.

4. Controls over the underwriting of insurance risks

The conventional underwriting process at EH Ré SA contains two parts: (a) signature of the policy; and (b) underwriting of the credit limits requested by the policyholder in the case of commercial credit insurance and / or issuance of individual bonds as part of a bonding contract.

#### 5. Controls over investments

As part of the general approach to investment management, the company applies a series of controls to its investments.

EH Ré SA investments are subject to the general risk management framework, encompassing the risk strategy and corresponding risk appetite (e.g. limits). The investment limits set based on risk appetite are incorporated into the investment strategy, which comprises a clearly-defined Strategic Asset Allocation (SAA).

#### B.4.2. Implementation of compliance function

#### **B.4.2.1.** Remit

The scope of the Compliance function at EH Ré SA is focused, albeit not exclusively, on the following areas:

- Protecting personal data;
- Complying with privacy laws;
- Preventing any form of insider trading and market manipulation;
- · Preventing money laundering and terrorist financing;
- Complying with economic sanctions:
- Preventing fraud and corruption;
- Preventing any infringement of competition laws; and

Identifying and managing conflicts of interest.

The following areas, although they are managed and implemented by other departments (e.g. Risk & Capital Management, Human Resources, Purchasing, and Market Management, Commercial & Distribution), are also reviewed by the Compliance function:

- Subcontracting;
- Incompatible offices, Fit & Proper process;
- Laws on market practices and consumer protection;
- Laws on insurance intermediation; and
- Implementing Solvency II policies.

## **B.4.2.2.** Internal organisation

The Company always has a Compliance Officer, Regional Compliance Officers and, where appropriate, Local Compliance Officers for each branch and subsidiary.

These Local Compliance Officers are therefore responsible for the Compliance function's involvement at local level.

Compliance Officers are chosen based on their skill set and experience. They attend regular training sessions that have been approved or organised by the industry. They are also chosen based on their integrity, which is investigated by way of background checks.

Moreover, in accordance with the Company's operational and functional structure, compliance comes under the remit of the Management Committee member responsible for functions relating to finance, capital management, risk control, legal oversight and compliance. Local Compliance Officers report to the Head of Finance of their respective branch or subsidiary as their line manager, but also to their Regional Compliance Officer. Similarly, Regional Compliance Officers tend to report to the Head of Finance of their respective region as their line manager, but also to the Company's Compliance Officer.

EH Ré SA's Chief Compliance Officer acts as the primary liaison between the Euler Hermes Group and the compliance team at parent company Allianz. She is responsible for adapting compliance programmes issued by Allianz or drawing up compliance programmes to be applied across the Euler Hermes Group.

She also chairs the Integrity Committee and sits on the Risk Committee.

The Internal Audit function independently and objectively verifies the suitability and effectiveness of the Chief Compliance Officer.

The Compliance function ensures that EH Ré SA and its employees carry out their professional activity with complete integrity and in compliance with the professional, legal and regulatory requirements incumbent upon insurers in general, and credit insurers in particular.

Its aim is therefore to help protect EH Ré SA and its employees against the risks arising from violating laws, circulars issued by the prudential regulator, EH Group and Allianz rules, and insurance standards of ethics.

With regard to the scopes defined above, the Compliance Officer is responsible for:

- Cross-disciplinary management:
  - Managing and organising the EH compliance network at the head office, the branches and the subsidiaries (with the help of the Regional and Local Compliance Officers);
  - Producing a report on compliance risk and implementing appropriate measures;
- Prevention, advice and support:
  - Monitoring and assessing the risks involved in the Company's compliance procedures:
  - Designing new procedures;
  - Defining and implementing quality standards;

- Detection, acknowledgement and communication of compliance problems and rules:
  - o Overseeing adherence to compliance rules in order to detect any infringements;
  - Using communication and training initiatives to raise awareness of current compliance procedures within EH, its branches and its subsidiaries.

#### B.4.2.3. How it functions

Compliance at EH Ré SA is basically structured around the following three pillars:

- Management: tangible and genuine involvement of managers and executives (tone at the top);
- The Compliance function itself: based on the analysis of compliance risks, it structures, evaluates and reports on the effectiveness of the control system for all subjects (exhaustive-ness and robustness tests):
- Compliance function representatives inside the business lines and support functions: these
  representatives act as go-betweens, providing feedback on operations and helping to disseminate compliance-related messages.

The primary activities of the Compliance function are:

- Identifying and assessing compliance risk, and drawing up a plan of action accordingly. Compliance risk is the risk that the Company and/or its employees are hit with legal, administrative or regulatory sanctions for a failure to comply with legal and regulatory integrity and conduct rules that results in reputational damage and possibly financial harm. This reputational damage may also arise from failing to adhere to internal policy and the Company's own values and rules of conduct as regards the integrity of its activities. A loss of reputation may damage the credibility of the Company and its employees.
- Risks are analysed annually so as to define the scope and priorities of the Compliance function. This analysis is based on more detailed studies that may have been carried out elsewhere (e.g. on the risk of fraud and corruption). In this way, based on the risk assessment, a Compliance Plan is drawn up every year and validated by management. The Plan contains not only the measures to be taken but also an estimate of how many employees will be required to implement them. The necessary resources are thus seconded (Principle 10) to ensure the Compliance function runs properly. The plan of action is sent to the internal audit team for information purposes. The EH Ré SA Compliance Plan is drawn up and monitored pursuant to point 3.2.5 of the 2012 Circular on internal control: "The compliance function draws up a written plan of action. This plan provides a sufficiently detailed description of the nature and frequency of the missions to be carried out by the compliance function over a specific period (one or several years). The plan is based on a risk-based approach, the principles of which are established in writing and evaluated regularly. Risk assessment comprises all the institution's activities and entities, and takes into account all relevant data obtained during previous compliance activities. The analysis also covers expected changes and developments." The Plan is attached to this Memorandum of Governance.
- Monitoring expected changes (laws, systems, markets): The Compliance function works with the Legal Affairs function to monitor regulatory changes, offer advice and help draw up directives on regulatory compliance. It helps management to organise compliance training for employees and works with operational teams to ensure that employees are aware of compliance risk. As well as acting as a point of contact for employees, the Compliance function uses a matrix to divide its work into 10 key areas of compliance. Each area is allocated to a subject head, which is responsible for monitoring legislative and regulatory developments in that area and reporting back to the team. These 10 areas are:
  - Anti-corruption;
  - Anti-fraud;
  - Anti-money laundering;
  - Economic sanctions;
  - Code of conduct and conflicts of interest;
  - Data protection;
  - o Antitrust;
  - Solvency II;
  - Training and disclosure;
  - o Compliance reviews; and
  - Internal control.

The aim of the matrix is to ensure that the team deals with the aforementioned areas in real time and on an ongoing basis.

#### B.5. Internal audit function

#### B.5.1. Internal audit function implementation within EH Ré SA

EH Ré SA does not have its own internal audit function. This is outsourced to EH Group. This function is performed independently so that it reports to the Chief Executive Officer (CEO) and to the Audit and Risk Committee.

Audit is organized by function:

- Risk / HR
- Market Management / Commercial Underwriting/Distribution
- Finance / Accounting
- Operations and Corporate Governance

It has to be noted that Regional correspondents have been put in place.

An annual program of audit assignments is defined every year. This program, based on a risk mapping and a pragmatic approach to requirements, includes global audits of the subsidiaries (sovereign audits), transversal audits of processes performed simultaneously in the main subsidiaries, and vertical audits of all the processes of a given function within a subsidiary. It is subject to both a discussion and a validation process with operational staff, general management and the Audit Committees.

The last stage of the validation of the audit programs the presentation to the Audit and Risk Committee for approval in the fourth quarter. The audit program is consistent with achieving a five-year risk cover while at the same time providing short-term cover of the most sensitive risks.

The audit activity is governed by an audit charter. The latest version was updated in June 2014 and approved by the Audit and Risk Committee in November 2016. It sets out in details the missions and organization of the various control levels within the Group and its subsidiaries. It is supplemented by the development of audit standards and procedures at local and Group levels.

As third-line-of-defense, execution of regular controls, e.g. for distribution networks, is not in scope of the Internal Audit Function.

### B.5.2. Internal audit framework

## **Audit Universe and Audit Plan**

An audit universe, including outsourced and co-sourced functions, must be defined and revised annually based on a risk-based approach driven by structured risk-ratings that have been assigned to audit areas after a rigorous risk-assessment has been completed. The audit universe must also cover the complete system of Governance. It must also take into account scope and frequency. This risk-based utilizes the application of risk-rating factors categorized by risk type.

Internal Audit must engage adequate capacity to ensure that there is satisfactory coverage of the risk-universe within a 5-year audit plan. Consequently, each year, audit resources must be allocated to audit areas according to the risk measures and the risk-universe must be (re)assessed on a rolling basis. This annual audit plan must be approved by the EH CEO and the Audit Committee.

## Performance of internal audits

Internal Audit works are evidenced through documented and structured working papers.

### **Audit reports**

EH Ré SA Internal Audit issues an audit report for each audit which includes detailed results and appropriate recommendations based on facts and professional judgment. The audit report also summarizes the most important results including an overall assessment of the auditee's risk and internal control status.

Management is responsible for implementing related corrective actions and for remediating identified audit findings. EH Ré SA Internal Audit must be informed of the actual implementation of recommendations. Internal Audit must perform follow-up actions and must implement escalation steps.

## **Providing advice**

In addition to auditing activities, EH Ré SA management may seek the advice of Internal Audit on internal control related topics. The advisory function of Audit may not jeopardize its core audit activities and the fulfilment of its audit plan The Head of Internal Audit of EH Ré SA must confirm to the EH Ré SA CEO (and Audit Committee), at least annually, the independence of the internal audit activity.

## B.5.3. Independence and objectivity of the internal audit function

In order to ensure the objectivity and the independence of the Internal Audit function, the following specific requirements have been set:

#### Independence

The Internal Audit Function must have a standing within the EH organizational structure that ensures to maintain the necessary independence. Necessary independence means that no undue influence is exercised over the Internal Audit Function. Internal Audit must avoid conflicts of interest in fact or appearance. Internal Auditors and the Internal Audit function have the authority to express assessment and recommendations but cannot give orders (except in cases of suspicion of illegal activities/fraud).

#### **Reporting Lines**

Head of EH Internal Audit reports directly to the CEO and to the Audit Committee. The Head of EH Internal Audit must regularly have direct interaction with the CEO and the Chair of the Audit Committee. EH Internal Audit department also reports functionally to AZ Group Audit and is subject to the oversight of AZ Group Audit.

#### **Unrestricted information access**

EH Internal Audit has the right to communicate with any employee and obtain information, records or data necessary to carry out its responsibilities, to the extent legally permitted. EH Internal Audit has the responsibility and the right to review activities, procedures and processes in all areas of the EH Group, without limitation. EH Internal Audit has the unlimited right to obtain information and management must inform Internal Audit of serious deficiencies and major changes in internal control systems. This information must be handled with discretion and confidentiality.

## **Fitness and Propriety**

Internal auditors must possess analytical skills, knowledge in the field of finance, accounting and IT as well as an understanding of the organization of insurance and/or finance companies. In order to achieve and maintain the required professional skill level, continuing training is necessary. Skills in effective communication are also important.

Enhancing independence and objectivity, and avoiding potential conflicts of interest, tenure of internal audit key function holders is limited to eight years.

The Head of Internal Audit must possess the qualification, experience and knowledge required to evaluate the adequacy and effectiveness of the system of governance, issue recommendations, in particular as to deficiencies with regard to the internal control system and the compliance with the corporate rules, and verify the compliance with decisions taken as a consequence thereof. He or she must be familiar with all Internal Audit relevant standards, publications and practices.

The Head of the Internal Audit must share characteristics of (i) honesty, integrity and reputation, (ii) competence and capability, and (iii) financial soundness. The EH Ré SA Fit and Proper Policy apply.

#### **Outsourcing of Internal Audit tasks**

In general, EH Internal Audit should be exercised with EH Group internal resources. If EH Internal Audit lacks certain knowledge, skills or competencies, resources can be sought from third parties. In cases of outsourcing, as permitted by law and supervisory bodies, EH Internal Audit management remains responsible for achieving all required audit standards defined by this Policy and other applicable standards.

Complete outsourcing of an Audit function to external providers is not permitted. No exception is allowed.

#### **B.6.** Actuarial function

#### B.6.1. Implementation of the actuarial function

The Actuarial Function of EH Ré SA is outsourced to EH Group.

The tasks and processes described in the following section apply to the Actuarial Function.

### **Actuarial Function Report**

The Actuarial Function must provide a report on an annual basis, called the Actuarial Function Report (AFR).

#### Coordination of the calculation of technical reserves

It is within the responsibility of the Actuarial Function to ensure that the level of technical reserves is adequate by setting up an effective control framework. In this context, requirements to technical reserves are referring to reserves under IFRS, Solvency II ("technical provisions") and other supplementary financial information.

### Opinion on Underwriting, Pricing and Product Development

The opinion on underwriting, pricing and product development is performed by the Actuarial Function which may rely upon available and up to date analyses and results if appropriately discussed and challenged.

The Actuarial Function is reporting the results of its analysis to the Reserve Committee.

## Opinion on the Reinsurance Policy and Program

The opinion on the reinsurance policy and program is performed by the Actuarial Function which may rely upon available and up to date analyses and results if appropriately discussed and challenged.

The Actuarial Function ensures that its opinion on the reinsurance policy and program is provided to and considered by the Reinsurance Committee or comparable management meetings.

## Contribution to Risk Management

Through its tasks relating to the contribution to risk management, the Actuarial Function contributes an actuarial perspective to the risk management system.

The Actuarial Function delivers consistent and high quality data and results for the parameterization of risk capital models and, if a replicating portfolio is used, of liability cash flows for replication process, in a timely manner.

The Actuarial Function interacts with Risk & Capital Management by contributing to the assessment of insurance risks.

The Actuarial Function provides all the results and conclusions resulting from the analyses to Risk & Capital Management on a regular basis as well as to the Risk Committee or comparable management meetings

## B.6.2. Governance

## **EH Ré SA Board of Management**

The EH Ré SA Board of Management is responsible for sound organizational and operational structures and procedures to ensure compliance with the Actuarial Policy. It establishes and maintain an appropriate and effective Actuarial Function, in proportion to EH Ré SA's risk exposure.

The EH Ré SA Board of Management decides on and clearly assigns the relevant tasks for the Actuarial Function.

The Actuarial Function Holder is approved by the EH Ré SA Board of Management.

#### **Actuarial Function**

The Actuarial Function Holder is defined as the Responsible Actuary. The nomination of the EH Ré SA Actuarial Function Holder is pre-aligned with the EH Group Actuarial Function Holder.

The EH Ré SA Actuarial Function Holder is responsible for the implementation of the EH Group's Actuarial Function principles and procedures and is empowered by local management to fulfil this task.

The Head of the EH Ré SA Actuarial Function has a direct reporting line to the EH Ré SA Board of Management.

#### Committees

An appropriate committee structure or comparable management meetings have to be set up in order to enable the Actuarial Function to fulfil its roles and responsibilities.

The Actuarial Function Holder is a member of the Reserve Committee.

#### B.6.3. Interfaces

The Actuarial Function has intense interfaces and a close cooperation with other functions. In line with regulatory requirements, reciprocal oversight shall be exercised amongst the functions mentioned below. The relationship of the Actuarial Function with the Risk & Capital Management, Compliance and Internal Audit functions is as follows:

## Relationship with the Risk & Capital Management Function

The Actuarial Function is co-operating closely in many areas, in particular the Actuarial Function is

- Providing input and advice regarding the amount, structure and uncertainty of the technical provisions. This includes close interaction with respect to methodologies, models and assumptions commonly used for the calculation of technical provisions as well as for Risk Capital
- Contributing to methodologies, models and assumptions used for the assessment of Risk in the area of expertise of the Actuarial function
- Contributing to the overall Risk Management process for its area of expertise

## **Relationship with the Compliance Function**

The compliance oversight covers the adequate set-up of the Actuarial function.

## **Relationship with the Internal Audit Function**

The Actuarial Function (as a 2nd line of defense function) and the Internal Audit Function (3rd line of defense) shall be separated with no reporting of one function into the other. However, this does not exclude to jointly exercise specific tasks in the course of investigations.

