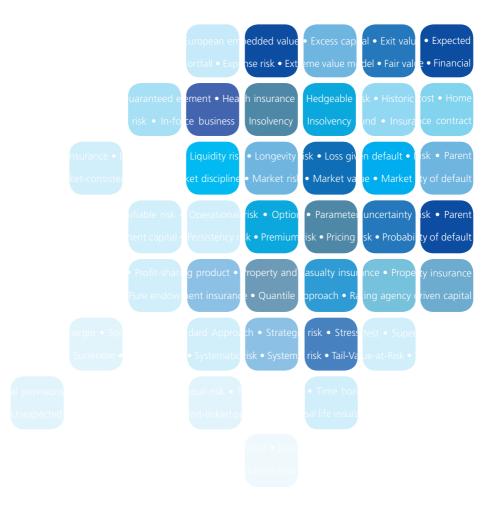




# **Solvency II Glossary**



# Acknowledgements

The glossary project of the Comité Européen des Assurances (CEA) and the Groupe Consultatif Actuariel Européen (Groupe Consultatif) has been conducted in close collaboration with a wide range of experts from the European insurance industry without whose contributions this project could not have been achieved.

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## **Important Notice**

The CEA-Groupe Consultatif Solvency II Glossary provides a common set of terminology for a selected number of terms. It aims to be an objective reference document and not presenting the particular views of CEA and the Groupe Consultatif.

Several of the definitions in this glossary are still being discussed and debated by the various parties involved in Solvency II. Consequently, this work will need to continue to evolve in the future in line with the developments of Solvency II.

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# 1. Introductory Note

Solvency II is one of the most challenging and exciting projects in Europe's Financial Services Action Plan. The importance and necessity to review the existing framework is generally accepted, the scope of the project is extremely broad, the parties involved are numerous and the ambition is thus very high.

It has frequently been noted by the many stakeholders and involved parties that a lack of common definitions on key terms exists, for example with respect to risk definitions and valuation principles. This potentially leads to a reduced understanding and even misunderstandings between parties involved and has therefore been identified as one of the potential obstacles to rapid progress and the building of consensus within the Solvency II project.

The Comité Européen des Assurances (CEA) and the Groupe Consultatif Actuariel Européen (Groupe Consultatif) have therefore decided to work on a glossary of Solvency II terminology, focusing on a selected number of key terms.

The purpose of this document is to provide a common set of terminology for all parties involved in the Solvency II project, hence aiming to be an objective reference document and not presenting the particular views of the CEA and the Groupe Consultatif. The glossary wants to create clarity and alignment on terminology and concepts which are currently being referred to in multiple ways, and which are currently being defined in a divergent manner by various users. To this end, the glossary proposes preferred terms where multiple terms exist for the same concept. Where appropriate, notes have been provided in addition to the definitions to further improve clarity and give more detailed explanation.

The glossary only covers a selection of terms used in the context of Solvency II, relating to risk types, insurance products availability requirements and risk management. It has not been the ambition to be exhaustive, nor to provide definitions for well-defined and generally accepted terminology. The selection of terms and the definitions retained in this glossary are based on discussions held between the CEA and the Groupe Consultatif. Where possible we have drawn on existing definitions, giving particular weight to formal sources. Feedback has been received from a large number of individuals and organisations. The CEA and the Groupe Consultatif want to thank those involved for their valuable contributions.

Some of the definitions in this glossary are still being discussed and debated by the various parties involved in Solvency II. Consequently this work will need to continue to evolve in the future.

The glossary project of the CEA and the Groupe Consultatif has been conducted in close collaboration with a wide range of experts from the European insurance industry without whose contributions this project could not have been achieved.

Solvency II Glossary

## 2. List of Defined Terms

Acceptable asset Accident insurance Adjusted Solvency Capital Requirement Admitted asset Affiliated investment risk Alternative risk transfer Annuity Arm's length transaction Asset-liability management Asset-liability mismatch risk Available economic capital Available solvency margin Back-testing Best estimate Best estimate liability Biometric risk Book value Break-up basis Business risk Calamity risk Captive insurer Carrying amount Casualty insurance Catastrophe risk Central estimate Claims risk Compliance risk Concentration risk Confidence level Contagion Contingent capital Cost of capital approach Counterparty credit risk Credit insurance Credit risk Critical illness insurance Current entry value Current estimate Current exit value

Custody risk Default risk Disability insurance Disability risk Diversification Double gearing Dread disease insurance Economic balance sheet Economic capital Economic value Eligible capital Embedded guarantee Embedded option Embedded value Endowment insurance Entry value Equity risk European embedded value Excess capital Exit value Expected loss (only for credit insurance) Expected policyholder deficit Expected shortfall Expense risk Extreme value model Fair value Financial conglomerate Financial group Foreign exchange risk Funeral insurance Fungible capital General insurance Going concern basis Group insurance Guarantee Guaranteed benefit Guaranteed element Health insurance Hedgeable risk

Historic cost Home supervisor Host supervisor Hybrid capital Inflation risk In-force business Insolvency Insurance contract Insurance group Insurance guarantee scheme Insurance obligation Interest rate risk Internal model Lapse Lapse risk Lead supervisor Legal risk Liability insurance Life insurance Liquidity risk Longevity risk Loss given default Management risk Marine, aviation, and transport insurance Market-consistent valuation Market discipline Market risk Market value Market value margin Mark-to-market valuation Mark-to-model valuation Migration risk Minimum Capital Requirement Mispricina risk Model risk Morbidity risk Mortality risk Motor insurance Non-diversifiable risk Non-life insurance Operational risk Option

Parameter uncertainty risk Parent company Pension scheme Percentile approach Performance linked benefit Permanent capital Persistency risk Premium risk Pricing risk Probability of default Probability of ruin Procyclicality Product design risk Property and casualty insurance Property insurance Provision Prudential filter Prudent person approach Pure endowment insurance Ouantile approach Rating agency driven capital Real-estate risk Regulatory capital **Regulatory surplus** Reinsurance Reinsurance counterparty risk Reinvestment risk Reputational risk Required economic capital Reserve risk Risk margin Run-off basis Scenario analysis Sensitivity test Settlement risk Solvency Capital Requirement Solvency margin Spread risk Standard formula Strategic risk Stress test Supervisory ladder

Supervisory review process Surety business Surplus capital Surrender Surrender risk Systematic risk Systemic risk Tail-Value-at-Risk Target capital Technical provision Technical risk Term insurance Time horizon Total balance sheet approach Underwriting risk Unexpected loss (only for credit risk) Unit-linked contract Universal life insurance Value-at-Risk Value of in-force business Whole life insurance With-profit product Workers compensation insurance

# 3. Glossary

Acceptable asset	Capital (either on or off-balance sheet) which, under regulatory rules, may be taken into account (fully or partially) to cover insurance obligations. Related terms: Available solvency margin, Eligible capital
Accident insurance	Generic term applying to all types of insurance indemnifying or reimbursing for losses caused by bodily accident or for expenses of medical treatment necessitated by bodily accident. Related term: Health insurance
	Defined as 'Accident and Health insurance' in EU law. For more details see Annex A and B(a) of First Council Non-Life Directive 73/239/EEC and consecutive amending directives.
Adjusted Solvency Capital Requirement	Adjustment to the Solvency Capital Requirement under Pillar I based on Pillar II regulation under the Solvency II regime. Related terms: Minimum Capital Requirement, Solvency Capital Requirement Pillar II adjustments are expected to be made on the basis of the supervisory review process, hence being firm specific.
Admitted asset	See: Acceptable asset and Eligible capital
Affiliated investment risk	The risk that an investment in a member company of the same financial conglomerate or financial group may be difficult to sell, lose its value, or create a drain on the financial resources of the insurer. <sup>1</sup> Related term: Market risk

Related term: Market risk

Alternative risk transfer Any form of risk transfer that includes at least an element of insurance risk, opposed to pure financial risk, other than a pure insurance contract.<sup>2</sup> Abbreviation: ART Related term: Reinsurance Possible features of ART include, but are not restricted to:<sup>3</sup> Tailor-made solutions: Multi-vear policies: - Often the coverage of risks that the conventional market would regard as uninsurable; - Often the inclusion of some form of risk transfer of noninsurance risk: - The definition of ART includes, but is not restricted to, financial reinsurance and securitisation of insurance risks.<sup>4</sup> Annuity\* A contract that provides a series of regular payments (both amount and timing) by the insurer (amount payable / benefit) under specified conditions for a specified period of time.<sup>5</sup> Related term: Pension scheme An annuity may begin at a specified time after the issuing of the contract (deferred annuity), or following a specified trigger such as death or disability, e.g. orphans' benefits or disability annuities. Annuity benefits under an insurance contract typically end upon the death of the insured person, or cease upon recovery of the insured from disability or after a predefined period. Coverage may relate to one or two persons, respectively single-life or joint-life. The contract can be funded by the policyholder by means of a single premium or through a series of instalments. The amount of regular payments to the beneficiary may be fixed or not, i.e. variable or fixed annuity, certain or temporary. Annuity contracts are sold on an individual and group basis. Arm's length A transaction between two related or affiliated parties that transaction is conducted as if they were unrelated, so that there is no question of a conflict of interest.

The definition applies to annuity products within the EU, not per definition to US products in its entirety.

