

INSURANCE (LONG-TERM BUSINESS VALUATION AND SOLVENCY) REGULATIONS 2018

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Insurance Act 2008

INSURANCE (LONG-TERM BUSINESS VALUATION AND SOLVENCY) REGULATIONS 2018

Laid before Tynwald: Coming into Operation:

30 June 2018

The Isle of Man Financial Services Authority makes the following Regulations under section 50(1) of the Insurance Act 2008.

1 Title

These Regulations are the Insurance (Long-Term Business Valuation and Solvency) Regulations 2018.

2 Commencement

These Regulations come into operation on 30 June 2018.

3 Interpretation

In these regulations –

"the Act" means the Insurance Act 2008;

"**ancillary own-funds**", in relation to an insurer, mean its funds that are approved by the Authority in order to qualify as ancillary own-funds in accordance with Part 5;

"active financial market" means an arm's length financial market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis;

"actuary" has the meaning given in the Act;

"**arm's length**", in relation to a market or transaction, means that the market transaction is assumed to involve only sophisticated parties which are independent of one another with each party having the expertise, resources and information necessary to understand the relevant economic effect of the transaction;

"approved supervisor" means—

(a) the Authority;



- (b) the insurance supervisory authorities of the United Kingdom;
- (c) an insurance supervisory authority of a country in the European Union;
- (d) an insurance supervisory authority in a regime which has been assessed by EIOPA as being equivalent to Solvency II; or
- (e) any other insurance supervisory authority as may be approved by the Authority;

"**basic own-funds**", in relation to an insurer, comprise the insurer's funds which—

- (a) meet the requirements to qualify as basic own-funds as set out in Part 5; and
- (b) if they require the approval of the Authority in order to qualify as basic own-funds under Part 5, are so approved;

"basic solvency capital requirement" means the aggregate of the individual risk capital requirements in accordance with the correlation matrix in Regulation 53;

"basis point" is a measure equal to 0.01%;

"best estimate" has the meaning given in Regulation 26(1);

"BSCR" is an abbreviation meaning basic solvency capital requirement;

"**capital requirement**" means the amount and composition of capital required by these Regulations to be held by an insurer pursuant to section 12 of the Act, or a component thereof, as the context requires;

"capital add-on" has the meaning given in Regulations 52(1) and 52(2);

"**collateral arrangement**" is an arrangement under which collateral providers, for the purposes of securing or otherwise covering the performance of a relevant obligation, do one of the following—

- (a) transfer full ownership of the collateral to the collateral taker; or
- (b) provide collateral by way of security in favour of, or to, a collateral taker, and the legal ownership of the collateral remains with the collateral provider or a custodian when the security right is established;

"covered bond" means a security issued by a credit institution which is collateralised against a pool of assets, where, in the event of a failure of the issuer, those assets can cover claims at any point in time;

"**credit rating**", in relation to the credit rating of an entity, is an indicator of the entity's ability to pay back a debt and an implicit forecast of the likelihood of the entity defaulting;

"ECAI" means an External Credit Assessment Institution that evaluates the credit risk of debtors and assigns a credit rating;

"EEA" means the European Economic Area;



"EIOPA" means the European Insurance and Occupational Pensions Authority;

"eligible ancillary own-funds", in relation to an insurer, are its ancillary ownfunds which are eligible in meeting its SCR and MCR (as the context requires) in accordance with Regulation 127;

"eligible basic own-funds", in relation to an insurer, are its basic own-funds which are eligible in meeting its SCR and MCR (as the context requires) in accordance with Regulation 127;

"eligible own-funds", in relation to an insurer, are its combined—

- (a) eligible basic own-funds; and
- (b) eligible ancillary own-funds (if any);

"financial statements", in relation to an insurer, unless the context requires otherwise means its audited financial statements;

"IFRS" has the meaning given in Regulation 9(2)(a);

"ineligible" in relation to the own-funds of an insurer, has the meaning given in Regulation 127(3);

"**insurer**", unless the context requires otherwise, means an insurer as referred to in Regulation 4;

"insurance", to avoid any doubt and unless the context requires otherwise, includes assurance and reinsurance;

"international accounting standards" has the meaning as given in Regulation 9(2);

"loss-given-default" means the average loss resulting from the default of a counterparty;

"material", in relation to a misstatement of an asset, liability or capital item, means a misstatement that could influence the decisions-making or judgment of the intended user of the information;

"MCR" is an abbreviation meaning minimum capital requirement;

"**minimum capital requirement**" has the meaning as referred to in section 12 of the Act;

"**nominated ECAI**" means an ECAI nominated in accordance with Regulation 49;

"**NSLT health**" is health insurance business that is not pursued on a similar technical basis to that of life insurance business;

"OECD" means the Organisation for Economic Co-operation and Development;

"**own-funds**", in relation to the own-funds of an insurer, has the meaning given in Regulation 127(1);

"**own-fund item**" in relation to the own-funds of an insurer, has the meaning given in Regulation 127(4);

"**policyholder**", in relation to an insurer, means a person who for the time being is the legal holder of a policy for securing a contract with the insurer, and

- (a) in relation to that long-term business as consists in the granting of annuities upon human life, includes an annuitant; and
- (b) in relation to insurance business of any other kind, includes a person to whom, under a policy, a benefit is due or a periodic payment is payable;

"related entity" is an entity which is wither a subsidiary of the insurer, an entity in which a participation is held by the insurer (defined in Regulations 124 and 125), or an entity linked to the insurer by a relationship that requires the production of consolidated accounts;

"ring-fenced funds" are arrangements where an identified set of assets and liabilities are managed as though they were a separate undertaking, and must not include conventional index-linked, unit-linked or reinsurance business;

"**risk margin**" is the cost to the insurer of holding an amount of its eligible ownfunds equal to its SCR before any capital add-on;

"**risk profile**", in relation to an insurer, refers to the nature, scale and complexity of the total risks to which the insurer is or may be exposed;

"SCR" is an abbreviation meaning solvency capital requirement;

"SLT health" is health insurance business that is pursued on a similar technical basis to that of life insurance business;

"**solvency capital requirement**" has the meaning as referred to in section 12 of the Act;

"**special purpose vehicle**", in relation to the risk transfer activities of an insurer, means a financial legal entity, or cell of a protected cell company in accordance with the Protected Cell Companies Act 2004 (or equivalent), which acts as a reinsurer (or similar) to the insurer;

"solvency ratio", in relation to an insurer, is the ratio of the amount of its eligible own-funds to its SCR determined under these Regulations, or for a counterparty of the insurer who is also an insurer, such equivalent items in accordance with the corresponding solvency regime of the approved supervisory authority of that insurer's home jurisdiction;

"the insurer" shall, unless the context requires otherwise, be construed in accordance with Regulation 5(1); and

"technical provisions", in relation to an insurer, means the provision established by the insurer which corresponds to the economic value of the insurer fulfilling all of its insurance obligations over the lifetime of its portfolio of insurance policies.

4 Application

These regulations apply to the carrying on of insurance business of -

(a) classes 1, 2 and 10; and



(b) classes 12 and 12A in respect of contracts within classes 1, 2 and 10,

and therefore apply to an insurer authorised in respect of any such class, or combination thereof, as applicable.

5 Capital requirements

- (1) Pursuant to section 12 of the Act, an insurer (hereafter "the insurer") must calculate its MCR and SCR in accordance with these Regulations as are applicable to its business.
- (2) Where the insurer is a dormant insurer it may comply with its MCR and SCR by complying with the requirements of Schedule 1.

6 Expert judgement

- (1) Where the insurer makes assumptions about any of the material components of its SCR or MCR calculation (as applicable), the assumptions must be reasonable and based on the expertise of persons with relevant knowledge, experience and understanding of the risks inherent in the insurer's business.
- (2) Pursuant to paragraph (1), the insurer must, taking due account of the principle of proportionality in accordance with Regulation 25, ensure that its internal users of the relevant assumptions are informed about the assumptions' relevant content, degree of reliability and limitations.
- (3) For the purposes of paragraph (2), service providers to whom functions or activities of the insurer have been outsourced are considered to be internal users.

7 Actuary's report

- (1) The actuary appointed by the insurer must produce a written report, to its board of directors at least annually.
- (2) The report must document all tasks that have been undertaken by the actuarial function and their results, and must clearly identify any deficiencies and give recommendations to the Board as to how those deficiencies should be remedied.
- (3) The report must provide the insurer's board of directors with sufficient information to enable it to adequately understand and assess the appropriateness of the key assumptions, expert judgements and results relating to the valuation of the insurer's technical provisions and SCR.
- (4) In the report the actuary must draw conclusions on the appropriateness, accuracy and completeness of the
 - (a) methodologies used to determine the value of the insurer's assets, liabilities, own-funds and technical provisions;

- (b) best estimate assumptions used by the insurer to determine the technical provisions; and
- (c) valuation of the insurer's solvency capital requirement.
- (5) The report must also include any other factors which the actuary considers are material to the present or future valuation of the insurer's SCR.

PART 1: VALUATION OF ASSETS AND LIABILITIES OTHER THAN TECHNICAL PROVISIONS

8 Application

Pursuant to Regulation 5, the insurer must value its assets and liabilities other than its technical provisions in accordance with this Part.

9 Valuation methodology

- (1) The insurer must recognise its assets and liabilities on its regulatory balance sheet, in accordance with relevant accounting standards provided that those standards include valuation methods that are consistent with the following valuation approach—
 - (a) assets must be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction; and
 - (b) liabilities must be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction.
- (2) In paragraph (1), the relevant accounting standards are
 - (a) the International Financial Reporting Standards ("IFRS") issued by the IFRS Foundation and the International Accounting Standards Board (IASB);
 - (b) the Generally Accepted Accounting Practice in the UK ("UK GAAP"); or
 - (c) such other standards as may be approved by the Authority.
- (3) When valuing liabilities under sub-paragraph (1)(b), no adjustment to take account of the own credit standing of the insurer may be made.
- (4) If the standards referred to in paragraph (1) allow for the use of more than one valuation method, the insurer must only use valuation methods that are consistent with paragraph (1).
- (5) If the valuation methods included in the standards referred to in paragraph (2) are not consistent either temporarily or permanently with



the valuation approach set out in paragraph (1), the insurer must use other valuation methods consistent with paragraph (1).

- (6) If the insurer does not value its assets or liabilities in its financial statements using accounting standards as referred to in paragraph (2), it may recognise and value its assets and liabilities based on the valuation method it uses for preparing its annual or consolidated financial statements provided that—
 - (a) the valuation method is consistent with paragraph (1); and
 - (b) the valuation method is proportionate with respect to the nature, scale and complexity of the risks inherent in the business of the insurer.
- (7) If the requirements of sub-paragraphs (6)(a) or (6)(b) are not met the insurer must value its assets or liabilities, as the case may require, using the accounting standard in paragraph (2)(a) unless to do so would impose costs on the insurer that would be disproportionate with respect to the total administrative expenses involved.
- (8) The insurer must value its individual assets and liabilities separately.

10 Valuation of assets and liabilities

(1) In this Regulation —

"market participant" means a sophisticated party (as referred to in the definition of "arm's length") that is either a seller of an investment to an active financial market or a buyer of an investment from an active financial market.

- (2) The insurer must, when valuing its assets and liabilities in accordance with Regulations 9(1) to 9(5), follow the approach in this Regulation, taking into account the characteristics of the asset or liability that would affect the pricing of that asset or liability, including the condition and location of the asset or liability and restrictions, if any, on the sale or use of the asset or liability.
- (3) The insurer must value its assets and liabilities based on the assumption that the insurer will pursue its business as a going concern.
- (4) As the default valuation method, the insurer must value its assets and liabilities using quoted market prices in active financial markets for the same assets or liabilities.
- (5) If the use of quoted market prices in active financial markets for the same assets or liabilities is not possible, the insurer must value its assets and liabilities using quoted market prices in active financial markets for similar assets and liabilities with adjustments input to reflect differences; and those adjustments shall reflect factors specific to the asset or liability including all of the following—

- (a) the condition and location of the asset or liability;
- (b) the extent to which the similar asset or liability is comparable to the asset or liability; and
- (c) the volume or level of activity in the markets within which the similar asset or liability is observed.
- (6) If the requirements referred to in paragraph (5) are not satisfied, the insurer may, subject to the approval of the Authority, use an alternative valuation method, such as the marking assets to model approach defined in Regulation 15.
- (7) When using alternative valuation methods to value assets and liabilities, the insurer must rely as little as possible on data specific to the insurer and make maximum use of relevant market data including the following—
 - (a) quoted prices for identical or similar assets or liabilities in markets that are not active;
 - (b) data other than quoted prices that is observable for the asset or liability, including interest rates and yield curves observable at commonly quoted intervals, implied volatilities and credit spreads; or
 - (c) market-corroborated data, which may not be directly observable, but is based on or supported by observable market data.

and all such market data shall be adjusted for the factors referred to in paragraph (5).

- (8) To the extent that relevant observable inputs are not available, including in circumstances where there is little, if any, market activity for the asset or liability at the valuation date, the insurer must use unobservable data reflecting the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.
- (9) Pursuant to paragraph (8), if unobservable inputs are used, the insurer must adjust data that is specific to the insurer if reasonable available information indicates that other market participants would use different data or there is something particular to the insurer that is not available to other market participants.
- (10) When assessing the assumptions about risk, as referred to in paragraph (8), the insurer must take into account the risk inherent in the specific valuation technique used to measure fair value and the risk inherent in the inputs of that valuation technique.

11 Recognition and valuation of contingent liabilities

(1) In this Regulation –



"**contingent liability**" is a potential obligation of the insurer that may or may not be incurred, depending on the outcome of an event.

- (2) The insurer must recognise contingent liabilities that are material, as liabilities when valuing its assets and liabilities in accordance Regulations 9 and 10.
- (3) The insurer must value material contingent liabilities as equal to the expected present value of future cash flows required to settle the contingent liability over the lifetime of that contingent liability, using the basic risk-free interest rate term structure in Regulation 27.

12 Valuation of goodwill and intangible assets

When valuing its assets and liabilities in accordance with Regulations 9 and 10, the insurer must value the following assets at zero—

- (a) goodwill; and
- (b) intangible assets other than goodwill, unless the intangible asset can be sold separately and the insurer can demonstrate to its board of directors that there is a value for the same or similar assets that has been derived in accordance with Regulations 9 and 10, in which case the asset shall be valued in accordance with Regulations 9 and 10.