Actuarial Tasks are included in the audit program and methodology of the Internal Audit Function, including a periodic assessment of the adequacy and effectiveness of the Actuarial Function. The head of the Internal Audit Function should keep the Actuarial Function Holder informed of any audit findings relating to actuarial tasks – and vice versa.

Upon request, the EH Ré SA Internal Audit Function Holder can attend the Reserve Committee at his/her own discretion especially in order to test the operational effectiveness of the committee.

#### **B.7.** Outsourcing

## B.7.1. Implementation of the outsourcing policy

## **Definition of outsourcing**

Outsourcing is defined as an arrangement of any form between EH Ré SA and a service provider (Provider), whether supervised or not, whether from EH Group or where the Provider is a company controlled by Allianz (Group Internal Outsourcing) or not by which that Provider performs a Function or

Service, whether directly or through Sub-Outsourcing, which would otherwise be performed by EH Ré SA itself.

Thus, in order for an arrangement to qualify as Outsourcing in the meaning of this Policy, the following criteria have to be cumulatively met:

- In the absence of Outsourcing, the outsourced Function or Service would be performed by the Outsourcing Operating Entity (OE) itself.
- The provided process, service or activity qualifies as a Function or Service as defined in the following
- The provided Function or Service is material in scope and time.

Sub-Outsourcing is defined as Outsourcing of an outsourced Function or Service in full or in part by the Provider or a Sub-Provider to a (further) Sub-Provider by way of a separate Sub-Outsourcing agreement.

#### **Functions and Services**

In the context of the Outsourcing Policy, a Function is defined as an internal capacity to undertake practical tasks within a system of governance, including the Key Functions. For the purpose of the Outsourcing Policy the Key Functions are Risk Management, Internal Audit, Compliance, Actuarial, Legal and Accounting & Reporting.

In the context of the Outsourcing Policy, a Service is defined as an activity, which specifically relates to conducting the core business of EH Ré SA.

## **Critical or Important Functions or Services (CIFS)**

A Function or Service is critical or important if it is essential to the operation of the Outsourcing OE as it would be unable to deliver its services to customers (e.g. policy holders) without the Function/Service (CIFS).

Where Functions or Services are only partially outsourced, it is relevant whether these outsourced parts are per se critical or important. Whether this is the case needs to be assessed using a risk-based approach taking into account qualitative as well as quantitative criteria.

If the outsourced Function or Service is performed by more than one Provider (e.g. claims settling by various intermediaries), an overall assessment of the entire outsourced Function/Service performed by the entirety of Providers has to be carried out in order to assess criticality and importance.

#### **Outsourcing processes**

The outsourcing processes laid out in *the EH Ré SA Global Outsourcing Policy* consist of the following phases:

### 1. Decision phase (Business plan and risk assessment)

The decision phase involves the business and risk assessments as to whether the Function or Service should and may be outsourced (make or buy decision). This requires, in particular, the following tasks to be performed by the designated Business Owner for all kinds of Outsourcing:

- Assessing the contemplated performance of a Function/Service
- Establishing a Business Plan
- Conducting a Risk Assessment
- If identical Functions/Services are outsourced to a multitude of Providers based on identical terms

## 2. <u>Implementation Phase – Provider selection and outsourcing agreement</u>

## a) Requirements for all Kinds of Outsourcing

- a. Provider Selection/Due Diligence
- EH Ré SA has to conduct Due Diligence in order to ensure that the Provider has the ability to perform the Functions or Services to be outsourced according to EH Ré SA's documented objectives, standards (e.g. data protection/security) and specifications.

- Due Diligence shall be conducted by the designated Business Owner.
- EH Ré SA may rely on Due Diligence of the Provider which has been recently (up to one year) carried out by a different operating entity of EH Group if and to the extent that it relates to a comparable Outsourcing.

#### b. Outsourcing Agreement

EH Ré SA has to enter into a written Outsourcing agreement with the Provider. Such Outsourcing agreement must at least provide for the following:

- Description of Services, responsibilities, quality / security standards, standards of care and where appropriate service levels and / or KPIs to measure performance as well as feasible mitigation measures and key controls to be performed by the Provider to address risks identified in the Risk Assessment / Due Diligence.
- Provider's obligations
- The need for prior approval by EH Ré SA for any Sub-Outsourcing and the fact that the Provider's duties and responsibilities remain unaffected thereby
- EH Ré SA's right to request information about the outsourced Function or Service and their performance
- Appropriate termination rights and notice periods to assure business continuity
- EH Ré SA's right to request changes to the Outsourcing agreement or withdraw from the agreement if required by the supervisory authority.

## b) Additional Requirements for Outsourcing CIFS

In case the Outsourcing relates to CIFS, the following requirements have to be met in addition to the ones listed above:

## a. Provider Selection/Due Diligence

As part of the Due Diligence, EH Ré SA shall additionally:

- Ensure that relevant aspects of the Provider's risk management and internal control systems are adequate
- Verify that all staff of the Provider who will be involved in providing the outsourced Function or Service are sufficiently qualified and reliable
- Ensure that the Provider has adequate contingency plans in place to deal with emergency situations (e.g. data leakages) or business disruptions and periodically tests backup facilities where necessary.

# b. Outsourcing Agreement

In addition to requirements for all kinds of outsourcing for outsourcing agreement found above, an Outsourcing agreement concerning CIFS also has to provide for the following:

- Provider's obligation to:
  - Assure and maintain the elements listed in the additional requirements for outsourcing CIFs for provider selection/due diligence above for the whole duration of the Outsourcing;
  - Integrate the outsourced Function or Service into his risk management and internal control systems;
  - Comply with EH Ré SA's guidelines and policies relating to the outsourced Function/Service;
  - Follow the same provisions on the security and confidentiality of information relating to EH Ré SA or its policy holders or beneficiaries that are applicable to EH Ré SA
  - Avoid any conflict of interest in relation to EH Ré SA and a duty to notify to EH Ré SA any threatened conflict of interest.
- Right to carry out on-site inspections of the business premises of the Provider either by EH Ré
  SA or its external auditors in order to get effective access to all information relating to the outsourced Function/Service.

- c. Notification to Supervisory Authority
- EH Ré SA has to notify in writing any Outsourcing of CIFS to the CAA:
  - o A description of the scope and rationale for the Outsourcing and the Provider's name.
  - In a timely manner prior to implementing the Outsourcing, affording the supervisory authority sufficient time to examine the Outsourcing and its compliance with supervisory law before it comes into force
  - Material developments that are relevant for supervisory purposes
  - o Adherence to more detailed provisions due to local laws

## c) Further requirements for Outsourcing of Key Functions

In case the Outsourcing concerns a Key Function, the following requirements have to be met in addition to the ones listed above:

- The Due Diligence has to comprise the Fit & Proper Test for all persons performing the outsourced Key Function at the Provider.
- The notification to the supervisory authority should also include the name of the person responsible for the outsourced Function/Service at the Provider. Upon request of the supervisory authority, EH Ré SA has to be able to demonstrate that this person has passed the Fit & Proper Test

## 3. Operational Phase (monitoring & steering)

EH Ré SA must maintain a process for regularly monitoring the Provider's performance and compliance with the Outsourcing agreement. Monitoring activities may include

- Requesting and reviewing performance,
- Back-up or data security testing reports from the Provider,
- · Holding status meetings with the Provider,
- Assessing service delivery against agreed KPIs or service levels or
- In specific cases conducting on-site inspections of Provider's premises.

The Business Owner is thereby designated and one of his prior tasks is to determine and document (what, when, how & results) the adequate monitoring activities and intervals with a view to the importance of the outsourced Function/Service as well as the risks entailed with the Outsourcing.

EH Ré SA shall take appropriate action if the Provider's performance or risk management (incl. its contingency planning) is materially deficient endangering EH Ré SA's compliance with regulatory requirements or its ability to deliver its services to the policy holders.

Appropriate action includes

- · Raising objections to the Provider,
- Requesting remediation,
- · Asserting penalties or damages,
- Amending the Outsourcing as well as,
- Ultimately, early terminating the Outsourcing agreement, providing information to the second Line of Defense or EH Group-level Key Functions, where the adverse event may be relevant for them.

When Outsourcing CIFS, the BoM of EH Ré SA shall regularly (at least yearly) receive reports on the performance of the Provider according to the Outsourcing agreement and be informed ad hoc about any material adverse events.

## 4. Exit Phase

If EH Ré SA decides to terminate the Outsourcing, it needs to ensure that it has the necessary capabilities and capacities to insource the outsourced Function/Service or to outsource it to a different Provider (business continuity), before it effectively terminates the Outsourcing agreement.

## B.7.2. Roles and responsibilities

### **Board of Management**

The BoM is responsible for sound organizational and operational structures and procedures to ensure compliance with this Policy. More specifically, the responsibilities are:

- Implementing the Outsourcing Policy into EH Ré SA's system of governance (i.e. adopting Local Outsourcing Policy (LOP) where required by this Policy) and in particular the OE's corporate rules according to the OE's business and risks;
- Ensuring definition and implementation of processes for monitoring, steering and reviewing the Outsourcing of Functions or Services;
- Ensuring that a local Outsourcing Function is established.

#### **Designated Business Owner**

The designated Business Owner must ensure adherence to the Outsourcing Policy and fulfil all tasks that have been assigned to EH Ré SA in the Outsourcing Policy with respect to the Outsourcing(s) for which he is responsible. In particular, the designated Business Owner is in charge of:

- Classifying the Outsourcing as simple, CIFS or Key Functions;
- Setting-up the necessary Business Plan and Risk Assessment, including the screening of any Outsourcing against the criteria of this Policy;
- Undertaking Due Diligence with regard to the Provider;
- Involving the relevant organizational units in the Outsourcing process, obtaining all necessary approvals from the BoM and providing regular performance reports to the BoM when Outsourcing CIFS;
- Setting-up the necessary contingency plans and exit strategies together with Operational Resilience in case of Outsourcing CIFS;
- Monitoring the Outsourcing and making amendments to the Outsourcing where necessary;
- Taking the appropriate measures in case of any adverse event or termination of the Outsourcing, involving the relevant Key Functions, the OE's Privacy Function and ISO;
- Adequately documenting each individual step of the Outsourcing process and delivering the Outsourcing agreement and key supporting documentation for central storing to Local Outsourcing Function.

## **Outsourcing Function**

The Outsourcing Function is in charge of:

- Ensuring Identification of Business Owner;
- Central storing (electronic copies) of all Outsourcing agreements and key supporting documentation of the Outsourcing process (e.g. Risk Assessment, Business Plan, Due Diligence, BoM approvals, notifications to supervisory authority);
- Keeping an inventory of all Outsourcing agreements based on a matrix, allowing up-to-date reporting to Group Outsourcing Function on short notice upon request;
- Supporting the Business Owner in performing the tasks under this Policy.

## Legal and Compliance Function

The responsibilities of the Legal and Compliance function are:

- Ensuring adoption of an LOP by the BoM where required;
- Advising on how to implement this Policy/the LOP in the OE and assisting Business Owner in classifying the Outsourcing as simple, CIFS or Key Function;
- Drafting/reviewing Outsourcing agreements;
- Notifications/applications to supervisory authority, if required by local law.

## Risk & Capital Management Function

The Risk & Capital Management Function is in charge of:

- Ensuring an adequate reflection of outsourced Functions or Services in the Outsourcing OE's risk management and internal control system;
- Supporting the Outsourcing OE's Business Owner in the Risk Assessment and Due Diligence
  process (in particular with a view to the adequacy of the Provider's risk management and internal control system).

## B.7.3. Outsourcing of any critical or important operational functions

One CIF has been outsourced to EH Ré AG. The outsourcing concerns Accounting and Reporting function, Compliance, Actuarial, Audit functions and Management tasks.

One key function has been outsourced within EH Group. It concerns Risk Capital Management service.

One important function has been outsourced outside EH Group. It concerns local Lux Accounting and Tax.

## B.8. Any other information

The BoD has established an effective system of governance which provides for sound and prudent management and is proportionate to the nature, scale and complexity of the operations of EH Ré SA.

- Written policies covering risk management, internal control, internal audit, actuarial function and outsourcing have been implemented and are regularly reviewed.
- The system of governance is well structured around the committees and key functions with the three lines of defense principle being respected.
- All those who perform governance functions are fit and proper.
- The risk management system covers underwriting and reserving, investment and asset liability management, operational risk management and reinsurance and other risk mitigation techniques.
- EH Ré SA conducts at least every year an ORSA that takes into account the overall solvency needs, the risk profile and risk appetite and the requirements regarding the determination of the technical provisions.

# C. Risk profile

## C.1. Underwriting risk

## C.1.1. Description of the measures used

EH Ré SA's Risk Management team measures and assesses its risks using EH Ré SA's internal risk capital model. Further details on the methodologies used within the internal model for underwriting risk can be found in Section E.4.2.1.

The internal model reflects the risk profile of EH Ré SA and is used to measure the solvability through the risk capital. The model has to be used in both strategic and tactical decisions to ensure that a sufficient risk tolerance is respected. Following that, Internal Model should be appropriate for all the different decisions that can be taken in the company and that have an impact on the risk profile and be appropriate for the use.

The Risk Capital (RC) calculated for the underwriting risk amounts to 15M€, increasing by 1% compared to 2015. This development is deemed non material.

## C.1.2. Description of the risk exposure

EH Ré SA's P&C underwriting risk is composed of:

- Premiums risk for fidelity lines of business: the risk of loss because of an unexpected high loss volume resulting in an insufficient coverage of premiums. Premium risk is subdivided in catastrophe risk (CAT risk) and non-catastrophe risk (non-CAT risk)
- Reserve risk: the risk of loss resulting from deviations between payments for incurred losses
  that have not yet been definitively settled and the reserves set up to cover these payments, or
  the use of an insufficient basis for the calculation of reserves

## C.1.3. Description of assets investment

Please refer to Section C.2.3 for information regarding how assets have been invested in accordance with the "prudent person principle" so that EH Ré SA's risks, including underwriting risk, have been properly managed.

#### C.1.4. Risk concentration

Please refer to Section C.3.4 for a description of the material risk concentrations to which EH Ré SA is exposed.

# C.1.5. Risk mitigation

As mentioned in section C.3.5, EH Ré SA reinsurance structure allows for an efficient mitigation of underwriting risk.

## C.1.6. Expected profit included in future premiums

Please refer to Section C.2.6 of this report for information on the total amount of the expected profit included in future premiums.

## C.1.7. Risk sensitivity

Information on relevant stress tests and scenario analysis, as well as the underlying methods and main assumptions, can be found in Section C.2.7 of this report.

#### C.2. Market risk

## C.2.1. Description of the measures used

EH Ré SA's Risk Management team measures and assesses its risks using EH Ré SA's internal risk capital model. Further details on the methodologies used within the internal model for market risk can be found in Section E.4.2.1.

The table below summarizes model changes which had an impact on market risk assessment.

Model Change Short Name	Affected Module	Model Change short description	
Credit Spread Model	Market Risk	Incremental spread modelling Improved coverage of adverse historical shocks Term structure of credit spreads is modelled Improved adequacy of high yield risk charges Avoidance of rating hierarchy violations	
Economic Sce- nario Generator (ESG) - new interest rate parametrization	Market Risk	Enhanced flexibility of model volatility function and increased skew	

### C.2.2. Description of the risk exposure

Within EH Ré SA, Market Risk is composed of the following risks:

- Interest rate risk: the risk of loss which can arise due to changes in market interest rates e.g. if future interest income is above or below a fixed or guaranteed interest rate applicable to reserves
- Equity risk: the risk of loss based on market changes in the value of an equity or a participation portfolio.
- Equity Volatility risk: it measures an adverse move in implied volatilities of equity options.
- <u>Property (Real Estate) risk</u>: the risk of loss arising from changes in the market price for property investments.
- <u>Spread Risk</u>: the risk due to exposure to some spread. It often arises with a long-short position or with derivatives.
- <u>Foreign Exchange, Currency risk</u>: the risk of loss arising from changes in foreign currency exchange rates
- Market risk concentrations

The standalone Market RC amounts to 13 M€, decreasing by -3 M€ (-17%) compared to 2015:

## Market risk capital evolution

Risk Category	Q4 2016	Q4 2015	Var	%
Interest Rate (+Vol)	6	7	-1	-16%
Credit Spread	4	4	0	1%
Exchange Rate	3	4	-1	<i>-26%</i>
Inflation Risk	1	1	-1	-52%
Equity (+Vol)	0	0	0	n/a
Real Estate	0	0	0	n/a
Total	13	16	-3	-17%

As required by the Directive, the calculations of these sub-risks are mainly based on the Assets market values and market conditions.