Α

Asset-liability management	The management of an insurer's assets with specific reference to the characteristics of its liabilities so as to optimise the balance between risk and return. <sup>6</sup>
	Abbreviation: ALM
	Related term: Asset-liability mismatch risk
	Asset-liability management forms part of the overall risk management framework of an insurer. <sup>7</sup>
Asset-liability mismatch risk	<ul> <li>Risk of a change in value from a deviation between asset and liability cash flows, prices, or carrying amounts, caused by:</li> <li>A change in actual cash flows (for assets and/or liabilities);</li> <li>A change in the expectations on future cash flows (for assets and/or liabilities);</li> <li>A ccounting inconsistencies.</li> </ul>
	Synonym: Asset-liability risk
	Related term: Asset-liability management
	The deviation from the expected values may relate to a difference (or different evolvement) in timing and/or the amount of cash flows.
	Asset-liability mismatch risk originates from changes in market risk-factors.
	See: Risk Map in Appendix I for an overview of the types of market risk.
Available economic capital	Internally defined capital measure based on the companies' valuation of the market-consistent value of assets minus the market-consistent value of obligations.
	Related term: Required economic capital
Available solvency margin	The difference between the value under regulatory measurement of the eligible capital held by an insurer, and the sum of the values under regulatory measurement of the obligations.

Related term: Eligible capital

## Back-testing

The process of comparing actual experience with statistical predictions.

For example used as a formal statistical framework to verify if actual losses are in line with projected losses in VaR models.

Best estimate The probability-weighted average, also referred to the mean. The estimation process is unbiased and based on all currently available information including information of currently observable trends, but excluding effects from events not yet occurred.

Related term: Best estimate liability

Also referred to as 'central estimate' or 'current estimate'.

The concept of best estimate applies to many circumstances, including the valuation of insurance contracts, the valuation of assets or liabilities, a cash flow stream, an individual assumption, or a valuation approach.<sup>8</sup>

Sometimes the term best estimate refers specifically to the current estimation of the mean value, i.e. the probability-weighted average, of cash flows. In other cases, the term best estimate refers specifically to the current estimation of the mean value of risk weighted cash flows, as e.g. IAS 39.42.

Best estimate liability	The expected or mean value (probability weighted average)
	of the present value of future cash flows for current
	obligations, projected over the contract's run-off period,
	taking into account all up-to-date financial market and
	actuarial information.

Related term: Best estimate

Sometimes also being referred to as 'central estimate' or 'current estimate'.

Note that the term liability does not refer to a liability in the accounting sense, but is used in its general meaning (as a synonym for any certain or potential obligation for payment now or in the future). The use of the term best estimate liability has historically grown. When used in the context of solvency, calculations should include all current obligations, including policyholder obligations and expenses, e.g. administration cost and loss adjustments, and explicitly value all embedded options and guarantees.

Best estimate values do not include any risk margins whatsoever.

The assessment of the best estimate liability refers to the valuation of future liability cash flows in aggregate, not to each individual assumption, as in practice it can be very difficult to determine whether an individual assumption is a best estimate.<sup>9</sup>

The best estimate refers to the total obligations under the contract, taking into account the timing for answering these obligations, hence discounting is implicitly included.

Whether it is possible to split the measurement of the liability in an estimate of the mean value of the distribution function and an estimate of the risk adjustments, depends on circumstances, but it should provide the same result as directly estimating the entire liability.

**Biometric risk** Underwriting risks covering all risks related to human life conditions, e.g. death, disability, longevity, but also birth, marital status, age, and number of children (e.g. in collective pension schemes).

Related terms: Disability risk, Longevity risk, Morbidity risk, Mortality risk

See: Risk Map in Appendix I for an overview of the types of life underwriting risks.

**Book value** 

See: Carrying amount

**Break-up basis** 

A method of considering the financial situation of an institution assuming that the company is liquidated by settling all obligations at their current value as far as the current value of available resources allows that.

Synonym: Wind-up basis

Related terms: Going concern basis, Run-off basis

**Business risk** Unexpected changes to the legal conditions to which insurers are subject, changes in the economic and social environment, as well as changes in business profile and the general business cycle.<sup>10</sup>

Related terms: Custody risk, Management risk, Operational risk, Reputational risk, Strategic risk

In practice it is often difficult to distinguish between legal changes causes business risk and those causing insurance risk.

Business risk is difficult to quantify and is hence expected not to be modelled under Solvency II regulation.

See: Risk Map in Appendix I.

Calamity risk	The risk that a single event of major magnitude leads to a significant deviation in actual claims from the total expected claims.
	Related term: Catastrophe risk
	The concept strongly relates to the notion of catastrophe risk, but is considered to be broader, as catastrophe risk relates to events occurring over a short period, whereas calamity risks typically include longer lasting events, e.g. a pandemic.
	The notion of calamity risk is per definition relative to the financial position of the individual insurer and any significance will need to be defined in mathematical terms. The exact definition of what constitutes a calamity hence varies per insurer.
Captive insurer	An insurance company established by a parent firm for the purpose of insuring the exposures of the parent or its affiliates. <sup>11</sup>
	Related terms: Financial conglomerate, Financial group
	Usually only a small part, if any, of a captive's risk exposure is related to providing insurance or reinsurance to other parties. <sup>12</sup>
	This definition does not include mutual insurers, because they have no share capital so the ownership is jointly and undivided amongst its members, unlike a captive where the ownership is linked to a parent or group.
Carrying amount	The amount at which an asset or liability is recognised in the balance sheet.
	Synonym: Carrying value
	Linked to IAS 36.6 (impairment of assets), IAS 16.6 (property, plant and equipment) and IAS 38.8 (intangible assets). <sup>13</sup>
	This value is not necessarily the same as historic cost, e.g. because the carrying amount takes into account depreciation or could be a fair value.
Casualty insurance	A generic term used to describe all types of insurance products which are not Life, Health, or Property insurance.
	Related terms: Liability insurance, Property insurance

Catastrophe risk
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The risk that a single event, or series of events, of major magnitude, usually over a short period (often 72 hours), leads to a significant deviation in actual claims from the total expected claims.<sup>14</sup>

Related term: Calamity risk

The notion of catastrophe risk is per definition relative to the financial position of the individual insurer and any significance will need to be defined in mathematical terms. The exact definition of what constitutes a catastrophe hence varies per insurer.

### Central estimate See: Best estimate

**Claims risk** 

An underwriting risk. A change in value caused by ultimate costs for full contractual obligations (claims without administration costs) varying from those assumed when these obligations were estimated.

Related term: Underwriting risk

Claims risk is often split in reserve and premium risk in order to distinguish between expired and unexpired contracts.

Reserve risk only relates to incurred claims, i.e. existing claims, (e.g. including IBNR and IBNER), and originates from claim sizes being greater than expected, differences in timing of claims payments from expected, and differences in claims frequency from those expected.

Premium risk only relates to future claims (excluding IBNR and IBNER), and originates from claim sizes being greater than expected, differences in timing of claims payments from expected, and differences in claims frequency from those expected.

See: Risk Map in Appendix I.

# **Compliance risk** The risk of legal or regulatory sanctions resulting in a financial loss, or loss of reputation as a result of an insurer's failure to comply with laws, regulations, rules, related self-regulatory organisation standards, and codes of conduct.<sup>15</sup>

Related terms: Business risk, Legal risk, Operational risk

See: Risk Map in Appendix I.

**Concentration risk** The exposure to increased losses associated with inadequately diversified portfolios of assets and/or obligations.

Related term: Diversification

Concentration risk for an insurer may arise with respect to investments in a geographical area, economic sector, or individual investments, or due to a concentration of business written within a geographical area, of a policy type, or of underlying risks covered.

Confidence levelStatistical measure of the level of certainty regarding an<br/>outcome, typically expressed as the probability value (1 - α)<br/>associated with a confidence interval.

The confidence level is often expressed as a percentage, e.g. the confidence level with  $\alpha = 0,05$ , is the 95% confidence level.

**Contagion** The propagation of the effect of a failure or financial distress of an institution in a sequential manner to other institutions, markets or systems, or to other parts of a financial group or financial conglomerate.

Related term: Systemic risk

- **Contingent capital** Contractually obligated instruments that trigger under a pre-defined condition.<sup>16</sup>
- **Cost of capital approach** An approximation through which a risk margin is determined based on the present value of the cost of capital charge for all future capital requirements until run-off.

Related term: Market value margin

The cost of capital approach is often applied to determine the market-consistent value of cash flows with non-hedgeable risks (e.g. motor claims). In this case the risk margin is referred to as the Market value margin.

## Counterparty credit risk See: Credit risk

**Credit insurance** A form of guarantee against loss resulting from default on the part of debtors.<sup>17</sup>

Synonym: Credit risk insurance

Related legal EU term is 'Credit and Suretyship Insurance'. For more details see Annex A and B(g) of First Council Non-Life Directive 73/239/EEC.

## Credit risk The risk of a change in value due to actual credit losses deviating from expected credit losses due to the failure to meet contractual debt obligations. Related terms: Default risk, Settlement risk, Spread risk Credit risk comprises default and settlement risk. Credit risk can arise on issuers of securities (in the company's investment portfolio), debtors (e.g. mortgagors), or counterparties (e.g. on reinsurance contracts, derivative contracts, or deposits) and intermediaries, to whom the company has an exposure.<sup>18</sup> A related but different type of risk, classified under market risk, is spread risk, which refers to the risk of a change value due to movements in the market price of credit risk. Expected loss and Unexpected loss for credit risk are specific elements of Basel II and the Capital Requirements Directive for the calculation of capital requirements for credit risk. The former is defined as 'the ratio of the amount expected to be lost on an exposure from a potential default of a counterparty or dilution over a one year period to the amount outstanding at default', the latter as 'the difference between the maximum loss incurred and expected losses, measured to a specific confidence level'.<sup>19</sup> See: Risk Map in Appendix I. Critical illness insurance An insurance policy that pays a benefit if the insured is diagnosed with a specified critical illness during the policy term Abbreviation: CII Synonym: Dread disease insurance

Related terms: Health insurance, Life insurance

Critical illness insurance can be sold as a separate health or life insurance policy, but can also be a rider to a (group) life or health insurance contract.