13 Recognition and valuation of deferred taxes

- (1) When valuing its assets and liabilities in accordance with Regulations 9 and 10 the insurer must recognise and value deferred tax assets and liabilities in relation to all assets and liabilities that are recognised for solvency and tax purposes.
- (2) Pursuant to paragraph (1), the insurer must value deferred taxes, other than deferred tax assets arising from the carry forward of unused tax credits and the carry forward of unused tax losses, on the basis of the difference between the values ascribed to assets and liabilities valued according to Regulation 10, and the values ascribed to assets and liabilities as recognised and valued for tax purposes.
- (3) The insurer must only ascribe a positive value to deferred tax assets if it is probable that future taxable profit will be available against which the deferred tax asset can be utilised, taking into account any legal or regulatory requirements on the time limits relating to the carry forward of unused tax losses or the carry forward of unused tax credits.

14 Valuation of participations

 When valuing its assets and liabilities in accordance with Regulations 9 and 10, the insurer must recognise holdings in related entities that meet



the criteria in Regulations 124 and 125 at the quoted market price in an active financial market in accordance with Regulation 10(3).

- (2) If the approach in paragraph (1) does not comply with the principle of proportionality in Regulation 25
 - (a) the insurer must value holdings in subsidiary insurers using the equity method based on recognition and measurement of the subsidiary's balance sheet consistent with the requirements of Regulations 9 and 10;
 - (b) the insurer must value holdings in related insurers other than subsidiaries using the equity method using recognition and measurement of the related insurer's balance sheet consistent with the requirements of Regulations 9 and 10;
 - (c) if the approach in sub-paragraph (b) is not practicable, proportionate or possible, the insurer must use an alternative valuation method in accordance with Regulation 10(6). The insurer must notify the Authority of the reason why the approach in sub-paragraph (b) cannot be used.
 - (d) the insurer must value holdings in related entities, other than those in sub-paragraphs (a) and (b) using the equity method using recognition and measurement of the related entity's balance sheet consistent with the requirements of Regulations 9 and 10.
 - (e) if the approach in sub-paragraph (d) is not practicable, proportionate or possible, the insurer must value the holding using the equity method applied to the related entity's balance sheet following IFRS, with the amendment that goodwill and other intangible assets must be deducted in accordance with Regulation 12.
 - (f) if the approach in sub-paragraph (e) is not practicable, proportionate or possible, for related entities, other than subsidiaries of the insurer, the insurer must use an alternative valuation method in accordance with Regulation 10(6).

15 Recognition of marked-to-model asset portfolios

(1) In this Regulation—

"marked-to-model", is an asset valuation technique where the price of an asset is determined by a financial model as opposed to an active financial market, due to the market for that financial instrument not being available.

(2) Pursuant to Regulation 10(6), an insurer may determine the value of the assets backing a portfolio of its life insurance obligations, using the 'marked to model' approach as an alternative valuation method to that



required by Regulation 10(6), subject to obtaining approval from the Authority, and only when the following conditions all are met—

- (a) the insurer has assigned a portfolio of assets, consisting of bonds or assets with similar cash flow characteristics, to cover the best estimate of the portfolio of insurance obligations, and maintains that assignment over the lifetime of the obligations, except for the purpose of maintaining the replication of expected cash flows between assets and liabilities where the cash flows have materially changed;
- (b) the portfolio of insurance obligations and the assigned portfolio of assets are identified, organised and managed separately from the other activities of the insurer and the assigned portfolio of assets cannot be used to cover losses arising from other activities of the insurer;
- (c) the expected cash flows of the assigned portfolio of assets (net of expected defaults) replicate the expected cash flows of the portfolio of insurance obligations in the same currency, with no material basis mismatch;
- (d) there are no future premium payments in the portfolio of insurance obligations;
- (e) the portfolio of insurance obligations only includes longevity risk, expense risk, revision risk and/or mortality risk as defined in Regulation 53;
- (f) if the portfolio of insurance obligations includes mortality risk, the best estimate of the portfolio increases by no more than 5% under a mortality risk shock specified in sub-paragraph (j);
- (g) there are no policyholder options as defined in Regulation 91(2) in the portfolio of insurance obligations, or only a surrender option where the surrender value does not exceed the value of the assets valued in accordance with Regulation 9;
- (h) the cash flows of the assigned portfolio of assets are fixed and cannot be changed by the issuers of the assets or any third parties, except where—
 - (i) cash flows are linked to inflation and these assets replicate the cash flows of the portfolio of insurance obligations which are linked to inflation; or
 - (ii) issuers have the right to change the cash flows of the asset in such a manner that the investor receives sufficient compensation to allow it to obtain the original cash flows by reinvesting in assets of an equivalent or better credit quality;

- (i) the portfolio of insurance obligations consists of the whole of the obligations of each contract in the portfolio; and
- (j) the mortality shock is the more onerous of the following two shocks, applied to contracts for which an increase in mortality rates increases the best estimate—
 - (i) an instantaneous permanent increase in mortality rates of 15%; and
 - (ii) an instantaneous increase to mortality rates (expressed as percentages) by an absolute value of 0.15%, in the 12 months following the valuation date.
- (3) If the asset portfolio includes risks which are not covered by the SCR in accordance with Regulation 51 then the insurer may not mark the asset portfolio to model.
- (4) The marked-to-model portfolio is treated in the same way as a ringfenced fund when determining its SCR, in accordance with Regulation 115.

16 Recognition of assets and liabilities in a ring-fenced fund

- (1) The assets in a ring-fenced fund of the insurer, determined in accordance with Regulation 138, are those arising from the investment of premiums received by the insurer in relation to the policies which comprise the ring-fenced fund, along with any other payments into and assets provided to the fund.
- (2) The liabilities in a ring-fenced fund comprise those liabilities attributable to the insurance contracts or risks covered by the ring-fenced fund. These include the technical provisions including any future discretionary benefits which the insurer expects to pay.
- (3) The insurer must attribute liabilities to the ring-fenced fund only if honouring those liabilities would entail an appropriate and permitted use of the restricted assets or own-funds.
- (4) The reduced transferability of the assets of a ring-fenced fund must be reflected in the calculation of the excess of assets over the liabilities of the insurer in accordance with Regulation 137.

PART 2: VALUATION OF TECHNICAL PROVISIONS

17 Technical provisions

(1) Pursuant to Regulation 5, the insurer must, in accordance with this Part, establish technical provisions with respect to all of its insurance obligations.



- (2) The value of the technical provisions must correspond to the economic value of the insurer fulfilling its insurance obligations to its policyholders arising over the lifetime of the insurer's portfolio of insurance contracts.
- (3) The calculation of technical provisions must make use of and be consistent with—
 - (a) relevant information provided by active financial markets; and
 - (b) generally available data on relevant underwriting risks.

18 Calculation of technical provisions

(1) In this Regulation—

"**surplus funds**" are accumulated profits which have not been made available for distribution to policyholders.

- (2) The value of the insurer's technical provisions is equal to the sum of a best estimate determined in accordance with Regulation 26 and a risk margin determined in accordance with Regulation 37.
- (3) The insurer must value the best estimate and the risk margin separately.
- (4) The insurer must calculate its technical provisions separately for each of its ring-fenced funds, and for the remainder of the insurer's assets and liabilities.
- (5) When calculating its technical provisions, the insurer must take account of the following
 - (a) all expenses that might reasonably be expected to be incurred by the insurer in servicing insurance obligations in accordance with Regulation 34;
 - (b) inflation, including expenses and claims inflation; and
 - (c) all payments to policyholders, including future discretionary bonuses, which the insurer expects to make, whether or not those payments are contractually guaranteed, unless those payments are surplus funds.
- (6) Pursuant to sub-paragraph (5)(c) the surplus funds of the insurer can only be considered to be insurance liabilities of the insurer to the extent that the surplus funds are not allocated by the insurer to Tier 1 basic own-funds in accordance with Regulation 129.
- (7) The insurer must be able to demonstrate to its board of directors the appropriateness of the level of its technical provisions, as well as the applicability and relevance of the methods applied, and the adequacy of the underlying statistical data used, in determining those provisions.
- (8) The insurer must validate the calculation of technical provisions, in particular by comparison against experience, at least once a year and more often if there are indications that the data, assumptions or methods

used in the calculation of the level of the insurer's technical provisions are no longer appropriate. The results of this validation must be included within the report in Regulation 7.

- (9) Pursuant to paragraph (8) the insurer must assess the impact of changes to its assumptions regarding the effect of future management actions on the valuation of its technical provisions. If changes in an assumption on future management actions has a significant impact on the technical provisions, the insurer must be able to explain the reason for this impact and how the impact is taken into account in its decision making process.
- (10) The insurer must carry out the validation required by paragraph (8) separately for the best estimate (separately for the gross best estimate and amounts recoverable from reinsurance contracts and special purpose vehicles), and the risk margin.

19 Documentation of technical provisions

- (1) The insurer must document the following processes, and be able to provide them to the Authority on request—
 - (a) The collection of data and analysis of its quality and other information that relates to the calculation of its technical provisions;
 - (b) The choice of assumptions used in the calculation of its technical provisions, including the choice of relevant assumptions about the allocation of expenses;
 - (c) The selection and application of actuarial and statistical methods for the calculation of its technical provisions, including the use of any simplifications;
 - (d) The validation of its technical provisions in accordance with Regulation 18(8).
- (2) For the purpose of paragraph (1)(a), the documentation must include detailed description of the data used to determine the insurer's technical provisions including—
 - (a) data groupings used and how they impact the result;
 - (b) the collection of data, how it was analysed and a comment on its quality;
 - (c) if data is not used consistently over time in the calculation of technical provisions, an explanation of its inconsistent use and its justification;
 - (d) any data issues which are considered material to the valuation of the insurer's technical provisions.



- (3) For the purpose of paragraph (1)(b), the documentation must include a detailed description of the best estimate assumptions used to determine the insurer's technical provisions including—
 - (a) a directory of the economic and demographic assumptions used in determining its technical provisions;
 - (b) assumptions regarding the use of future management actions;
 - (c) assumptions about policyholder behaviour;
 - (d) limitations of assumptions used;
 - (e) processes in place to review assumptions;
 - (f) an explanation of significant changes in assumptions and an estimation of the impact of material changes;
 - (g) a comparison of the best estimate against experience including a review of the quality of past best estimate assumptions and how the insight of past experience has been used to improve the quality of current calculations.

20 Recognition and de-recognition of insurance obligations

- (1) For the calculation of its technical provisions, an insurer must recognise all of its insurance obligations. This includes all contracts of insurance written by the insurer for the categories of insurance business specified in Regulation 4.
- (2) The insurer must recognise an insurance obligation at either the date the insurer becomes a party to the contract that gives rise to the obligation or the date the insurance cover begins, whichever date occurs earlier.
- (3) The insurer must only recognise the obligations within the boundary of the contract in accordance with Regulation 21.
- (4) The insurer must derecognise an insurance obligation only when it is extinguished, discharged, cancelled or expires fully.

21 Boundary of an insurance contract

- (1) For the purposes of this Part the boundaries of an insurance contract shall be defined in accordance with this Regulation.
- (2) Pursuant to Regulation 20(1) all obligations of the insurer relating to its insurance contracts, including obligations relating to unilateral rights of the insurer to renew or extend the scope of the contract and obligations that relate to paid premiums, must belong to the contract unless otherwise stated in this Regulation.
- (3) Subject to paragraphs (4), (6) and (7) as applicable, obligations which relate to insurance cover provided by the insurer after any of the



following dates do not belong to the contract, unless the insurer can compel the policyholder to pay the premium for those obligations —

- (a) the future date where the insurer has a unilateral right to terminate the contract;
- (b) the future date where the insurer has a unilateral right to reject premiums payable under the contract; or
- (c) the future date where the insurer has a unilateral right to amend the premiums or the benefits payable under the contract in such a way that the premiums fully reflect the risks.
- (4) Sub-paragraph (3)(c) applies if the insurer has a unilateral right to amend at a future date the premiums or benefits of its portfolio of insurance contracts in such a way that the premiums of the portfolio fully reflect the risks covered by the portfolio.
- (5) Pursuant to (4), in the case of obligations where an individual risk assessment of the obligations relating to the insured person of the contract is carried out at the inception of the contract and that assessment cannot be repeated before amending the premiums or benefits, the insurer must assess at the level of the contract whether the premiums fully reflect the risk.
- (6) The insurer must not take into account any restrictions of any of its unilateral rights as referred to in paragraph (3) or any limitations of the extent to which premiums or benefits can be amended that have no discernible effect on the economics of the contract.
- (7) The insurer must, for the purposes of paragraph (3), only consider that premiums fully reflect the risks covered by a portfolio of its insurance contracts, if there is no circumstance under which the amount of the benefits and expenses potentially payable under the portfolio exceeds the amount of the premiums potentially payable under the portfolio.

22 Homogeneous risk groups

- (1) The insurer must segment its insurance obligations into homogeneous risk groups when calculating its technical provisions.
- (2) The assignment of an insurance obligation of the insurer to a homogeneous risk group must reflect the nature of the risks relating to the obligation.
- (3) If an insurance contract covers risks across homogenous risk groups, the insurance obligations under the contract must, if possible, be unbundled into the appropriate risk group.
- (4) If an insurance contract includes health insurance obligations and other insurance obligations under the contract, those obligations must, if possible, be unbundled.



23 Assumptions underlying the calculation of technical provisions

- (1) The insurer must only consider assumptions underlying the calculation of its technical provisions to be realistic if all of the following conditions are met—
 - (a) the insurer is able to explain and justify each of the assumptions used, taking into account the significance of the assumption, the uncertainty involved in the assumption as well as relevant alternative assumptions;
 - (b) the circumstances under which the assumptions would be considered false can be clearly identified;
 - (c) unless otherwise provided in this section, the assumptions are based on the characteristics of the portfolio of insurance obligations and where possible regardless of the insurer holding the portfolio;
 - (d) the insurer uses the assumptions consistently over time and within homogeneous risk groups, without arbitrary changes; and
 - (e) the assumptions adequately reflect any uncertainty underlying the cash flows.
- (2) For the purpose of sub-paragraph (1)(c), the insurer must only use information specific to the insurer, including information on claims management and expenses, if that information reflects the characteristics of the portfolio of insurance obligations better than information that is not limited to the specific insurer, or if the calculation of technical provisions in a prudent, reliable and objective manner without using that information is not possible.
- (3) The insurer must set assumptions on future active financial market parameters and scenarios (as applicable) that are appropriate and consistent with the purpose of Regulation 9(1).
- (4) If the insurer uses the 'marked to model' approach in accordance with Regulation 15, the model used to produce projections of future active financial market parameters must comply with all of the following requirements—
 - (a) the model must generate asset prices that are consistent with asset prices observed in an active financial market;
 - (b) the model must assume no arbitrage opportunities exist; and
 - (c) the calibration of the model's parameters and scenarios must be consistent with the relevant risk-free interest rate term structure used to calculate the insurer's best estimate.