The evolution of the Market Risk is detailed as follows:

#### Interest rate sub-risk

The Interest Rate (IR) sub-risk slightly decreases by -1M€ because of the global decrease of the interest rate over the year 2016. The increase of the interest rate during the last quarter of 2016 was compensated by a decrease in the exposure subject to interest rate risk.

#### Exchange rate sub-risk

The decrease of -1 M€ if the Exchange Rate sub-risk is mainly to a reduction of exposures in United States Dollar (USD) and Polish Zloty (PLN), partly offset by an increase of the Great Britain Pound (GBP).

#### Inflation sub-risk

The Inflation sub-risk slightly decreased by -0,7M€ (-52%). This evolution is mainly explained by the decrease of the Euro (EUR) technical provisions exposures.

#### Other sub-risks

The other sub-risks are stable and not significant.

## C.2.3. Description of assets investment

EH Ré SA actively manages its investment portfolio and is actively taking investment risks in a controlled and limited manner. This is based on the firm belief that by taking risks on the investment side additional value can be generated on a mid to long-term basis, i.e. that the additional return on investments overcompensates the additional cost of capital in the mid- to long-run.

This approach results in a mid to long-term focused investment policy with an emphasis on strategic asset allocation and the goal of realizing the long-term risk premium of asset classes.

Tactical asset allocation is used on a limited basis as an enhancement to the strategic asset allocation in order to profit from market opportunities. The investment activities follow the general principles of a congruent Asset Liability Management (ALM) with a sufficient duration and currency matching within prescribed limits. All technical reserves shall be supported by investments made by Investment and Treasury Group (ITG) in respect with local regulation.

EH Ré SA's investment strategy aims for a positive global mid- to long-term (3-5 years) risk adjusted after tax investment return considering:

- Local as well as group-wide external and internal regulations, and policies
- Risk-bearing capacity and risk tolerance of EH Ré SA's and its shareholders
- General principles of a congruent Asset-Liability-Management

- Return objectives, expectations, and risk tolerance of the shareholders
- Expectations of external parties (e.g. regulators, rating agencies, clients)

While pursuing the investment philosophy and objectives outlined, investment management and risk controlling at EH Ré SA is based on a common understanding of the investment and ALM related risks and comprehensively defined risk management and controlling processes embedded in clear and transparent organizational and governance structures, whereby the following principles apply.

### Principle 1: Prudent Person Principle (refers to the Solvency II EU Directive)

EH Ré SA only invests in assets and instruments whose risks can be properly measured, managed and controlled, taking into account the assessment of its overall solvency needs.

All assets are invested in such a manner as to ensure the security, quality, liquidity and profitability of the portfolio as a whole.

Assets held to cover the technical provisions shall also be invested in a manner appropriate to the nature and duration of the insurance and reinsurance liabilities. Those assets shall be invested in the best interest of policyholders and beneficiaries.

In the case of a conflict of interest, EH Ré SA ensures that the investment is made in the best interest of policyholders and beneficiaries.

The use of derivative instruments shall be possible insofar as they contribute to a reduction of risks or facilitate efficient portfolio management.

## Principle 2: Focus on liquid, high quality, low risk assets

The predominant portion of the portfolio shall be invested in cash and liquid, tradable, high quality securities, mainly: Developed Market Treasuries and Government related Bonds, Covered Bonds. Further diversification in credit investments (e.g. corporate bonds, Asset Backed Securities (ABS)/ Mortgage Backed Securities (MBS), Emerging Market Bonds) are allowed within pre-defined risk limits. Main technical reserves shall be supported by investments in cash and fixed income securities. Parts of the reserves and the economic net asset value might be invested in Equity and Real Estate within pre-defined risk limits. The investment universe shall encompass:

- Fixed Income Instruments
  - o Cash
  - Treasuries / Government related bonds
  - Securitized and collateralized bonds
  - Corporate bonds
- Equity
- Real Estate
- Alternative : Private Equity and Derivatives (for hedging purposes only)
- Strategic investments in the group subsidiaries and other related companies are excluded from the scope of Asset management (AM) as they are managed according to specific rules (Joint Venture for example)

Other alternative asset classes like hedge funds, infrastructure, renewable energy or liquid standard-ized structured products (e.g. on indices or baskets) are currently not part of the investment universe, but might be included in the light of risk diversification in a very limited way. The introduction of new asset classes and investment products/mandates is subject to the approval of the EH Finance Committee.

### Principle 3: Asset-Liability-Management

The investment activities follow the general principles of a congruent ALM with a sufficient duration and currency matching within prescribed limits. The duration differences between assets and liabilities and the net foreign currency exposure will be regularly monitored and appropriate actions and hedges will be executed.

### Principle 4: Diversification

On the basis of the requirement that insurance technical liabilities are to be covered or secured at all times with investment portfolios showing low volatility, the diversification of risk within the portfolios is of special importance. Diversification is a central part of the Investment Policy and is to be pursued:

- Across asset classes (strategic asset allocation)
- Within asset classes (e.g. geographic and industry diversification)
- At the securities level (e.g. the number and weighting of the counterparties)
- Across investment styles
- Across asset managers for mandates with a dedicated alpha focus

## Principle 5: Avoiding investments that threaten EH Ré SA's reputation

EH Ré SA voluntarily restricts its investments beyond legal requirements in order to minimize its reputational risk. On the investment side a decline in reputation can be caused by direct or indirect holdings of companies engaged in activities despised by EH Ré SA's stakeholders and/or the public at large, e.g. investments in the area of defense.

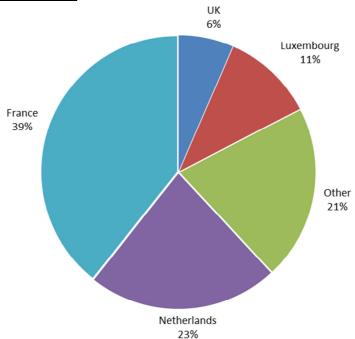
#### C.2.4. Risk concentration

On the basis of the requirement that insurance technical liabilities are to be covered or secured at all times with investment portfolios showing low volatility, the diversification of risk within the portfolios is of special importance. Diversification is a central part of the Investment Policy and is to be pursued:

- Across asset classes (strategic asset allocation)
- Within asset classes (e.g. geographic and industry diversification)
- At the securities level (e.g. the number and weighting of the counterparties)
- · Across investment styles
- Across asset managers for mandates with a dedicated alpha focus

EH Ré SA diversifies its risk across geographical area and does not over rely on one specific country or economy.

## Assets geographical allocation



## C.2.5. Risk mitigation

The following tables summarize the level of the sensitivity limits in place. Some of these limits are monitored at Group level.

Financial limits applied at EH Group level	2016 value	2016 Limit
Credit VaR	829.8M€	1686.7M€
Exchange rate (FX) exposure (fixed income)	316.7M€	497.0M€
FX exposure (equity)	96.4M€	994.0M€
Financial limits applied at EH Ré SA level	2016 value	2016 Limit
Financial limits applied at EH Ré SA level  Financial Value at Risk	2016 value 69.3M€	2016 Limit 104.6M€

#### Asset allocation limits

The Strategic Asset Allocation (SAA) is a target asset allocation set yearly by the FiCo (Finance Committee) in order to ensure a balance between the assets yields and the related risk capital.

The Asset Allocation (AA) is monitored every month to ensure it stays within the leeways defined in the risk appetite.

## C.2.6. Expected profit included in future premiums

EH Ré SA's expected profits included in future premiums (EPIFP) amount to 4.3 M€.

## C.2.7. Risk sensitivity

EH Ré SA has designed and implemented a firm-wide program covering stress testing, reverse stress testing and scenario analysis.

For stress tests, EH Ré SA usually follows standards shocks in line with European Insurance and Occupational Pensions Authority (EIOPA) recommendations. For scenario analysis and reverse stress tests, a dedicated process is run by the Enterprise Stress Testing Group which is a panel made of risk, business and economic experts who meet on an annual basis to identify up to 5 most relevant stress scenarios for the year to come. These scenarios are subsequently proposed to EH Risk Committee for review and selection before execution across the company.

It must be noted that the scenarios described in the following sections are enterprise-wide scenarios and not specifically designed for EH Ré SA on a standalone basis. As a result, the assumptions listed are those directly applied to insurance entities ceding to EH Ré SA. Non-market assumptions indirectly affect EH Ré SA through the cession from EH insurance entities while market assumptions directly impact EH Ré SA risk profile.

All tests and scenarios are further detailed in the following sections.

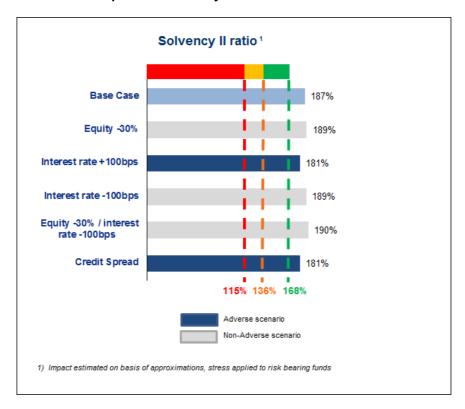
#### C.2.7.1. Standard Financial Stress Scenarios

EH Ré SA solvency position is challenged on an annual basis against a set of financial stress tests recommended by Allianz and in line with EIOPA recommendations. In 2016, the following scenarios were analysed:

- Equity drop: -30% in market values of all equity investments
- Interest rates up: +100 bp in interest rate
- Interest rates down: -100 bp in interest rate
- Credit: +100 bp in credit spread on corporate and asset-backed security bonds
- Combined scenario: -30% in market values of all equity investments and -100 bp interest rate

The following graph shows their impacts on EH Ré SA Solvency II ratio:

#### Stress tests impact on Solvency II ratio:



In 2016, the methodology of the stresses calculation has been improved: the stress impact is now applied not only to the own funds but also to the risk capital.

#### C.2.7.2. Scenario analysis

As introduced above, EH Enterprise Stress Testing Group has identified and proposed to EH Risk Committee a set of relevant 'business' scenarios for analysis. From the 2016 exercise, the following scenarios have been approved by EH Risk Committee for analysis:

- 2008 financial crisis: The financial crisis is designed to be a recurrent scenario as it serves as a benchmark given its severity level since 1929
- Hard landing in China: This scenario is identified as the most relevant macro-driven scenario to EH risk profile
- Political risk in Italy: This scenario is designed to capture the effects of the current sovereign debt situation and banking sector worsening in Italy

EH Ré SA will be affected in two different ways by the above scenarios:

- First, a direct impact on its investment portfolio through market and credit risk
- Second, an indirect impact from the cession of EH insurance entities to EH Ré SA.

This is further detailed in following sections.

#### 2008 financial crisis

The scenario is a replication of the macroeconomic and financial market shocks observed on EH risk profile during the financial crisis over 2008 and 2009.

In parameterizing and running this scenario analysis, EH has used the following key assumptions:

- Decrease in equity market value by -50% with the following effects:
  - Impact on own funds due to decrease in equity and United Kingdom (UK) pension funds values
  - Impact on equity risk SCR due to decrease in market value while equity volatility remains constant
  - o Reduction in UK pension funds value and therefore in the capital add-on related to it
  - Decrease of insurance companies market value by 15%.
- Increase in credit spread by +50% with the following effects:
  - o Increase in UK pension funds credit spread risk and therefore in the related capital add-on
  - No impact on own funds.
- Increase credit insurance risk by a factor between 1,3 and 4 to replicate 2008 effects (per country) with the following effects
  - o Increase in current year loss ratio leading to decrease in own funds due to increase in technical reserves after tax and in risk margin
  - Increase in current year reserve risk SCR while constant volatility of reserves assumed as observed from historical data
  - Increase in next year loss ratio leading to decrease in own funds due to the decrease of future profits after tax and the increase of risk margin
  - o Increase in trade credit insurance risk SCR and therefore in the related capital add-on
  - Constant diversification
  - Tax relief impact due to reduction in net deferred tax liabilities as a consequence of market changes
  - o No impact on credit risk SCR for retrospective reinsurance
  - o No dividend
  - Scenario contagion assumed to be 1/3 impact on current year and 2/3 impact the next year

Under a scenario similar to the 2008 financial crisis, EH Ré SA, as a reinsurance entity of EH, would see its solvency position as of end of 2016 remain above regulatory requirements with a 103% ratio as shown in the table below:

## Crisis 2008 scenario results

In M€	Base case	Stress scenario
Own funds	134	113
Risk capital	72	110
Solvency ratio	187%	103%

The above results confirm that the Capital Management Range set by EH Ré SA BoD between 168% and 246% for 2017 is appropriate to fully absorb the impact of such scenario without breaching regulatory capital requirements.

Nonetheless, the solvency ratio would drop below the 115% Minimum Capital Ratio set by its BoD for capital management purposes. As a consequence, EH Ré SA would need to take corrective actions.

### Hard landing in China

This scenario consists of reflecting the consequences of a hard landing of the Chinese economy on EH insurance entities and ultimately on EH Ré SA. EH Enterprise Stress Testing Group has identified that in such situation the following effects would be observed:

- Rise in domestic insolvency index at a range between 30 to 40%
- Impact on countries exporting to China e.g. APAC (primarily Australia), Latin America and Africa
- Default events within the commodity market on major players e.g. Glencore, Louis Dreyfus,
  etc.
- Impact on maritime transport with increased insolvencies on major players.

The next section describes how the above effects have been translated into stressed risk parameters for the insurance entities ceding to EH Ré SA, both on credit and market risk side.

In order to reflect the increase in insolvencies on Chinese buyers, the probability of defaults of all the Chinese buyers have been increased by a factor 1.3.

Further to that and in order to reflect the contagion effect on countries identified as directly affected by this rise, the probability of defaults of all buyers within APAC, Latin America and African countries have been increase by a factor 1.1.

Finally, to reflect the defaults of major players within the industry sectors identified as directly affected (maritime transport and commodities), the probability of defaults of the top 10 buyers by exposure amount within these sectors have been floored to 20% so to force at least 2 major defaults across these buyers.

With respect to market risk effects, it has been identified that such scenario would impact the following market risk factors as described below:

EMU	Shock	
10y yield "risk-free" (Swap)	-30 bps	
European Covered Bond spreads	+10 bps	
Investment grade credit spreads	+100 bps	
High Yield credit spreads (BB / B only)	+250 bps	
Morgan Stanley Capital International European Economic and Monetary Union Index (MSCI EMU)	-10.00%	
EUR/USD (in value, not shock)	1.05	
10y yield "risk-free" sovereign (Treasuries)	-50 bps	
Investment grade credit spreads	+130 bps	
Morgan Stanley Capital International United State of America Index (MSCI USA): total return p.a. in EUR	-7.00%	
ΔEM Currency	-20.00%	
Morgan Stanley Capital International Emerging Markets Index (MSCI EM): total return p.a. in EUR	-15.00%	
Inflation	-100 bps	
Real Estate	0.00%	

In addition, the above market risk effects were assumed to impact (after tax) the own funds through the decrease of asset values owned by EH Ré SA and this was reflected in the calculation.

Under a scenario of hard landing of the Chinese economy, EH Ré SA solvency position as of end of 2016 would remain well above regulatory requirements with a solvency ratio standing at 170% as shown in the table below:

In M€	Base case	Stress scenario
Own funds	134	129
Risk capital	72	76
Solvency ratio	187%	170%

Under such a scenario, EH Ré SA would not need to take any measure, neither for regulatory capital purposes, nor for capital management purposes as the stress ratio would remain within the Capital Management Range set by EH Ré SA BoD between 168% and 246% for 2017.

# Political risk in Italy

This scenario consists of reflecting the effects of a deteriorated sovereign debt situation and banking sector worsening in Italy leading the government to take measures creating political risk on EH exposures in Italy.

EH Enterprise Stress Testing Group has identified that the trigger for such an event would be the default of a medium-size Italian bank. For that purpose, it has selected the case of Monte Paschi bank given its financial distress situation and its long standing experience in financing small and medium enterprises and therefore its direct potential effects on EH exposures.

The translation of this scenario into stressed parameters for EH insurance entities is described in the next section.

Given the complexity to identify the direct exposures that could be affected and the contagion effect of such default across EH exposures, it was decided to adopt for credit risk parametrization a simple but yet severe approach by applying a factor 3 on the probability of defaults of all Italian exposures.