С

Current entry value	The amount that the insurer would charge to a policyholder today for entering into a contract with the same remaining rights and obligations as the existing contract. <sup>20</sup>
	Synonym: Entry value
	Related term: Current exit value
	At inception, the measurement would be calibrated to the actual premiums incurred (and recoverable acquisition cost incurred). That calibration would act as a starting point for determining risk margins at later dates. <sup>21</sup>
	Because there is no secondary market for most insurance liabilities, that amount would need to be estimated. <sup>22</sup>
Current estimate	See: Best estimate
Current exit value	The amount that the insurer would expect to have to pay today to another entity if it transferred all its remaining contractual rights and obligations immediately to that entity (and excluding any payment receivable or payable for other rights and obligations, such as renewal rights). <sup>23</sup>
	Synonym: Exit value
	Related term: Current entry value
	Because there is no secondary market for most insurance liabilities, that amount would need to be estimated. <sup>24</sup>
	This is a type of market-consistent value of the entire portfolio of the insurer and similar to the fair value of that portfolio.
Custody risk	The risk arising from the failure to hold secure custody of assets or to incur a loss in failing to obtain or release the correct secure custody when conducting purchase and sale transactions. <sup>25</sup>

Related terms: Business risk

21

Default risk	The risk of a change in value caused by the fact that actual default rates deviate from expected default rates with respect to non-payment of interest or principle.
	Related terms: Credit risk, Settlement risk, Spread risk
	Default risk is a sub-type of credit risk, which also comprises settlement risk.
	See: Risk Map in Appendix I.
Disability insurance	A health or life insurance policy, or rider to a life insurance policy, that provides a single or periodic payments to replace lost income when the insured is unable to work because of illness or injury. <sup>26</sup>
	Abbreviation: DI
	Synonym: Disability income insurance
	Related term: Health insurance
Disability risk	A change of value caused by a deviation of the actual randomness in the rate of insured persons that are incapable to perform one or more duties of their occupation due to a physical or mental condition, compared to the expected randomness.
	Related terms: Biometric risk, Morbidity risk
	Disability risk only relates to cover against loss of income, contrary to morbidity risk, relating to cover other than loss of income, e.g. medical expenses.
	Such a disability may be partial (a disabled person can perform a material part of their occupation), total (a disability which is sufficient to prevent the person from performing any of the duties of their occupation), permanent (the disability is expected to be for the life of the person), or temporary (a disability from which the person is expected to recover).
	See: Risk Map in Appendix I.

Diversification	Reduction in risks among assets and/or obligations of an institution by accumulating risks that are not fully correlated in an aggregated risk position, e.g. the aggregated amount of risks within a product portfolio or at a company level is smaller compared to the simple addition of the individual risks.
	Related terms: Concentration risk, Systematic risk
	Diversification is based on the principle that not all risks will crystallise at the same moment - provided that the underlying sources of risk, i.e. risk drivers or triggers, are not fully dependent.
	Diversification with respect to insurance obligations is typically achieved through writing a large portfolio of independent contracts, by writing insurance across a number of different lines, or by geographical spread or directly in capital markets. Asset diversification is typically achieved through spreading investments in order to avoid excessive concentration of assets or exposure to a single counterparty.
Double gearing	Situation in which one entity holds capital for regulatory purposes, which is issued by another entity within the same group and the issuer is also using the same capital for regulatory purposes. <sup>27</sup> In that situation, externally generated capital of the group is 'geared up' twice; first by the parent, and then a second time by the dependant.
	Double gearing (and multiple gearing) is normally associated with a parent down streaming capital to its dependant. It can also take the form of an entity holding capital for regulatory purposes issued by an entity above it in the group's organisational chart (up streamed capital), or by a sister affiliate.
	Multiple gearing occurs when the dependant in a situation of double gearing further down streams the capital for regulatory purposes to a third entity within the group, so that the parent's externally generated capital is geared up a third time. <sup>28</sup>

Dread disease insurance See: Critical illness insurance

**Economic balance sheet** Balance sheet statement based on one of those accounting approaches using market-consistent values for all current assets and current obligations relating to in-force business, including off-balance sheet items.

Related term: In-force business, Total balance sheet approach

Depending on the reporting approach different items can be recognized or not recognized in the balance sheet, as well the definition of a current resource or obligation can vary from approach to approach. The economic balance sheet provides the market-consistent value of the shareholder equity.

**Economic capital** See: Available economic capital, Required economic capital

Economic value See: Market-consistent valuation

**Eligible capital** Capital (either on or off-balance sheet) which, under regulatory rules, may be taken into account (fully or partially) in determining the insurer's available capital for solvency purposes.

Related term: Available solvency margin

Also referred to also as admitted assets, acceptable assets, and unrestricted assets, but eligible capital is the preferred term for Solvency II purposes.

More formally referred to in European Commission publications as 'Eligible Elements to cover Capital Requirements'.

Embedded guarantee See: Guaranteed benefit, Guaranteed element

Embedded option See: Option

E

Embedded value	<ul> <li>An estimate of the value to shareholders of a book of insurance business at a given date, consisting of the following components:<sup>29</sup></li> <li>Free surplus allocated to the covered business;</li> <li>Required capital, less the cost of holding required capital;</li> <li>Value of future shareholder cash flows from in-force covered business.</li> </ul>
	Abbreviation: EV
	Related terms: European embedded value, Value of in-force business
	The embedded value concept is applicable to general insurance, although it is more commonly encountered in the life context.
	The value of renewals of existing contracts is included, but the value of future new contracts is excluded. <sup>30</sup>
Endowment insurance	Insurance payable to the beneficiary if the insured survives the maturity date of the contract, or to a beneficiary if the insured dies prior to the maturity date. <sup>31</sup>
	Related terms: Life insurance, Pure endowment insurance
	The minimum benefits are defined at the point of sale.
Entry value	See: Current entry value
Equity risk	The risk of a change in value caused by deviations of the actual market values of equities and/or income from equities from their expected values. <sup>32</sup>
	Related terms: Market risk, Real-estate risk
	See: Risk Map in Appendix I.
European embedded value	A method for calculating the embedded value according the principles and guidelines set by the CFO Forum.*
	Abbreviation: EEV
	Related term: Embedded value
Excess capital	See: Surplus capital
Exit value	See: Current exit value

\* Chief Financial Officer Forum, forum of major European insurance companies.

Expected loss (only for credit risk)	See: Credit risk
Expected policyholder deficit	Risk-measure used to determine the risk-based capital of an insurer. It refers to the expected cost of insolvency.
	Abbreviation: EPD
	Related terms: Probability of ruin, Value-at-Risk
	The expected cost is obtained through multiplying the probability of the occurrence of insolvency by the average cost of that insolvency.
	There are different definitions available for this term.
Expected shortfall	See: Tail-Value-at-Risk
Expense risk	The risk of a change in value caused by the fact that the timing and/or the amount of expenses incurred differs from those expected, e.g. assumed for pricing basis.
	Synonym: Operating expense risk
	Related term: Operational risk
	See: Risk Map in Appendix I.
Extreme value model	Mathematical and probabilistic models that provide methods to assign probabilities to the tails of the distribution curve of a particular kind of risk factor.
	<ul> <li>Extreme value theory covers the following two main types of models:</li> <li>The distribution of the maximum value of a sequence of random observations, as a reference distribution for more general cases;</li> <li>The distribution of the excesses over a high threshold.</li> </ul>

F

Fair value	The amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction [IAS 32, 11]. <sup>33</sup>
	Related terms: Arm's length transaction, Market value, Market- consistent valuation
	This is a similar concept to market value, but the fair value may be a mark-to-model price if no actual market price for asset/liability exists. It needs to be considered that there exist different concepts on what a market price is, especially considering prices observed in markets which are not deep, active or liquid, or where different markets exist.
Financial conglomerate	Any group of entities under common control whose exclusive or predominant activities consist of providing significant services in at least the insurance sector and the banking sector or investment services sector, subject to conditions defined in EU law. <sup>34</sup>
	Abbreviation: FC
	Related term: Financial group
Financial group	A group of undertakings deploying financial activities, which consists of a parent undertaking, its subsidiaries, and the entities in which the parent undertaking or its subsidiaries hold a significant participation. Or, undertakings linked to each other by a relationship subject to conditions defined in EU law. <sup>35</sup> Related term: Financial conglomerate
	Realed term maneur congromerate

Foreign exchange risk	The risk of a change in value caused by the fact that actual foreign currency exchange rates differ from those expected.
	Abbreviation: FX risk

Synonym: Currency risk

Foreign exchange risk can arise if the assets and liabilities of an insurer are not in the same currency, or if contracts for administrative and other services are contracted in a currency different to the currency implied in the premium determination.

Also, in some jurisdictions, the sale of contracts in other than the local currency has an impact on the rates of persistency or discontinuance in the event that the policyholders are exposed to a mismatch.<sup>36</sup>

For insurers it is common to distinguish between FX mismatch risk, where there are differences in currencies of assets and liabilities or supporting capital, and FX translation risk, which arises in groups where the currency of assets and liabilities/supporting capital in a local entity is different to the reporting currency of the group.<sup>37</sup>

See: Risk Map in Appendix I.

# **Funeral insurance** A life policy with a low sum assured intended to pay for the burial costs on the death of the insured.<sup>38</sup>

Synonym: Funeral cost insurance

Related term: Life insurance

Also referred to as an assistance policy.<sup>39</sup>

## Fungible capital

That part of the capital of a group which can be transferred between different legal entities of the group.

Capital flow from a legal entity may be restricted due to regulatory capital requirements.

However a group has always the option to sell a legal entity and thereby free capital.