24 Future management actions

- (1) The methods and techniques for the estimation of the future cash flows of the insurer, and hence the assessment its technical provisions, may take account of potential realistic future actions taken by the management of the insurer.
- (2) Such an assumption on future management actions may only be considered to be realistic if it meets all of the following conditions—
 - (a) it is determined in an objective manner;
 - (b) it is consistent with the insurer's current business practice and business strategy, including the use of risk-mitigation techniques;
 - (c) if there is sufficient evidence that the insurer will change its practices or strategy, it is consistent with the changed practices or strategy;
 - (d) it is consistent with the insurer's other assumptions on future management actions;
 - (e) it is not contrary to any obligations of the insurer towards its policyholders, or to legal requirements applicable to the insurer;
 - (f) it takes account of any public indications by the insurer as to the actions that it would expect to take or not take; and
 - (g) it takes account of the time needed to implement the management actions and any expenses caused by them.
- (3) The insurer must be able to verify, and take such actions as are adequate and appropriate to verify, that assumptions about its future management actions are realistic through suitable means, including
 - (a) a comparison of assumed future management actions with management actions actually taken previously by the insurer;
 - (b) a comparison of future management actions taken into account in the insurer's current and past calculations of the best estimate; and
 - (c) an assessment of the impact of changes in the assumptions of future management actions on the value of the insurer's technical provisions.
- (4) The insurer must be able to explain any relevant deviations in relation to sub-paragraphs (3)(a) and (3)(b) upon request of the Authority and, if changes in an assumption on future management actions has a significant impact on the technical provisions, the reasons for that sensitivity and how the sensitivity is taken into account in the decision-making process of the insurer.
- (5) In relation to its future management actions as referred to in paragraph(1), the insurer must establish and maintain a comprehensive future



management actions plan, approved by its board of directors, and available to the Authority on request, which provides for all of the following—

- (a) the identification of future management actions that are relevant to the valuation of the insurer's technical provisions;
- (b) the identification of the specific circumstances in which the insurer would reasonably expect to carry out each respective future management action referred to in sub-paragraph (a);
- (c) the identification of the specific circumstances in which the insurer may not be able to carry out each respective future management action referred to in sub-paragraph (a), and a description of how those circumstances are considered in the calculation of its technical provisions;
- (d) the order in which future management actions referred to in subparagraph (a) would be carried out and the insurer's governance requirements applicable to those future management actions;
- (e) a description of any on-going work required to ensure that the insurer is in a position to carry out each respective future management action referred to in sub-paragraph (a);
- (f) a description of how the future management actions referred to in sub-paragraph (a) have been reflected in the calculation of the insurer's best estimate in its technical provisions;
- (g) a description of the applicable internal reporting procedures that cover the future management actions referred to in sub-paragraph(a) included in the insurer's calculation of the best estimate in its technical provisions.

25 Proportionality

- (1) The insurer must use methods to calculate its technical provisions which are proportionate to the nature, scale and complexity of the risks underlying its insurance obligations.
- (2) In determining whether a method of calculating its technical provisions is proportionate, the insurer must carry out an assessment which includes—
 - (a) an assessment of the nature, scale and complexity of the risks underlying its insurance obligations;
 - (b) an evaluation in qualitative or quantitative terms of the error introduced in the results of the method due to any deviation between the following—
 - (i) the assumptions underlying the method in relation to the risks;

- (ii) the results of the assessment referred to in sub-paragraph(a).
- (3) The assessment must include all risks which affect the amount, timing or value of the cash in- and out-flows required to settle the insurer's insurance obligations over their lifetime.
- (4) For the purpose of the calculation of the risk margin, the assessment must include all risks referred to in Regulation 37(5)(h) over the lifetime of the underlying insurance obligations.
- (5) The assessment must be restricted to the risks that are relevant to that part of the calculation of the insurer's technical provisions to which the method is applied.
- (6) A method is considered to be disproportionate to the nature, scale and complexity of the risks if the error referred to in sub-paragraph (2)(b) is material, unless one of the following conditions are met—
 - (a) no other method with a smaller error is available and the method is not likely to result in an underestimation of the amount of technical provisions; or
 - (b) the method leads to an amount of technical provisions of the insurer that is higher than the amount that would result from using a proportionate method and the method does not lead to an underestimation of the risk inherent in the insurance obligations that it is applied to.

26 Calculation of the best estimate

- (1) The best estimate is the sum of the expected present value of future cashflows of the insurer.
- (2) The expected present value of future cash-flows of the insurer are the probability-weighted average of future cash-flows, taking account of the time value of money, using the relevant risk-free interest rate term structure in accordance with Regulation 27.
- (3) The calculation of the best estimate must be based upon—
 - (a) up-to-date and credible information; and
 - (b) realistic assumptions,

and be performed using adequate, applicable and relevant actuarial and statistical methods.

(4) Information must only be considered to be credible if the insurer can evidence of the credibility of the information taking into account the consistency and objectivity of that information, the reliability of the source of the information and the transparency of the way in which the information is generated and processed. The Authority will treat



information as credible until such time as it may require it to be validated.

- (5) The best estimate must be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles. Those amounts must be calculated separately, in accordance with Regulation 39.
- (6) The insurer must calculate the best estimate in a transparent manner and in such a way as to ensure that the calculation method and the results derived from it are capable of review by a qualified expert.
- (7) The choice of actuarial and statistical methods for the calculation of the best estimate must be based on their appropriateness to reflect the risks which affect the underlying cash flows of the insurer and the nature of the insurance obligations.
- (8) Those actuarial and statistical methods must be consistent with and make use of all relevant data available for the calculation of the best estimate.
- (9) If a calculation method is based on grouped policy data, the insurer must ensure that the grouping of policies creates homogeneous risk groups that appropriately reflect the risks of the individual policies included in those groups, in accordance with Regulation 36.
- (10) The insurer must analyse the extent to which the present value of its cash flows depend both on the expected outcome of future events and developments and on how the actual outcome in certain scenarios could deviate from the expected outcome.
- (11) If the present value of the insurer's cash flows depends on future events and developments the insurer must use a method to calculate the best estimate for cash flows which reflects those dependencies.

27 Risk-free interest rate term structure

- (1) The relevant risk-free interest rate term structure for each currency, set out in Regulation 66, will be published periodically by the Authority.
- (2) In relation to the risk-free interest rate structure
 - (a) for durations of less than one year, the annual risk-free interest rate shall be used; and
 - (b) investment expenses must be allowed for in the cash flows underlying the calculation of technical provisions in accordance with Regulation 34 and not in the risk-free interest rates used to discount technical provisions.

28 Appropriate use of approximations to calculate the best estimate

If the insurer has insufficient data of appropriate quality, deemed in accordance with Regulations 43 and 44, to apply a reliable actuarial method, it may use appropriate approximations to calculate the best estimate provided that all of the following requirements are met—

- (a) the insufficiency of data is not due to inadequate internal processes or procedures of collecting, storing or validating data used for the valuation of the insurer's technical provisions;
- (b) the insufficiency of data cannot be remedied by the use of external data which meets the requirements of Regulation 43(5);
- (c) it would not be practicable for the insurer to adjust the data to remedy the insufficiency.

29 Comparison of best estimate against experience

- (1) The insurer must have processes and procedures in place to ensure that its best estimates, and the assumptions underlying the calculation of its best estimates, are regularly compared against relevant experience.
- (2) If such comparison identifies systematic deviation between experience and the best estimate calculations, appropriate adjustments to either or both of the—
 - (a) actuarial methods being used; or
 - (b) assumptions,

must be made.

30 Future discretionary benefits

- (1) In calculating the best estimate, the insurer must take into account future discretionary benefits which are expected to be made, whether or not those payments are contractually guaranteed.
- (2) If future discretionary benefits depend on the assets held by the insurer, the insurer must—
 - (a) base the calculation of the best estimate on the assets currently held by the insurer;
 - (b) assume future changes of its asset allocation in accordance with Regulation 33(3); and
 - (c) ensure that the assumptions on the future returns of the assets is consistent with the relevant risk-free interest rate term structure and the valuation of the assets in accordance with Regulation 27.
- (3) When calculating its technical provisions, the insurer must determine separately the value of any relevant future discretionary benefits.



31 Policyholder behaviour

- (1) In calculating the best estimate, the insurer must take sufficient steps to identify relevant policyholders' behaviour.
- (2) An assumption made by an insurer with respect to the likelihood that policyholders will exercise contractual options, including but not limited to lapses and full or partial surrenders, must—
 - (a) be realistic and based on current and credible information; and
 - (b) take account, either explicitly or implicitly, of the impact that future changes in financial and non-financial conditions may have on the exercise of those options.
- (3) Assumptions about the likelihood that policyholders will exercise contractual options must be based on analysis of past policyholder behaviour and a prospective assessment of expected future policyholder behaviour.
- (4) Such analysis must take into account the following—
 - (a) how beneficial the exercise of the options was or would have been to the policyholders under past circumstances;
 - (b) the influence of past and future economic conditions;
 - (c) the impact of past and future management actions;
 - (d) if relevant, how past projections compared to the actual outcome; and
 - (e) any other circumstances that are likely to influence a decision whether to exercise the option.
- (5) The likelihood that policyholders will exercise contractual options, including lapses and surrenders, must not be assumed to be independent of the elements mentioned in paragraph (4), unless proper evidence to support such an assumption can be observed or if the impact would not be material.
- (6) In general, policyholders' behaviour must not be assumed to be independent of
 - (a) active financial markets;
 - (b) the insurer's treatment of customers; or
 - (c) publicly available information,

unless proper evidence to support the assumption can be observed.

32 Contractual options and financial guarantees

(1) When calculating the best estimate, the insurer must take into account all of the following –

- (a) all financial guarantees and contractual options included in its insurance policies; and
- (b) all factors which may affect the likelihood that its policyholders will exercise contractual options or realise the value of financial guarantees.
- (2) Pursuant to (1)(b) an assumption made by the insurer with respect to policyholder behaviour must meet the requirements of Regulation 31.

33 Cash flow included in the calculation of best estimates

- (1) The cash flow projection used in the calculation of the best estimate must take account of all the cash in- and out-flows required to settle the insurance obligations over their lifetime.
- (2) The cash flow projection used in the calculation of the best estimate must include all of the following cash flows, to the extent that these cash flows relate to the insurer's existing insurance contracts—
 - (a) benefit payments to policyholders;
 - (b) payments that the insurer will incur in providing contractual benefits that are paid in kind;
 - (c) payments of expenses in accordance with Regulation 34;
 - (d) premium payments and any additional cash flows that result from those premiums;
 - (e) payments between the insurer and intermediaries relating to insurance obligations;
 - (f) payments between the insurer and investment firms in relation to contracts with index-linked and unit-linked benefits; and
 - (g) taxation payments which are, or are expected to be, charged to policyholders or are required to settle the insurance obligations.
- (3) The calculation of the best estimate must take into account expected future developments that will have a material impact on the cash in- and out-flows required to settle the insurer's insurance obligations over the lifetime thereof.
- (4) Such future developments must include demographic, legal, medical, technological, social, environmental and economic developments including inflation.
- (5) The cash flow projection used in the calculation of the best estimate must, explicitly or implicitly, take account of all uncertainties in the insurer's cash flows, including all of the following characteristics—
 - (a) uncertainty in the timing, frequency and severity of insured events;



- (b) uncertainty in claim amounts, including uncertainty in claims inflation, and in the period needed to settle and pay claims;
- (c) uncertainty in the amount of expenses;
- (d) uncertainty in expected future developments to the extent that it is practicable;
- (e) uncertainty in policyholder behaviour;
- (f) dependency between two or more causes of uncertainty; and
- (g) dependency of cash flows on circumstances prior to the date of the cash flow.

34 Expenses

- (1) Pursuant to Regulation 33(2)(c) the cash flow projection used in the calculation of the best estimate must take into account all of the following expenses, which relate to obligations of the insurer—
 - (a) administrative expenses;
 - (b) investment management expenses;
 - (c) claims management expenses; and
 - (d) acquisition expenses.
- (2) The expenses referred to in sub-paragraphs (1)(a) to (1)(d) must take into account overhead expenses incurred in servicing the insurance obligations.
- (3) The insurer's overhead expenses must be allocated in a realistic and objective manner and on a consistent basis over time to the parts of the best estimate to which they relate.
- (4) Expenses in respect of reinsurance contracts and special purpose vehicles is taken into account in the gross calculation of the best estimate.
- (5) Expenses must be projected on the assumption that the insurer will write new business in the future (assuming it currently does).

35 Time value of money of cash flows

- (1) The probability-weighted average cash flows of the insurer must take into account the time value of money.
- (2) For this purpose
 - (a) the time value of money of each future cash flow must be calculated using the risk-free term structure in accordance with Regulation 27 for the relevant currency of that cash flow; and
 - (b) the best estimate must be calculated separately for obligations in different currencies.

36 Homogenous risk groups of life insurance obligations

- (1) Pursuant to Regulation 33 the insurer's cash flow projections used in the calculation of the best estimate must be made separately for each policy.
- (2) If the separate calculation for each policy would be an undue burden on the insurer, it may carry out the projection by grouping policies, provided that the grouping complies with all of the following requirements—
 - (a) there are no significant differences in the nature and complexity of the risks underlying the policies that belong to the same group;
 - (b) the grouping of policies does not misrepresent the risk underlying the policies and does not misstate their expenses; and
 - (c) the grouping of policies is likely to give approximately the same results for the best estimate calculation as a calculation on a per policy basis, in particular in relation to financial guarantees and contractual options included in the policies.