For the market risk effect of such scenario, the parameterization of the market risk factors was set by applying the shocks shown below:

### Political risk in Italy - market risk factors

Market risk factors	Shock
10y yield "risk-free" (Swap)	+50 bps
European Covered Bond spreads	+30 bps
Investment grade credit spreads	+150 bps
High Yield credit spreads (BB / B only)	+400 bps
MSCI EMU	-7.00%
EUR/USD (in value, not shock)	1
10y yield "risk-free" sovereign (Treasuries)	-15 bps
Investment grade credit spreads	+50 bps
MSCI USA: total return p.a. in EUR	5.00%
ΔEM Currency	-5.00%
MSCI EM: total return p.a. in EUR	-5.00%
Inflation	-50 bps
Real Estate	-5.00%

In addition, the above market risk effects were assumed to impact (after tax) the own funds through the decrease of asset values owned by EH Ré SA and this was reflected in the calculation.

Under an approximated scenario of political risk in Italy, EH Ré SA solvency position as of end of 2016 would remain well above regulatory requirements with a solvency ratio standing at 149% as shown in the table below:

## Political risk in Italy - scenario results

In M€	Base case	Stress scenario
Own funds	134	123
Risk capital	72	83
Solvency ratio	187%	149%

The above results confirm that the Capital Management Range set by EH Ré SA Board of Directors between 168% and 246% for 2017 is appropriate to fully absorb the impact of such scenario without breaching regulatory capital requirements.

Nonetheless, the solvency ratio would drop below the 168% Action Barrier set by its Board of Directors for capital management purposes. As a consequence, EH Ré SA would need to take corrective actions.

## C.3. Credit risk

## C.3.1. Description of the measures used

EH Ré SA's Risk Management team measures and assesses its risks using EH Ré SA's internal risk capital model. Further details on the methodologies used within the internal model for credit risk can be found in Section E.4.2.1.

The table below summarizes model changes which had an impact on credit risk assessment.

Model Change Short Name	Affected Module	Model Change short description		
Correlation module	Local Credit Insurance model	Changes in correlation matrix and factors  Design of bonding specific correlatio matrix and factors		
Contagion mechanism	Local Credit Insurance model	Changes to the modelling of the default contagion/propagation process across business units		

## C.3.2. Description of the risk exposure

Within EH Ré SA, Credit Risk is composed of the following risks:

- <u>Counterparty default risk:</u> the risk of loss due to default of the counterparty within the context of transactions e.g. derivative, reinsurance, loans etc.
- <u>Credit risk attached to credit & surety:</u> credit risk that can arise either from the risk of loss in the economic value of credit exposures because of deterioration in the credit quality of counterparties (migration risk) including their defaults, or non-performance of instruments. Default occurs as the result of the inability or unwillingness to fulfil contractual obligations.
- <u>Country transfer risk:</u> the risk of loss arising from cross-border transactions as a result of transfer and convertibility risks (e.g. the risk of a country not being able to make payments due, freeze on deposits or limitations on foreign currency transfers).
- <u>Issuer/Investment credit risk:</u> the risk of loss arising from an unexpected change in the creditworthiness (migration or default) or collateral of a debtor. Default occurs as the result of the inability or unwillingness to fulfil contractual obligations.
- <u>Settlement risk:</u> the risk of loss arising from trading activities when there is a mutual undertaking to deliver on a progressive basis, for example when the trading centers fall within different time zones, and the counterparty does not fulfil its contractual obligations, despite the fact that the other party to the contract has already performed its duties.

The Credit Risk Portfolio is subdivided in 3 different risk categories: the Insurance portfolio, the Investment portfolio and the Reinsurance portfolio.

The total Credit Risk Capital increased by +15 M€ between 2015 and 2016:

## Credit risk capital per activities (in M€)

Portfolios	Q4 2016	Q4 2015	Var
Insurance portfolio	61	57	5
Internal Model	52	49	4
Scaling	9	8	1
Stop Loss Impact	0	-15	15
Insurance portolio after Stop Loss	61	42	20
Reinsurance portolio	8	10	-2
Investment portfolio	0	1	-1
Total Standalone after Stop Loss	70	53	17

## Reinsurance portfolio

The decrease of the Reinsurance portfolio risk capital by -2 M€ (-20%) is mainly due to the decrease of the underlying exposure by -12%.

The remaining decrease is due to a slight recalibration of the reinsurance capital risk calculation model, thus generating less risk capital for a same amount of exposure.

## Investment portfolio

Despite a stable exposure, the Investment portfolio risk capital decreased by − 1 M€ because of a derisking of the portfolio structure: exposure in bonds was decreased while the exposure in cash and loans increased.

### Insurance portfolio

At EH Ré SA level, Insurance activities are split according to the following lines of business:

Insurance portfolio risk capital per LoB (in M€)

Insurance portfolio LoB	Q4 2016	Q4 2015	Var
Credit Insurance	59	54	5
Others	2	2	0
Total before Stop Loss	61	57	5
Stop Loss Impact	0	-15	15
Total after Stop Loss	61	42	17

The above table highlights the weight of the Credit insurance LoB which represents more than 95% of the global Insurance portfolio risk capital. Moreover, the "Others" LoB is quite stable.

For this reason, only the Credit Insurance LoB is analysed hereunder, as well as the Stop Loss impact.

## C.3.3. Description of assets investment

Please refer to Section C.2.3 of this report for information regarding how assets have been invested in accordance with the "prudent person principle" so that EH Ré SA's risks have been properly managed.

## C.3.4. Risk concentration

For EH Ré SA, two kinds of monitoring have to be considered:

- Monitoring of the exposures of the LEs at Group level
- Monitoring of the reinsurance exposure limits at EH Ré level

The monitoring processes and conclusions are summarized hereafter.

## C.3.4.1. Monitoring of exposure at Group level

## Sensitive buyers

EH has defined a grade scale for the buyers from 1 (best) to 10 (worst).

For the grades 6 to 10, a threshold of exposure is defined. Buyers with exceeded thresholds are included into a list of sensitive buyers and subject to a closer monthly monitoring.

The same stance is expected in 2017.

## Sensitive and high risk countries

EH has defined 4 Country Risk Levels: Low, Medium, Sensitive and High risk":

- "Sensitive risk" countries are those with a serious risk of payment disruption.
- "High risk" countries are those with a higher risk of payment disruption.

Sensitive and high risk countries are listed within the "master list countries" and monitored more specifically.

### Sanctioned countries

EH Ré SA also closely monitors exposures on countries with existing restrictions.

When sanctions prohibit any type of activity with or in a particular country, then the concerned country is given an "off-cover" status. As a result, EH Ré SA does not have any exposure in such countries.

## C.3.4.2. Monitoring of reinsurance exposures at EH Ré SA level

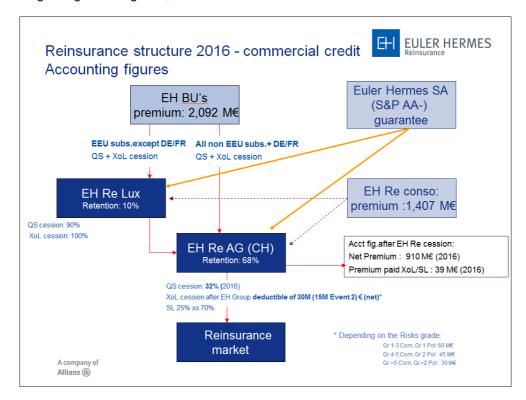
EH Ré has its own set of limits, depending on country grades, buyers rating and LEs / Regions:

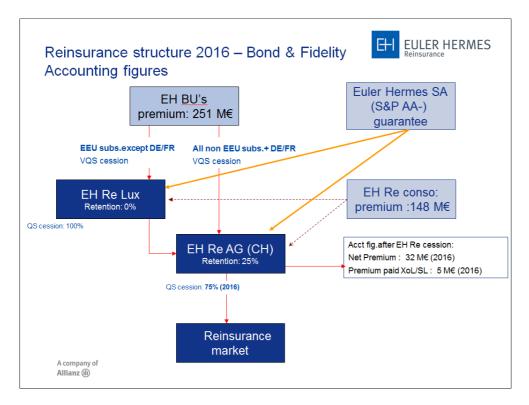
Based on the information reported by the reinsured LEs / Regions, EH Ré SA monitors its reinsurance limits on a quarterly basis. As of Q4 2016, the exposures limits are under control:

- Individual Buyer limits: no exposure usage > 100%
- Global Buyer limit: 3.4% of global usage (stable compared to Q4 2015)
- Individual Country limits: <1% of usage excess; the limits will be increased in 2017</li>
- Global Country limit: 53% of global usage

#### C.3.5. Risk mitigation

Regarding risk mitigation, below is an overview of EH Ré SA's reinsurance structure in 2016:





## Effectiveness of reinsurance

To form its opinion the EH Group Actuarial Function participates on a regular basis to the reinsurance committee meetings organized by EH Ré AG where the profitability of assumed business and potential changes on the internal and external reinsurance cessions are discussed. Moreover, the EH Group

#### Credit exposure limits (CRisP)

CRisP (the Allianz group-wide limit management system) is applied at EH Group for identification, assessment and management of exposure concentration risk related to exposure arising from Investment portfolio, Reinsurance receivables and Credit insurance exposures.

On this basis, EH Group manages any breach on its investment portfolio and its reinsurance receivables. Allianz notifies any breach on credit insurance exposures in order for EH to remediate these breaches.

There is **no** recorded **breach** of Credit exposure limits as of 31.12.2016.

## C.3.6. Expected profit included in future premiums

Please refer to Section C.2.6 of this report for information on the total amount of the expected profit included in future premiums.

#### C.3.7. Risk sensitivity

Please refer to section C.2.7 of this report for information on relevant stress tests and scenario analysis, as well as the underlying methods and main assumptions.

## C.4. Liquidity risk

### C.4.1. Description of the measures used

The liquidity risk is the risk that requirements from current or future payment obligations cannot be met. This comprises insufficient liquidity resources to meet payment obligations under current (base case scenario) as well as potential future conditions (stress scenarios).

Liquidity risk management is a component of EH Ré SA's risk appetite and is a core part of the financial planning, taking into account the cash flow schedule as well as capital allocation process.

In accordance with the Liquidity Risk Management policy currently being implemented, an analysis has been performed to identify accurately the resources and needs of liquidity and to simulate the evolution of EH Ré SA's liquidity ratio on different time horizons and in different conditions.

In this approach, we consider the liquidity ratio as being the fraction of needs of liquidity over resources of liquidity:

- Liquidity resources mainly come from premiums, reinsurance receivables and investment inflow
- Liquidity needs mainly include policyholder benefits and claims and related expenses, reinsurance payables, operating expenses, dividends and planned purchase or re-purchase of assets

According to the Risk Appetite of EH Ré SA, the liquidity ratio is managed according to the following thresholds:

- Ratio > 100% : Red (action level)
- 100% > Ratio > 80% : Amber (alert level)
- Ratio < 80% : Green

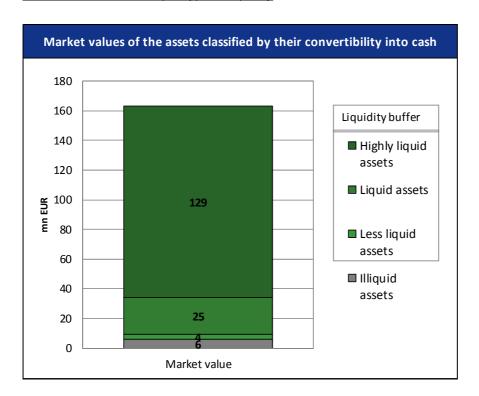
It has to be noted that since EH Ré SA retention is 10%, the percentage between the needs (cash flow out) and the sources (cash flow in) is structurally above 80%

However, liquidity for EH Ré SA is not a real risk as all the flows are internal inside EH

As a result, EH Ré SA Risk Committee decided in 2017 to increase the lower threshold from 80% to 95%.

## C.4.2. Description of the risk exposure

The following table shows that, as of Q4 2016, more than 90% of EH Ré SA's assets are liquid or highly liquid.



#### C.4.3. Description of assets investment

Please refer to Section C.2.3 of this report for information regarding how assets have been invested in accordance with the "prudent person principle" so that EH Ré SA's risks have been properly managed.

## C.4.4. Risk concentration

EH Ré SA is not exposed to any material risk concentration regarding liquidity risk.

## C.4.5. Risk mitigation

EH Ré SA liquidity risk is borne by EH Ré AG. EH Ré SA would face any liquidity issue by increasing its capital.

# C.4.6. Expected profit included in future premiums

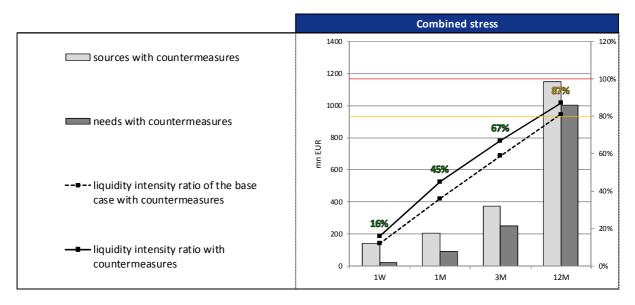
Please refer to Section C.2.6 of this report for information on the total amount of the expected profit included in future premiums.

## C.4.7. Risk sensitivity

EH Ré SA identified several liquidity stress scenarios and chose to perform the one which appeared to be the most relevant for 2016: a deterioration of the market conditions leading to an economic crisis, a recession event which implies an increase of the claim frequency for credit insurers.

Thus, a combination of a market stress scenario and a recession scenario (reserve risk and credit risk) was simulated.

The following graph shows the stress scenario liquidity analysis:



As for Q4 2015, even after application of the countermeasures, the liquidity ratio calculated in Q4 2016 for different 2017 time horizons remains under 100% but does not fall under the 80% threshold. This situation results from EH Ré SA reinsurance structure and is accepted.

## C.5. Operational risk

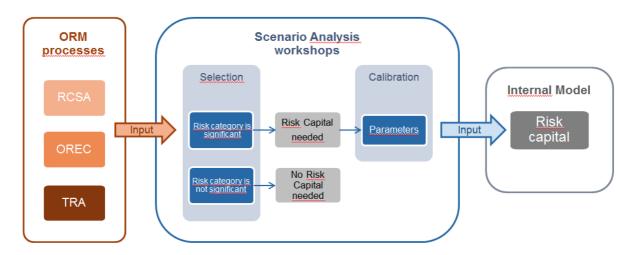
## C.5.1. Description of the measures used

EH Ré SA has an own internal model to compute the loss distribution attached to the operational risk.

The computation is based mainly on four elements:

- Operational losses registered
- Top Risk Assessment (TRA)
- Risk and Control Self Assessment (RCSA)
- Scenario Analysis (ScA)

Operational risk is managed by many processes which are also taken into account in the operational risk capital computation process:



 The Risk and Control Self-Assessment (RCSA) process aims at mapping and evaluating the process-level risks and controls. This "in-depth" assessment is performed on a yearly basis and reviewed on a quarterly basis  The Operational Risk Event Capture (OREC) is an ongoing process aiming at identifying operational risks through: The identification and assessment of operational events and losses, the feeding of an operational losses database. This process is also a process leading to continuous improvement of business performance

## 1. The Risk and Control Self-Assessment (RCSA)

This process aims at mapping and evaluating the process-level risks and controls. This "in-depth" assessment is performed on a yearly basis and reviewed on a quarterly basis

## 2. The Operational Risk Event Capture (OREC)

This is an ongoing process aiming at identifying operational risks through: The identification and assessment of operational events and losses, the feeding of an operational losses database. This process is also a process leading to continuous improvement of business performance

#### 3. The Top Risk Assessment Process (TRA)

This is a structured and systematic process implemented at EH Ré SA level as well as at regional level. Its objective is to identify and remediate significant threats to financial results, operational viability and the delivery of key strategic objectives, regardless of whether they can be quantified or not.

The TRA scope covers all risk categories defined in the Group Risk Policy (i.e. market, credit, underwriting, business, operational, reputational, liquidity and strategic risk) as well as concentration and emerging risks. For each of the (major) top risks, respective EH Ré SA's Board Members are defined as risk owners and define a target score.

