

## SCOR Global Life

### Market Consistent Embedded Value 2013

	<b>Contents</b>	<b>Page</b>
1	Introduction .....	2
2	Covered Business .....	3
3	Market Consistent Embedded Value Results .....	4
3.1	Components of the MCEV .....	4
3.2	MCEV impact of the acquisition of the former Generali U.S. ....	5
3.3	Analysis of MCEV Earnings .....	6
3.4	Value of New Business (VNB) .....	8
4	Sensitivity Analysis .....	9
5	Reconciliation of the MCEV to IFRS Equity and Group MCEV .....	10
6	Methodology .....	11
6.1	Shareholder Net Worth (SNW) .....	11
6.2	Required Capital (RC) .....	11
6.3	Free Surplus (FS) .....	11
6.4	Value of In-Force (VIF) .....	11
6.5	Present Value of Future Profits (PVFP) .....	12
6.6	Value of New Business (VNB) .....	12
6.7	Frictional Costs of Required Capital (FCRC) .....	12
6.8	Cost of Residual Non Hedgeable Risks (CoRNHR) .....	12
6.9	Time Value of Financial Options and Guarantees (TVFOGs) .....	13
6.10	Consolidation .....	13
6.11	Change in Embedded Value .....	13
6.12	Sensitivity Calculations .....	14
7	Assumptions .....	15
7.1	Operating Assumptions .....	15
7.2	Economic Assumptions .....	16
7.3	Tax Assumptions .....	19
8	Disclaimer .....	20
9	External Opinion .....	21
	Glossary .....	22

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 1 Introduction

This document contains details of the 2013 Market Consistent Embedded Value (MCEV or Embedded Value) of SCOR Global Life. SCOR calculates the MCEV of its Life and Health business in accordance with the CFO Forum's Market Consistent Embedded Value Principles<sup>1</sup>. In this document MCEV refers to these principles.

Note that SCOR does not report an analysis of change in Group MCEV. In all other respects this disclosure complies with the MCEV Principles.

Towers Watson has been engaged to review the MCEV. The scope and conclusions of this review are stated in section 9 below.

This MCEV disclosure should not be viewed as a substitute for SCOR SE's primary financial statements.

---

<sup>1</sup> Copyright Stichting CFO Forum Foundation 2008

6 May 2014

### 2 Covered Business

The MCEV covers 100% of the Life and Health reinsurance business of SCOR, written by the following operating entities (including all their branches), which in the following are collectively referred to as SCOR Global Life:

- SCOR Global Life SE, Paris
- SCOR Global Life Reinsurance Ireland Ltd., Dublin
- SCOR Global Life Americas Reinsurance Company, Delaware
- SCOR Global Life Reinsurance Company of Delaware, Delaware
- SCOR Global Life Reinsurance International (Barbados) Ltd., Bridgetown
- SCOR Life Assurance Company, Delaware
- SCOR Life Reassurance Company, Delaware
- SCOR Global Life Australia Pty. Ltd., Sydney
- SCOR Global Life USA Reinsurance Company, Delaware
- SCOR Reinsurance Asia-Pacific Pte. Ltd., branch for South Korea
- SCOR SE, branch for China, Beijing
- SCOR Reinsurance Company (Asia), Ltd., Hong Kong
- SCOR Perestrakhovaniye Russia, Moscow
- SCOR Africa Limited, South Africa

The former SCOR Global Life Reinsurance Company of Texas, Dallas has been renamed and redomesticated as SCOR Global Life Reinsurance Company of Delaware, Delaware.

The MCEV covers the former Generali U.S. Holdings, Inc. ("Generali U.S.") business acquired as of 1 October 2013.

## 2013 Market Consistent Embedded Value - Supplementary Information

### 6 May 2014

### 3 Market Consistent Embedded Value Results

#### 3.1 Components of the MCEV

	MCEV 2012	MCEV 2013
Shareholder Net Worth (SNW)	1,542.1	1,912.7
<i>Required Capital (RC)</i>	917.3	1,199.9
<i>Free Surplus (FS)</i>	624.8	712.7
Value of In-force Business (VIF)	1,914.0	2,552.2
<i>Present Value of Future Profits (PVFP)</i>	2,791.7	3,581.6
<i>Time value of Financial Options and Guarantees (TVFOGs)</i>	-5.6	-6.4
<i>Frictional Costs of Required Capital (FCRC)</i>	-72.7	-123.0
<i>Cost of Residual Non-Hedgeable Risks (CoRNHR)</i>	-799.4	-900.0
<b>Market Consistent Embedded Value</b>	<b>3,456.1</b>	<b>4,464.8</b>

(After tax, in €m)

Table 1: MCEV 2012 and MCEV 2013 of SCOR Global Life

At end 2013, SCOR Global Life's MCEV was 29.2% higher than the MCEV at end 2012. This increase was brought about by the acquisition of the former Generali U.S. business and the good performance of the business during the period.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 3.2 MCEV impact of the acquisition of the former Generali U.S.