37 Calculation of the risk margin

- (1) The risk margin must be calculated by determining the cost of providing an amount of eligible own-funds equal to the insurer's SCR.
- (2) The insurer's risk margin (*'RM'*) must be calculated using the following formula—

$$RM = CoC \cdot \sum_{t \ge 0} \frac{SCR_{RI}(t)}{(1 + r_{t+1})^{t+1}}$$

where –

- (a) *CoC* denotes the Cost-of-Capital rate in accordance with paragraph (3);
- (b) SCR_{RI}(t) denotes the SCR of the reference insurer company after t years, determined in accordance with paragraph (5);
- (c) r_{t+1} denotes the basic risk-free interest rate in the local currency of the insurer for the maturity of t + 1 years.
- (3) The Cost-of-Capital rate is set at 5%.
- (4) The insurer must allocate its risk margin to the relevant homogeneous risk groups in Regulation 22 in accordance with the contribution of each risk group to the insurer's SCR.
- (5) The calculation of the risk margin is based on all of the following assumptions (if applicable)—
 - (a) the whole portfolio of insurance obligations of the insurer that calculates the risk margin (the original insurer) is taken over by another insurer (the reference insurer);



- (b) the transfer of insurance obligations includes any reinsurance contracts and arrangements with special purpose vehicles relating to these obligations;
- (c) the reference insurer does not have any insurance obligations or own-funds before the transfer takes place;
- (d) after the transfer, the reference insurer does not assume any new insurance obligations;
- (e) after the transfer, the reference insurer raises eligible own-funds equal to the SCR necessary to support the insurance obligations over the lifetime thereof;
- (f) after the transfer, the reference insurer has assets which amount to the sum of its SCR and of the technical provisions net of the amounts recoverable from reinsurance contracts and special purpose vehicles;
- (g) the assets are selected in such a way that they minimise the capital requirement for market risk that the reference insurer is exposed to;
- (h) the SCR of the reference insurer captures all of the following risks—
 - (i) underwriting risk with respect to the transferred business;
 - (ii) if it is material, the market risk referred to in subparagraph (g), other than interest rate risk;
 - (iii) credit risk with respect to reinsurance contracts, arrangements with special purpose vehicles, intermediaries, policyholders and any other material exposures which are closely related to the insurance obligations; and
 - (iv) operational risk;
- (i) the loss-absorbing capacity of technical provisions, in the reference insurer corresponds for each risk to the loss-absorbing capacity of technical provisions in the original insurer;
- (j) there is no loss-absorbing capacity of deferred taxes for the reference insurer; and
- (k) the reference insurer will, subject to sub-paragraphs (d) and (e), adopt future management actions that are consistent with the assumed future management actions of the original insurer.
- (6) The SCR of the original insurer is assumed to be equal to the SCR of the reference insurer under the assumptions set out in paragraph (5).

- (7) The calculation must include any capital add-on imposed in Regulation 52, unless the capital add-on is a result of the insurer's systems of governance not adequately addressing its risk profile.
- (8) The insurer must determine the risk margin using the approach in this regulation at least once a year.
- (9) Pursuant to paragraph (8), and in accordance with Regulation 25, for subsequent quarterly calculations of the risk margin, the insurer may derive the risk margin from the result of the full calculation determined in accordance with paragraph (8), without an explicit calculation of the formula referred to in paragraph (2).

38 Optional simplified calculation of the risk margin

Pursuant to Regulation 37, the insurer may use simplified methods when it calculates the risk margin, including one or more of the following –

- (a) methods which use approximations for the amounts included in the calculation of *SCR*_{RI}(*t*); or
- (b) methods which approximate the discounted sum of the amounts included in the calculation of $SCR_{RI}(t)$, without calculating each of those amounts separately.

39 Recoverables from reinsurance contracts and special purpose vehicles

- (1) The insurer must calculate the best estimate gross, without deduction of amounts recoverable from reinsurance contracts and special purpose vehicles if applicable.
- (2) The amounts recoverable from—
 - (a) special purpose vehicles;
 - (b) finite reinsurance contracts; and
 - (c) other reinsurance contracts,

must each be calculated separately.

- (3) The amounts recoverable from reinsurance contracts and special purpose vehicles must be
 - (a) calculated consistently with the boundaries of the insurance or reinsurance contracts to which those amounts relate;
 - (b) adjusted to take account of expected losses due to the default of the counterparty in accordance with regulations 40 or 42.
- (4) The amounts recoverable from a special purpose vehicle must not exceed the aggregate maximum risk exposure of that special purpose vehicle to the insurer.



- (5) The aggregate maximum risk exposure is the sum of the maximum payments, including expenses that the special purpose vehicles may incur, excluding expenses that meet all of the following criteria—
 - (a) the special purpose vehicle has the right to require the insurer which has transferred risks to the special purpose vehicle to pay the expense; and
 - (b) the special purpose vehicle is not required to pay the expense unless and until an amount equal to the expense has been received from the insurer which has transferred the risks to the special purpose vehicle.
- (6) If the insurer which has transferred risks to the special purpose vehicle it must not include the expense as an amount recoverable from the special purpose vehicle.
- (7) For the purpose of calculating the amounts recoverable from reinsurance contracts and special purpose vehicles—
 - (a) cash flows must only include payments in relation to compensation of insurance events and unsettled insurance claims;
 - (b) payments in relation to other events or settled insurance claims must be accounted for outside the amounts recoverable from reinsurance contracts and special purpose vehicles;
 - (c) if a deposit has been made for the cash flows, the amounts recoverable must be adjusted accordingly to avoid a double counting of the assets and liabilities relating to the deposit; and
 - (d) if cash flows payable from the special purpose vehicles to the insurer do not directly depend on the claims against the insurer ceding risks, the amounts recoverable from those special purpose vehicles for future claims must only be taken into account to the extent that the structural mismatch between claims and amounts recoverable can be verified in a prudent, reliable and objective manner.

40 Optional simplified calculation of recoverables from reinsurance contracts and special purpose vehicles

- (1) Pursuant to Regulation 39, the insurer may calculate the amounts recoverable from reinsurance contracts and special purpose vehicles before adjusting those amounts to take account of the expected loss due to default of the counterparty as the difference between the following estimates—
 - (a) the best estimate calculated gross; and
 - (b) the unadjusted net best estimate, which is calculated as the best estimate, after taking into account the amounts recoverable from

reinsurance contracts and special purpose vehicles and without an adjustment for the expected loss due to default of the counterparty.

- (2) Pursuant to paragraph (1)(b), the insurer
 - (a) may use methods to derive the unadjusted net best estimate from the gross best estimate without an explicit projection of the cash flows underlying the amounts recoverable from reinsurance contracts and special purpose vehicles; and
 - (b) must calculate the unadjusted net best estimate based on homogeneous risk groups, and each of those homogeneous risk groups must cover not more than one reinsurance contract or special purpose vehicle unless those reinsurance contracts or special purpose vehicles provide a transfer of homogeneous risks.

41 Counterparty default adjustment for recoverables

- (1) Pursuant to Regulation 39(3)(b) the amount recoverable from reinsurance contracts and special purpose vehicles must be adjusted to take account of expected losses due to default of the counterparty.
- (2) The adjustment to take account of expected losses due to default of a counterparty must be calculated as the expected present value of the change in cash flows underlying the amounts recoverable from that counterparty, that would arise if the counterparty defaults, including as a result of insolvency or dispute, at a certain point in time.
- (3) The adjustment must be calculated and shown separately from the rest of the amounts recoverable.
- (4) For the purpose of paragraph (2), the change in cash flows must not take into account the effect of any risk mitigating technique that mitigates the credit risk of the counterparty, other than risk mitigating techniques based on collateral holdings.
- (5) Pursuant to paragraph (4), risk mitigating techniques that are not taken into account must be separately recognised without increasing the amount recoverable from reinsurance contracts and special purpose vehicles.
- (6) The calculation must—
 - (a) be carried out separately by each counterparty and for each homogeneous risk group; and
 - (b) take into account the probability of default of all possible default events over the lifetime of the reinsurance contract or arrangement with the special purpose vehicle and whether and how the probability of default varies over time.



- (7) The average loss resulting from a default of a counterparty must not be assessed at lower than 50% of the amounts recoverable excluding the adjustment calculated in paragraph (2), unless there is a reliable basis for another assessment.
- (8) The probability of default of a special purpose vehicle must be calculated on the basis of the credit risk inherent in the relevant assets held by the special purpose vehicle.

42 Optional simplified calculation of the counterparty default adjustment

Pursuant to Regulation 40, the insurer may calculate the adjustment for expected losses due to default of the counterparty for a specific counterparty and homogeneous risk group to be equal as follows—

$$Adj_{CD} = -\max\left(0; 0.5 \cdot \frac{PD}{1 - PD} \cdot Dur_{mod} \cdot BE_{rec}\right)$$

where –

- (a) *PD* denotes the probability of default of that counterparty during the following 12 months;
- (b) *Dur_{mod}* denotes the modified duration of the amounts recoverable from reinsurance contracts with that counterparty in relation to that homogeneous risk group; and
- (c) *BE_{rec}* denotes the amounts recoverable` from reinsurance contracts with that counterparty in relation to that homogeneous risk group.

43 Data Quality

- (1) The insurer must have internal processes and procedures in place to ensure the appropriateness (in accordance with paragraph (2)), completeness (in accordance with paragraph (3)) and accuracy (in accordance with paragraph (4)) of the data used in the calculation of its technical provisions.
- (2) Data used in the calculation of the insurer's technical provisions must only be considered to be complete if all of the following conditions are met—
 - (a) the data includes sufficient historical information to assess the characteristics of the underlying risks and to identify trends in the risks; and
 - (b) the data is available for each of the relevant homogeneous risk groups used in the calculation of the insurer's technical provisions and no relevant data is excluded from being used in the calculation of the insurer's technical provisions without justification.

- (3) Data used in the calculation of the insurer's technical provisions must only be considered to be accurate if all of the following conditions are met—
 - (a) the data is free from material errors;
 - (b) data from different time periods used for the same estimation are consistent; and
 - (c) the data is recorded in a timely manner and consistently over time.
- (4) Data used in the calculation of the insurer's technical provisions must only be considered to be appropriate if all of the following conditions are met—
 - (a) the data is consistent with the purposes for which it will be used;
 - (b) the amount and nature of the data ensure that the estimations made in the calculation of the technical provisions on the basis of the data do not include a material estimation error;
 - (c) the data is consistent with the assumptions underlying the actuarial and statistical techniques that are applied to it in the calculation of the technical provisions;
 - (d) the data appropriately reflect the risks to which the insurer is exposed with regard to its relevant insurance obligations;
 - (e) the data was collected, processed and applied in a transparent and structured manner, based on a documented process that comprises all of the following
 - the definition of criteria for the quality of data and an assessment of the quality of data, including specific qualitative and quantitative standards for different data sets;
 - (ii) the use of and setting of assumptions made in the collection, processing and application of data; and
 - (iii) the process for carrying out data updates, including the frequency of updates and the circumstances that trigger additional updates; and
 - (f) the insurer must ensure that its data is used consistently over time in the calculation of the technical provisions.
- (5) The insurer may use data from an external source provided that, in addition to fulfilling the requirements set out in this Regulation, all of the following requirements are met—
 - (a) the insurer is able to demonstrate to its board of directors that the use of that data is more suitable than the use of data which are exclusively available from an internal source;


- (b) the insurer must know the origin of that data and the assumptions or methodologies used to process that data;
- (c) the insurer must identify any trends in that data and the variation, over time or across data, of the assumptions or methodologies in the use of that data; and
- (d) the insurer is able to demonstrate to its board of directors that the assumptions and methodologies referred to in sub-paragraphs (b) and (c) reflect the characteristics of the insurer's insurance obligations.

44 Limitations of data

- (1) If data does not comply with Regulation 43, the insurer must document appropriately the limitations of the data including a description of whether and how those limitations will be remedied and of the functions within the system of governance of the insurer responsible for that process. This must be included in the reporting of deficiencies in Regulation 7(2).
- (2) Such data, before adjustments to remedy limitations are made to it, must be recorded and stored appropriately.

PART 3: SOLVENCY CAPITAL REQUIREMENT

45 Solvency Capital Requirement

- (1) An insurer must calculate its Solvency Capital Requirement ("SCR") on the presumption that the insurer will pursue its business as a going concern.
- (2) The SCR has been calibrated to ensure all quantifiable risks to which the insurer is exposed are taken into account.
- (3) Pursuant to paragraph ((2), the SCR covers existing business of the insurer as well as, if applicable, new business to be written in the 12 months following the valuation date. With respect to existing business it must cover only unexpected losses.
- (4) The SCR corresponds to the Value-at-Risk of the basic own-funds of an insurer subject to a confidence level of 99.5% over a one-year period.
- (5) Pursuant to regulation 5, the insurer must
 - (a) determine its SCR using the standard formula in Regulation 51; and
 - (b) apply an adjustment to its SCR as may be specified by the Authority as a capital add-on in accordance with Regulation 52.

46 Use of risk mitigation techniques

- (1) When calculating its SCR, the insurer must take account of the effect of risk mitigation techniques in accordance with Regulation 116, provided that credit risk and other risks arising from the use of such techniques are properly reflected in the insurer's SCR.
- (2) The recognition of risk mitigation techniques in the calculation of the insurer's SCR must reflect the economic substance of the technique used and must be restricted to risk-mitigation techniques that effectively transfer the risk outside the insurer.
- (3) In order to avoid the situation whereby the effectiveness of a risk mitigation technique is undermined by the existence of material basis risk, as defined in Regulation 48, in particular because of a currency mismatch, the insurer must reflect material basis risk in the calculation of its SCR, otherwise the risk-mitigation technique must not be recognised.

47 Scenario based calculations

(1) In this Regulation—

"rolling hedge arrangement" is where an in force risk mitigation technique is replaced at the time of its expiry with a similar arrangement regardless of the solvency position of the insurer.

- (2) Each scenario is related to a risk that the insurer may be exposed to. The risks included in the standard formula approach are in Regulation 51.
- (3) The scenario applies an instantaneous stress to the assets, liabilities and technical provisions of the insurer.
- (4) If the impact of the scenario on the assets, liabilities and technical provisions of an insurer results in a reduction in the insurer's basic ownfunds, then the amount of reduction is the insurer's capital requirement to be held against that risk.
- (5) If the impact of a scenario on the assets, liabilities and technical provisions of an insurer results in an increase in the insurer's basic ownfunds then the capital requirement to be held by the insurer against that risk is zero.
- (6) When applying the stresses underlying each scenario—
 - (a) the insurer must not take into account risk-mitigation techniques that rely on the insurer taking future action, such as dynamic hedging strategies and future management actions at the time the stress is applied;
 - (b) dynamic hedging strategies and future management actions must be distinguished from rolling hedge arrangements;
 - (c) the scenario does not change the amount of the risk margin included in the insurer's technical provisions;



- (d) the scenario does not change the value of the insurer's deferred tax assets and liabilities;
- (e) the scenario does not change the value of future discretionary benefits included in the insurer's technical provisions; and
- (f) the scenario must take account of the impact of the scenario on the value of any risk mitigation technique in use by the insurer complying with Regulation 116.
- (7) Following the application of the scenario the insurer
 - (a) can allow for recovery in its portfolio of business (if applicable);
 - (b) can take account of a future management action that may be taken in the post scenario world, as long as the management action complies with the requirements of Regulation 24; and
 - (c) must take account of any material adverse impact of the scenario or the management actions, if management actions are allowed for, on the likelihood that policyholders will exercise contractual options.
- (8) The insurer may use simplified methods to recalculate its technical provisions allowing for the impact of the scenario provided that the simplified method does not lead to a material misstatement of the insurer's capital requirements.