The target ratings of all top risks are part of the overall risk appetite, which is formally approved by the BoM. If the actual risk rating is higher than the target risk rating, the risk owner is responsible for ensuring that a documented risk mitigation plan is in place.

The TRA process is based on a quarterly review and monitoring, with a full run exercise once per year.

EH Ré SA TRA most recent full run was carried out in Q4 2016. Top risks identified are classified by order of magnitude based on their "actual scores"; these actual scores result from the assessment of the frequency and impact being the highest score between the economic impact and the reputational impact.

#### 4. Operational risk capital calculation process

Each year, "Scenario Analysis" workshops are organized with EH Ré experts for both companies EH Ré AG and EH Ré SA in order to set the Internal Model parameters to be used to calculate the Operational risk capital.

The inputs for these workshops are the results and assessments of the operational risk management processes described hereabove, as well as Allianz and public operational losses databases, aiming at helping an appropriate calibration of the parameters.

### C.5.2. Description of the risk exposure

Below is EH Ré SA's definition of operational risk, as well as several sub-categories of this risk:

- Operational risk: the risk of loss resulting from inadequacies or failures in processes or controls due to technical resources, people, organization or external factors
- <u>Legal risk:</u> The risk of loss caused by non-compliance with existing or new legislation or supervisory regulations, disadvantageous changes to existing laws or supervisory regulations, as well as the risk of a loss resulting from material litigation or regulatory proceedings, in particular through disadvantageous interpretations of laws by courts. Furthermore, legal risk in-

- cludes losses due to ambiguity of laws or unfavourable contract clauses. Legal risk does not constitute a separate risk category, as it is captured by business risk (via operational risk)
- <u>Financial misstatement risk:</u> The risk of loss caused by issuing external financial reports which are not fairly stated in all material respects. Financial misstatement risk is partially covered by the business risk category (via operational risk)

EH Ré SA's standalone operational risk capital decreased by 8% from Q4 2015 to Q4 2016 and amounts to 3 M€.

#### C.5.3. Description of assets investment

Please refer to Section C.2.3 of this report for information regarding how assets have been invested in accordance with the "prudent person principle" so that EH Ré SA's risks have been properly managed.

#### C.5.4. Risk concentration

EH Ré SA is not exposed to any material risk concentration regarding operational risk.

#### C.5.5. Risk mitigation

EH Ré SA does not enter into specific risk mitigation techniques for operational risk.

## C.5.6. Expected profit included in future premiums

Please refer to Section C.2.6 of this report for information on the total amount of the expected profit included in future premiums.

## C.5.7. Risk sensitivity

Please refer to section C.2.7 of this report for information on relevant stress tests and scenario analysis, as well as the underlying methods and main assumptions.

#### C.6. Other material risks

EH Ré SA is not concerned by any other material risks.

## C.7. Any other information

EH Ré SA does not have any other information regarding the risks being disclosed in the above.

# D. Valuation for solvency purposes

### D.1. Assets

## D.1.1. Valuation of assets

The following table summarizes the amounts for EH Ré SA assets, classified by asset classes as disclosed in the Quantitative Reporting Templates (QRT), for both MVBS valuation and LUXGAAP valuation.

In €	MVBS	LUX GAAP	Explanations
Goodwill			
Deferred acquisition costs		1,947,596	DAC not recognized in MVBS
Intangible assets			
Deferred tax assets	1,000		Deferred tax assets not recognized in LUX GAAP
Pension benefit surplus			
Property, plant & equipment held for own use			
Investments (other than assets held for index-linked and unit-linked contracts)	173,576,000	170,693,534	
Property (other than for own use)		-	
Participations and related undertakings		-	
Equities			
Equities - listed		-	
Equities - unlisted		-	
Bonds	173,576,000	170,693,534	
Government Bonds	89,642,000	87,580,863	Amortized cost to fair value
Corporate Bonds	69,671,000	68,849,813	Amortized cost to fair value
Structured notes		•	
Collateralised securities	14,263,000	14,262,858	Linear amortized cost to actuarial amortized cost
Collective Investments Undertakings		•	
Derivatives		-	
Deposits other than cash equivalents		-	
Other investments		-	
Assets held for index-linked and unit-linked contracts		-	
Loans and mortgages		-	
Loans on policies		-	
Loans and mortgages to individuals		-	
Other loans and mortgages		-	
Reinsurance recoverables from:	489,101,120	525,606,442	No reserve discounting in LUX GAAP Elimination of a claim in UK already booked at EH Re SA
Non-life and health similar to non-life	489,101,120	525,606,442	
Non-life excluding health	489,101,120	525,606,442	
Health similar to non-life		-	
Life and health similar to life, excluding health and index-linked and unit-linked		-	
Health similar to life			
Life excluding health and index-linked and unit-linked		•	
Life index-linked and unit-linked		•	
Deposits to cedants	2,242,000	2,241,811	
Insurance and intermediaries receivables	191,906,250	141,462,013	Some liabilities are netted with assets in LUX GAAP. In MVBS liabilities have to be un-netted No discounting in LUX GAAP
Reinsurance receivables	31,780	- 59,427,181	Some liabilities are netted with assets in LUX GAAP. In MVBS liabilities have to be un-netted No discounting in LUX GAAP
Receivables (trade, not insurance)	33,000	33,246	Ŭ
Own shares	*	-	
Amounts due in respect of own fund items or initial fund called up but not yet paid in		44,832,692	Unpaid capital
Cash and cash equivalents	22,887,000	22,887,180	
Any other assets, not elsewhere shown		-	
Total assets	879,778,150	850,277,333	

Below is an overview of valuation and recognition bases applied in MVBS as well as the differences with LUXGAAP.

## Intangible assets

Intangible assets other than goodwill should be valued at zero unless the intangible asset can be sold separately and the undertaking can demonstrate that there is a value for the same or similar asset that has been derived from quoted market prices in active markets (see chapter 3.3 for guidance on the general valuation principles). Then, the market value for this intangible asset should be booked on account.

Computer software tailored to the needs of the undertaking and "off the shelf" software licenses that cannot be sold to another user shall be valued at zero.

## **Deferred Tax Assets (DTA)**

### Temporary concept

Deferred taxes – except deferred tax assets arising from the carry forward of unused tax losses or unused tax credits – shall be valued on the basis of the difference between:

- The values ascribed to assets recognized and valued in accordance with the EU Directive on Solvency II and
- The values ascribed to assets as recognized and valued for tax purposes

Deferred taxes shall be recognized and valued in relation to all assets that are recognized for Solvency II or for tax purposes.

## Balance sheet item concept

Temporary differences between the Solvency II value of the assets and its corresponding tax base should be assessed on a single asset basis. The deferred tax calculations should take into account the tax regulations specific to particular assets in the applicable tax regimes.

Deferred tax assets should not be discounted.

In cases where assets are included with zero value or are not recognized in the MVBS, a temporary difference might, nevertheless, arise if their tax value is not nil.

#### **Participations**

In case of revaluations IFRS/MVBS with respect to participations (fully consolidated subsidiaries), no Deferred Taxes (DT) on those revaluations are allowed to be booked in MVBS.

### Special funds/ tax transparent entities

In most jurisdictions it is not the special fund which is taxable with its income but the respective owner of the special fund (for tax purposes the special fund is "transparent"). In the MVBS of the regulated parent entity has to include all taxes which refer to the respective regulated entity itself. Therefore, no reporting of "service" deferred taxes is allowed in the MVBS data submission of special funds and other tax transparent entities. In consequence, "service" deferred taxes in IFRS at the level of the special funds or other tax transparent entities have to be eliminated in the MVBS of these entities. The insurance parent company itself will recognize in its MVBS the respective deferred taxes and potential additional deferred taxes as a reaction of the IFRS-MVBS revaluation of the investment in the special funds or other tax transparent entity.

## Deferred tax netting

Deferred taxes of one taxable entity have to be netted in case the respective offsetting criteria are. Under MVBS the legal entity (solo view) has to ensure that deferred tax netting between different consolidated units belonging to the same solo view already takes place at solo level.

#### **Bonds**

The line item "Bonds" includes the sum of government bonds, corporate bonds, structured notes and collateralized securities.

All Bonds items are valued at fair value in MVBS.

# Reinsurance recoverables from Non-life excluding Health

The calculation of reinsurance recoverables leads either to the recognition of reinsurance recoverables calculated as a whole or the best estimate for the reinsurance recoverable. No risk margin should be reported in the section of the reinsurance recoverable as the risk margin recognized within the technical provisions is already net of reinsurance. However, a Credit Default Adjustment (CDA) has to be calculated. The best estimate of technical provisions has to be calculated gross.

The time difference between recoveries and direct payments should be taken into account when calculating the reinsurance recoverables and recoverables from Special Purpose Vehicles (SPVs). The amounts recoverable from special purpose vehicles, from finite reinsurance contracts and from other reinsurance contracts should each be calculated separately.

For the purpose of calculating the amounts recoverable from reinsurance contracts and special purpose vehicles, the cash-flows shall only include payments in relation to compensation of insurance events and unsettled insurance claims. Payments in relation to other events or settled insurance claims shall be accounted for outside the amounts recoverable from reinsurance contracts and special purpose vehicles and other elements of the technical provisions. Where a deposit has been made for the cash flows, the amounts recoverable shall be adjusted accordingly to avoid a double counting of the assets and liabilities relating to the deposit.

For the probability-weighted average of future cash flows of recoverables from reinsurance contracts and special purpose vehicles relating to Non-Life, the following cash inflows and cash outflows should be taken into account:

- Cash inflows include, e.g., recoverables for claims payments or benefits and for related expenses and revenue from reinsurance commission and from shares in profit from technical sources relevant to individual reinsurance contracts
- Cash outflows include, e.g., future premiums

The amounts recoverable from reinsurance contracts and special purpose vehicles for non-life insurance obligations shall be calculated separately for premium provisions and for provisions for claims outstanding. Therefore, the cash flows relating to the provisions for claims outstanding should include those compensation payments that relate to the claims accounted for in the ceding entity's gross provisions for claims outstanding. The cash flows relating to premium provisions shall include all other payments.

The CDA should be calculated as the expected present value of the change in cash flows underlying the amounts recoverable from that counterparty that arises if the counterparty defaults (including defaults as a result of insolvency or dispute) at a certain point in time. For that purpose, the change in cash flows shall not take into account the effect of any measures that mitigate the credit risk of the counterparty, other than risk mitigating techniques based on collateral holdings. The risk mitigating techniques that are not taken into account shall be separately recognized without increasing the amount recoverable from reinsurance contracts and special purpose vehicles. The calculation should take account of possible default events over the lifetime of the reinsurance contract or arrangement with the special purpose vehicle and whether the probability of default varies over time, and how when it does vary. It shall be carried out separately by each counterparty and for each line of business. In non-life insurance, it shall also be carried out separately for premium provisions and provisions for claims outstanding.

## **Deposits to cedants**

Deposits to cedants include deposits relating to reinsurance accepted. In MVBS, Deposits to cedants are valued at fair value.

## Insurance and intermediaries receivables

Due to the short term nature of the receivables, we generally consider the amortised cost value to be fair value. However, since valuation allowances have to be eliminated in the MVBS, the fair value of the receivables might deviate from the amortized cost value. In these cases, a revaluation adjustment is necessary.

#### Reinsurance receivables

Due to the short term nature of the receivables we consider amortized cost value to be fair value. However, since valuation allowances have to be eliminated in the MVBS, the receivables might have to be adjusted.

#### Receivables (trade, not insurance)

Due to the short term nature of the receivables we consider amortized cost value to be fair value. However, since valuation allowances have to be eliminated in the MVBS, the receivables might have to be adjusted.

## Cash and cash equivalents

Bank accounts shall not be netted off, thus only positive accounts shall be recognized in MVBS. Bank overdrafts are to be shown within liabilities unless where both, legal right of offset and demonstrable intention to settle net exist. Cash and cash equivalents are measured at fair value.

## D.1.2. Material intangible assets

EH Ré SA does not have any material intangible asset.

## D.1.3. Changes to the recognition and valuation bases used or to estimations

There has not been any change to the recognition and valuation of material classes of assets during the year 2016.

# D.1.4. Assumptions and judgments on the future and other major sources of estimation uncertainty

There are no specific assumptions or judgments about future and other major sources of estimation uncertainty.

## D.1.5. Material financial assets

# D.1.6. Related undertakings not valued using quoted market prices or the adjusted equity method

EH Ré SA does not have any related undertakings.

## D.1.7. Financial and operating leases

EH Ré SA does not have any financial or operating leases.

### D.1.8. Material deferred tax assets

EH Ré SA does not have any material deferred tax assets.

## D.1.9. Aggregating class of assets

Asset classes are in line with QRT requirements.

## D.2. Technical provisions

## D.2.1. Valuation of technical provisions for solvency purposes

The table below summarizes the technical provisions amounts by SII LoB.

In €	Credit and suretyship insurance
Total Best estimate - gross	542,148,820
Risk Margin	2,788,480
Amount of the transitional on Technical Provisions	
Technical provisions - total	544,937,300

The calculation of technical provisions is composed of the calculation of the following elements:

## 1) Undiscounted Claims Provisions

99% of EH Ré SA business is EH-internal business and hence reserved according to EH-Group guidelines. Thus, standard actuarial methods as Chain-Ladder, Bornhuetter-Ferguson and Enterprise Risk Management (ERM) are used to estimate the level of undiscounted claims provisions and cross-validation of gross and ceded reserves takes place within the LRC processes.

## 2) Undiscounted Premium Provisions

In general the premium provisions are defined as the present value of all future outflows less inflows from future events post the evaluation date that will be incurred under the insurer's existing policies that have not yet expired.

In general the Future Premium (FP) is calculated by analysing the relevant information (. If commercial data are hard to track or not complete and for small LoBs there is a possibility to apply ratio based approach: it could be based on the benchmark ratio FP/ Gross Written Premium (GWP) from other countries. Given the low materiality of these small LoBs this simplification is considered as appropriate.

For multi-year policies the recognition of profits is limited to a maximum of 1 year if writing profitable business. In case of a loss making portfolio of contracts the full duration is recognised.

Contract lapses are taken into account, i.e. if a contract is cancelled it should not be projected within the FP calculation. Furthermore it is up to the local actuaries to decide about any average lapse/cancelation rates to be taken into account.

Referring to contract boundaries it is to note that EH can unilaterally terminate or amend credit lines related to the risks covered in its contracts at any time (for Credit Insurance (CI)/ World Program (WP) lines of business). Following a strict interpretation of article 18 of the SII Delegated Acts EH must consider the scenario of cancelling all limits (where applicable, i.e. if policy wording allows for limit cancelling and if premium depends from limit/covered amount) when calculating the future premium (as part of premium provisions).

FP from tacit renewals are taken into account using detailed tacit renewal assumptions (per country or even per LoB (if necessary)).

The ceded premium provisions can be calculated analogously to the gross premium provisions. Ceded FP can be calculated by multiplying an appropriate cession rate with the Gross FP.

## 3) Discounting of Claims and Premium Provisions

The main input for the calculation of the discounting is the cash flows. The absolute cash flows indicate which amounts of the respective reserves are paid out in which future period (independently from Accident Year (AY)):

## Claims provisions:

The claims provisions cash flow follows the payments of claims and can be directly calculated using triangles.

#### Premium provisions:

In General Premium Provisions can be split into a claims/expenses related part (i.e. (Combined Ratio (CR) - Acquisition Expenses (AE)) \* (Premium Received (PR) + FP)) and a premium related part (i.e. (– FP + Recovery Rate (RR))).

The premium provisions cover risk exposure where the insurer is bound to business by in force policies with exposure in the future. Hence the claims behind have not happened yet. But in general the claims/expenses related part of premium provisions covers future claims. Therefore the cash flow behaviour of the claims/expenses related part should be similar to the cash flow behaviour of the

claims provisions. The only difference is that the premium provisions are mainly related to claims attached to the next future period/year. Hence their cash flow behaves like a cash flow of the ultimate claims costs. So for estimating the cash flow of the claims/expenses related part of the premium provisions the ultimate cash flow (pattern) is used.

The premium related part is expected to be paid in/out within the next year and hence do not have the same maturity than the claims/expenses related part of the premium provisions. Therefore the absolute cash flow is calculated by multiplying (CR - AE) \* (PR + FP) with the ultimate cash flow pattern and adding the premium related amount to the first year of the cash flow.