SCOR completed the acquisition of 100% of the former Generali U.S. Holdings Inc., on 1 October 2013 for a total consideration of €587m. The impact of this acquisition is fully reflected in MCEV 2013. This business is referred to as Generali U.S. business in the rest of this document.

There was a strong Embedded Value gain of €437.7m on the purchase of the Generali U.S. business, as shown in the following table:

MCEV of the Generali U.S. business as at 31 December 2013	1,038.8
Purchase price	-587.0
Transaction costs (net of tax)	-14.0
<b>MCEV gain on purchase</b>	<b>437.8</b>

(After tax, in €m)

Table 2: MCEV impact of the acquisition of the Generali U.S. business

In relation to this acquisition, SCOR Global Life received a capital allocation of €364m in the form of an internal loan from its parent company, SCOR SE.

## 2013 Market Consistent Embedded Value - Supplementary Information

### 6 May 2014

### 3.3 Analysis of MCEV Earnings

	Free Surplus	Required Capital	VIF	MCEV
<b>MCEV 2012</b>	<b>624.8</b>	<b>917.3</b>	<b>1,914.0</b>	<b>3,456.1</b>
Opening adjustments (capital movements)	-183.0	-	0.0	-183.0
<b>Adjusted MCEV 2012</b>	<b>441.8</b>	<b>917.3</b>	<b>1,914.0</b>	<b>3,273.2</b>
Value of new business	-246.8	159.1	428.1	340.3
Expected existing business contribution (reference rate)	0.4	0.0	90.0	90.3
Expected existing business contribution (in excess of reference rate)	-	-	-	-
Transfers from VIF and required capital to free surplus	293.6	-116.6	-177.0	-
Experience variances	-50.7	-5.8	123.7	67.1
Assumption changes	-13.5	7.1	10.5	4.2
Other operating variances	-79.2	-14.8	-6.4	-100.4
<b>Operating MCEV earnings</b>	<b>-96.3</b>	<b>29.0</b>	<b>468.9</b>	<b>401.6</b>
Economic variances	51.6	0.0	109.0	160.6
Other non-operating variances	-0.4	-	5.9	5.5
<b>Total MCEV earnings</b>	<b>-45.1</b>	<b>29.0</b>	<b>583.8</b>	<b>567.7</b>
Closing adjustments (foreign exchange movements)	-48.0	-40.6	-89.2	-177.8
Capital increase for Generali U.S. acquisition	364.0	-	-	364.0
MCEV gain on Generali U.S. purchase	0.0	294.2	143.6	437.8
<b>MCEV 2013</b>	<b>712.7</b>	<b>1,199.9</b>	<b>2,552.2</b>	<b>4,464.8</b>

(After tax, in €m)

Table 3: Analysis of change in MCEV

**Operating MCEV earnings** of €401.6m were 11.6% of the MCEV 2012.

**Total MCEV earnings** of €567.7m were 16.4% of the MCEV 2012.

**Opening adjustments** of -€183.0m are net capital movements from SCOR Global Life to SCOR SE in 2013, consisting of decreases of allocated capital, fees and interest paid by SCOR Global Life to SCOR SE. The capital allocation received in relation to the acquisition of the Generali U.S. business is presented separately.

**Experience variances** of €67.1m were due to portfolio optimisations on US and UK business, partly offset by negative claims experience on US, French and UK business.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

**Assumption changes** are modestly positive, and mainly result from lower projected maintenance expenses.

**Other operating variances** of -€100.4m in 2013 were mainly driven by modelling improvements on US business and improvements in the modelling of tax in France.

**Economic variances** of €160.6m are primarily due to a fall in the cost of residual non-hedgeable risks resulting from higher interest rates, and favourable investment returns over the year.

**Other non-operating variances** of €5.5m are primarily due to a reduction in corporate tax rates in the UK.

**Closing adjustments** of -€177.8m were the effects of foreign exchange movements, primarily the fall of the US dollar against the Euro.