**General insurance** Generic term mostly used in Anglo-Saxon countries to refer to all risks others than life.

Synonym: Non-Life insurance

**Going concern basis** A method of considering the financial situation assuming that an entity will continue to operate.<sup>40</sup>

Related terms: Break-up basis, Run-off basis

Going concern means that the entity (which can be a holding entity) continues its operations. It does not impose requirements on the type of operations, only that the total business volume should not be reduced too much. Hence, the selling of part, or even the entire insurance business, while starting another insurence business does not per definition violate the going concern assumption. The purpose is mainly to refer to a situation where the entity is able to proceed all its activities in the foreseeable future unforced by liquidation procedures.

**Group insurance** Contracts in which insurance cover is provided to a number of insured people (normally a workforce) or a number of other individual risks of one party, usually the counter-party, or many affected parties, which are not necessarily parties under the contract, under a single master contract.

The group plan is typically arranged by the employer of the insured individual or another group, e.g. sport clubs for all their members or automobile clubs for third party liability of all their members. Group contracts and policy conditions are usually issued on a yearly renewable term, but permanent plans also exist. The premium may be shared between contract holder and those insured.

Guarantee

See: Guaranteed benefit, Guaranteed element

## **Guaranteed benefit**

Payments or other benefits to which a particular policyholder or investor has an unconditional right that is not subject to the contractual discretion of the issuer.<sup>41</sup>

Related term: Guaranteed element

The unconditional right of the policyholder implies that no condition is subject to the insurer's discretion, nor to insurer's performance. Hence, a guaranteed benefit, or its determination, is contractually stipulated without any ability of the insurer to influence that benefit, neither by discretion nor by its performance. Accordingly, a guarantee is a risk bearing feature, since the amount to be paid might deviate from the earnings of the insurer, without the ability of the insurer to avoid that.

**Guaranteed element** An obligation to pay guaranteed benefits, included in a contract that may also contain other benefits, which may be subject to insurer's discretion or subject to the performance of the insurer.<sup>42</sup>

Related term: Guaranteed benefit

**Health insurance** Generic term applying to all types of insurance indemnifying or reimbursing for losses (e.g. loss of income) caused by illness or disability, or for expenses of medical treatment necessitated by illness or disability.<sup>43</sup>

Related terms: Accident insurance, Disability insurance

Defined as 'Accident and Health insurance' in EU law. For more details see Annex A and B(a) of First Council Non-Life Directive 73/239/EEC and consecutive amending directives.

Hedgeable risk A risk associated with an asset or an obligation that can be effectively neutralised by buying or selling a market instrument (or engaging in a contract with a third party in an arm's length transaction under normal business conditions), whose value is expected to change in such a way as to offset the change in value of the asset or liability caused by the presence of the risk.

Related terms: Arm's length transaction, Diversification, Systematic risk

The term hedgeable risk depends on market conditions. It is not a characteristic of the risk itself. Further it may be that the risk can be cheaper and more easily mitigated through other means, e.g. some storm risks can be mitigated at lower cost in a world-wide pool than through storm bonds.

Non-hedgeable risks are risks that cannot be hedged or easily transferred to a third party due to the lack of a deep and liquid market.<sup>44</sup>

**Historic cost** Assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds received in exchange for the obligation, or in some circumstances (for example, income taxes), at the amounts of cash or cash equivalents expected to be paid to satisfy the liability in the normal course of business.<sup>45</sup>

Related term: Carrying amount

Home supervisor	The supervisory authority which is responsible for the prudential supervision in the EU Member State in which the insurer has obtained its license to perform its EU insurance activities (home country), <sup>46</sup> and which is also responsible for the prudential supervision of business underwritten in other EU Member States via branches or freedom of services.
	Related terms: Host supervisor, Lead supervisor
	In EU legislation, home Member State is defined as the Member State where the undertaking has its based office, see Article 2(f) 2005/68/EC.
Host supervisor	The supervisory authority which is responsible for the prudential supervision in the EU Member State in which an insurance undertaking has a subsidiary, other than the home Member State which has licensed the insurer to perform its EU insurance activities.
	Related terms: Home supervisor, Lead supervisor
	In EU legislation, host Member State is defined as the Member State where the undertaking provides services or has a branch, see Article 2(n) 2005/68/EC, whereas home Member State is defined as the Member State where the undertaking has its based office, see Article 2(f) 2005/68/EC.
Hybrid capital	Capital that has the form of a combination of two or more different financial structures or instruments.
	Examples are subordinated and deeply subordinated debt.
	Hybrid capital is used to provide cheaper funding than share capital.

Inflation risk	The risk of a change in value caused by a deviation of the actual market-consistent value of assets and/or liabilities from their expected value, due to inflation, e.g. price inflation, wage inflation, etc., leading to an unanticipated change in insurance cost and/or impact of an insurance contract, e.g. with respect to contract limits.
In-force business	The portfolio of insurance contracts which give raise to current obligations or current rights.
Insolvency	The point at which under national bankruptcy procedures the owner looses ownership rights and/or the policyholders are no longer entitled to the orderly settlement of contracts.
Insurance contract	A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder or its beneficiary if a specified uncertain future event (the insured event) affects the policyholder. <sup>47</sup>
	<i>IFRS4, Appendix B provides detailed guidance on the definition of 'insurance contract'.</i>
Insurance group	A group structure which contains two or more insurers.48
	Related terms: Captive insurer, Financial conglomerate, Financial conglomerate, Insurance entity
	The structure of insurance groups may derive from an ultimate holding company which is not an insurer. Such a holding company can be an industrial or commercial company, another financial institution (for example a bank), or a company the majority of whose assets consist of shares in insurance companies (and/or other regulated financial institutions). <sup>49</sup>

# Insurance guarantee scheme

Arrangements which should ensure that policyholders and beneficiaries are not left without compensation in the event of the insolvency of an insurance entity.

Abbreviation: IGS

This can either be achieved by providing reimbursement to policyholders/beneficiaries or by securing the continuation of the insurance contracts.

In the field of third motor liability insurance, the EU legislation requires Member States to set up a compensation body with the task of providing compensation, at least up to the limits of the insurance obligation for damage to property or personal injuries caused by an unidentified vehicle or a vehicle for which the legal insurance obligation has not been satisfied.<sup>50</sup>

Insurance guarantee schemes also exist for worker's compensation.

IGS can be focused on one or on multiple lines; the financing of these schemes can be either private or public and can be very diverse.

# Insurance obligation An insurer's contractual obligations/rights under an insurance contract.<sup>51</sup>

#### Related term: Best estimate liability

Total net obligations associated with an insurance company can be split into various parts such as policyholder obligations, obligations arising from business and management cost of the portfolio, tax liabilities, and debts to creditors and others, and in total rights to policyholders (e.g. regarding premiums due or recoveries).

Liabilities can be measured net or gross of risk mitigation and transfer contracts including reinsurance and hedging.

Amount recognized on the balance sheet to meet as liabilities to reflect obligations arising out of insurance contracts, include:

- Claims liabilities (whether reported or not);
- Liabilities for unearned premiums;
- Liabilities for unexpired risks;
- Life insurance liabilities, and;
- Other liabilities related to life insurance contracts (e.g. premium deposits, accumulated savings for unit-linked contracts, accumulated guaranteed bonus for participating contracts, liabilities for future bonuses for participating contracts).

#### Interest rate risk

The risk of a change in value caused by a deviation of the actual interest rates from the expected interest rates.

Related terms: Market risk, Asset-liability mismatch risk

See: Risk Map in Appendix I.

## Internal model

Risk management system of an insurer for the analysis of the overall risk situation of the insurance undertaking, to quantify risks and/or to determine the capital requirement on the basis of the company specific risk profile.

Related term: Standard formula

Within the Solvency II framework an internal model is intended to fully or partially replace the standard formula for the calculation of the Solvency Capital Requirement. Both quantitative and qualitative requirements will be set by the regulator and explicit approval has to be granted by the supervisor.

Lapse	The expiration of all rights and obligations under an insurance contract if the policyholder fails to comply with certain obligations required to uphold those, e.g. premium payment.
	Related terms: Lapse risk, Surrender
	Typically, the insurer must receive the premium payment within a specified period after the due date.
Lapse risk	The risks of a change in value caused by deviations from the actual rate of policy lapses from their expected rates.
	Synonym: Persistency risk
	Related terms: Lapse, Surrender risk, Underwriting risk
	See: Risk map in Appendix I.
Lead supervisor	The supervisory authority responsible for the supervision of a financial group or conglomerate.
	Related terms: Home supervisor, Host supervisor
Legal risk	The possibility that lawsuits, adverse judgements from courts, or contracts that turn out to be unenforceable, disrupt or adversely affect the operations or condition of an insurer. <sup>52</sup>
	Related terms: Business risk, Operational risk
	The result may lead to unplanned additional payments to policyholders or that contracts are settled on an unfavourable basis, e.g. unrecoverable reinsurance.
	See: Risk Map in Appendix I.
Liability insurance	Type of non-life insurance that provides insurance to meet legal obligations to third parties arising from non-intentional acts or wrongs, e.g. negligence by the insured.
	Related term: Casualty insurance
	Reasons for legal obligations include bodily injury, property damage, and professional errors.
	Defined as 'Third party liability insurance' in EU law.