48 Basis risk

- In this Part, basis risk arises from the situation in which a risk exposure covered by a risk-mitigation technique, in accordance with Regulation 46, does not correspond completely to the risk exposure of the insurer.
- (2) Basis risk arising from a currency mismatch is where the risk exposure covered by the risk mitigation technique is expressed in a currency different to the risk exposure actually held by the insurer.
- (3) Pursuant to paragraph (2) if there is a material currency mismatch risk for a risk mitigation technique used against an underwriting risk exposure, the insurer may still take into account the risk-mitigation technique in determining its SCR, provided that the risk-mitigation technique complies with Regulations 117, 118(3), 118(5) and 119, and the currency risk is not already included in the currency risk capital requirement.
- (4) The insurer must take the currency mismatch risk into account, for each foreign currency, in the respective underwriting risk capital requirement by adding 25% of the difference between the following to the relevant capital requirement for that risk exposure, calculated in accordance with the standard formula—
 - (a) The hypothetical capital requirement for the relevant underwriting risk that would result from a simultaneous



occurrence of the scenario for the underwriting risk capital requirement and the scenario for the currency risk capital requirement set out in Regulation 66.

- (b) The capital requirement for the relevant underwriting risk.
- (5) If the risk-mitigation technique covers more than one underwriting risk, the calculation referred to in sub-paragraph (4) is carried out for each of those risks.
- (6) If the risk mitigation technique is a non-proportional reinsurance contract or a special purpose vehicle, the capital requirement resulting from the calculations in sub-paragraph (5) must not exceed 25% of the capacity of that risk mitigation technique.

49 Use of external credit assessments

- (1) The insurer may use an external credit assessment, if required by the standard formula, to calculate a capital requirement.
- (2) The external credit assessment must be issued by an ECAI that has been approved for use by the Authority. The insurer can nominate one or more ECAIs subject to the requirements of paragraph (3).
- (3) When using credit assessments from its nominated ECAI, the insurer must comply with all of the following requirements
 - (a) if the insurer decides to use the credit assessments produced by its nominated ECAI for a certain class of items, it must use those credit assessments consistently for all items belonging to that class;
 - (b) if the insurer decides to use the credit assessments produced by its nominated ECAI, it must use them in a continuous and consistent way over time;
 - (c) the insurer must only use nominated ECAI credit assessments that take into account all amounts of principal and interest owed to it;
 - (d) if only one credit assessment is available from a nominated ECAI for a rated item, that credit assessment must be used to determine the capital requirements for that item unless the requirements of paragraph (6);
 - (e) if two credit assessments are available from nominated ECAIs and they correspond to different parameters for a rated item, the assessment generating the higher capital requirement must be used;
 - (f) if more than two credit assessments are available from nominated ECAIs for a rated item the two assessments generating the two lowest capital requirements must be used except for in the following circumstances—



- (i) if the two lowest capital requirements are different, the assessment generating the higher capital requirement of those two credit assessments must be used;
- (ii) if the two lowest capital requirements are the same, the assessment generating that capital requirement must be used;
- (g) if available, the insurer must use both solicited and unsolicited credit assessments from ECAIs.
- (4) If an item is part of the larger or more complex exposures of the insurer (including type 2 securitisation and resecuritisation positions), the insurer must produce its own internal credit assessment of the item and allocate it to one of the 7 steps in the credit quality assessment scale in accordance with Regulation 50.
- (5) If the insurer's own internal credit assessment generates a lower capital requirement than the one generated by the credit assessments available from a nominated ECAIs, then the own internal credit assessment must not be taken into account for the purposes of this Regulation.
- (6) Further to paragraph (3)(d), if only one credit assessment is available from a nominated ECAI for a securitisation position, that credit assessment must not be used and instead the capital requirement for that item must be derived as if no credit assessment by a nominated ECAI is available.
- (7) If a nominated ECAI issues a credit assessment for a specific issuing program or facility to which the item constituting the exposure belongs, that credit assessment must be used by the insurer.
- (8) For a certain item, where no directly applicable credit assessment exists, but a credit assessment been issued by a nominated ECAI for a specific issuing program or facility to which the item constituting the exposure does not belong or a general credit assessment exists for the issuer, that credit assessment must be used by the insurer in either of the following cases—
 - (a) it produces the same or higher capital requirement than would otherwise be the case and the exposure in question ranks equally or junior in all respects to the specific issuing program or facility or to senior unsecured exposures of that issuer, as relevant; or
 - (b) it produces the same or lower capital requirement than would otherwise be the case and the exposure in question ranks equally or senior in all respects to the specific issuing program or facility or to senior unsecured exposures of that issuer, as relevant,

and in all other cases, the insurer must consider that there is no credit assessment by a nominated ECAI available for the exposure.

(9) Credit assessments issued by a nominated ECAI for issuers within a corporate group must not be used as the credit assessment for another issuer within the same corporate group.

50 Association of credit assessments to credit quality steps

- (1) If the counterparty of an exposure of the insurer—
 - (a) has a credit assessment by a nominated ECAI, that exposure is assigned a credit quality step in accordance with a table of 7 credit quality steps, numbered 0 to 6, published by the Authority for the purpose of these Regulations; and
 - (b) does not have a credit assessment by a nominated ECAI available that exposure is assigned a credit quality step of 5, unless stated otherwise in these Regulations.

51 Solvency Capital Requirement - standard formula approach

(1) Pursuant to Regulation 45 the SCR as calculated by the standard formula approach must be determined by the insurer as follows—

$$SCR = \sqrt{BSCR^2 + BSCR \cdot SCR_{op_UL} + SCR_{op_UL}^2 + Adj + SCR_{op_nonUL}}$$

where –

- (a) *BSCR* is determined in accordance with Regulation 53;
- (b) *Adj* is determined in accordance with Regulation 54;
- (c) SCR_{op_UL} is determined in accordance with Regulation 57;
- (d) SCR_{op_nonUL} is determined in accordance with Regulation 57.
- (2) Pursuant to paragraph (1), if the insurer has material ring-fenced funds, determined in accordance with Regulation 139, the insurer must determine its SCR using the approach set out in Regulation 115.

52 Solvency Capital Requirement - capital add-on

- (1) Pursuant to Regulation 45 the Authority may, in exceptional circumstances, adjust the insurer's SCR by way of a capital add-on if the Authority has concluded during the supervisory review process that the insurer's—
 - (a) risk profile deviates significantly from the assumptions underlying the standard formula in accordance with Regulation 51; or
 - (b) systems of governance deviate significantly from the requirements of the Corporate Governance Code of Practice for Regulated Insurance Entities ("CGC"), and those deviations prevent it from being able to properly identify, measure, monitor,



manage and report the risks that it is or could be exposed to and that the application of other measures is in itself unlikely to improve the deficiencies sufficiently within an appropriate timeframe.

- (2) Pursuant to paragraph (1), the imposition of a capital add-on is exceptional in the sense that it will be used only as a measure of last resort, when other supervisory measures are ineffective or inappropriate. Furthermore, the term exceptional should be understood in the context of the specific situation of each insurer rather than in relation to the number of capital add-ons imposed in the Island's life insurance market.
- (3) The Authority will communicate its decision in writing to the insurer, stating its reasons.
- (4) The Authority may vary or revoke a capital add-on in accordance with this Regulation.
- (5) The capital add-on will have a numerically positive value and the insurer must provide the Authority with all information it requires to determine such an amount.
- (6) Pursuant to paragraph (1)(a) the methodology used to determine the capital add-on must comply with Regulation 45.
- (7) Pursuant to paragraph (1)(b) the capital add-on must reflect an assessment of the significance of the deviation regarding the system of governance, and will be determined on a case-by-case basis.
- (8) At a minimum, the capital add-on will remain in place for as long as the circumstances under which it was imposed are not remedied to the satisfaction of the Authority. However, if the standardised approach does not adequately reflect the very specific risk profile of an insurer the capital add-on may remain over consecutive years.
- (9) If a capital add-on applies to the insurer for reasons which are appropriate for the insurer to remedy, then the insurer must take all reasonable steps to remedy the circumstances that led to the capital add-on requirement.

53 Basic Solvency Capital Requirement

- (1) Pursuant to Regulation 51(1)(a) the Basic Solvency Capital Requirement ("BSCR") is an aggregation of the capital requirements for prescribed risks, allowing for diversification between risks.
- (2) The BSCR includes capital requirements for the following risks—
 - (a) market risk;
 - (b) counterparty default risk;
 - (c) life underwriting risk;



- (d) health underwriting risk; and
- (e) intangible asset mix risk.
- (3) The BSCR must be determined by the insurer as follows—

$$BSCR = \sqrt{\sum_{r,c} Corr_{r,c} \cdot SCR_r \cdot SCR_c + SCR_{intangibles}}$$

where -

- (a) *Corr*_{*r*,*c*} are the entries of the correlation matrix *Corr*;
- (b) *SCR*^{*r*} and *SCR*^{*c*} are the capital requirements for the individual SCR risks according to the rows and columns of the correlation matrix *Corr*;
- (c) *SCRintangibles* is the capital requirement for intangible asset risk;
- (d) *Corr* is defined as—

Corr	Market	Default	Life	Health
Market	1	0.25	0.25	0.25
Default	0.25	1	0.25	0.25
Life	0.25	0.25	1	0.25
Health	0.25	0.25	0.25	1

54 Adjustment for the loss-absorbing capacity of technical provisions and deferred taxes

- (1) Pursuant to Regulation 51(1)(b) the adjustment to the SCR for the lossabsorbing capacity of the insurer's technical provisions and deferred taxes reflects potential compensation from unexpected losses, through a simultaneous decrease in the insurer's technical provisions or deferred taxes or a combination of the two.
- (2) That adjustment takes account of the risk mitigating effect provided by any relevant future discretionary benefits of insurance contracts meeting the requirements of Regulation 30, to the extent the insurer can establish that a reduction in those benefits can be used to cover its unexpected losses when they arise.
- (3) The risk mitigating effect provided by future discretionary benefits can be no higher than the sum of the insurer's technical provisions and deferred taxes relating to those future discretionary benefits.
- (4) The value of future discretionary benefits under each scenario is compared to the value of those benefits under the underlying assumptions of the insurer's best- estimate calculation.
- (5) The adjustment for the loss-absorbing capacity of the insurer's technical provisions and deferred taxes is the sum of the following items —



- (a) the adjustment for the loss-absorbing capacity of technical provisions, Adj_{TP} determined in accordance with regulation 55; and
- (b) the adjustment for the loss-absorbing capacity of deferred taxes determined in accordance with regulation 56.

55 Adjustment for the loss absorbing capacity of technical provisions calculation

(1) Pursuant to Regulation 54 the adjustment to the SCR for the lossabsorbing capacity of technical provisions is equal to the following –

 $Adj_{TP} = -\max(0; \min(BSCR - nBSCR; FDB))$

where –

- (a) *nBSCR* denotes the net Basic Solvency Capital Requirement see paragraph (2); and
- (b) *FDB* denotes the best estimate of future discretionary benefits.
- (2) The *nBSCR* is calculated as for the *BSCR* in Regulation 53 except that when carrying out the scenario based calculations in accordance with Regulation 47, the requirement in Regulation 47(6)(e) can be waived as the insurer can change the value of future discretionary benefits included in its technical provisions when applying the stresses under the scenario.
- (3) For the purposes of paragraph (2), the insurer must take into account all legal, regulatory or contractual restrictions in the distribution of future discretionary benefits.
- (4) For each individual risk in Regulation 53(2), if the gross capital requirement calculated using the approach in regulation 53 and the net capital requirement calculated in accordance with paragraph (2) are derived from different stresses within the scenario, the gross capital requirement for that risk must be calculated using the stress in the scenario that determined the net capital requirement.

56 Adjustment for the loss absorbing capacity of deferred taxes

- (1) Pursuant to Regulation 54 the adjustment to the SCR for the lossabsorbing capacity of deferred taxes is equal to the change in the value of deferred taxes of the insurer that would result from an instantaneous loss of an amount that is equal to the insurer's SCR using the standard formula approach, calculated as though there was no adjustment for the loss absorbing capacity of deferred taxes.
- (2) Subject to paragraph (3) to (6), deferred taxes are valued in accordance with Regulation 13.
- (3) If the loss would result in the increase in the insurer's deferred tax assets, the insurer must take into account the magnitude of the loss and its

impact on the its current and future financial situation when assessing whether it is probable that future taxable profits will be available against which the deferred tax asset can be utilised in accordance with Regulation 13.

- (4) A decrease in the insurer's deferred tax liabilities or an increase in its deferred tax assets must result in a negative adjustment for the loss-absorbing capacity of its deferred taxes.
- (5) If the calculation of the adjustment results in a positive change of the insurer's deferred taxes, the adjustment is nil.
- (6) If it is necessary to allocate the loss to its causes in order to calculate the adjustment for the loss-absorbing capacity of the insurer's deferred taxes, the insurer must allocate the loss to the risks in Regulation 53(2). The allocation must be consistent with the contribution of the specific risk to the BSCR.

57 Operational risk capital requirement

(1) In this Regulation—

"**operational risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to the loss arising from inadequate or failed internal processes, from personnel or systems or from external events.

(2) Pursuant to Regulation 51 the operational risk capital requirement of the SCR consists of two elements—

where –

(a) *SCR*_{op_UL} is the operational risk capital requirement in respect of the insurer's insurance obligations with unit-linked and index-linked benefits.

$$SCR_{op_UL} = EXP_{UL}$$

where –

 (i) *EXPut* is the value of expenses incurred by the insurer for insurance obligations with unit-linked and index-linked benefits in the twelve months prior to the valuation date, excluding acquisition expenses and renewal commission; and

where –

(b) *SCR*_{op_nonUL} is the operational risk capital requirement for all other insurance obligations of the insurer —

 $SCR_{op_nonUL} = \max(Op_{premiums}, Op_{provisions})$

where-



- (i) $Op_{premiums} = 0.04 \cdot Earn_{nonUL} + \max(0, 0.04 \cdot (Earn_{nonUL} 1.2 \cdot pEarn_{nonUL}))$
- (ii) *Earn*_{nonUL} denotes the premiums earned by the insurer during the 12 months prior to the valuation date for its life insurance obligations where the investment risk is not borne by the policyholder, including reinsurance premiums;
- (iii) *pEarn*_{nonUL} denotes the premiums earned by the insurer during the 12 months prior to the 12 months prior to the valuation date for its life insurance obligations where the investment risk is not borne by the policyholder, including reinsurance premiums;
- (iv) $Op_{provisions} = 0.0045 * \max(0, TP_{nonUL});$ and
- (v) *TP*_{nonUL} denotes the insurer's technical provisions for life insurance obligations where the investment risk is not borne by the policyholder, excluding the risk margin and before deduction of recoverables from reinsurance contracts and Special Purpose Vehicles.