The **Capital increase for Generali U.S. acquisition** of €364m represents the internal loan for the acquisition of the Generali U.S. business.

The **MCEV gain on Generali U.S. purchase** is the added Market Consistent Embedded Value from the acquisition of the Generali U.S. business determined as the MCEV of the business on 31 December 2013 less the purchase consideration and transaction costs as at 1 October 2013.

## 2013 Market Consistent Embedded Value - Supplementary Information

### 6 May 2014

#### 3.4 Value of New Business (VNB)

	MCEV 2012	MCEV 2013
VNB	122.3	340.3
PVNBP	3,428.5	6,281.1
New business margin	3.6%	5.4%

(After tax, in €m)

Table 4: VNB and new business margins on MCEV 2012 and 2013

The increases in VNB and new business margin compared to the 2012 values are mainly due to growth in new business from the existing franchise and large deals written in 2013.



## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 4 Sensitivity Analysis

	<b>MCEV (in €m)</b>	<b>Change (in €m)</b>	<b>% Change 2013</b>
Base case	4,464.8		
Mortality/Morbidity -5% (life insurance)	6,005.5	+ 1,540.6	+ 34.5%
No mortality improvements (life insurance)	2,253.2	- 2,211.7	- 49.5%
Mortality/Morbidity -5% (annuities)	4,441.2	- 23.6	- 0.5%
Lapse rates -10%	4,636.7	+ 171.9	+ 3.8%
Maintenance expenses -10%	4,555.6	+ 90.8	+ 2.0%
Interest rates +100 bps	4,470.0	+ 5.1	+ 0.1%
Interest rates -100 bps	4,419.4	- 45.5	- 1.0%
Equity and property capital values -10%	4,451.2	- 13.7	- 0.3%
Equity and property implied volatility + 25%	4,462.6	- 2.2	- 0.0%
Swaption implied volatility + 25%	4,464.7	- 0.1	- 0.0%

(After tax)

Table 5: Sensitivities of MCEV 2013

	<b>VNB (in €m)</b>	<b>Change (in €m)</b>	<b>% Change 2013</b>
Base case	340.3		
Mortality/Morbidity -5% (life insurance)	398.8	+ 58.5	+ 17.2%
No mortality improvements (life insurance)	217.3	- 123.0	- 36.1%
Mortality/Morbidity -5% (annuities)	311.5	- 28.8	- 8.5%
Lapse rates -10%	387.1	+ 46.8	+ 13.8%
Maintenance expenses -10%	345.4	+ 5.1	+ 1.5%
Interest rates +100 bps	293.4	- 46.9	- 13.8%
Interest rates -100 bps	394.3	+ 54.0	+ 15.9%
Equity and property capital values -10%	340.3	-	-
Equity and property implied volatility + 25%	340.3	-	-
Swaption implied volatility + 25%	340.3	-	-

(After tax)

Table 6: Sensitivities of VNB 2013

SCOR's Life and Health reinsurance portfolio is exposed primarily to mortality risk. Changes to mortality and morbidity assumptions have a strong impact on the MCEV and VNB.

Economic assumptions have a relatively minor impact on values.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 5 Reconciliation of the MCEV to IFRS Equity and Group MCEV

The equity capital of SCOR Global Life SE includes medium and short-term loans from SCOR SE. For the Embedded Value calculation and disclosure, these loans are treated as capital of SCOR Global Life, as described in section 6.1. This allocated capital and deferred tax assets allowed for in the VIF must therefore be added to the IFRS net assets of SCOR Global Life in order to reconcile the MCEV with the IFRS equity.

	31 December 2012	31 December 2013
IFRS net assets of SCOR Global Life	1,391.8	1,554.0
Allocated capital	940.7	1,340.2
<b>Adjusted IFRS equity of SCOR Global Life</b>	<b>2,332.5</b>	<b>2,894.2</b>
Market Consistent Embedded Value	3,456.1	4,464.8
<b>Value not recognised in IFRS equity</b>	<b>1,123.6</b>	<b>1,570.6</b>

(After tax, in €m)

Table 7: Reconciliation of the MCEV 2012 and MCEV 2013 to IFRS equity

The value not recognised in IFRS equity increased by €446.9m, mainly due to the value not recognised originating from the Generali U.S. business acquired and new business written.

The Group MCEV of SCOR is the IFRS equity for SCOR published in its 2013 Annual Report, plus the value not recognised in IFRS equity above. The non-covered business IFRS equity is calculated as IFRS equity for SCOR, excluding minorities, less adjusted IFRS equity of SCOR Global Life.