As quota shares are the main contributors to the reinsurance portfolio it is considered as appropriate using the assumption of having the same cash flow patterns for gross and ceded reserves.

As described above the main task is to calculate the cash flows of the claims provisions and the premium provisions and the respective discount effect. For this purpose the following cash flow patterns are calculated on a yearly basis:

The ultimate cash flow pattern indicates which share of the ultimate claims costs is paid out in which development period. This pattern starts with the AY as first development year.

The reserves cash flow pattern indicates which share of the (total) reserves is paid out in which future period.

The cash flow patterns are calculated using annual triangles and standard actuarial methods (e.g. Development Factor Method (DFM)).

Finally the cash flow patterns are applied to the undiscounted claims provisions resp. premium provisions to calculate undiscounted cash flows. To allow for a currency specific discounting the undiscounted cash flows / reserves are split into the main settlement currencies.

The cash flows are then multiplied with discount factors to come up with discounted cash flows. The sum of the discounted cash flows results in the discounted reserves.

The discount factors are calculated for each relevant currency by using the respective currency related risk free rate including the volatility adjustment.

#### 4) Risk Margin

The market value of liabilities is defined as the discounted best estimate reserve plus a Risk Margin (RM), also known as Market Value Margin (MVM), representing the cost of capital to run off the business until final settlement. In other words, the risk margin is the cost of holding the necessary capital in excess of the best-estimate of the liabilities. Hence, the risk margin is integral part of the market value of liabilities and links the calculation of liabilities to risk models.

The calculation of the risk margin is based on the assumption that the whole portfolio of (re)insurance obligations, including any related reinsurance contracts is transferred to another (re)insurance undertaking – called reference undertaking - immediately (i.e. t=0). The transfer scenario is defined such that only non hedgeable risks need to be considered. Especially it is assumed that the transfer of insurance and reinsurance obligations includes any reinsurance contracts relating to these obligations and that the reference undertaking is assumed not to have any (re)insurance obligations and any own funds before the transfer takes place. Only after the transfer of the portfolio the reference undertaking would raise eligible own funds, these assets should be considered to be selected in such a way that they minimise the SCR for market risk that the reference undertaking is exposed to. For non-life insurance obligations market risk can be considered to be nil as a result of the above 'transfer' assumptions.

The risk categories to be captured are:

Underwriting risk with respect to the transferred business: premium reserve RC and claims reserve RC. (The premium risk capital is adjusted to reflect the legally bound future premium only, called premium reserve risk capital.)

- Credit risk with respect to reinsurance contracts, SPVs, intermediaries and any other material exposures
- Business risk (Cost and Lapse risk)
- Operational risk

EH Ré SA bases the calculation of risk margin on the internal model SCR. For the risk margin calculation one of the main inputs is the risk capital.

For Reserve Risk and Premium Reserve Risk a roll-forward approach is used which is in line with the usual approach for those risks. Hence, Previous Year Model results are used.

### 5) Counterparty Default Adjustment (CDA)

In order to separate the individual risks as specified under Solvency II, a Counterparty Default Adjustment (CDA) has to be calculated. In the calculation, the risk mitigation effect of reinsurance is taken into account even though the risk of the counterparties' default remains. This has to be considered separately and an adjustment is made to the reinsurance recoveries in form of the CDA.

The following (simplified) version of the CDA (=AdjCD) is calculated:

$$Adj_{CD} = -\max\left((1 - RR).\frac{PD}{1 - PD} \cdot Dur_{\text{mod}} \cdot BE_{rec}; 0\right)$$

where:

- RR = Recovery Rate = the possible % of retrieval even after a Reinsurer defaults
- PD = Probability of Default of the counterparty within the next 12 months.
- Durmod = modified Duration of the (ceded) recoverables
- BErec = Best-Estimate of the (ceded) recoverables, i.e. the total ceded reserves

Motivation of the formula: (a) the formula is a time-discrete simplification of the time-continuous formula with "ln(1-PD)" inside, i.e. the 1st order Taylor-Approx. (b) The CDA is like the Expected Loss for ceded recoverables with a duration of "Durmod" years.

## D.2.2. Level of uncertainty

In this section we are showing both, the uncertainty of undiscounted claims reserves estimations (i.e. stochastic reserve analysis) as well as the sensitivity of Technical Provisions (TP) on certain input parameters.

#### Stochastic Reserving

Stochastic simulations ("Mack-Bootstrapping") are conducted on the IFRS claims reserves by Actuarial for the main lines of business in order to provide reserve distributions around the best estimate reserves. Furthermore, the Actuarial function conducts a range calculation based on aggregated yearly triangle data and scales it to the current reserve levels of EH Group.

As per the Group Actuarial Calculations we found the below spread of pure quantitative and Company Best Estimate (CBE) results for the main lines of business:

		Quantitative	
		Reserves	Qualitative Reserves
France	a	46%	50%
DACH	a	51%	51%
Italy	Cl-dom	51%	51%
UK	a	51%	51%

#### Combined Ratio Analysis

The premium reserves reflect the present value of all future outflows less inflows from future events post the valuation date that will be incurred under the insurer's existing policies that have not yet expired.

Hence, future outflows (i.e. future claims and administrative costs) and future inflows (i.e. future premiums) are taken into account in the premium reserves estimation. The future outflows are estimated via an adjusted combined ratio. As this parameter is a key driver of the premium reserves level, the sensitivity of (undiscounted) premium provisions on changing CRs has been tested and is quite significant:

In k€	Base case	-2%	+2%
Gross	51,920	47,814	56,025
Net	6,568	6,180	6,956

Furthermore, the impact of a 5% change in the Unearned Premium Reserve (UPR) (Cash) have been tested on the premium reserves level. Results are displayed in the tables below:

In k€	Base case	-5%	+5%
Gross	51,920	49,112	54,728
Net	6,568	6,287	6,849

## D.2.3. Material changes in calculation assumptions for technical provisions

As EH Ré SA mainly reinsures business from EH SA, the four following material changes in the relevant assumptions in the calculation of technical provisions that have been required by the National Bank of Belgium (NBB) to EH SA are also applicable to EH Ré SA:

- Tacit renewals
- Minimum premium approach
- Rebate ratio
- UPR

## D.2.4. Differences with technical provisions in financial statements

In MVBS, technical provisions amount as of Q4 2016 was at 545M€. In LUXGAAP the amount was at 690M€. This difference is explained by the three following reasons:

- Technical provisions are not discounted in LUXGAAP. This difference has a negative impact on LUXGAAP valuation of 35M€
- No equalization reserve is recognized in MVBS. This difference has a negative impact on LUXGAAP of 112M€
- No risk margin is recognized in LUXGAAP. This difference has a positive impact in LUXGAAP of 2M€

#### D.2.5. Matching adjustment

EH Ré SA does not apply a matching adjustment.

## D.2.6. Volatility adjustment

The discount effect is currently calculated by taking into account the volatility adjustment (VA) inside the risk-free SWAP (yield) curves. A sensitivity study have been performed where only the EUR SWAP curve with and without volatility adjustment is applied to the cashflows, i.e. omitting the impact of different settlement currencies.

The impact of the volatility adjustment is negligible (only 0.12% deviation between the discounted reserves with VA and without VA).

#### D.2.7. Transitional risk-free interest rate-term structure

EH Ré SA does not apply the transitional risk-free interest rate-term structure referred to in Article 308c of Directive 2009/138/EC.

#### D.2.8. Transitional deduction

EH Ré SA does not apply the transitional deduction referred to in Article 308d of Directive 2009/138/EC.

## D.2.9. Recoverable from mitigation techniques

In 2016, EH Ré SA had reinsurance recoverables of nearly 489M€. The recoverables are coming from non-life excluding health. Of these recoverables, 90.9% come from claims provisions, with the remaining due to premium provisions.

There were no recoverables from special purpose vehicles.

#### D.3. Other liabilities

The following table summarizes the amounts for EH Ré SA other liabilities, classified by other liabilities classes as disclosed in the QRT, for both MVBS valuation and LUXGAAP valuation.

In €	MVBS	LUX GAAP	Explanations
Contingent liabilities			
Provisions other than technical provisions		•	
Pension benefit obligations		•	
Deposits from reinsurers	1,317,000	1,316,781	
Deferred tax liabilities	32,226,180	-	Deferred tax liabilities are not recognized in LUX GAAP
Derivatives		•	
Debts owed to credit institutions		-	
Financial liabilities other than debts owed to credit institutions			
Insurance & intermediaries payables	93,978,720	50,425,229	No discounting in LUXGAAP
Reinsurance payables	72,229,910	12,769,054	Some liabilities are netted with assets in BEGAAP. In MVBS liabilities have to be un-netted Historical LUXGAAP adjustment
Payables (trade, not insurance)	527,000	527,371	
Subordinated liabilities	33,436,000	33,435,597	
Subordinated liabilities not in basic own funds		-	
Subordinated liabilities in basic own funds	33,436,000	33,435,597	
Any other liabilities, not elsewhere shown	548,000	547,648	
Total other liabilities	234,262,810	99,021,681	

## **Deposits from reinsurers**

Deposits from reinsurers include amounts (e.g. cash) received from a reinsurer or deducted by the reinsurer according to the reinsurance contract.

In MVBS, Deposits from reinsurers are recorded at fair value.

#### **Deferred Tax Liabilities (DTL)**

#### Temporary concept:

Deferred taxes shall be valued on the basis of the difference between

- the values ascribed to liabilities recognized and valued in accordance with the EU Directive on Solvency II and
- the values ascribed to liabilities as recognized and valued for tax purposes.

Deferred taxes shall be recognized and valued in relation to all assets that are recognized for Solvency II or for tax purposes.

#### Balance sheet item concept:

Temporary differences between the Solvency II value of the liabilities and its corresponding tax base should be assessed on a single liability basis. The deferred tax calculations should take into account the tax regulations specific to particular liabilities in the applicable tax regimes.

Deferred tax liabilities should not be discounted.

In cases where liabilities are included with zero value or are not recognized in the MVBS, a temporary difference might, nevertheless, arise if their tax value is not nil.

#### **Participations**

In case of revaluations IFRS/MVBS with respect to participations (fully consolidated subsidiaries), no DT on those revaluations are allowed to be booked in MVBS

#### Special funds/ tax transparent entities

In most jurisdictions it is not the special fund which is taxable with its income but the respective owner of the special fund (for tax purposes the special fund is "transparent"). In the MVBS of the regulated parent entity has to include all taxes which refer to the respective regulated entity itself. Therefore, no reporting of "service"

deferred taxes is allowed in the MVBS data submission of special funds and other tax transparent entities. In consequence, "service" deferred taxes in IFRS at the level of the special funds or other tax transparent entities have to be eliminated in the MVBS of these entities. The insurance parent company itself will recognize in its MVBS the respective deferred taxes and potential additional deferred taxes as a reaction of the IFRS-MVBS revaluation of the investment in the special funds or other tax transparent entity.

## Deferred tax netting

Deferred taxes of one taxable entity have to be netted in case the respective offsetting criteria are. Under MVBS the legal entity (solo view) has to ensure that deferred tax netting between different consolidated units belonging to the same solo view already takes place at solo level

## Insurance & intermediaries payables

Insurance and intermediaries payables refer to amounts past due to policyholders, insurers, and other business linked to insurance, but that are not technical provisions. They include amounts past due to (re)insurance intermediaries, e.g. commissions due to intermediaries but not yet paid by the entity. They exclude loans and mortgages due to other insurance companies if they are only related to financing such as loans and mortgages rather than being linked to insurance business.

Due to their short-term nature, the settlement amount is considered to be a good proxy of the fair value for MVBS. However, there might be instances where the settlement amount differs from the fair value.

## Reinsurance payables

Reinsurance payables are amounts past due to reinsurers (especially current accounts) other than deposits that are linked to reinsurance business, but that are not included in reinsurance recoverables. They include payables to reinsurers that relate to ceded premiums. Due to their short-term nature, the settlement amount is considered to be a good proxy of the fair value for MVBS. However, there might be instances where the settlement amount differs from the fair value.

## Payables (Trade, not Insurance)

Payables (trade, not insurance) include amounts due to tax authorities.

Payables are generally recognized at the amounts actually due on repayment (i.e., their settlement amount). Due to their short-term nature, the settlement amount is considered to be a good proxy of the fair value for MVBS. However, there might be instances where the settlement amount differs from the fair value.

#### **Subordinated liabilities**

Subordinated liabilities are debts which rank after other specified debts when the entity is liquidated.

One key characteristic of subordinated liabilities is the existence of a subordination agreement.

In MVBS, subordinated liabilities are valued at fair value. Fair value changes that are driven by changes in the own credit standing of the issuer since issuance of the instrument have to be excluded for Solvency II valuation purposes. Note that such changes would typically be included in the IFRS fair value calculation, and therefore it is standard that the Solvency II valuation of subordinated liabilities differs from the IFRS fair value calculation. The valuation of subordinated liabilities is the same, regardless of whether the debt qualifies as basic own funds or not.

Adjustments that are necessary due to changes in the own credit standing must be reported in a separate account.

## Any Other Liabilities, not Elsewhere Shown

"Any Other Liabilities, not Elsewhere Shown" include any liabilities not included in the other balance sheet items and, thus, represent a miscellaneous category.

Due to the miscellaneous character of this category, the following accounts were allocated to this line item:

Fee payables include accounts payables resulting from investment fund management and distribution. Due to their short-term nature, the settlement amount is considered to be a good proxy of the fair value for MVBS. However, there might be instances where the settlement amount differs from the fair value.

#### Accruals and deferrals

Due to their short-term nature, the settlement amount is considered to be a good proxy of the fair value for MVBS. However, there might be instances where the settlement amount differs from the fair value. In LUXGAAP, Deferred revenue need to be allocated in the income statement for the period(s) to which the revenue relate. Revenue paid in advance (financial instruments, exchange differences and other) need therefore firstly to be allocated on this account. Thereafter the revenue is linearly amortized to the respective revenue account in the income statement over the lifetime covered by the prepayment. Accrued expenses need to be allocated in the income statement for the period(s) to which the expenses relate. Expenses related to the period need to be allocated on this account even if the settlement date is at a later period.

## Puttable equity instruments

Issued puttable instruments are classified as liabilities. This includes liabilities from mandatory redeemable shares, i.e., preference shares that provide for mandatory or give the holder the option to require redemption by the issuer for a fixed or determinable amount at a fixed or determinable date. It could also be liabilities from other puttable equity instruments, i.e., any financial instrument that gives the holder the contractual right to put the instrument back to the issuer for cash or another financial asset.

## Held for sale liabilities

The accounting guidelines for non-current assets and disposal groups held for sale and discontinued operations are provided in IFRS 5. A disposal group shall be allocated to other asset and liability categories depending on their nature and valued accordingly.

#### Other

Account for rounding differences Balance Sheet (BS) and Consolidation account for loss from intercompany sale are per definition zero in MVBS.

### D.3.1. Leasing arrangements

EH Ré SA does not have any financial or operating leases.

## D.3.2. Deferred tax liabilities

On 31 December 2016, the total deferred tax liabilities equalled 32.2M€ (Solvency II value). Deferred tax liabilities are mainly due to temporary differences due to the claims equalization reserve.

#### D.3.3. Economic benefits

EH Ré SA does not recognize any outflows of economic benefits.

## D.3.4. Employee benefits

EH Ré SA does not have any employees.

## D.3.5. Contingent liabilities

EH Ré SA does not recognize any contingent liability.

## D.4. Alternative methods for valuation

For every class of assets, alternative valuation method is used if the asset class price is not quoted on an active market for the same assets. The following table summarizes the asset classes that are valuated using alternative valuation methods.

MVBS asset	Specificities when alternative valuation method	MVBS value (In €)
Collateralised securities		14,262,859
Cash and cash equivalents	Valuated at purchase price	22,887,181
Deposits to cedants	Valuated at purchase price	2,242,000
	Total alternative valuation method	39,392,040

## D.5. Any other information

There is no other information to disclose with regards to valuation for solvency purposes.