Life insurance	Category of insurance contracts for which the benefit payment is based on the occurrence of death, disability, or critical illness of the insured within the specified coverage term, or on the life status of the insured at maturity.
	Related term: Health insurance
	Life insurance offers life and/or death coverage of the insured in the form of a single or multiple (as well regular in case of an annuity) lump sum payments to a beneficiary.
	Health insurance products are often sold as a rider to a (group) life contract. In sensu stricto these are not life insurance, because they do not relate to the occurrence of death.
	The classes of life insurance that EU insurers can write on a license are defined in Annex I of Life Directive 2002/83/EC.
Liquidity risk	The risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize a loss.
	Related term: Market risk
	Liquidity risk may arise due to illiquidity of the assets held to meet the cash flow requirements (commonly referred to as asset, market, or trading liquidity risk), but also due to insufficient funds being available to meet cash flow requirements (funding liquidity risk).
	From a more theoretical point of view liquidity risk on a day-to- day basis could also be understood as a change in value due to a deviation of the actual cash flow requirements from the expected cash flow requirements, being the cost of being over- or under capitalised.
	See: Risk Map in Appendix I.
Longevity risk	Type of biometric risk. A change in value caused by the actual mortality rate being lower than the one expected.
	Related term: Biometric risk
	Longevity risk affects contracts where benefits are based upon the likelihood of survival, i.e. annuities, pensions, pure endowments, and specific types of health contracts.
	See: Risk Map in Appendix I.

Loss given default	Means the ratio of the loss on an exposure due to the default
Loss given default	of a counterparty to the amount outstanding at default. <sup>53</sup>
	Abbreviation: LGD
	Synonyms: Loss in the event of default, Loss severity
	Related term: Probability of default
Management risk	Type of business risk. The risk associated with an incompetent management or a management with criminal intentions. <sup>54</sup>
	Related terms: Business risk, Operational risk, Strategic risk
	See: Risk Map in Appendix I.
Marine, aviation, and transport insurance	<ul> <li>Category of insurance products defined in EU law providing coverage for:<sup>55</sup></li> <li>Accidental injury of passengers,</li> <li>All damage to or loss of railway rolling stock, sea, river and canal vessels, goods in transit and baggage, and</li> <li>All liability arising out of the use of ships vessels or boats on the sea, lakes, rivers or canals, including carrier's liability.</li> </ul>
	Abbreviation: MAT
	Defined as 'Marine, Aviation, and Transport insurance' in EU law. For more details see Annex A and B(a) of First Council Non-Life Directive 73/239/EEC and consecutive amending directives.
Market-consistent valuation	The practise of valuing assets and liabilities on market values where observable with a given quality (mark-to-market), where not, on market-consistent valuation techniques (mark-to-model).
	Related terms: Market value, Mark-to-market valuation, Mark- to-model valuation

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Market discipline	The creation of disciplining pressure through the publication
	of financial information and other information about
	the insurer's activities to the public, sometimes only to
	policyholders, providing transparency, hence allowing market
	participants and policyholders to assess key organisational
	and product information. <sup>56</sup>

Disclosure requirements and recommendations may either be imposed by the responsible supervisory authority or based on the insurer's own initiatives.

Market discipline serves to ensure that insurers display a fair attitude towards policyholders and provide financial transparency toward market participants.<sup>57</sup>

Market risk The risk of changes in values caused by market prices or volatilities of market prices differing from their expected values.

Related term: Asset-liability management

See: Risk Map in Appendix I.

Market value The amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction;<sup>58</sup> based on observable prices within an active, deep and liquid market which is available to and generally used by the entity.

Abbreviation: MV

Related terms: Arm's length transaction, Fair value, Marketconsistent valuation

Fair value is a similar concept to market value, but the fair value may be a mark-to-model price if no actual market price for asset/liability exists.

Market value margin	The measurement attribute for determining the risk margin in a market consistent measurement of an insurance obligation or asset reflecting the price charged by market participants for accepting the deviation risk inherent in a cash flow.
	Abbreviation: MVM
	Related terms: Best estimate liability, Fair value, Market- consistent valuation, Market value
	Under the cost of capital approach the MVM is to be approximated as the present value of the cost of capital for all future Solvency Capital Requirements or economic capital requirements which will have to be put up during the entire run-off of the portfolio of assets and liabilities for the risks of the in-force book of business. <sup>59</sup>
Mark-to-market valuation	The practice of valuing insurance rights and obligations, or more broadly security and financial instruments, using current market prices. <sup>60</sup>
	Related terms: Mark-to-model valuation, Market-consistent valuation
Mark-to-model valuation	The practice of valuing insurance rights and obligations, or more broadly security and financial instruments <sup>61</sup> based on modelling.
	Related term: Market-consistent valuation
	Mark-to-model valuing is often based on benchmarking, extrapolation or other forms of calculation based on current and market-consistent parameters, if case any such form of modelling can be applied. <sup>62</sup>
Migration risk	The risk of a change in value caused by a deviation of the actual probability of a future default by an obligor from the expected probability of future default, adversely affecting the present value of the contract with the obligor today. <sup>63</sup> Related term: <b>Credit risk</b>
Minimum Capital Requirement	The capital level representing the final threshold that triggers ultimate supervisory measures in the event that it is breached.
	Abbreviation: MCR
	Related term: Solvency Capital Requirement

Mispricing risk	Term used to describe the fact that for a range of reasons premiums may turn out to be too low to cover the insurer's expenses related to claims, claims handling, and administration. <sup>64</sup>
	Synonym: Pricing risk
	Related term: Underwriting risk
	Mispricing risk is not depicted in the risk map of Appendix I, because it is no unique source of risk.
Model risk	The risk that a model is not giving correct output due to a misspecification or a misuse of the model.
	Related term: Parameter uncertainty risk
	See: Risk Map in Appendix I.
	<ul> <li>Possible sources of model risk include, but are not restricted to:</li> <li>The use of an inappropriate model;</li> <li>The inappropriate use and implementation ofmodels;</li> <li>The selection of inappropriate models;</li> <li>Errors within the models or the estimated parameters;</li> <li>Insufficient or incorrect data.</li> </ul>
	Correct model choice given the information available, but a deviation of reality from the model at a later stage.
Morbidity risk	Type of biometric risk. A change of value caused by the actual disability and illness rates of the persons insured deviating from the ones expected.
	Related terms: Biometric risk, Disability risk
	Morbidity risk is generally considered as to only relate to insurance cover for losses other than loss of income, i.e. medical expenses, contrary to disability risk.
	An increase in the frequency of an insured becoming disabled or ill may for example result in higher claim patterns than charged for in the premiums.
	It affects health insurance contracts where payments are paid for insured types of disability and/or illness.
	See: Risk Map in Appendix I.

#### **Mortality risk**

Type of biometric risk. A change in value caused by the actual mortality rate being higher than the one expected.

Related terms: Biometric risk, Longevity risk

An increase in the frequency of the death of insured persons may for example result in higher claim patterns than charged for in the premiums.

Mortality risk affects all life insurance contracts and those health insurance contracts where claims depend upon the death of the insured.

See: Risk Map in Appendix I.

Motor insurance A generic term referring to all types of insurance indemnifying for third party liability, legal liability for bodily injury, and damage to property of others, arising out of ownership or operation of a motorised vehicle<sup>65</sup> (compulsory cover as in EU Directives), and/or other losses arising out of the ownership, or operation of a motorised vehicle by the insured (comprehensive cover).

Related term: Liability insurance

Defined as 'Motor third party liability insurance and Motor other classes' in EU law. For more details see Annex A and B(a) of First Council Non-Life Directive 73/239/EEC and consecutive amending directives.

#### 

See: Systematic risk

**Non-life insurance** Generic term used to refer to all types of insurance business other than Life insurance, including for example Property insurance, Liability insurance, Motor insurance, Accident insurance, and Health insurance.

Synonym: General insurance

Related terms: Life insurance, Health insurance

In Anglo-Saxon countries the term General insurance is commonly used.

Official term used in EU law to refer to specified classes of insurance defined in First Council Directive 73/239/EEC and amended in consecutive Non-life Directives.

**Operational risk** Risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from external events (including legal risk), differ from the expected losses.<sup>66</sup>

Related terms: Business risk, Compliance risk, Expense risk, Legal risk, Management risk, Model risk, Reputational risk, Strategic risk

Operational risks relate to operational loss events caused by internal or external reasons, excluding all 'financial' risks that a company has taken on in the expectation of a financial return.

See: Risk Map in Appendix I.

Option

A contract feature that gives a party of a contract the right (or potential right) to affect the discretionary net cash flows under the contract<sup>67</sup> under conditions and limitations of the discretion as outlined in the contract.

It involves a right granted by the insurer to the policyholder to exercise a particular choice related to a specific product; the product in which the option is embedded. The option may be exercisable by the policyholder at certain pre-specified points in time and under particular circumstances. It may be exercised automatically or may require an explicit decision by the policyholder.

Most options are conversion features granted to the buyer or early termination options reserved by the issuer of a security, but there are also options for management decisions of the insurer.