	31 December 2013
Covered business MCEV	4,464.8
Non-covered business IFRS Equity	2,085.8
<b>Total Group MCEV</b>	<b>6,550.6</b>

(After tax, in €m)

Table 8: Group MCEV (excluding minorities)

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 6 Methodology

The Embedded Value was calculated in accordance with the MCEV principles of the CFO Forum as issued in June 2008 and later amended in October 2009.

#### 6.1 Shareholder Net Worth (SNW)

The Shareholder Net Worth (SNW) of each SCOR Global Life entity is derived from the local statutory (regulatory) equity by making a number of adjustments to convert to a market value basis. The most important adjustments are:

- allowing for the market value of invested assets
- removing intangible assets
- adjusting the book value of outstanding debt to its market value
- replacing the statutory pension liabilities by their IFRS values, in cases where the latter are higher

In addition, the SNW contains capital allocated by SCOR SE to SCOR Global Life in the form of internal loans amounting to €1,149m and capital allocated to L&H business booked in composite entities to cover statutory and internal solvency requirements amounting to €33m.

All adjustments allow for the consequential impact on deferred tax.

It should be noted that the SNW does not fully coincide with the definition of admissible assets under local solvency regulations.

#### 6.2 Required Capital (RC)

The projected level of required capital is based on the higher of current statutory requirements on a going-concern basis (i.e. taking into account the necessity to hold a certain multiple of the local minimum solvency margin due to competitive pressures or guidance from the regulator) and internal requirements on a group level. The statutory requirements are the higher. No allowance is made for Solvency II.

The resulting aggregate required capital exceeds the capital required to meet SCOR's target rating.

#### 6.3 Free Surplus (FS)

Free surplus is the difference between shareholder net worth and required capital.

#### 6.4 Value of In-Force (VIF)

The VIF is calculated as:

- Present Value of Future Profits (PVFP)
- + Time Value of Financial Options and Guarantees (TVFOGs)
- + Frictional Costs of Required Capital (FCRC)
- + Cost of Residual Non Hedgeable Risk (CoRNHR)

The calculation of each of these components is described in more detail below.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 6.5 Present Value of Future Profits (PVFP)

The PVFP is the present value at the valuation date of projected statutory profits expected to emerge to shareholders from the business in-force, discounted at the reference rate, net of projected maintenance expenses and tax attributable to in-force business. Allowance is made for the projected impact of tax losses carried forward.

The PVFP is calculated:

- on a certainty equivalent basis, i.e. projecting investment returns on assets at the reference rate and discounting treaty proceeds at the same rate
- on a deterministic basis, i.e. the effect of asymmetries in the impact of risks is allowed for in the TVFOGs in the case of financial risks, and otherwise in the CoRNHR

The PVFP excludes any new treaties (expected to be) underwritten after the valuation date and any new policies underwritten after the valuation date and reinsured under in-force treaties.

The value of expected renewals of treaties which are renewed on an annual basis without significant commercial effort has been included in the PVFP. Future renewals which require significant commercial effort have been excluded from the PVFP.

The future outgoing premium payments for some annually renewable external retrocession treaties that cover the portfolio of SCOR Global Life against catastrophic events have been projected over the full lifetime of the covered blocks of business. As a prudent assumption, no future claims recoveries to the benefit of SCOR Global Life under these treaties have been projected.

The PVFP also allows for future commissions expected to be received by ReMark on a look-through basis.

### 6.6 Value of New Business (VNB)

The VNB is calculated as:

Statutory profit or loss during the reporting year in respect of new business written during the reporting period, after acquisition expenses and tax,

- + the VIF related to new business written during the reporting period.

Economic capital for the calculation of the CoRNHR for new business is allocated on a marginal basis for the 2013 calculation.

### 6.7 Frictional Costs of Required Capital (FCRC)

Assets backing required capital can be regarded as being locked-in. The corresponding frictional costs are the tax on the investment return earned on these assets and the net of tax investment management expenses for these assets. The Frictional Costs of Required Capital (FCRC) are the present value of these annual costs projected over the outstanding life of in-force policies.