## E. Capital Management

#### E.1. Own funds

#### E.1.1. Information on the own funds

## E.1.1.1. Management of the own funds

Capital poses the central resource for EH Ré SA to support the multiple activities. It ties to EH RÉ SA risk strategy which defines the relevant risk appetite with regard to the risk bearing capacity including EH RÉ SA's capital and solvency targets as well as risk limits, thus implementing the EH RÉ SA's business strategy. Capital management describes the set of activities undertaken by EH RÉ SA to ensure its adequate capitalization. The following principles are applied:

- 1. Capital management protects the Group's capital base and supports effective capital management on Group level in line with the Group Risk Policy. It allocates capital to the underlying risk drivers under the budget limited by the risk strategy and with the target of optimizing the expected return under this constraint. Risk considerations and capital needs are integrated into management and decision-making processes. This is done by attribution of risk and allocation of capital to the various segments, lines of business and investments.
- 2. EH RÉ SA facilitates the fungibility of capital from a group-wide perspective by pooling / upstreaming available excess capital to EH Group while at the same time ensuring a sufficient level of capital is held at the local level. This includes a consideration of a buffer above the Minimum Capital Ratio to take into account potential market volatility.
- 3. EH Group ensures to comply with regulatory minimum capital requirements.
- 4. To ensure competiveness, EH Group, however, is committed to a top quartile capitalization and rating relative to its peers.
- 5. Capital is centrally managed in accordance with Group-wide rules and allocated to the benefit of the Group and its shareholders.
- 6. EH RÉ SA capitalization is managed using adequate buffers above minimum regulatory and where applicable rating agency requirements. Excess capital not required for business purposes over the (three year) plan horizon will be up-streamed by EH RÉ SA.
- 7. Capital management seeks to add economic value over our cost of capital.
- 8. EH management is committed to have shareholders participate in the economic development of the Group through dividend payments.
- 9. The capital allocation for steering the business is based on the internal risk capital model also taking into account other constraints (such as rating and liquidity).
- 10. Risk Capital is allocated economically top down to the LEs, businesses or products earning the highest returns (separating underwriting and investment returns for Property and Casualty (P&C) and AM) and shall be embedded into pricing.

#### Capital management strategy

To meet Solvency II requirements in an efficient manner, EH Ré SA has set in place target capitalization ratios and limits to fulfil any regulatory and financial obligations it could have.

In accordance with the standards and guidelines coming from EH Group, EH Ré SA updated its capital management policy in 2016, willing to have an even more precise capital management. EH Ré SA thereby put in place an additional set of limits, to supplement the previous minimum ratios and target ratios, as shown below:

Please refer to Section B.3.3.4 for further details on the capital management strategy.

## E.1.1.2. Description of the own funds

Under Solvency II, Own Funds are distinguished into Basic Own Funds and Ancillary Own Funds. Basic Own Funds are defined as the excess of assets over liabilities plus any qualifying subordinated liabilities. Ancillary Own Funds are defined as any capital resources other than Basic Own Funds that could be called up in order to absorb losses. Ancillary Own Funds are off-balance sheet and require regulatory approval in order to qualify.

EH Ré SA Own funds are defined in line with Solvency II requirements as the consolidation of the excess of assets over its liabilities, reduced by the amount of dividends to be paid (no dividend paid by EH Ré SA).

Own funds can be classified as "basic" own funds or "ancillary" own funds, and in three different tiers depending on their quality.

As of Q4 2016, EH Ré SA own funds are of high quality, all classified as basic own funds in Tier 1.

EH Ré SA does not have any ancillary own funds.

## Composition of own funds (MVBS)

In M€	Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 3
Ordinary share capital (gross of own shares)	16.2	16.2		
Reconciliation reserve	84.4	84.4		
Subordinated liabilities			33.4	-
An amount equal to the value of net deferred tax assets	0.0			0.0
Total basic own funds after deductions	134.0	100.6	33.4	0.0

On 31th December 2016, the amount recognized as subordinated liabilities was 33.4M€. This amount is the same as the one recognized for the year 2015. This subordinated debt have been provided by EH Ré AG for an undefined period (with a minimum of 5 years) and their interests are indexed on the annual rate Euribor 1 year + 0.20 (In 2015 interests were indexed on annual rate Euribor 6 months + 0.20).

## Own funds evolution (MVBS)

in M€	Q4 2016	Q4 2015	Variation
Total assets	880	805	74
Total liabilities	779	<i>7</i> 05	75
Excess of assets over liabilities	101	101	0
- Subordinated liabilities	33	33	0
SII Own funds	134	134	0

Main explanations for the evolution of own funds:

- The increase of assets by +74 M€ is mainly due to the increase of the (Re)insurance receivables by +75 M€, after an accounting correction of +70M€ from the Assets to the Liabilities
- The increase of liabilities by +75 M€ is mainly due to the increase of the (re)insurance payables by +68 M€, in line with the +70 M€ correction of the assets side mentioned above

#### E.1.1.3. SCR and MCR covers

The following table summarizes the available amounts of own funds to cover MCR and SCR.

In M€	Total	Tier 1 - unrestricted	Tier 1 - restricted	Tier 2	Tier 3
Total available own funds to meet the SCR	134.0	100.6	33.4		0.0
Total available own funds to meet the MCR	134.0	100.6	33.4		
Total eligible own funds to meet the SCR	134.0	100.6	25.1	8.3	0.0
Total eligible own funds to meet the MCR	129.3	100.6	25.1	3.6	

MVBS figures

## E.1.1.4. Differences between valuation in financial statements and for solvency purposes

## E.1.1.5. Description of items deducted from own funds

EH Ré SA does not have any ring-fenced or matching adjustment portfolio.

EH Ré SA does not have any item deducted from own funds.

## E.1.2. Additional ratios

EH Ré SA does not disclose any other additional ratios.

#### E.1.3. Reconciliation reserve

The following table summarizes the calculation of reconciliation reserve.

Breakdown of the reconciliation reserve (MVBS)

Value	In M€
100.6	Excess of assets over liabilities
16.2	Other basic own fund items
84.4	Reconciliation reserve

## E.2. Solvency Capital Requirement and Minimum Capital Requirement

#### E.2.1. Amount of SCR and MCR

The table below shows the evolution of the RC components between 2015 and 2016:

in M€	Q4 2016	Q4 2015	Var	%
Market	13	16	-3	-18%
Credit	69	54	15	29%
P/C Underwriting risks	15	15	0	1%
Business Risk	0	1	0	-36%
Operational Risk	3	3	0	8%
Total Standalone RC	101	88	13	14%
Diversification effect	-23	-26	3	-13%
Total Diversified RC	78	62	16	26%
Tax impact	-21	-18	-3	17%
Capital Add-on	20	13	7	54%
Tax relief on add-on	-5	-4	-1	35%
SCR	72	53	20	38%

As the SCR is calculated using the Internal Model, it is subject to supervisory assessment.

In 2016, the amount accounted for EH Ré SA's MCR is 17.9 M€. It has changed by +2% since 2015 where the MCR amount accounted was 17.6M€.

#### E.2.2. Standard formula

EH RÉ SA does not use the standard formula and has instead developed its own internal model.

#### E.2.3. Inputs to calculate the MCR

The Minimum Capital Ratio for EH Ré SA based on internal and standard model is shown below for Q4 2016. For the standard model as well as for the internal model, the MCR equals the floor of 25% of the SCR. The calculation approach, which is the one recommended by the EIOPA, is exactly the same as in previous quarters and is explained below the table.

IM/SM	MCR	AMCR	SCR	MCR linear	45% SCR	25% SCR	MCR combined
SM	27,480,299	3,600,000	109,921,194	16,610,761	49,464,537	27,480,299	27,480,299
IM	17,922,139	3,600,000	71,688,556	16,610,761	32,259,850	17,922,139	17,922,139

The main inputs that enter into the calculation of EH Ré SA's MCR are summarized in the table below Main inputs for MCR calculation

	Segment (SII LoB)	provisions	Factor for premiums written	
9	Credit and surety insurance and proportional reinsurance	17.7%	11.3%	

## E.2.4. Material changes to SCR and MCR

No material change affected both EH Ré SA's SCR and MCR.

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

EH Ré SA does not use the duration-based equity risk sub-module in the calculation of its SCR as it is not applicable to its business.

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

#### E.4.1. Description of the internal model

#### Purposes for using an internal model

EH Ré SA has implemented an internal model for the computation of the SCR attached to the Credit and Surety portfolio.

The standard formula for the representation of the credit and surety premiums risk has a certain number of flaws which, for a pure credit and surety insurance company, leads to have some doubts on the SCR deriving from the standard formula. As these flaws can be dealt with by modelling the credit & surety premiums risk using a credit risk model, EH Ré SA has decided to opt for an internal model.

Following elements are considered to be flaws attached to the SCR computation on credit and surety premiums risk:

- Separation of the SCR premiums and SCR Cat Risk
- Application of reinsurance treaties in the standard formula leading to either under and over estimation of the SCR

- Overestimation of the SCR premiums by integrating in the net earned premiums paid to reinsurers for non-proportional treaties
- Underestimation of nonlinear risk mitigation features present in the policies
- Backward looking values representing the effect of risk mitigation measures implemented in the policy
- Computation based on the premiums which is not the most adequate measure of the risk

The credit insurance business of EH Ré SA is to take a share of the credit risk borne by the policy-holder on its buyer. The classical credit risk modelling approaches, in particular those used in the banking world, are fully applicable to EH Ré SA's situation in order to simulate a loss distribution representing the expected loss with a one year time horizon.

#### Structure of the internal model

A credit risk modelling is essentially a two steps approach:

- Simulation of the exposure which are defaulting leading to define the Exposure at Default (EAD)
- Application of the mitigation factors either present in policies, in the reinsurance treaties or other mitigation clauses leading to define the Ultimate Loss (UL) borne by the insurance company.

This modelling framework allows addressing all the issues stated in the point above.

- Production of one loss distribution covering all kind of loss scenarios and loss events
- Risk mitigation features (either present in policy or a reinsurance treaty) can be modelled the way they are functioning and not estimated
- Risk mitigation features attached to the policies are representing the current status of the portfolio
- The model is based on exposure which is key metrics of the risk taken
- The parameters are defined in order to represent the risk borne by EH Ré SA on a one year time horizon

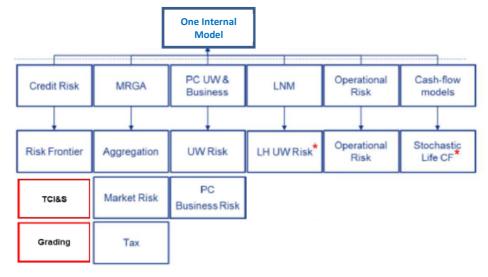
## Scope of internal model

The EH Ré SA internal risk capital model covers:

- All of its major insurance operations through its Trade Credit Insurance and Surety (TCI&S), grading, underwriting (P&C UW & Business) and operational risk models
- Its investment portfolio through its market risk and credit risk models
- Its pension funds through its cash-flow and Life Non Market risk (LNM) models

The picture below depicts the scope and structure of the Internal Model.

## Structure of the internal model



<sup>\*</sup> Not in the scope of EH Ré SA

#### E.4.2. Methodologies

#### E.4.2.1. Process within the internal model

EH Ré SA uses a full internal model to calculate its risk capital. The main methodologies and assumptions used in its internal model are detailed in the following sections.

#### E.4.2.1.1 Market Risk

#### Definition of the measurement of the risk

Value at Risk (VaR): Quantifies the change in economic value as the minimum amount of capital required to ensure economic solvency for shock scenarios calibrated to a one year period with a given probability level. A probability level of 99,5% is retained for the risk capital and a level of 99,93% is retained for the economic capital.

The modelling approach within market risk has the four following generic components.

- The definition of risk factors and of their impacts
- The distributional assumptions
- The calibration of the risk factors
- Valuation of positions

## Change of economic capital

The approximation is the assumption that the underlying portfolio remains unchanged while being valued, so that risk factors are applied to the current portfolio positions, instantaneously at the as-of-date.

## **Distributional assumptions**

All risk factors reflecting market risk have either a lognormal or normal distribution.

## Calibration of risk factor distribution and to Measurement period

EH Ré SA calibrates the distribution of risk factors on historical observation of weekly time series. This means the distribution of risk factors needs to be scaled to reflect this longer horizon.

## Scenario based aggregation and its advantages

By means of Monte Carlo simulations, i.e. generation of independent samples of scenarios, EH Ré SA generates a set of random scenarios, sufficiently large to estimate statistical quantities.

#### E.4.2.1.2 Reserve risk

#### **Reserving Uncertainty**

Loss reserving is the process of forecasting unpaid liabilities. In order to measure the uncertainty embedded with forecasting, it is needed to obtain a predictive distribution of the unpaid liabilities and the associated cash flows. For most stochastic reserving models discussed in the actuarial literature it is not easy or rather impossible to obtain a predictive distribution analytically. Therefore, a simulation approach was adopted: bootstrapping.

#### **Cash flow Estimation for Reserve Risk**

Where a paid bootstrap has been used to estimate reserve uncertainty in a LoB, the projected cash flow for that LoB is already available as defined by the bootstrap.

Where either an incurred bootstrap or a lognormal simulation of the reserve has been used a cash flow estimate is required in order to obtain an estimation of the paid claims over the first future time period.

#### **Dependencies**

A rank normal correlation is applied within the ultimate gross loss distributions of the reserving LoBs.

## The emergence pattern methodology

The evaluation of risk as it manifests over the first calendar year of development is based on a methodology using Emergence Patterns (EP). These are patterns which describe the loss recognition over time of both premium and reserve risk.

#### **Risk Capital**

Even know the SCR is defined using the Value at Risk at the confidence level of 99.5%, EH Ré SA uses the term Ultimate Reserve Risk Capital for the difference between the VaR at the 99.93 percentile of the ultimate loss distribution at the horizon date and the mean of the ultimate loss distribution at the as-of-date. For a profit distribution this is the difference between the 0.07 percentile and the mean.

The Risk Margin is calculated according to the method prescribed by Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) for Solvency II.

## **Loss Reserve Risk Margin Calculation**

The Risk Margin by LoB is calculated for the Loss Reserves. First, the net risk profile by LoB is mapped to the Solvency II LoBs. Next, the Risk Capital is calculated and then used to generate the Risk Margin.

## **Premium Reserve Risk Margin Calculation**

The methodology for calculating the Risk Margin for the premium reserve is identical to that used for the loss reserves for all calendar years except the first. Using the net risk profile from the emergence pattern model section, the capital required for the Premium Risk is calculated.

#### E.4.2.1.3 Credit risk

EH decided to manage credit risk calculation with the combined use of two different models:

- Moody's KMV (MKMV) model Risk Frontier which stands for reinsurance and investments portfolios;
- EH Internal Model (EH IM) which is a specific model developed for credit insurance portfolio.

Credit risk capital is calculated at first separately for each sub-type of credit risk prior to be consolidated across credit risks.

MKMV Risk Frontier is a Moody's solution for Reinsurance and Investment modelling.

EH IM is an internal model developed by EH in order to capture specificities of credit insurance business (buyer focused risk assessment and default definition, policy features and reinsurance structure).

## E.4.2.1.3.1 Credit risk for reinsurance and investment modelling

Credit risk is measured as a change in market value of the portfolio over a certain time horizon, due to defaults and credit quality migrations.

Risk capital calculation is done through internal models based on a Value-at-Risk ("VaR") approach. Following this approach, the loss in the portfolio value of businesses is assessed within a one year timeframe for a large number of shock scenarios with a probability of occurrence up to 99,5% for risk capital calculation and 99,93% for economic capital calculation. This loss distribution provides Credit Value at Risk (CVaR) and Expected Losses (EL).

The required internal risk capital is defined as the difference between the portfolio value under best estimate conditions and the portfolio value under the adverse conditions associated with the desired confidence level. The loss distribution is then derived.

For investment portfolio, Exposure at Default (EAD) and Loss Given Default (LGD) are estimated following a linear model derived from a statistical analysis of historic data by asset classes.

## E.4.2.1.3.2 Credit risk for trade credit insurance & surety

The Exposure at Default (EaD) is defined as the exposure of the buyer at the time of the default of the claims declared before application of any loss mitigation techniques.

EH is using a Merton-type approach as a basis to build its default process using a Gaussian copula framework.

The Loss Given Default (LGD) is obtained by applying to the EaD all possible loss reduction features.

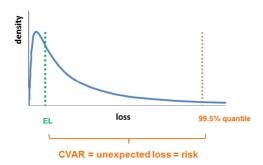
Then the simulation is based on monte carlo numerical method based on correlated Gaussian path.

## A model based on a static approach of the risk underwriting policy

EH Ré SA chose to integrate management actions that are foreseen for the next year.