58 Intangible asset capital requirement

Pursuant to Regulation 53 the intangible asset risk capital requirement of the BSCR is equal to the following—

$$SCR_{intangibles} = 0.8 \cdot V_{intangibles}$$

where –

(a) *V*_{intangibles} denotes the amount of intangible assets as recognised and valued in accordance Regulation 12.

59 Market risk capital requirement

(1) In this Regulation—

"**market risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level or volatility of market prices of financial instruments;

- (2) Pursuant to Regulation 53 the market risk capital requirement of the BSCR is calculated from the following capital requirements for market sub-risks—
 - (a) interest rate risk;
 - (b) equity risk;
 - (c) property risk;
 - (d) spread risk;

- (e) currency risk; and
- (f) market concentration risk.
- (3) The capital requirement for market risk is equal to the following –

$$SCR_{market} = \sqrt{\sum_{r,c} MarketCorr_{r,c} \cdot Market_r \cdot Market_c}$$

where -

- (a) *Market*^{*r*} and *Market*^{*c*} are the capital requirements for the individual market shock scenarios according to the rows and columns of the correlation matrix *MarketCorr*;
- (b) *MarketCorr*_{*r*,*c*} are the entries of the correlation matrix *MarketCorr* –

MarketCorr	Interest	Equity	Property	Spread	Currency	Conc.
Interest	1	А	А	А	0.25	0
Equity	А	1	0.75	0.75	0.25	0
Property	А	0.75	1	0.5	0.25	0
Spread	А	0.75	0.5	1	0.25	0
Currency	0.25	0.25	0.25	0.25	1	0
Concentration	0	0	0	0	0	1

- (4) The parameter A is equal to 0 if the capital requirement for interest rate risk set out in Regulation 61 is the capital requirement referred to in sub-paragraph (a) of that Regulation.
- (5) In all other cases, the parameter A is equal to 0.5.
- (6) If an insurer has a participation in a related entity, determined in accordance with Regulations 124 and 125, the market risk capital requirement of the participation must be determined in accordance with Regulation 114.

60 Look-through approach

- (1) The insurer must assess the economic substance of its market risk exposure inherent in all of its investments including collective investment vehicles or other investments packaged as funds by adopting a "look-through approach" as follows—
 - (a) the insurer must assess the risks applying to each relevant asset underlying the investment vehicle or fund (as the case may require); and
 - (b) the market shock scenarios must be applied to each of the underlying assets to calculate the capital requirement for market risk.
- (2) The look-through approach also applies to—



- (a) indirect exposures to market risk other than collective investment vehicles and investments packaged as funds;
- (b) equally to both actively managed funds and passively managed funds.
- (c) indirect exposures to underwriting risk;
- (d) indirect exposures to counterparty risk;
- (3) The look-through approach does not apply to investments of the insurer in related entities. These are valued in accordance with regulation 14.
- (4) If a number of iterations of the look-through approach is required the number of iterations must be sufficient to ensure that all material market risk is captured.
- (5) If external asset management firms delay publicising the composition of an investment to which the look-through approach applies, the insurer must ensure that it is able to access the information required so that it can identify the nature of all relevant underlying assets.
- (6) If the meeting the requirements of the approach in paragraph (1) doesn't comply with the principal of proportionality in Regulation 25, the market risk capital requirement may be calculated on the basis of the target underlying asset allocation of the collective investment vehicle or fund, provided—
 - (a) such a target allocation is available to the insurer at the level of detail necessary for calculating the capital requirement; and
 - (b) the underlying assets are managed according to this target allocation.
- (7) For the purpose of the calculation referred to in paragraph (6), homogeneous data groupings may be used, provided they are applied in a prudent and proportionate manner.
- (8) If the approaches in paragraphs (1) and (6) cannot be applied, the collective investment entity or fund is treated as equity type 2 in the equity risk capital requirement calculation in Regulation 64.

61 Interest rate risk capital requirement

(1) In this Regulation—

"interest rate risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in term structure of interest rates.

(2) Pursuant to Regulation 59 the interest rate risk capital requirement of the market risk capital requirement is equal to the larger of the following the sum, over all currencies, of its capital requirement for the risk of an—



- (a) increase in the term structure of interest rates as calculated in accordance with Regulation 62; or
- (b) decrease in the term structure of interest rates as calculated in accordance with Regulation 63.

62 Increase in the term structure of interest rates

(1) Pursuant to Regulation 61(2)(a) the capital requirement for the risk of an increase in the term structure of interest rates for a given currency is equal to the loss in the insurer's basic own-funds that would result from an instantaneous increase in basic risk-free interest rates for that currency at different maturities in accordance with the following table –

Maturity <i>t</i> (years)	Relative change $S^{up}(t)$
1	70%
2	70%
3	64%
4	59%
5	55%
6	52%
7	49%
8	47%
9	44%
10	42%
11	39%
12	37%
13	35%
14	34%
15	33%
16	31%
17	30%
18	29%
19	27%
20	26%
90	20%

- (2) $S^{up}(t)$ is the relative change stress factor to be applied to the term structure of the interest rate, for each maturity *t* specified in the table above.
- (3) The increased interest rate for a maturity t is the basic risk-free interest rate for that maturity multiplied by $(1 + S^{up}(t))$.
- (4) If the basic risk free interest rate is negative, the revised basic interest rate is—



 $r(t) + |r(t)| \cdot S^{up}(t)$

where r(t) is the basic risk-free interest rate for maturity t.

- (5) For maturities that are
 - (a) not specified in the table in paragraph (1), subject to sub paragraphs (b) and (c), $S^{up}(t)$ is linearly interpolated;
 - (b) shorter than 1 year, $S^{up}(t)$ is 70%; and
 - (c) longer than 90 years, $S^{up}(t)$ is 20%.
- (6) In any case, the increase of basic-risk-free interest rates at a maturity is at least one percentage point.

63 Decrease in the term structure of interest rates

(1) Pursuant to Regulation 61(2)(b)61(2)(a) the capital requirement for the risk of a decrease in the term structure of interest rates for a given currency is equal to the loss in the insurer's basic own-funds that would result from an instantaneous decrease in basic risk-free interest rates for that currency at different maturities in accordance with the following table –

Maturity <i>t</i> (years)	Relative change $S^{down}(t)$
1	-75%
2	-65%
3	-56%
4	-50%
5	-46%
6	-42%
7	-39%
8	-36%
9	-33%
10	-31%
11	-30%
12	-29%
13	-28%
14	-28%
15	-27%
16	-28%
17	-28%
18	-28%
19	-29%
20	-29%
90	-20%

(1) $S^{down}(t)$ is the relative change stress factor to be applied to the term structure of the interest rate, for each maturity *t* specified in the table above.

- (2) The decreased interest rate for a maturity *t* specified in the table above is the basic risk-free interest rate for that maturity multiplied by $(1 + S^{down}(t))$.
- (3) For maturities that are
 - (a) not specified in the table in paragraph (1), subject to sub paragraphs (b) and (c) the value of the increase is linearly interpolated;
 - (b) shorter than 1 year, $S^{down}(t)$ is 75%; and
 - (c) longer than 90 years, $S^{down}(t)$ is 20%.
- (4) For negative basic risk-free interest rates the decrease is nil.
- (5) The impact on the value of participations of the insurer in financial and credit institutions, determined in accordance with Regulations 124 and 125, of the decrease in the term structure of basic risk-free interest rates is considered only on the value of the participations that are not deducted from the insurer's basic own-funds.
- (6) Further to paragraph (5), the part deducted from the insurer's basic ownfunds is considered only to the extent that such impact increases the insurer's basic own-funds.

64 Equity risk capital requirement

(1) In this Regulation—

"equity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level or volatility of the market price of equities;

"**type 1 equities**" comprise equities listed in stock exchanges in the countries which are members of the European Economic Area ('EEA') or the Organisation for Economic Cooperation and Development ('OECD');

"type 2 equities" comprise —

- (a) equities listed in stock exchanges in countries which are not members of the EEA or the OECD;
- (b) equities which are not listed, hedge funds, commodities and other alternative investments; and
- (c) all assets other than those covered in the
 - (i) interest rate risk capital requirement defined in Regulation 61;
 - (ii) property risk capital requirement defined in Regulation 65; or
 - (iii) spread risk capital requirement defined in Regulation 68,



including the assets and indirect exposures if the insurer is using the look-through approach set out in Regulation 60(8).

- (2) Pursuant to Regulation 59 the equity risk capital requirement of the market risk capital requirement is based on consideration of the capital requirement for type 1 equities and the capital requirement for type 2 equities.
- (3) The capital requirement for equity risk is equal to the following –

$$Market_{equity} = \sqrt{\sum_{r,c} EqCorr_{r,c} \cdot Market_{equity,r} \cdot Market_{equity,c}}$$

where –

- (a) *Market*_{equity,r}, *Market*_{equity,c} are the capital requirements for equity risk per type according to the rows and columns of the correlation matrix *EqCorr*; and
- (b) $EqCorr_{r,c}$ are the entries of the correlation matrix EqCorr –

EqCorr	Type 1	Type 2		
Type 1	1	0.75		
Type 2	0.75	1		

(4) Pursuant to (3)(a) the capital requirement for each of type 1 and type 2 equities is equal to the following –

$$Market_{equity,i} = \max(Equity_i^{VolUp}, Equity_i^{VolDown})$$

where -

(a) *i* is 1 for Type 1 equities and 2 for Type 2 equities;

(b)

$$Equity_{i}^{VolUp} = \sqrt{\sum_{r,c} EqVolUpCorr_{r,c} \cdot EquityShock_{i} \cdot VolUp_{i}}$$

where –

(i) $EqVolUpCorr_{r,c}$ are the entries of the correlation matrix EqVolUpCorr—

EqVolUpCorr	EquityShock _i	VolUp i		
EquityShock _i	1	0.75		
VolUp i	0.75	1		

- (ii) VolUpi is the loss in the insurer's basic own-funds that would result from an increase of 50% in the best estimate volatility assumption used by the insurer for equity type *i*.
- (iii) *EquityShocki* is equal to the loss of the insurer' basic ownfunds that would result from an instantaneous permanent

decrease in the value of all of its type i equity investments by a shock factor specific to equity type i—

	Type 1	Type 2	
EquityShocki	39%	49%	

(c)

 $Equity_{i}^{VolDown} = \sqrt{\sum_{r,c} EqVolDownCorr_{r,c} \cdot EquityShock_{i} \cdot VolDown_{i}}$

where –

(i) *EqVolDownCorr*_{r,c} are the entries of the correlation matrix *EqVolDownCorr*—

EqVolDownCorr	EquityShock _i	VolDown
EquityShock _i	1	0
VolDown _i	0	1

- (ii) *VolDowni* is the loss in the insurer's basic own-funds that would result from a decrease of 15% in the best estimate volatility assumption used by the insurer for equities of type *i*.
- (iii) *EquityShocki* is defined in sub-paragraph (b)(iii).

65 Property risk capital requirement

(1) In this Regulation—

"property risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level of market price of property.

(2) Pursuant to Regulation 59 the property risk capital requirement of the market risk capital requirement is equal to the loss in the insurer's basic own-funds that would result from an instantaneous decrease of 25% in the value of immovable property.

66 Currency risk capital requirement

(1) In this Regulation and Regulation 67–

"**currency risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level of currency exchange rates;

"foreign currency" means a currency other than the local currency;



"foreign currency group" means a group of currencies in accordance with paragraph (2);

"local currency" means Great British Pounds;

"**reporting currency**" means the currency used for the preparation of the insurer's audited financial statements.

(2) The foreign currency groups are as follows—

Foreign Currency Group Table 1								
1	1 2		4					
Euro	US Dollar	Singapore Dollar	Australian Dollar					
Swiss Franc	Chinese Yuan Renminbi	Indian Rupee	New Zealand Dollar					
Swedish Krona	Hong Kong Dollar	Malaysian Ringgit	South African Rand					
Norwegian Krone	Taiwan Dollar	Thai Baht						
Danish Krone	Saudi Riyal							
Polish Zloty								
Czech Koruna								
Hungarian Forint								
Bulgarian Lev								
Croatian Kuna								
Romanian Leu								

Foreign Currency Group Table 2										
5	6	7	8	9	10					
Canadian Dollar	Japanese Yen	Russian Ruble	Turkish Lira	South Korean Won	Icelandic Krona					
Brazilian Real										
Mexican Peso										
Chilean Peso										
Colombian Peso										

- (3) Assumptions in relation to currency risk capital requirements must include (if applicable) that an investment of the insurer in—
 - (a) a type 1 or 2 equity which is listed on multiple stock exchanges operating with different currencies is assumed to be sensitive to the currency of the equity's main listing;

- (b) a type 2 equity which is not listed is assumed to be sensitive to the currency of the country in which the issuer of the equity has its main operations; and
- (c) immovable property is assumed to be sensitive to the currency of the country in which the property is located.
- (4) For the scenarios in paragraph (6), the base currency for the stress is the local currency, unless the insurer can meet the requirements of paragraph (10).
- (5) If the insurer is exposed to currency risk in relation to one or more of the currencies within a foreign currency group, the capital requirement for currency risk for that foreign currency group is calculated in accordance with paragraph (6).
- (6) For a foreign currency group, the capital requirement for currency risk, is equal to the larger of the following scenarios—
 - (a) the capital requirement for the risk of an increase in value of the foreign currency group against the local currency as referred to in paragraph (7); and
 - (b) the capital requirement for the risk of a decrease in value of the foreign currency group against the local currency as referred to in paragraph (8).
- (7) The capital requirement for the risk of an increase in value of a foreign currency group against the local currency is equal to the insurer's loss in its basic own-funds that would result from an instantaneous increase of 25% in the value of the foreign currency group against the local currency.
- (8) The capital requirement for the risk of a decrease in value of a foreign currency group against the local currency is equal to the insurer's loss in its basic own-funds that would result from an instantaneous decrease of 25% in the value of the foreign currency group against the local currency.
- (9) Pursuant to Regulation 59 the currency risk capital requirement of the market risk capital requirement is the aggregation of the capital requirement for each foreign currency group as calculated in paragraph (6), using a correlation matrix and is equal to the following—

$$Market_{fx} = \sqrt{\sum_{r,c} CurrencyCorr_{r,c} \cdot Market_{fx,r} \cdot Market_{fx,c}}$$

where -

- (a) Market_{fx,r}, Market_{fx,c} are the currency risk capital requirement for each foreign currency group as calculated in paragraph (6), according to the rows and columns of the correlation matrix *CurrencyCor* as set out under sub-paragraph (b); and
- (b) *CurrencyCorr*_{*r,c*} are the entries of the correlation matrix *CurrencyCorr*—



CurrencyCorr	1	2	3	4	5	6	7	8	9	10
CurrGroup 1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CurrGroup 2	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CurrGroup 3	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CurrGroup 4	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5
CurrGroup 5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5
CurrGroup 6	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5
CurrGroup 7	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5
CurrGroup 8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5
CurrGroup 9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5
CurrGroup 10	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1

- (10) If the insurer has a material exposure to a single foreign currency group, which for the purposes of paragraph (11) shall be referred to as "foreign currency group C" (for example where the insurer's reporting currency is different to the local currency), and the conditions in paragraph (11) apply, the insurer can substitute the local currency for foreign currency group C and foreign currency group C for the local currency. If the insurer makes such a substitution foreign currency group C shall be the base currency against which the other foreign currency groups are stressed in the scenarios in paragraph (6).
- (11) The conditions referred to in paragraph (10) are—
 - (a) in respect of the insurer's overall cash inflows, more than 50% of the present value of future cash inflows are in foreign currency group C;
 - (b) in respect of the cash flows of foreign currency group C, the present value of future cash inflows of that currency group exceeds the present value of future cash outflows of that currency group; and
 - (c) in respect of the cash flows of foreign currency group C, the present value of future cash inflows of the insurer would continue to exceed the present value of future cash outflows of the insurer following the application of the more adverse of the stresses in the scenario set out in paragraph (6), applied to foreign currency group C against the local currency.
- (12) If the insurer has material exposures to one or more currencies other than those specified in the foreign currency group table it must notify the Authority and obtain the Authority's written approval as to which foreign currency group the currency shall be included in.