### 6.8 Cost of Residual Non Hedgeable Risks (CoRNHR)

The aggregate CoRNHR allows for the cost of risks not already allowed for in the PVFP or TVFOGs. These costs include operational risk, cedant credit risk, unavoidable market risk, the effect of the asymmetric influence of tax, the effect of asymmetries in risk distributions or asymmetries in the impact of risks on treaties of the portfolio and an allowance for uncertainty in the best estimate of shareholder cashflows.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

The CoRNHR is calculated using a cost of capital approach:

- The Non Hedgeable Risk Based Capital (NHRBC) required for SCOR Global Life's Life and Health business portfolio on an aggregate basis is determined consistent with a 99.5% confidence level over a one year time horizon using SCOR's internal economic capital model. Diversification of non hedgeable risks within the covered business is allowed for, but diversification with the risks of non-covered business is excluded, in line with the MCEV principles.
- A cost of capital rate of 4% per annum is applied.

### 6.9 Time Value of Financial Options and Guarantees (TVFOGs)

The Financial Options and Guarantees (FOGs) allowed for in the MCEV cover all material options and guarantees in SCOR Global Life reinsurance business. The FOGs embedded in reinsurance contracts have been valued on a market consistent basis.

Various reinsured U.S. accumulation contracts contain Financial Options and Guarantees (FOGs) in the form of guaranteed minimum death benefits. The impact of these FOGs was projected for a large number of stochastically generated risk-neutral economic scenarios for the yield curve and the S&P 500 equity index. The TVFOGs were calculated as the difference between:

- the average present value of projected statutory profits, discounted at the respective reference rate, from all the stochastic economic scenarios, and
- the "certainty equivalent VIF" calculated on the basis of the financial parameters at the valuation dates.

The FOGs for certain U.S. Universal Life products and Italian savings policies with interest rate guarantees were derived on the basis of internal benchmarks or benchmarks based on MCEV results published by other insurers in the corresponding markets.

The same methodology has also been applied in valuing the FOGs for the value of new business.

### 6.10 Consolidation

Embedded Values of legal entities have been consolidated by:

- replacing book values of subsidiaries by their respective MCEVs
- eliminating any differences between intra-group receivables and payables (net of applicable tax)

### 6.11 Change in Embedded Value

The opening adjustments are net capital movements, namely interest and fees paid by SCOR Global Life to SCOR SE, profits transferred by SCOR Global Life to SCOR SE and changes to capital allocated by SCOR SE to SCOR Global Life, excluding the capital increase for the Generali U.S. acquisition which is shown as a separate movement.

The allocated capital as per 31 December 2013 corresponds to loans from SCOR SE to SCOR Global Life, deferred tax assets allocated to the life division and capital allocated to Life and Health business booked in composite entities to cover statutory and internal solvency requirements.

The capital increase for the Generali U.S. acquisition shows capital movements arising from the acquisition of the Generali U.S. business.

The value of new business is the sum of the actual 2013 after tax statutory profit or loss arising from the new business written in 2013 (allowing for internal and external acquisition expenses) and the VIF of this business at the end of 2013.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

It has been calculated using 2013 closing assumptions. It includes the value of new treaties underwritten during 2013, the value of 2013 new business on treaties in force at 31 December 2012, and the actual renewals in 2013 of annually renewable treaties in those cases where the renewal required significant commercial effort.

The expected existing business contribution (reference rate) is the unwinding of one year's discounting for business in-force as at 31 December 2012, plus expected after tax investment income on the SNW, assuming investment returns equal to the reference rate.

SCOR sets the expected existing business contribution (in excess of reference rate) to be nil.

Experience variances include the differences between actual experience and projected results during the year 2013 with respect to mortality, morbidity, lapses, expenses etc. on business in force as at 31 December 2012 as well as portfolio optimizations carried out during the year.

Assumption changes show the impact of changes made in 2013 to non-economic parameters affecting the business in-force as at 31 December 2012.

Other operating variances show the effect of changes made to projection models in 2013.

Economic variances reflect differences between actual and expected returns on invested assets, including changes to unrealised capital gains and losses, and the aggregate impact of changes to the economic environment during the reporting year, including changes to projected investment returns, letter of credit costs and inflation rates.

Other non-operating variances show the effect on the MCEV of changes to the legal or regulatory environment, such as changes to tax rates, changes to regulatory capital requirements, and so on.

The gain on purchase shows the excess of the year end 2013 value of the Generali U.S. business acquired over the purchase price paid on 1 October 2013.

Closing adjustments reflect movements of foreign exchange rates against the Euro from 2012 to 2013. MCEV earnings have been converted into Euros using 2012 exchange rates with the exception of the value added by new business and capital movements, which have been converted using 2013 exchange rates.