EH Ré SA has opted for the use of a simulation approach to determine its Loss distribution. It is the natural approach in presence of non-homogeneous portfolios in high dimension. For Solvency II purposes, the risk capital is then measured from the simulated loss distribution as follows:

CVaR99.5% = 99.5% quantile loss - Expected Loss (EL).



This choice has also the advantage of allowing the simulation of "extreme scenarios", in particular the increase in frequency of claims (multiple loss events) and the occurring of large losses (single loss events). Those events are covered by the man-made risk component of the standard formula.

## A model distinguishing the systemic risk and the idiosyncratic risk

In the case of trade credit insurance, a particular limit/exposure is triggered if an invoice sent by the policyholder is not paid by the buyer. In general a default event leading possibly to a loss is triggered as a reported insured claim.

The central element of the model is to determine in a particular scenario

- whether or not a claim is to be expected on a counterpart
- whether or not the triggered claim will lead to an indemnification by EH
- whether or not EH Group can recover part of the indemnified amount later on to be indemnified

The capacity of the buyers/counterparties to fulfil their commitments (e.g. to pay the received invoices) can depend either on its own actions but also on the economic environment. As a consequence, it has been judged that the commonly used credit factor modelling that distinguishes an idiosyncratic risk and a systemic risk is considered as the most adequate for the simulation of losses in the Trade Credit Insurance and Surety portfolio.

#### A point-in-time framework

The calibration of the parameter reflects the situation of the coming 12 months period.

## E.4.2.1.4 Aggregation and diversification

Value at Risk (VaR) quantifies the change in economic value as the minimum amount of capital required to ensure economic solvency for shock scenarios calibrated to one year period with a given probability.. The Required Internal Risk Capital is defined as the difference between the portfolio value under best estimate conditions and the portfolio value under the adverse conditions associated with the desired confidence level.

The aggregation method for EH Ré SA internal model is based on an integrated Monte-Carlo simulation for market risk taking marginal risk distributions for non-market risk into account by modelling dependencies via a Gaussian Copula approach and taken into account diversification effects across sources of risk.

## E.4.2.2. Difference between standard model and internal model E.4.2.2.1 Market risk

Note: The scopes of IM & Standard Model (SM) computations are identical for the market risk. It covers the EH Ré SA investment portfolio and the investments attached to the German defined benefit pension funds). There are however some differences in risk as some risks covered in the market risk of the SM are covered in the credit risk of the IM.

The main differences between IM and SM for Credit spread risk are:

- For Covered and Other Bond: lower shocks are applied in the Internal model compared to the Standard Model
- <u>Intra-Risk Diversification:</u> The SM approach does not allow for any diversification when aggregating all the values of shocked instruments when the IM approach allows for a significant diversification between the asset classes.

Other differences come from difference in granularity/calibration between the two models.

Note also that European Economic Area (EEA) sovereign bonds, AAA and AA rated non-EEA sovereign bonds, supranational, and mortgage loans on residential property are not exempt from spread risk in the internal model.

- 1. The difference of capital requirements between standard model and internal model for **Foreign Exchange risk** comes from two main effects:
- <u>Intra-Risk Diversification:</u> the Standard model does not allow for diversification in the submodule which is not the case in the IM
- <u>Level of Shocks:</u> While a single level of shock of 25% is defined in the SM approach, a specific level of shock is used in the IM.
- 2. The difference of capital requirements between IM and SM for **Interest rates risk** comes from the following effects:
- In Standard Model, Up and down stresses % changing the yield curve vary by term to maturity. A minimum is defined for IR up stress..
- In Internal Model, changes in the yield curve like twists are considered, shifts for long-term are set. In addition, volatility stress is applied to yield curves.
- In Internal Model, there is diversification of Interest Rates risk.
- 3. Equity risk

The average shock level for Equity type 1 and Equity type 2 are slightly higher in IM than SM.

4. Property risk

The average shock level for property risk is lower in IM than in SM.

#### E.4.2.2.2 Credit risk

The Internal Model credit risk covers some component of the Standard Model market risk and of the non-life underwriting risk. The SM counterparty default risk components are all covered by the IM SM credit risk.

The IM credit risk covers risks which are not covered in the SM (counterparty risk on European State bonds and counterparty risk on the SCR equivalent losses ceded to reinsurers).

As a consequence, these differences added to the differences in classification/granularity and calibration between the models and the differences in modelling (discrete approach for SM vs stochastic approach for IM) explain the differences in credit risk.

#### E.4.2.2.3 Non-Life Risks:

Both models capture the same types of risks EH Ré SA is facing but following different classification and methods.

Both models cover:

- The premium, reserve and business risk due to cancellation of policies
- The ordinary claims level and the extraordinary claims level (recession, single loss events)

The classification is different between the two models. All risks (premium, reserve and business) are under non-life risk for the SM while the equivalent of the premium risk of the Trade Credit Insurance and Surety business is classified under credit risk for the IM and the lapse risk is under business risk. This has a double impact representation and diversification

On components classified both under the non-life risks, the main difference lies in:

- The methodology (discrete approach for the SM vs stochastic approach for the IM)
- The calibration (across the industry for the SM vs own calibration for the IM).
- The introduction of a diversification between "sub" lines of business (I.e. different products classified under credit and surety for EIOPA) of EH Ré SA and a diversification between countries
- The diversification approach (diversification limited to non-life risk in the SM while extended to all risk in the IM)

The relative weights of these various components contribute all significantly to the difference between IM and SM.

On the Trade Credit Insurance and Surety portfolio, EH Ré SA has developed its own model which has been classified as credit risk.

This IM presents the following significant differences with the SM:

- Computation at the level of the risk (buyer (i.e. client of the insured which must pay its invoice)
- Random scenario generation to simulate the loss distribution allowing to cover different extreme scenario which are embedded in the premium risk and not captured in parallel

The results of the IM and its comparison to the SM shows that the significant difference is due to the non-justified by EIOPA calibration of the recession risk and the fact that the calibration of the premium risk by EIOPA is not in line with our own experience (EIOPA is roughly +50% higher than EH own calibration using EIOPA method) while the contribution of the large/single losses to the SCR are equivalent.

#### E.4.2.2.4 Business Risks

Both models try to capture the deterioration of future earnings following a shock in terms of commercial activity. In the internal model, the business risk has 2 components:

- One not comparable with the standard model (the new production risk SCR equal to the fixed cost attached to the new production)
- One which is partially comparable with the standard model (retention risk loss of operating profit to due to a less performant than anticipated renewal campaign)

The standard model covers only this second risk.

However, on the component which philosophy is similar, the calibration is not comparable and therefore the results are not directly comparable:

- Internal model loss of operating profit on 100% of the portfolio
- Standard model loss of operating profit on the profitable portfolio

## E.4.2.2.5 Operational risk

The SM and IM approaches are significantly different. The IM is based on own expert scenarios of operational risk while the SM is based on a across the industry calibration. As a consequence, EH Ré SA will not comment on the difference between the two models.

#### E.4.2.3. Diversification

The diversification mechanisms are significantly different due to:

- all differences reported in the components of the pre diversified SCR (classification of risk, calibration of risk...).
- calibration factors which are different (in particular for the operational risk which is diversified in the IM and not in the SM).
- the nature of the SM (discrete approach) and the nature of the IM (stochastic modelling).

As a consequence, EH notes that the diversification ratio is similar, recognises that both approaches have been adequately computed and understands both results but cannot comment on this similarity of results.

#### E.4.2.3.1 Tax relief

The tax relief methodology is identical between SM and IM computation.

Both methodologies calculate per branch the minimum of :

- the tax rate multiplied by the Risk Capital (if necessary splitting the Risk Capital per tax rate category)
- the DTL in the MVBS

The difference in tax relief comes from the fact that in the IM, the tax relief is equal to tax rate multiplied by Risk Capital. While in the standard model, it is a mix between the two components (tax rate applied to SCR and DTL in MVBS).

## E.4.3. Data quality

EH Ré SA has implemented a data quality framework across the whole company in accordance with the Solvency II expectations. Thus, EH Ré SA has produced all necessary deliverables with roles and responsibilities for each of them adding to an overall data governance organization.

Hence, the EH Ré SA data quality framework has set in place specific committees at different levels (the Group Data Quality Council at strategic level and the Data Committee at operational level) and a clear definition of the stakeholders' roles and responsibilities with validated attributions.

Moreover, in order to monitor the quality of data, KPIs have been implemented, are monitored and reported to the various committees through data quality dashboards. This consolidation and reporting towards data committees are executed in such a way to be aligned to the EH quarterly risk capital closing process.

These KPIs are reported separately: KPIs per risk type on one side and IT KPIs on the other side.

Hereunder is a Data Quality Dashboard (DQD) as of Q4 2016 showing that the quality of the data used at EH Ré (both AG and SA) to calculate the RC is totally under control; no KPIs at EH Ré level are assessed as not effective yet (KO).

	Accu	racy	Comple	teness	Confo	rmity	Consis	tency	Duplio	ation	Timel	iness	Tot	al
Risk Type	KPI#	KO#	KPI#	KO #	KPI#	KO #	KPI#	KO#	KPI#	KO#	KPI#	KO #	KPI#	KO#
Business Risk	1	0	0	0	0	0	1	0	0	0	1	0	3	0
Credit Risk	5	0	2	0	0	0	3	0	0	0	1	0	11	0
IT System Risk	0	0	2	0	2	0	0	0	2	0	4	0	10	0
Market Risk	1	0	10	0	7	0	2	0	0	0	1	0	21	0
Operational Risk	1	0	0	0	0	0	1	0	0	0	1	0	3	0
Premium Risk	2	0	0	0	0	0	1	0	0	0	3	0	6	0
Reserve Risk	2	0	0	0	0	0	1	0	0	0	3	0	6	0
Tax Risk	3	0	0	0	0	0	1	0	0	0	3	0	7	0
Total	15	0	14	0	9	0	10	0	2	0	17	0	67	0

Note: The Credit Risk KPIs only cover the "Investment" and "Reinsurance" parts. The "Insurance" part is covered at BU level, as well as the Reserve Risk.

## E.4.4. Risks not covered by standard formula but covered by internal model

The only risk that is not covered by the standard formula but that is covered by the internal model is the business risk. It is composed of both Lapse risk and Cost risk as defined below.

- Lapse risk: the risk including all policyholder behaviour and all options by the policyholder that are deemed a risk driver.
- Cost risk: the risk of a budget deficit resulting from the fact that fixed costs are accompanied by lower returns that planned. The cost risk is coming from 2 main components (1) Persistency Risk i.e. the risk that renewal rates for existing P&C contracts will drop, leading to lower contribution margins and (2) New Business Risk i.e. the risk of not writing new business and thus not earning premiums needed to cover fixed acquisition costs.

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

#### E.5.1. Non-compliance with the Minimum Capital Requirement

EH Ré SA is compliant with the Minimum Capital Requirement.

## E.5.2. Non-compliance with the Solvency Capital Requirement

EH Ré SA is compliant with the Solvency Capital Requirement.

#### E.6. Any other information

EH Ré SA does not have any additional disclosures regarding its capital management.

## Appendix 1: Key terms and abbreviations

Terms/Abbreviations	Description
SA	Société Anonyme
SFCR	Solvency and Financial Condition Report
FY	Fiscal Year
CRO	Chief Risk Officer
EH Ré SA	Euler Hermes Reinsurance SA
CAA	Commissariat aux Assurances
EH Ré AG	Euler Hermes Ré AG
EH Group	Euler Hermes Group
MMEA	Mediterranean countries, Middle East and Africa
APAC	Asia and Pacific
CIFS	Critical or Important Function or Services
ORSA	Own Risk and Solvency Assessment
TRA	Top Risk Assessment
IVU	Independent Validation Unit
SII	Solvency II
MVBS	Market Value Balance Sheet
VA	Volatility Adjustment
MCR	Minimum Capital Ratio
SCR	Solvency Capital Ratio
EU	European Union
EH SA	Euler Hermes SA
UW	Underwriting
IFRS	International Financial Reporting Standards
LUXGAAP	Luxembourg GAAP
EH WA	Euler Hermes World Agency
TCU	Transaction Cover
LOB	Line of Business
QS	Quota Share
XoL	Excess of Loss
CY	Current Year
PY	Previous Years
AZ	Allianz
SLA	Service Level Agreement
EH Ré	Euler Hermes Reinsurance
LRC	Loss Reserve Committee
MMCD	Market Management, Commercial and Distribution Function
IT	Information Technology
CFO	Chief Financial Officer
RSU	Restricted Stock Units
ASPP	Allianz Sustained Performance Plan
AEI	Allianz Equity Incentive
MTB	Mid Term Bonus
HR	Human Resource
ESPP	Employee Stock Purchase Plan
KPI	Key Performance Indicator
CFO RSU ASPP AEI MTB HR ESPP	Chief Financial Officer Restricted Stock Units Allianz Sustained Performance Plan Allianz Equity Incentive Mid Term Bonus Human Resource Employee Stock Purchase Plan

AMSB	Administrative Management or Supervisory Board
IMAP	Internal Model Approval Process
ASMG	Allianz Standards on Model Governance
CIR	Credit Insurance Risk
PAAC	Parameters & Assumptions Approval Committee
R&CM	Risk & Capital Management
BU	Business Unit
RIC	Risk Information and Claims
CA	Chief Actuary
VAC	Validation Coordinator
MO	Model Owner
MAAC	Model and Approval Adjustment Committee
ORGS	Operational Risk General System
VAL	Validation
BoD	Board of Directors
LE	Legal Entity
IM	Internal Model
CEO	Chief Executive Officer
AFR	Actuarial Function Report
OE	Operating Entity
BoM	Board of Management
LOP	Local Outsourcing Policy
CAT risk	Catastrophic risk
ESG	Economic Scenario Generator
RC	Risk Capital
IR	Interest Rate
USD	United States Dollar
PLN	Polish Zloty
GBP	Great Britain Pound
EUR	Euro
ALM	Asset Liability Management
ITG	Investment and Treasury Group
ABS	Asset Backed Securities
MBS	Mortgage-Backed Securities
AM	Asset management
FX	Exchange rate
EQ	Equity
SAA	Strategic Asset Allocation
AA	Asset Allocation
EPIFP	Expected Profit Included in Future Premiums
EIOPA	European Insurance and Occupational Pensions Authority
UK	United Kingdom
MSCI EMU	Morgan Stanley Capital International European Economic and Monetary Union Index
MSCI USA	Morgan Stanley Capital International United State of America Index
MSCI EM	Morgan Stanley Capital International Emerging Markets Index
CRisP	Credit Risk Platform
RCSA	Risk and Control Self Assessment

ScA	Scenario Analysis
OREC	Operational Risk Even Capture
QRT	Quantitative Reporting Templates
DTA	Deferred Tax Assets
DT	Deferred Taxes
CDA	Counterparty Default Adjustment
SPV	Special Purpose Vehicle
ERM	Enterprise Risk Management
FP	Future Premiums
GWP	Gross Written Premiums
CI	Credit Insurance
WP	World Program
AY	Attachment Year
CR	Combined Ratio
AE	Acquisition Expenses
PR	Premium Received
RR	Recovery Rate
DFM	Development Factor Method
RM	Risk Margin
MVM	Market Value Margin
PD	Probability of Default
TP	Technical Provisions
CBE	Company Best Estimate
UPR	Unearned Premium Reserve
NBB	National Bank of Belgium
DTL	Deferred Tax Liabilities
BS	Balance Sheet
P&C	Property & Casualty
EAD	Exposure at Default
UL	Ultimate Loss
TCI&S	Trade Credit Insurance & Suretyship
LNM	Life Non-Market
EP	Emergence Patterns
CEIOPS	Committee of European Insurance and Occupational Pensions Supervisors
MKMV	Moody's KMV model
CVaR	Credit Value at Risk
EL	Expected Loss
LGD	Loss Given Default
SM	Standard Model
EEA	European Economic Area
DQD	Data Quality Dashboard
RiCo	Risk Committee
FiCo	Financial Committee

## **Appendix 2: Publically disclosed QRTs**

Publically disclosed quantitativ Group main website: <a href="http://www.euluncolor.org">http://www.euluncolor.org</a>	ve reporting templates lerhermes.com/	(QRTs) can be	found on the Eule	r Hermes

## **Appendix 3: Disclaimer**

To the best of the Company's knowledge, the information contained herein is accurate and reliable as of the date of publication. However the Company does not assume any liability whatsoever for the accuracy and completeness of the information contained herein.