67 Currency risk capital requirement optional simplification

(1) The requirements of this Regulation may be applied by the insurer as an alternative to the requirements in Regulation 66.

- (2) For each foreign currency in respect of which the insurer is exposed to currency risk, the currency risk capital requirement is calculated in accordance with paragraph (3).
- (3) For a foreign currency, the capital requirement for currency risk is equal to the larger of the following scenarios—
 - (a) the capital requirement for the risk of an increase in value of the foreign currency against the insurer's reporting currency as referred to in paragraph (4); and
 - (b) the capital requirement for the risk of a decrease in value of the foreign currency against the insurer's reporting currency as referred to in paragraph (5).
- (4) The capital requirement for the risk of an increase in value of a foreign currency against the insurer's reporting currency is equal to the insurer's loss in its basic own-funds that would result from an instantaneous increase of 25% in the value of the foreign currency against its reporting currency.
- (5) The capital requirement for the risk of a decrease in value of a foreign currency against the insurer's reporting currency is equal to the insurer's loss in its basic own-funds that would result from an instantaneous decrease of 25% in the value of the foreign currency against its reporting currency.

68 Spread risk capital requirement

(1) In this Regulation—

"**spread risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level of credit spreads over the risk-free interest rate term structure.

(2) Pursuant to Regulation 59 the spread risk capital requirement of the market risk capital requirement is equal to the following –

 $Market_{sp} = Market_{sp}^{bonds} + Market_{sp}^{securitisation} + Market_{sp}^{cd}$

where –

- (a) *Market*^{bonds} is the capital requirement for spread risk of bonds and loans as defined in Regulation 69;
- (b) *Market*^{securitisation} is the capital requirement for spread risk on securitisation positions as defined in Regulation 71; and
- (c) *Market*^{*cd*}_{*sp*} is the capital requirement for spread risk on credit derivatives as defined in Regulation 72.



69 Spread risk on bonds and loans

- (1) Pursuant to Regulation 68(2)(a) the spread risk on bonds and loans capital requirement of the spread risk capital requirement, *Market*^{bonds}, is equal to the loss in basic own-funds of the insurer that would result from an instantaneous relative decrease of *stressi* in the value of each bond or loan *i*, other than mortgage loans that meet the requirements in Regulation 80, including bank deposits other than cash at bank referred to in Regulation 79.
- (2) The risk factor *stressi* must depend on the modified duration of the bond or loan *i* denominated in years (*dur_i*).
- (3) dur_i must never be lower than 1.
- (4) For variable interest rate bonds or loans, *duri* is equivalent to the modified duration of a fixed interest rate bond or loan of the same maturity and with coupon payments equal to the forward interest rate.
- (5) Bonds or loans which are not listed as a specific exposure in Regulation 70 and for which a credit assessment by a nominated ECAI is available are assigned a risk factor *stressi* depending on the credit quality step of the counterparty and the modified duration *duri* of the bond or loan *i* according to the following table –

	Credit quality step									
Dur i	0	1	2	3	4	5,6				
≤5	$0.9\% \cdot dur_i$	$1.1\% \cdot dur_i$	$1.4\% \cdot dur_i$	$2.5\% \cdot dur_i$	$4.5\% \cdot dur_i$	$7.5\% \cdot dur_i$				
5 <dur ≤10</dur 	4.5% + 0.5% $\cdot (dur_i - 5)$	5.5% + 0.6% $\cdot (dur_i - 5)$	7.0% + 0.7% $\cdot (dur_i - 5)$	12.5% + 1.5% $\cdot (dur_i - 5)$	$22.5\% + 2.5\% + (dur_i - 5)$	37.5% + 4.2% $\cdot (dur_i - 5)$				
10 <dur ≤ 15</dur 	7.0% + 0.5% $\cdot (dur_i - 10)$	8.5% + 0.5% $\cdot (dur_i - 10)$	10.5% + 0.5% $\cdot (dur_i - 10)$	20.0% + 1.0% $\cdot (dur_i - 10)$	35.0% + 1.8% $\cdot (dur_i - 10)$	58.5% + 0.5% $\cdot (dur_i - 10)$				
15 <dur ≤ 20</dur 	9.5% + 0.5% $\cdot (dur_i - 15)$	11.0% + 0.5% $\cdot (dur_i - 15)$	13.0% + 0.5% · (<i>dur_i</i> - 15)	25.0% + 1.0% · ($dur_i - 15$)	44.0% + 0.5% $\cdot (dur_i - 15)$	61.0% + 0.5% $\cdot (dur_i - 15)$				
> 20	12.0% + 0.5% · (<i>dur_i</i> - 20)	13.5% + 0.5% · (<i>dur_i</i> - 20)	15.5% + 0.5% $\cdot (dur_i - 20)$	30.0% + 0.5% $\cdot (dur_i - 20)$	$46.6\% + 0.5\% + (dur_i - 20)$	63.5% + 0.5% $\cdot (dur_i - 20)$				

(6) Bonds and loans which are not listed as a specific exposure in Regulation 70 and for which a credit assessment by a nominated ECAI is not available and for which debtors have not posted collateral are assigned a risk factor *stressi* depending on the duration *duri* of the bond or loan *i* according to the following table—

Duri	Stressi
Up to 5	$3.0\% \cdot dur_i$
More than 5 and up to 10	$15.0\% + 1.7\% \cdot (dur_i - 5)$
More than 10 and up to 20	$23.5\% + 1.2\% \cdot (dur_i - 10)$
More than 20	$Min[35.5\% + 0.5\% \cdot (dur_i - 20);1]$

- (7) Bonds and loans which are not listed as a specific exposure in Regulation 70 and for which a credit assessment by a nominated ECAI is not available and for which debtors have posted collateral are assigned a risk factor *stressi* according to the following—
 - (a) if the risk-adjusted value of collateral is higher than or equal to the value of the bond or loan *i*, *stressi* is equal to half of the risk factor that would be determined in accordance with paragraph 0;
 - (b) if the risk-adjusted value of collateral is lower than the value of the bond or loan *i*, and if the risk factor determined in accordance with paragraph 0 would result in a value of the bond or loan *i* that is lower than the risk-adjusted value of the collateral, *stressi* is equal to the average of the following—
 - (i) the risk factor determined in accordance with paragraph 0;
 - (ii) the difference between the value of the bond or loan *i* and the risk-adjusted value of the collateral, divided by the value of the bond or loan *i*; and
 - (c) if the risk-adjusted value of collateral is lower than the value of the bond or loan *i*, and where the risk factor determined in accordance with paragraph 0 would result in a value of the bond or loan *i* that is higher than or equal to the risk-adjusted value of the collateral, *stressi* is determined in accordance with paragraph 0.
- (8) The risk-adjusted value of the collateral is calculated in accordance with Regulations 84 and 85.

70 Treatment of specific exposures for spread risk on bonds and loans

(1) The insurer's exposures in the form of covered bonds which have been assigned to credit quality step 0 or 1 are assigned a risk factor *stressi* according to the following table—

Credit Step/ Duri	0	1		
Up to 5	$0.7\% \cdot dur_i$	$0.9\% \cdot dur_i$		
More than 5	$Min(1; 3.5\% + 0.5\% \cdot (dur_i - 5))$	$Min(1; 4.5\% + 0.5\% \cdot (dur_i - 5))$		

(2) Exposures in the form of bonds and loans issued by the following are assigned a risk factor *stress*_i of 0%—



- (a) the Island's Government;
- (b) the European Central Bank;
- (c) EU Member States' central government and central banks denominated and funded in the domestic currency of that central government and the central bank;
- (d) instruments issued by a multilateral development bank including—
 - (i) The International Bank for Reconstruction and Development;
 - (ii) The International Finance Corporation;
 - (iii) The Inter-American Development Bank;
 - (iv) The Asian Development Bank;
 - (v) The African Development Bank;
 - (vi) The Council of Europe Development Bank;
 - (vii) The Nordic Investment Bank;
 - (viii) The Caribbean Development Bank;
 - (ix) The European Bank for Reconstruction and Development;
 - (x) The European Investment Bank;
 - (xi) The European Investment Fund;
 - (xii) The Multilateral Investment Guarantee Agency;
 - (xiii) The International Finance Facility for Immunisation;
 - (xiv) The Islamic Development Bank.
- (e) exposures to international organisations including
 - (i) The European Community;
 - (ii) The International Monetary Fund;
 - (iii) The Bank for International Settlements ; or
- (f) exposures that are fully, unconditionally and irrevocably guaranteed by the European Investment Bank or the European Investment Fund.
- (3) Exposure in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in sub-paragraphs (2)(a) to (2)(d), if the guarantee meets the requirements set out in Regulation 123, must also be assigned a risk factor *stressi* of 0%.
- (4) Exposures in the form of bonds and loans issued by central governments and central banks other than those referred to in sub-paragraph 0, denominated and funded in the domestic currency of that central government and central bank, and for which a credit assessment by a

nominated ECAI is available is assigned a risk factor *stressi* depending on the credit quality step and the duration of the exposure according to the following table—

Credit quality step											
	Stressi	0 an	d 1	2	2	3	;	4	L	5 an	d 6
Dur i		ai	b_i	ai	b_i	ai	b_i	ai	b_i	ai	b_i
≤ 5	$b_i \cdot dur_i$	-	0%	-	1.1%	-	1.4%	-	2.5%	-	4.5%
5 < dur≤ 10	$a_i + b_i$ $(dur_i - 5)$	0%	0%	5.5%	0.6%	7.0%	0.7%	12.5%	1.5%	22.5%	2.5%
10< dur≤ 15	$\frac{(uur_i - b)}{a_i + b_i}$ $\cdot (dur_i - 10)$	0%	0%	8.4%	0.5%	10.5%	0.5%	20.0%	1.0%	35.0%	1.8%
15< dur≤ 20	$a_i + b_i$ $\cdot (dur_i - 15)$	0%	0%	10.9%	0.5%	13.0%	0.5%	25.0%	1.0%	44.0%	0.5%
>20	$Min[a_i + b_i \\ \cdot (dur_i - 20, 1])$	0%	0%	13.4%	0.5%	15.5%	0.5%	30.0%	0.5%	46.5%	0.5%

- (5) Exposures to bonds or loans issued by insurers for which a credit assessment by a nominated ECAI is not available and if the insurer meets the following requirements—
 - (a) the insurer meets its MCR or an equivalent approach in the jurisdiction of an approved supervisor;
 - (b) the insurer's solvency ratio is determined according to the requirements set out in these Regulations; and
 - (c) the insurer's solvency ratio is determined consistently to the scenario under consideration,

are assigned a risk factor *stressi* depending on the credit quality step and the duration of the exposure using the mapping between solvency ratios and credit quality steps according to the following table—

Solvency ratio	196%	175%	122%	95%	75%	75%
Credit quality step	1	2	3	4	5	6

- (6) If the solvency ratio of the insurer falls in between the solvency ratios set out in the table in paragraph (5), the value of *stressi* is linearly interpolated from the closest values of *stressi* corresponding to the closest solvency ratios set out in paragraph (5).
- (7) If the solvency ratio is lower than 75%, *stressi* is equal to the factor corresponding to the credit quality steps 5 and 6.
- (8) If the solvency ratio is higher than 196%, *stressi* is the same as the factor corresponding to the credit quality step 1.
- (9) Exposures to bonds or loans issued by insurers which do not meet their MCR under these regulations or an equivalent approach in the jurisdiction of an approved supervisor is assigned a risk factor *stressi* according to the following table—



Duration (years)	Stressi
Up to 5	7.5% · dur _i
More than 5 and up to 10	$37.5\% + 4.2\% \cdot (dur_i - 5)$
More than 10 and up to 15	$58.5\% + 0.5\% \cdot (dur_i - 10)$
More than 15 and up to 20	$61.0\% + 0.5\% \cdot (dur_i - 15)$
More than 20	$Min[63.5\% + 0.5\% \cdot (dur_{l_1} - 20); 1]$

71 Spread risk on securitisation positions

(1) In this Regulation—

"originator" in relation to a securitisation means an entity which –

- (a) itself or through related entities, directly or indirectly, was involved in the original agreement which created the obligations or potential obligations of the debtor or potential debtor giving rise to the exposure being securitised; or
- (b) purchases a third party's exposure for its own account then securitises it;

"resecuritisation position" is a securitisation where the risk associated with the underlying pool of exposures is tranched, and at least one of the underlying exposures is a securitisation position;

"securitisation", is a pool of various types of contractual debt, such as mortgages and loans, where the related cash flows are sold to third party investors as a tradable financial asset;

"securitisation position", is an exposure to a securitisation;

"securitisation special purpose entity (SSPE)" is a corporation, trust or other entity, other than an institution, organised for carrying out securitisations or resecuritisations, where —

- (a) the activities of which are limited to those appropriate to accomplishing that objective;
- (b) the structure of which is intended to isolate the obligations of the SSPE from those of the originator institution; and
- (c) in which the holders of the beneficial interests have the right to pledge or exchange those interest without restrictions;

"sponsor" in relation to a securitisation means an institution other than an originator institution that establishes and manages the securitisation scheme that purchases exposures from third-party entities;