### 6.12 Sensitivity Calculations

Sensitivities are generally calculated using the base case assumptions, except for the stated sensitivity assumption.

The sensitivities on interest rates allow for a change to the entire interest environment from a parallel shift in the yield curve, including a revaluation of fixed interest assets, a change in projected inflation rates and corresponding effects on Non Hedgeable Risk Based Capital. Where base interest rates are low, negative rates are assumed in the down sensitivity.

6 May 2014

### 7 Assumptions

#### 7.1 Operating Assumptions

Actuarial assumptions on mortality, morbidity, persistency etc. have been actively reviewed and are SCOR's best estimate assumptions as at the projection dates, which are derived from a mixture of historic experience and industry data. Appropriate allowance has been made for trends.

Reinsurance companies generally have less policy and experience data available than primary insurers. This means that Embedded Value calculations require more assumptions and simplifications than is the case for primary insurance companies.

Future maintenance and investment management expenses expected to be incurred in relation to the administration of the in-force business have been projected and deducted from the present value of statutory profits.

Acquisition expenses on new business written during the reporting year are allocated on the basis of activity analyses and a proportional allocation of indirect expenses.

The expense assumptions have been based on current expense levels and the expected run-off pattern of the in-force portfolio. In particular, no exceptional development or one-off costs were excluded from actual incurred expenses to derive the basis for expense projections, and no allowance was made for future productivity gains. Costs incurred in holding or service companies have been fully taken into account on a look-through basis. Expected costs of the integration of the Generali U.S. business have been included in projected expenses.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 7.2 Economic Assumptions

All assumptions relating to investment scenarios are constructed to reflect market conditions following a market consistent valuation approach. Reference rates have been derived from swap rates at the valuation date and do not include any liquidity premiums. The zero coupon reference rates used for the main currencies are as follows:

Term	EUR	USD	GBP	CAD
<b>31 December 2012</b>				
5 Years	0.62%	0.72%	0.88%	1.57%
10 Years	1.45%	1.75%	1.78%	2.15%
15 Years	1.93%	2.37%	2.42%	2.57%
20 Years	2.11%	2.61%	2.78%	2.68%
25 Years	2.31%	2.77%	2.98%	2.81%
30 Years	2.52%	2.86%	3.06%	2.95%
<b>31 December 2013</b>				
5 Years	1.12%	1.67%	2.03%	2.18%
10 Years	2.07%	3.10%	2.95%	3.17%
15 Years	2.55%	3.70%	3.32%	3.70%
20 Years	2.69%	3.94%	3.42%	3.83%
25 Years	2.83%	4.05%	3.43%	3.88%
30 Years	2.98%	4.07%	3.40%	3.92%

Table 9: Zero coupon reference rates for main currencies by duration

The 2012 and 2013 reference rates include a 15bps allowance for credit risk on the floating leg of the swap, and are extrapolated to an ultimate forward rate within 40 years after the last liquid point.

	EUR	USD	GBP	CAD
Last liquid point	20	30	50	20
Ultimate forward rate	4.20%	4.20%	4.20%	4.20%

Table 10: Extrapolation parameters EV 2013

The impact of using a yield curve based on alternative extrapolation methods and assumptions at the long end does not have a material impact on MCEV and VNB.



## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

For business containing FOGs, the valuation has been based on stochastic projections using market consistent, risk neutral economic scenarios, except where other approximations for a market-consistent valuation have been employed.

Volatility assumptions are based on observed market implied volatilities on exchange traded options (with the longest available term) at the respective valuation date:

<b>Equity implied volatilities</b>	
Equity Index	S&P 500
31 December 2012	21.1%
31 December 2013	18.7%

Table 11: At the money equity implied volatilities

<b>Swaption implied volatilities</b>	<b>31 December 2012</b>	<b>31 December 2013</b>
Term	USD	USD
1 Year	36.2%	25.8%
2 Years	33.6%	23.9%
3 Years	30.6%	22.2%
4 Years	28.5%	20.9%
5 Years	27.9%	20.0%
7 Years	25.2%	18.5%
10 Years	24.1%	16.5%

Table 12: Swaption implied volatilities for at-the-money swaptions with a 10-year tenor

The economic scenarios assume a correlation of -40% between annual returns on treasuries and on the S&P 500 index.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

The MCEVs have been converted into Euros using the exchange rates at the respective valuation dates. MCEV earnings and capital movements have been converted using end 2012 exchange rates with the exception of the value added by new business, which has been converted using end 2013 exchange rates. The value added by the acquisition of the Generali U.S. business has also been converted using end 2013 exchange rates. Changes in the MCEV due to changes in foreign exchange rates are disclosed under closing adjustments.