Parameter uncertainty risk	A change of value caused by the uncertainty in the estimation of the parameter values applied in a model.
	Related terms: Model risk, Operational risk
	<ul> <li>Possible sources of parameter uncertainty risk include, but are not restricted to:<sup>68</sup></li> <li>The number of observations on which best estimates are based is limited because the observation period is too short;</li> <li>The volatility of the observations makes estimation less certain;</li> <li>The period over which the observations were made may not include certain calamitous events that, in fact, should be reflected in the parameters of the distribution;</li> <li>The observations contain contaminated data.</li> <li>The observed population differs from the one being underwritten;</li> <li>There is an uncertainty for long-term insurance in projection of the parameters (diagnosis versus forecasting).</li> </ul>
	See: Risk Map in Appendix I.
Parent company	A company that controls subsidiaries through partial or full stock ownership or some other financial or legal connection, or that in the opinion of the competent authorities, effectively exercises a dominant influence over another undertaking. <sup>69</sup>
	Synonym: Parent undertaking
	Related legal EU term is 'Parent undertaking' defined in Article 2.9 of Directive 2002/87/EC on the supplementary supervision of financial conglomerates and Article 1 of Seventh Council Directive 83/349/EEC.
Pension scheme	A contract, an agreement, a trust deed, or rules stipulating which retirement benefits are granted and under which conditions. <sup>70</sup>
	Related terms: Annuity, Life insurance
Percentile approach	See: Quantile approach

Performance linked benefit	A contractual benefit sharing the policyholder in the performance of the insurer, i.e. the surplus under a group of contracts or the surplus of the entire entity; achieved after providing the guaranteed benefits, after making the related internal expenses as a result of received guaranteed premiums, and taking into account the investment income.
	Contracts can limit the surplus in which policyholders share, can determine to which extent they share in those surplus, and when and by which means the policyholders' share in surplus is benefited to individual policyholders. Contracts often grant insurers a certain discretion in that process.
	There are various methods for deciding how profits are shared.
Permanent capital	Instruments that have no end-date and are available indefinitely to absorb losses in defined circumstances. <sup>71</sup> Related term: Available solvency margin
Development of the	
Persistency risk	See: Lapse risk
Premium risk	See: Claims risk
Pricing risk	See: Mispricing risk
Probability of default	Risk measure. The likelihood that a counterparty will not repay contractual obligations according to the agreement.
	Abbreviation: PD
	Related term: Loss given default
	The probability of default is typically specified in terms of a one year period, <sup>72</sup> but may also relate to a longer or shorter period.
Probability of ruin	Risk measure. The likelihood that total net cash outflows exceed at any time the available resources starting with a given amount of resources, within a specified time horizon.
	Synonym: Ruin probability

Procyclicality	The cumulative pressure on a larger number of institutions to sell assets or raise capital at the same time, due to the 'Solvency Capital Requirements' and thereby potentially causing more extreme market movements than would otherwise be the case. <sup>73</sup>
	In addition, this causes sales to occur at inopportune times, i.e. when the achieved returns are such that in a cascade reaction even more assets need to be sold, with the consequence that a major impact on the entire industry is possible.
Product design risk	Generic term used to describe the fact that an insurer may face a risk exposure under its insurance contracts that was unanticipated in the design and pricing of the insurance contract. <sup>74</sup>
	Related term: Underwriting risk
	Product design risk is not depicted in the risk map of Appendix I, because it is no unique source of risk. It contains pricing risk and legal risk, to some extent as well operational risk and the risk, that the product is not successful in the market.
Property and casualty insurance	See: Casualty insurance, Property insurance
Property insurance	A generic term used to describe all non-life insurance products that can protect an insured against loss of, or damage to, property for specified peril(s). <sup>75</sup>
	Related term: Casualty insurance
	Defined as 'Insurance against Fire and other Damage to Property' in EU law. For more details see Annex A and B(a) of First Council Non- Life Directive 73/239/EEC and consecutive amending directives.
Provision	The amount needed under a certain measurement of a present obligation to meet that obligation adequately.
	The term 'technical provision' is a part of the provision separated for presentation purposes, referring to parts subject to uncertainty.

Prudential filter	Regulatory requirements applied to the measurement of rights and obligations under insurance contracts and capital obligations of the insurer which result in differences to the values shown in public financial reporting. <sup>76</sup>
	They are applied for prudential reporting purposes to ensure that the capital is suitably quantified to meet the specific aims of prudential supervision, <sup>77</sup> i.e. adjusting the measurement from the intend to represent the net obligations faithfully to the intend to meet them adequately.
Prudent person approach	A principle which guides asset management by requiring the manager to invest as a prudent person would do. Synonym: <b>Prudent man approach</b>
Pure endowment insurance	Insurance payable to the beneficiary if the policyholder is alive at the maturity date stated in the policy. Related terms: Endowment insurance, Life insurance
Quantile approach	Approach to define a risk margin above best estimate liabilities in terms of a confidence level. It defines a risk margin as the difference between the stated quantile of the applicable probability distribution (value at risk) and the mean of that distribution.
	Synonym: Percentile approach
	Related terms: Confidence level, Cost of capital approach, Risk margin, Value-at-Risk
	As this can, for low quantiles and/or skew distributions, lead to negative risk margins, a supplementary rule is needed if the resulting risk margin is always to be positive.

Solvency II Glossary

Rating agency driven capital	Amount of capital the rating agencies expect the company to hold for a given rating.
	It is designed to test and communicate capital adequacy warranting the target debt rating based on the rating agency metrics and models. <sup>78</sup>
Real-estate risk	The risk of a change in value caused by a deviation of the actual values of real-estate securities and/or income from real-estate securities, from their expected values. <sup>79</sup>
	Related term: Equity risk
	See: Risk Map in Appendix I.
Regulatory capital	See: Minimum Capital Requirement, Solvency Capital Requirement
Regulatory surplus	See: Surplus capital
Reinsurance	Type of risk mitigation on the basis of an insurance contract between one insurer or pure reinsurer (the reinsurer) and another insurer or pure insurer (the cedant), to indemnify against losses, partially or fully, on one or more contracts issued by the cedant in exchange for a consideration (the premium). <sup>80</sup>
Reinsurance counterparty risk	See: Credit risk
Reinvestment risk	Risk of a change in value caused by a deviation of the actual return on investment for funds to be reinvested, from the expected return on investment of these funds. <sup>81</sup> Related term: Market risk
Reputational risk	Type of business risk. The risk that adverse publicity regarding an insurer's business practices and associations, whether accurate or not, will cause a loss of confidence in the integrity of the institution. <sup>82</sup>
	Related term: Operational risk
	Reputational risk could arise from other risks inherent in an organisation's activities. The risk of loss of confidence relates to stakeholders, which include, inter alia, existing and potential customers, investors, suppliers, and supervisors. <sup>83</sup>
	See: Risk Map in Appendix I.

Required economic capital	The total of assets measured at market-consistent value, internally required by an insurer above the market- consistent value of obligations, in order to reduce the risk of not meeting the obligations to a defined risk measure (e.g. VaR, TVaR, EPD), and within a defined time period (e.g. one year). Related term: Available economic capital
Reserve risk	See: Claims risk
Risk margin	A generic term, representing the value of the deviation risk of the actual outcome compared with the best estimate, expressed in terms of a defined risk measure Related terms: Market value margin, Quantile approach The term 'risk margin' in the context of Solvency II refers to the amount above the best estimate liability.
Run-off basis	A method of considering the financial situation assuming that no new business will be written, but that the company will continue to operate with in-force business until the end of the term set by the policy conditions (e.g. the renewal date, the end of a fixed term, death of the insured person), including the settling of claims eventually arising during this period. <sup>84</sup> Related terms: <b>Break-up basis</b> , <b>Going concern basis</b>

Scenario analysis	Simulation of an alternative set of parameters within a model in order to establish the impact on the outcome.
	The following types of scenarios analysis can be distinguished:
	<ul> <li>Historical scenarios;</li> </ul>
	<ul> <li>Hypothetical scenarios;</li> <li>One off quants (a.g. simulation of strategic decisions)</li> </ul>
	- One-off events (e.g. simulation of strategic decisions).
	Synonym: Scenario testing
	Related terms: Sensitivity test, Stress test
Sensitivity test	A simulation designed to test the robustness of a relationship or projection, given various changes in the underlying assumptions.
	Related terms: Scenario analysis, Stress test
	A sensitivity test estimates the impact of one or more small moves in a particular risk factor, or a small number of closely linked risk factors.
Settlement risk	The risk of a change of value due to a deviation from the best estimate of the time-lag between the value and settlement dates of securities transactions. <sup>85</sup>
	Related term: Credit risk
Solvency Capital Requirement	The amount of capital to be held by an insurer to meet the Pillar I requirements under the Solvency II regime.
	Abbreviation: SCR
	Related terms: Adjusted Solvency Capital Requirement, Minimum Capital Requirement
	It is expected that the SCR may be derived using either an approved internal model or the standard formula.
Solvency margin	This term is used in the current Directives but will no longer be used under Solvency II and will be replaced by 'Solvency Capital Requirement and Minimum Capital Requirement'.
Spread risk	The risk of a change in value due to a deviation of the actual market price of credit risk from the expected price of credit risk.
	Related term: Market risk
	See: Risk Map in Appendix I

Standard formula	In the context of the Solvency II regime, a set of calculations prescribed by the regulator for generating the Solvency Capital Requirement.
	Related term: Internal model
	The standard formula is intended to be able to be used by a very wide range of undertakings.
Strategic risk	Type of business risk. The risk of a change in value due to the inability to implement appropriate business plans and strategies, make decisions, allocate resources, or adapt to changes in the business environment. <sup>86</sup>
	Related terms: Business risk, Management risk, Operational risk
	See: Risk Map in Appendix I
Stress test	A type of scenario analysis in which the change in parameters are considered significant, or even extreme.
	Abbreviation: ST
	Related terms: Scenario analysis, Sensitivity test
Supervisory ladder	In the context of Solvency II, describes the scale of control levels and accompanying supervisory measures for capital levels between the Solvency Capital Requirement and the Minimum Capital Requirement. <sup>87</sup>
Supervisory review process	In the context of Solvency II, describes the process that enables the supervisory authority to evaluate, on an ongoing basis, if the undertaking fulfils all relevant regulatory requirements.
	Abbreviation: SRP
Surety business	An obligation undertaken (a surety bond or guarantee) by one party (the surety) to another party (the beneficiary), to ensure the fulfilment of contractual, legal, or regulatory obligations by a third party (the principal) up to the bond limit. Related term: Credit insurance

Surplus capital	Term commonly used to refer to that part of the availa solvency margin that is held by an insurer in excess of t Solvency Capital Requirement.		
	Synonyms: Excess capital, Regulatory surplus		
	Related terms: Available solvency margin, Solvency Capital Requirement		
Surrender	The termination of an insurance contract by the policyholder.		
	Related terms: Lapse, Surrender risk		
	The insurer pays the policyholder or its beneficiary the cash value which is contractually agreed or legally prescribed.		
Surrender risk	The risk of a change in the value of an insurance polic caused by a deviation of the actual surrenders (prematur terminations) from the expected surrenders, i.e. thos assumed in the valuation, due to full repurchase, partia repurchase, premium reduction, conversion to paid-u policy status or transfer.		
	Related terms: Lapse risk, Surrender		
	Though driven by the same risk driver, i.e. the potential premature termination of an insurance contract, surrender risk is different from lapse risk because it relates to the change in value that is caused by the premature termination of contracts with a surrender value, while lapse only relates to the premature termination of contracts without a surrender value.		
	See: Risk Map in Appendix I.		
Systematic risk	Any risk inherent to the entire market or entire market segment which cannot be mitigated through diversification. Synonym: Non-diversifiable risk		
	Related term: Hedgeable risk		
	Also known as non-diversifiable risks (as measured by an asset's		
	beta), contrary to idiosyncratic risks.		