For the major foreign currencies, the following exchange rates have been used:

1 foreign currency = ... EUR	31 December 2012	31 December 2013
USD	0.7686	0.7274
GBP	1.2387	1.1955
CAD	0.7793	0.6858

Table 13: FX rates

Inflation assumptions of between 1.0% and 3.4% p.a., depending on the country and currency, have been used to project future maintenance expenses. Inflation rates were derived from market prices of inflation linked securities, where available.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

### 7.3 Tax Assumptions

Expected future tax payments have been projected using the applicable tax basis (allowing for valuation differences between the statutory and the tax accounts) after allowing for any applicable tax losses carried forward. No allowance has been made for potential tax on remittances/dividends from subsidiaries.

Different tax treatments of treaties booked in branches (which file local tax statements) have also been reflected in the projections.

The following tax rates have been applied to projected future profits expected to emerge in the main tax jurisdictions:

<b>Tax rate</b>	<b>MCEV 2012</b>	<b>MCEV 2013</b>
France	34.4%*	34.4%*
Germany	32.5%	32.5%
USA	35.0%	35.0%
UK	23.0%	23.0%
Ireland	12.5%	12.5%

Table 14: Tax rates for main tax environments

\*) Note that in France there is a temporary corporate tax rate of 38.0% in effect for 2014 and this has been modelled in the MCEV calculation. For MCEV 2012, there was a temporary tax rate of 36.1% modelled for years 2013 and 2014 as was in effect at that time.

6 May 2014

### 8 Disclaimer

#### Forward looking statements

SCOR does not communicate "profit forecasts" in the sense of Article 2 of (EC) Regulation n°809/2004 of the European Commission. Thus, any forward-looking statements contained in this communication should not be held as corresponding to such profit forecasts. Information in this communication may include "forward-looking statements", including but not limited to statements that are predictions of or indicate future events, trends, plans or objectives, based on certain assumptions and include any statement which does not directly relate to a historical fact or current fact. Forward-looking statements are typically identified by words or phrases such as, without limitation, "anticipate", "assume", "believe", "continue", "estimate", "expect", "foresee", "intend", "may increase" and "may fluctuate" and similar expressions or by future or conditional verbs such as, without limitations, "will", "should", "would" and "could." Undue reliance should not be placed on such statements, because, by their nature, they are subject to known and unknown risks, uncertainties and other factors, which may cause actual results, on the one hand, to differ from any results expressed or implied by the present communication, on the other hand.

As a result of the extreme and unprecedented volatility and disruption related to the financial crisis, SCOR is exposed to significant financial, capital market and other risks, including movements in interest rates, credit spreads, equity prices, currency movements, changes in government or regulatory practices, changes in rating agency policies or practices, and the lowering or loss of financial strength or other ratings.

Additional information regarding risks and uncertainties that may affect SCOR's business is set forth in the 2013 reference document filed 5 March 2014 under number D. 14-0117 with the French Autorité des Marchés Financiers ("AMF") posted on SCOR's website [www.scor.com](http://www.scor.com). SCOR undertakes no obligation to publicly update or revise any of these forward-looking statements, whether to reflect new information, future events or circumstances or otherwise.

Numbers presented throughout this report may not add up precisely to the totals in the tables and text. Percentages and percent changes are calculated based on rounded figures displayed on the tables and text and may not precisely reflect the percentages and percent changes that would be derived based on figures that would not be rounded.

6 May 2014

### 9 External Opinion

Towers Watson has reviewed the methodology and assumptions used to determine the 2013 embedded value results for the Life and Health business of SCOR SE ("SCOR") and its subsidiaries, together with the disclosure provided in this document, against the requirements of the European Insurance CFO Forum Market Consistent Embedded Value Principles ("MCEV Principles")<sup>2</sup>, and has also reviewed the results of the calculations. Our review covered the embedded value as at 31 December 2013, the value of 2013 new business, the analysis of movement of embedded value over 2013 and the sensitivities on the embedded value and value of new business.

Towers Watson has concluded that the methodology and assumptions used by SCOR, together with the disclosure provided in this document, comply with the requirements of the MCEV Principles, except for the absence in the disclosure of the analysis of Group MCEV earnings.