### Systemic risk

The risk of experiencing systemic events which may lead to the failure of institutions, markets or financial systems.<sup>88</sup>

Related term: Contagion

The spectrum of systemic risk ranges from the second-round effect on a single institution or market to the risk of having a systemic crisis affecting most of the (or even the whole) financial system. The geographical reach of systemic risk can be regional, national or international.<sup>89</sup>

Tail-Value-at-Risk	A coherent risk measure. For a given confidence level $1\text{-}\alpha$ it measures the average losses over the defined threshold (typically set as the VaR for a given quantile), i.e. the conditioned mean value, given that the loss exceeds the $1\text{-}\alpha$ percentile.
	Abbreviations: TVaR, TailVaR
	Synonym: Expected shortfall
	Related term: Value-at-Risk
Target capital	Term formerly used in the initial papers of the Commission Services, but no longer used and changed into Solvency Capital Requirement. <sup>90</sup>
Technical provision	See: Insurance obligation, Provision
Technical risk	See: Underwriting risk
Term insurance	Insurance payable to a beneficiary upon the death of the insured, provided death occurs within the term of the contract. <sup>91</sup>
	Synonym: Term life insurance
	Related term: Life insurance
	Term products are often sold as a rider or linked to another product, e.g. a mortgage or investment product.
Time horizon	The period over which any amount of required capital, e.g. Solvency Capital Requirement, is held in order to cover losses, within a given risk tolerance level.
	The time horizon for the SCR is set at one year and the confidence level will be set accordingly.
Total balance sheet approach	Principle which states that the determination of an insurer's capital that is available and needed for solvency purposes should be based upon all assets and liabilities, as measured in the regulatory balance sheet of the insurer, and the way they interact.

Underwriting risk	The risk of a change in value due to a deviation of the actual claims payments from the expected amount of claims payments (including expenses).
	Related terms: Biometric risk, Expense risk, Lapse risk, Claims risk, Surrender risk
	Total underwriting risk for non-life insurance includes the total of claims risk and expense risk for claims. For life insurance it includes the total of lapse, surrender, and biometric risks, as well as expense risk for claims.
	See: Risk Map in Appendix I.
Unexpected loss (only for credit risk)	See term: Credit risk
Unit-linked contract	A contract, under which benefits are determined based on the fair value of units of a mutual fund. The benefit reflects the fair value of a specific number of units, which is either contractually determined as a fixed number, or derived from other events under the contract, e.g. premium payments associated with a specific additional number of units based on the fair value of the units at the time of premium payment.
	In some cases additional guarantees can be given, e.g. minimum guaranteed maturity benefits, term insurance, etc.
	The investment risk is borne by the policyholder.
	Other forms are index-linkage, where the linked items are of such a kind, that the insurer is able to match entirely, or investment-linkage, where the contract does not refer to the fair value of units but to the fair value of assets in a portfolio. Performance-linked contracts refer to the returns recognized under a specific measurement approach from that portfolio or other performance of the insurer as actually occurred or recognized.
Universal life insurance	A flexible premium life insurance policy, resembling a savings account combined with a term insurance funded from the savings account, under which the policyholder may change the death benefit from time to time (with satisfactory evidence of insurability for increases) and vary the premium payments. <sup>92</sup> Related term: Life insurance

Value-at-Risk	Value-at-risk is a quantile of a distribution and used as a (non-coherent) risk measure. Abbreviation: VaR
	Related term: Tail-Value-at-Risk
	For example, if the twelve month value-at-risk with a 95% confidence level ( $\alpha = 0,05$ ) represents the amount of one million Euro, this means that an insurer would only expect to lose more than one million Euro once in 20 years (1/ $\alpha$ ). <sup>93</sup>
Value of in-force business	The value of future distributable post-tax profits, expected to emerge on business already written (including renewals), i.e. the in-force business. VIF excludes any value associated with future new contracts that have not yet been written.
	Abbreviation: VIF
	Related terms: Embedded value, European embedded value, In-force business
	VIF is calculated using current actuarial, economic and operational assumptions and is part of the embedded value. <sup>94</sup>

Whole life insurance	Insurance payable to a beneficiary upon death of the insured whenever that occurs: premiums may be payable for a specified number of years (limited payment life) or for life (straight life). <sup>95</sup>
	Whole life products typically provide level death benefits and vary mainly with respect to the period over which premiums are paid, varying from single premium to full lifetime premium payments. <sup>96</sup>
With-profit product	See: Performance linked benefit
Workers compensation insurance	Insurance cover for the cost of medical care and rehabilitation for workers injured on the job, during the way to and from the job, or to work related diseases.
	Related terms: Disability insurance, Health insurance, Life insurance
	Workers compensation insurance also compensates for wage loss and provides disability or death benefits for beneficiaries if the insured person is killed or injured in work-related accidents.

### Notes

- <sup>1</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>2</sup> Based on European Commission (2000) ART Market Study, Final Report, October 2000.
- <sup>3</sup> Based on European Commission (2000) ART Market Study, Final Report, October 2000.
- <sup>4</sup> Based on European Commission (2000) ART Market Study, Final Report, October 2000.
- <sup>5</sup> The definition applies to annuity products within the EU, not per definition to US products in its entirety.
- <sup>6</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>7</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>8</sup> Note from CFO Forum (2006) Elaborated principles for an IFRS Phase II Insurance Accounting Model, 22 June 2006.
- <sup>9</sup> Note from CFO Forum (2006) Elaborated principles for an IFRS Phase II Insurance Accounting Model, 22 June 2006.
- <sup>10</sup> Definition of General business risk in IAIS (2006) Glossary of terms, March 2006.
- <sup>11</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>12</sup> Note from IAIS (2005) Supervisory Standard on Suitable Forms of Capital, Revised Draft, 13 July 2005.
- <sup>13</sup> Note from IASB (2005) International Financial Reporting Standards, Framework for the Preparation and Presentation of Financial Statements (F), January 2005.
- <sup>14</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>15</sup> Based on BIS, Committee on Banking Supervision (2005) Compliance and the compliance function in banks, April 2005.
- <sup>16</sup> Swiss Re (2001) The Economics of Insurance, How insurers create value for shareholders, 2001, pp. 39.
- <sup>17</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>18</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>19</sup> Based on European Parliament and Council (2004) Capital Requirements Directive, COM (2004) 486 final, July 2004.
- <sup>20</sup> Draft definition: IASB (2006) Insurance contracts (phase II): Summary of possible accounting approaches (Agenda Paper 10D), Information for Observers, February 2006.
- <sup>21</sup> Note from IASB (2006) Insurance contracts (phase II): Summary of possible accounting approaches (Agenda Paper 10D), Information for Observers, February 2006.
- <sup>22</sup> Note from IASB (2006) Insurance contracts (phase II): Summary of possible accounting approaches (Agenda Paper 10D), Information for Observers, February 2006.
- <sup>23</sup> Draft definition: IASB (2006) Insurance contracts (phase II): Summary of possible accounting approaches (Agenda Paper 10D), Information for Observers, February 2006.

- <sup>24</sup> Note from IASB (2006) Insurance contracts (phase II): Summary of possible accounting approaches (Agenda Paper 10D), Information for Observers, February 2006.
- <sup>25</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>26</sup> Based on definition Disability income insurance in IAIS (2006) Glossary of terms, March 2006.
- <sup>27</sup> Based on BIS (1999) Capital Adequacy Principles Paper, February 1999.
- <sup>28</sup> Notes based on BIS (1999) Capital Adequacy Principles Paper, February 1999.
- <sup>29</sup> Based on CFO Forum (2005) Embedded Values, An educational session prepared by the CFO Forum for the Insurance Working Group, September 2005.
- <sup>30</sup> Based on CFO Forum (2005) Embedded Values, An educational session prepared by the CFO Forum for the Insurance Working Group, September 2005.
- <sup>31</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>32</sup> Based on definition for Equity and Real-estate risk in IAIS (2006) Glossary of terms, March 2006.
- <sup>33</sup> IASB (2005) International Financial Reporting Standards, Framework for the Preparation and Presentation of Financial Statements (F), January 2005.
- <sup>34</sup> Based on Articles 2(14) and 3 of European Commission and Parliament (2002) Financial Conglomerate Directive, Directive 2002/87/EC, December 2002.
- <sup>35</sup> Based on Article 2(12) of European Commission and Parliament (2002) Financial Conglomerate Directive, Directive 2002/87/EC, December 2002. Conditions for organisations linked to each other by a relationship are defined in Article 12(1) of Seventh Council Directive 83/349/EEC of 13 June 1983 based on the Article 54(3)(g) of the Treaty on consolidated accounts.
- <sup>36</sup> Note from definition Currency risk in IAIS (2006) Glossary of terms, March 2006.
- <sup>37</sup> Note based on CRO Forum (2005) Principles for Regulatory Admissibility of Internal Models, 10 June 2005.
- <sup>38</sup> KPMG (2001) The South African insurance industry, a glossary of terms, 2nd edition.
- <sup>39</sup> KPMG (2001) The South African insurance industry, a glossary of terms, 2nd edition.
- <sup>40</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>41</sup> European Commission, DG Internal Market (2004) IFRS4, Insurance Contracts, Appendix A, Commission Regulation No 2236/2004.
- <sup>42</sup> Based on European Commission, DG Internal Market (2004) IFRS4, Insurance Contracts, Appendix A, Commission Regulation No 2236/2004.
- <sup>43</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>44</sup> Note based on CEA CRO Forum (2006) Solutions to major issues for Solvency II Joint submission by the CRO Forum and CEA, 17 February 2006.
- <sup>45</sup> IASB (2005) International Financial Reporting Standards, Framework for the Preparation and Presentation of Financial Statements (F), January 2005.
- <sup>46</sup> Based on European Parliament and Council (2001) Directive 2001/17/EC, on the reorganisation and winding-up of insurance undertakings, 19 March 2001.