Towers Watson has performed limited high-level checks on the results of the calculations and has confirmed that any issues discovered do not have a material impact on the disclosed 2013 embedded value, value of new business, analysis of movement and sensitivities. Towers Watson has not, however, performed detailed checks on the models and processes involved.

In arriving at these conclusions, Towers Watson has relied on data and information provided by SCOR and its subsidiaries. This opinion is made solely to SCOR in accordance with the terms of Towers Watson's engagement letter. To the fullest extent permitted by applicable law, Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than SCOR for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.

\*  
\* \*

---

<sup>2</sup> Copyright © Stichting CFO Forum Foundation 2008

6 May 2014

### Glossary

<b>Certainty equivalent VIF</b>	VIF discounted using the risk-free yield curve without a risk margin.
<b>Cost of Residual Non Hedgeable Risks (CoRNHR)</b>	The cost of residual non hedgeable risks allows for the risks not already assessed in PVFP or TVFOGs. SCOR determines the CoRNHR by using a cost of capital approach. These non hedgeable risks consist of, for example, asymmetries, operational risk, credit risk and unavoidable market risk.
<b>Discount rate</b>	Risk-free rate for the respective currency and duration (i.e. the zero bond rate which is consistent with the risk-free yield). No liquidity premiums are taken into account.
<b>Economic assumptions</b>	Assumptions on the future development of parameters which do not depend on the composition of the portfolio, e.g. regarding future interest.
<b>Financial Options and Guarantees (FOGs)</b>	Options and guarantees in reinsurance treaties which can create asymmetric shareholder returns resulting from movements in financial variables.
<b>Free Surplus</b>	Capital allocated to underlying business in excess of Required Capital.
<b>Frictional Costs of Required Capital (FCRC)</b>	Costs of holding required capital at risk-free investment returns net of tax and investment expenses.
<b>Going-concern basis</b>	Assumption that the respective company will continue writing new business.
<b>New business</b>	New treaties written during the reporting period, including renewals of treaties which require significant commercial effort, and new policies reinsured under existing treaties.
<b>New business margin</b>	The ratio of the VNB and the PVNBP.
<b>Value of new business (VNB)</b>	Sum of the actual 2013 after tax statutory profit or loss arising from the new business written in 2013 (allowing for internal acquisition expenses) and the VIF of this business at the end of 2013, net of FCRC, CoRNHR and the value of FOGs.
<b>Non-economic assumptions</b>	Assumptions on the future development of parameters which are based on the current composition of the portfolio of treaties and policies insured, mainly biometrical assumptions like lapse, mortality and morbidity.
<b>Non Hedgeable Risk Based Capital (NHRBC)</b>	The economic capital required to cover the non hedgeable risks of SCOR Global Life's Life and Health business portfolio consistent with a 99.5% confidence level over a one year time horizon. It is determined using SCOR's internal economic capital model, allowing for diversification of non hedgeable risks within the covered business, but not allowing for diversification with the risks of non-covered business, in line with the MCEV principles.
<b>Present Value of Future Profits (PVFP)</b>	Present value at the valuation date of projected statutory profits expected to emerge to shareholders from the business in-force, discounted at the reference rate, net of projected maintenance expenses and tax attributable to in-force business.

## 2013 Market Consistent Embedded Value - Supplementary Information

6 May 2014

<b>Present Value of New Business Premiums (PVNBP)</b>	Present value of future premiums for new business including the premiums in the year the business has been written, discounted at the reference rate.
<b>Required Capital (RC)</b>	Capital which is needed to back internal and statutory solvency requirements.
<b>Reference rate</b>	A proxy for a risk-free rate appropriate to the currency, term and liquidity of the liability cash flows. Under the MCEV Principles, the reference rate is generally derived from the swap yield curve.
<b>Shareholder Net Worth (SNW)</b>	Capital not needed to back liabilities, also known as shareholders' equity, adjusted to allow for, among others, the share of unrealised capital gains on invested assets attributable to shareholders and differences between statutory and IFRS pension liabilities, and excluding intangible assets which cannot be used to cover statutory liabilities.
<b>Time Value of Financial Options and Guarantees (TVFOGs)</b>	The difference between the value of FOGs included in the PVFP and the total market consistent value of the FOGs.
<b>Value of In-Force (VIF)</b>	Present value of projected statutory profits, calculated at the valuation date, expected to emerge to shareholders from the business in-force, discounted at the discount rate, net of tax and maintenance expenses reduced by FCRC, CoRNHR and TVFOGs.