- <sup>47</sup> Adapted from European Commission, DG Internal Market (2004) IFRS4, Insurance Contracts, Appendix A, Commission Regulation No 2236/2004.
- <sup>48</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>49</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>50</sup> Note from The Council of the European Communities (1983) Second Council Directive 84/5/EEC, on the approximation of the laws of the Member States relating to insurance against civil liability in respect of the use of motor vehicles, 30 December 1983.
- <sup>51</sup> Adapted from the definition of Insurance liability in European Commission, DG Internal Market (2004) IFRS4, Insurance Contracts, Appendix A, Commission Regulation No 2236/2004.
- <sup>52</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>53</sup> European Parliament and Council (2004) Capital Requirements Directive, COM (2004) 486 final, July 2004.
- <sup>54</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>55</sup> Based on European Council (1973) First Non-Life Directive 73/239/EEC, on the coordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of direct insurance other than life assurance, 24 July 1973.
- <sup>56</sup> Based on European Commission, Internal Market DG (2002) MARKT2535-02 Considerations on the design of a future prudential supervisory system, 28 November 2002.
- <sup>57</sup> Notes based on European Commission, Internal Market DG (2002) MARKT2535-02 Considerations on the design of a future prudential supervisory system, 28 November 2002.
- <sup>58</sup> Based on definition Fair value from IASB (2005) International Financial Reporting Standards, Framework for the Preparation and Presentation of Financial Statements (F), January 2005.
- <sup>59</sup> Based on FOPI (2006) The Swiss Experience with Market Consistent Technical Provisions - the Cost of Capital Approach, February 24.
- <sup>60</sup> Based on definition for Marking to market in BIS Committee on Payment and Settlement Systems (2003) A glossary of terms used in payments and settlement systems, March 2003.
- <sup>61</sup> Based on BIS Committee on Payment and Settlement Systems (2003) A glossary of terms used in payments and settlement systems, March 2003.
- <sup>62</sup> Based on BIS (2004) International Convergence of Capital Measurement and Capital Standards, A Revised Framework, June 2004.
- <sup>63</sup> Based on definition for Downgrade or migration risk in IAIS (2006) Glossary of terms, March 2006.
- <sup>64</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>65</sup> Based on definition Automobile liability insurance in IAIS (2006) Glossary of terms, March 2006.

- <sup>66</sup> Based on European Parliament and Council (2004) Capital Requirements Directive, COM (2004) 486 final, July 2004.
- <sup>67</sup> Based on IAA (2005) Glossary International Actuarial Standards of Practice Regarding International Financial Reporting Standards, 16 June 2005.
- <sup>68</sup> Based on IAA (2004) Global Framework for Insurer Solvency Assessment, A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Associations, 2004.
- <sup>69</sup> Based on Article 2.9 of European Parliament and Council (2002) Directive 2002/87/ EC, on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate, 16 December 2002.
- <sup>70</sup> European Commission and Council (2003) Directive 2003/41/EC, On the Activities and Supervision of Institutions for Occupational Retirement Provision, June 2003.
- <sup>71</sup> Based on IAIS (2005) Supervisory Standard on Suitable Forms of Capital, Revised Draft, July 2005.
- <sup>72</sup> European Parliament and Council (2004) Capital Requirements Directive, COM (2004) 486 final, July 2004.
- <sup>73</sup> Based on CEIOPS (2005) Specific Calls for Advice From CEIOPS, April 2005.
- <sup>74</sup> Based on IAA (2004) A Global Framework for Insurer Solvency Assessment, A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association, 2004.
- <sup>75</sup> Based on European Council (1973) First Non-Life Directive 73/239/EEC, on the coordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of direct insurance other than life assurance, 24 July 1973.
- <sup>76</sup> IAIS (2005) Supervisory Standard on Suitable Forms of Capital, Revised Draft, July 2005.
- <sup>77</sup> IAIS (2005) Supervisory Standard on Suitable Forms of Capital, Revised Draft, July 2005.
- <sup>78</sup> CEA MOW 2005 (2005) Solvency Assessment Models Compared, Essential groundwork for the Solvency II Project, March 2005.
- <sup>79</sup> Based on the definition of Equity and Real-estate risk in IAIS (2006) Glossary of terms, March 2006.
- <sup>80</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>81</sup> Based on IAA (2004) A Global Framework for Insurer Solvency Assessment, A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association, 2004.
- <sup>82</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>83</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>84</sup> IAIS (2006) Glossary of terms, March 2006.
- <sup>85</sup> Based on IAA (2004) Global Framework for Insurer Solvency Assessment, A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association, 2004.

- <sup>86</sup> Based on FSA (2004) Policy Statement 04/16, Annex A.51, Integrated Prudential sourcebook for insurers, June 2004.
- <sup>87</sup> CEIOPS (2005) Cfa 15, Solvency control levels, Answers to the European Commission on the second wave of Calls for Advice in the framework of the Solvency II project, October 2005.
- <sup>88</sup> Hartmann, P. & De Bandt, O. (2000) ECB Working Paper 35: Systemic Risk: A Survey.
- <sup>89</sup> Note from Hartmann, P. & De Bandt, O. (2000) ECB Working Paper 35: Systemic Risk: A Survey.
- <sup>90</sup> European Commission, Internal Market DG (2004) MARKT2506-04 in the Calls for Advice (second wave), 23 December 2004.
- <sup>91</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>92</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>93</sup> Note based on IAIS (2006) Glossary of terms, March 2006.
- <sup>94</sup> Note from S&P (2004) Glossary of Insurance Securitization Terms, September 2004.
- <sup>95</sup> Based on IAIS (2006) Glossary of terms, March 2006.
- <sup>96</sup> Note from Atkinson, D.B. & Dallas, J.W. (2000) Life Insurance; Products and Finance, Charting a Clear Course, Society of Actuaries, 2000.

# 4. Appendix I Risk map

The concept of risk in relation to Solvency II can be defined as a change in value, either positive or negative, due to a deviation from the expected value.

The risk map identifies the main types of risk for insurers. The risk map should not be interpreted as a full overview of all risks for insurers that may have to be quantified under Solvency II. Most notably, the list of non-Life Underwriting risks is not comprehensive.

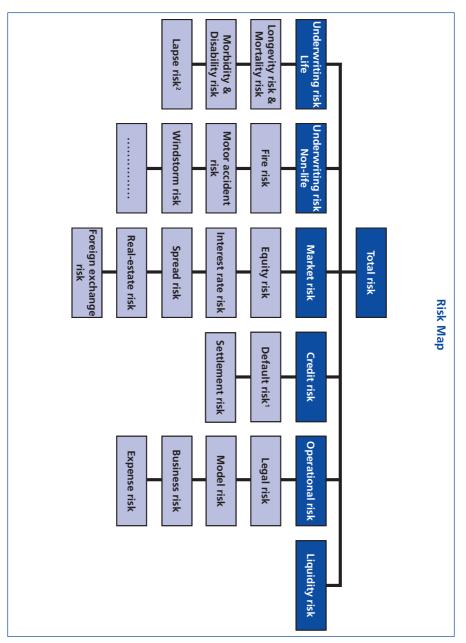
The overall risk categorisation is based on the classification of the IAA's Insurer Solvency Assessment Working Party\* with the five major risk categories of 'underwriting risk', 'market risk', 'credit risk', and 'operational risk', and 'liquidity risk'.

All risks of an insurance undertaking can be considered from different perspectives. A good example is provided by the two common views on underwriting risk. The first view originates from the nature of the administration of risk within the company, distinghuising between risks of claims which have already happened in the past – the reserve risk, and the risk of claims which will happen in the future – the premium risk. The other view considers the source of the risk e.g. fire, windstorm, morbidity, lapses. This risk map only displays the unique sources of risk.

Some "risks" are difficult to include within such a risk map. The concentration risk or calamity risk for example are in fact risks already included via their risk causes but have a special name because of their different diversification behaviour within a portfolio of risks: These risks refer to the total dependency of individual risks, because they may be triggered by the same event.

Finally, the risk map only covers the main risk types for insurers. Most risks can be further broken down into more detailed types. These sub-types are not displayed.

<sup>\*</sup> IAA (2004) A Global Framework forInsurer Solvency Assessment, A Report by the Insurer Solvency Assessment Working Party of the International Actuarial Association, 2004.



<sup>1.</sup> Default risk can arise on many parties, e.g. reinsurers, intermediaries, etc. but these are not included as separate risk types.

<sup>2.</sup> Lapse risk includes surrender risk.

# **Notes**



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CEA represents the views of European insurers to the EU institutions as well as international regulators and supervisors to ensure an appropriate regulatory framework.

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