"synthetic securitisation" is a securitisation where the transfer of risk involved is achieved by the use of credit derivatives or guarantees, and the exposures being securitised remain exposures of the originator;

"type 1 securitisation position" is a securitisation position meeting the requirements of paragraph (2);

"type 2 securitisation position" is a securitisation position meeting the requirements of paragraph (3);

- (2) Type 1 securitisation positions are securitisation positions that meet all of the following criteria—
 - (a) the position has been assigned to credit quality step 3 or better;
 - (b) the securitisation is listed in a regulated market of a country which is a member of the EEA or the OECD;
 - (c) the position is in the most senior tranche or tranches of the securitisation and possess the highest level of seniority at all times during the ongoing life of the transaction; for these purposes (a tranche is deemed the most senior where, after the delivery of an enforcement notice and if applicable an acceleration notice, the tranche is not subordinated to other tranches of the same securitisation transaction or scheme in respect of receiving principal and interest payments, without taking into account amounts due under interest rate or currency derivative contracts, fees or other similar payments);
 - (d) the underlying exposures have been acquired by the SSPE in a manner that is enforceable against any third party and are beyond the reach of the seller (originator, sponsor or original lender) and its creditors including in the event of the seller's insolvency;
 - (e) the transfer of the underlying exposures to the SSPE may must not be subject to material claw back provisions in the jurisdiction where the seller (originator, sponsor or original lender) is incorporated; this includes but is not limited to provisions under which the sale of the underlying exposures can be invalidated by the liquidator of the seller (originator, sponsor or original lender) solely on the basis that it was concluded within a certain period before the declaration of the seller's insolvency or provisions where the SSPE can prevent such invalidation only if it can prove that it was not aware of the insolvency of the seller at the time of sale;
 - (f) the underlying exposures have their administration governed by a servicing agreement which includes servicing continuity provisions to ensure, at a minimum, that a default or insolvency of the servicer does not result in a termination of servicing;
 - (g) the documentation governing the securitisation includes continuity provisions to ensure, at a minimum, the replacement of derivative counterparties and of liquidity providers upon their default or insolvency, if applicable;



- (h) all the assets underlying the securitisation belong to only one of the following categories—
 - residential mortgages or fully guaranteed residential loans issued by a counterparty with a the credit quality step 2 or above;
 - (ii) loans to small and medium-sized enterprises;
 - (iii) auto loans and leases for the financing of
 - (A) motor vehicles all power driven vehicles which are moved by their own means, having at least 4 wheels, being complete, completed or incomplete, with a maximum design speed exceeding 25km/h;
 - (B) trailers all non-self-propelled vehicles on wheels which are designed and constructed to be towed by a motor vehicle;
 - (C) agricultural or forestry tractors all tractors, trailers or interchangeable towed machinery, whether being complete, completed or incomplete, which is intended to be used in agriculture or forestry;
 - (D) motorcycles or motor tricycles two-wheeled vehicles without a sidecar or with a sidecar or vehicles with 3 symmetrically arranged wheels respectively, fitted with an engine having a cylinder capacity of more than 50 cm³ if of the interval combustion type and/or having a maximum design speed of more than 45 km/h; or
 - (E) tracked vehicles;
 - (iv) leased property;
 - (v) consumer loans;
 - (vi) credit card receivables;
- the pool of underlying assets may only include derivatives if these are used strictly for hedging currency or interest rate risk;
- (j) the position is not in a resecuritisation or a synthetic securitisation;
- (k) the underlying exposures do not include transferable financial instruments or derivatives, except financial instruments issued by the SSPE itself or other parties within the securitisation structure and derivatives used to hedge currency risk or interest rate risk;
- (l) at the time of issuance of the securitisation or when incorporated in the pool of underlying exposures at any time after issuance, the underlying exposures do not include exposures to credit-impaired

obligors (or if applicable, credit-impaired guarantors), if a creditimpaired obligor (or credit-impaired guarantor) is a borrower (or guarantor) who—

- (i) has declared bankruptcy, agreed with his creditors to a debt dismissal or reschedule or had a court grant his creditors a right of enforcement or material damages as a result of a missed payment within 3 years prior to the date of origination;
- (ii) is on an official registry of persons with adverse credit history; or
- (iii) has a credit assessment by an ECAI or has a credit score indicating a significant risk that contractually agreed payments will not be made compared to the average obligor for this type of loans in the relevant jurisdiction;
- (m) at the time of issuance of the securitisation or when incorporated in the pool of underlying exposures at any time after issuance, the underlying mortgages and loans do not include any mortgages or loans in default;
- (n) the repayment of the securitisation position is not structured to depend predominantly on the sale of assets securing the underlying exposures; however, this must not prevent those exposures from being subsequently rolled- over or refinanced;
- (o) if the securitisation has been set up without a revolving period or the revolving period has terminated and if an enforcement or an acceleration notice has been delivered, principal receipts from the underlying exposures are passed to the holders of the securitisation positions via sequential amortisation of the securitisation positions and no substantial amount of cash is trapped in the SSPE on each payment date;
- (p) if the securitisation has been set up with a revolving period, the transaction documentation provides for appropriate early amortisation events, which must include at a minimum all of the following—
 - (i) a deterioration in the credit quality of the underlying exposures;
 - (ii) a failure to generate sufficient new underlying exposures of at least similar credit quality; and
 - (iii) the occurrence of an insolvency-related event with regard to the originator or the servicer;
- (q) at the time of issuance of the securitisation, the borrowers (or, if applicable, the guarantors) have made at least one payment,



except if the securitisation is backed by credit facilities referred to in sub-paragraphs (h)(v) and (h)(vi);

- (r) in the case of securitisations where the underlying exposures are residential loans referred to in sub-paragraph (h)(i), the pool of loans does not include any loan that was marketed and underwritten on the premise that the loan applicant or, if applicable intermediaries, were made aware that the information provided might not be verified by the lender;
- (s) in the case of securitisations backed by residential mortgages, the assessment of the borrower's creditworthiness meets the requirements set out below—
 - before concluding a credit agreement, the creditor makes a thorough assessment of the borrower's creditworthiness, and that assessment has taken appropriate account of factors relevant to verifying the prospect of the borrower to meet their obligations under the credit agreement;
 - (ii) the procedures and information on which the assessment is based are established, documented and maintained;
 - (iii) the assessment of creditworthiness must not rely predominantly on the value of the residential immovable property exceeding the amount of the credit or the assumption that the residential immovable property will increase in value unless the purpose of the credit agreement is to construct or renovate the residential immovable property;
 - (iv) if a creditor concludes a credit agreement with a borrower the creditor must not subsequently cancel or alter the credit agreement to the detriment of the borrower on the grounds that the assessment of creditworthiness was incorrectly conducted (but this shall not apply if it is demonstrated that the borrower knowingly withheld or falsified the information);
 - (v) the creditor only makes the credit available to the borrower if the result of the creditworthiness assessment indicated that the obligations resulting from the credit agreement are likely to be met in the manner required under that agreement;
 - (vi) if a database is to be consulted, the creditor informs the borrower in advance;
 - (vii) if the credit application is rejected the creditor informs the borrower without delay of the rejection and, if applicable, that the decision is based on automated processing of data (if the rejection is based on the result of the database)

consultation, the creditor informs the borrower of the result of that consultation and of the particulars of the database consulted);

- (viii) the borrower's creditworthiness is re-assessed on the basis of updated information before any significant increase in the total amount of credit is granted after the conclusion of the credit agreement unless that additional credit was envisaged and included in the original creditworthiness assessment;
- (t) if the issuer, originator or sponsor of the securitisation is established in the European Union, it discloses to relevant stakeholders information on—
 - (i) the credit quality and performance of the underlying exposures;
 - (ii) the structure of the transaction;
 - (iii) the cash flows and any collateral supporting the exposures; and
 - (iv) all other information that is necessary;

for those stakeholders, if appropriate, to conduct comprehensive and well-informed stress tests;

- (u) if the issuer, originator and sponsors are established outside the European Union, comprehensive loan-level data in compliance with standards generally accepted by market participants is made available to relevant stakeholders at issuance and on a regular basis.
- (3) Type 2 securitisation positions must include all securitisation positions that do not qualify as type 1 securitisation positions.
- (4) Securitisations that were issued before the entry into force of this Regulation must qualify as type 1 if they meet only the requirements set out in sub-paragraphs (2)(a), (2)(c), (2)(d), (2)(h), (2)(j) and (2)(k).
- (5) Pursuant to Regulation 68(2)(b) the spread risk on securitisation positions capital requirement of the spread risk capital requirement, $Market_{sp}^{securitisation}$ is the sum of
 - (a) the capital requirement for type 1 securitisation positions calculated in accordance with paragraph (6);
 - (b) the capital requirement for type 2 securitisation positions calculated in accordance with paragraph (8); and
 - (c) the capital requirement for resecuritisation positions calculated in accordance with paragraph (11).



- (6) Pursuant to sub-paragraph (5)(a) the capital requirement for spread risk on type 1 securitisation positions is equal to the loss in the basic ownfunds of the insurer that would result from an instantaneous permanent decrease in the value of each type 1 securitisation position *i* held by the insurer, if the risk factor applied is *stress*_i.
- Pursuant to paragraph (6) the risk factor *stressi* is equal to the following (unless they are a type 1 securitisation position listed in paragraph (8))—

$$Stress_i = Min(b_i \cdot dur_i; 1)$$

where –

- (a) *dur_i* denotes the modified duration of securitisation position *i* denominated in years;
- (b) b_i is assigned depending on the credit quality step of securitisation position *i* according to the following table –

Credit Quality Step	b _i
0	2.1%
1	3.0%
2	3.0%
3	3.0%

- (8) Type 1 securitisation positions which are fully, unconditionally and irrevocably guaranteed by the European Investment Fund or the European Investment Bank, if the guarantee meets the requirements set out in Regulation 123, are assigned a risk factor *stressi* of 0%.
- (9) Pursuant to sub-paragraph (5)(b) the capital requirement for spread risk on type 2 securitisation position is equal to the loss in the basic ownfunds of the insurer that would result from an instantaneous permanent decrease in the value of each type 2 securitisation position *i* held by the insurer, if the risk factor applied is *stressi*.
- (10) Pursuant to paragraph (9) the risk factor *stressi* is equal to the following –

$$Stress_i = Min(b_i \cdot dur_i; 1)$$

where –

- (a) *dur*^{*i*} denotes the modified duration of securitisation position *i* denominated in years; and
- (b) b_i is assigned depending on the credit quality step of securitisation position *i* according to the following table –

Credit Quality Step	b _i
0	12.5%
1	13.4%
2	16.6%
3	19.7%
4	82.0%
5,6	100.0%

- (11) Pursuant to sub-paragraph (5)(c) the capital requirement for spread risk on resecuritisation positions is equal to the loss in the basic own-funds of the insurer that would result from an instantaneous permanent decrease in the value of each resecuritisation position *i*, if the risk factor applied is *stressi*.
- (12) The risk factor *stressi* is equal to the following—

$$Stress_i = Min(b_i \cdot dur_i; 1)$$

where -

- (a) *dur*^{*i*} denotes the modified duration of resecuritisation position *i* denominated in years; and
- (b) b_i is assigned depending on the credit quality step of resecuritisation position *i* according to the following table –

Credit Quality Step	b _i
0	33%
1	40%
2	51%
3	91%
4	100%
5,6	100%

- (13) The modified duration *duri* must not be lower than 1 year.
- (14) Securitisation positions for which a credit assessment from a nominated ECAI is not available is assigned a risk factor *stressi* of 100%.

72 Spread risk on credit derivatives

- Pursuant to Regulation 68(2)(b) the capital requirement for spread risk on credit derivatives (other than those referred to in paragraphs (4) and (5)) of the spread risk capital requirement, *Market^{cd}_{sp}* is equal to the higher of the following capital requirements
 - (a) the loss in the insurer's basic own-funds that would result from an instantaneous increase in absolute terms of the credit spread of the instruments underlying the credit derivatives in accordance with paragraphs (3) and (4); and



- (b) the loss in the insurer's basic own-funds that would result from an instantaneous relative decrease of the credit spread of the instruments underlying the credit derivatives by 75%.
- (2) For the purposes of sub-paragraph (1)(a), the instantaneous increase of the credit spread of the instruments underlying the credit derivatives for which a credit assessment by a nominated ECAI is available is calculated according to the following table –

Credit quality step	Instantaneous increase in spread	
0	+130 basis points	
1	+150 basis points	
2	+260 basis points	
3	+450 basis points	
4	+840 basis points	
5	+1620 basis points	
6	+1620 basis points	

- (3) The instantaneous increase of the credit spread of the instruments underlying the credit derivatives for which a credit assessment by a nominated ECAI is not available is 5 basis points.
- (4) The capital requirement for spread risk on credit derivatives which are part of the insurer's risk mitigation policy is nil, as long as the insurer holds either the instruments underlying the credit derivative or another exposure with respect to which the basis risk between that exposure and the instruments underlying the credit derivative is not material in any circumstances.
- (5) The capital requirement for spread risk on credit derivatives if the underlying financial instrument is a bond or a loan to any exposure listed in Regulation 0 is nil.

73 Single name counterparty exposure

(1) In this Regulation—

"single name exposures" are –

- (a) exposures of the insurer to counterparties that are connected to another counterparty in a way as may result (or appear to result) in a potential correlation of those exposures, including in the ways referred to in this Regulation; and
- (b) are referred to as "single name" simply to reflect that relationship irrespective of whether the parties concerned have the same name or not.
- (2) For the purposes of paragraph (1) –

- (a) exposures of the insurer to counterparties which belong to a corporate group are treated as a single name exposure; and
- (b) exposures of the insurer in respect of immovable properties which are located in the same building are treated as a single name exposure.
- (3) The insurer's exposure at default to a counterparty is the sum of its exposures to that counterparty.
- (4) The insurer's exposure at default to a single name exposure is the sum of the exposures at default to all counterparties that belong to the single name exposure.
- (5) The weighted average credit quality step on a single name exposure of the insurer is equal to the rounded-up average of the credit quality steps of its exposures to the counterparties that belong to the single name exposure, weighted by the value of each exposure.

74 Market risk concentration capital requirement

(1) In this Regulation—

"market concentration risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to changes in the level of market prices due to a concentration of exposures to a single counterparty; and

"single name exposure" is as defined in Regulation 73.

(2) Pursuant to Regulation 59 the market concentration risk capital requirement of the market risk capital requirement is calculated on the basis of single name exposures and is equal to the following—

$$Market_{conc} = \sqrt{\sum_{i} (Conc_i^2)}$$

where –

- (a) the sum covers all single name exposures *i*; and
- (b) *Conci* denotes the capital requirement for market risk concentration on a single name exposure *i*.
- (3) For each single name exposure *i*, the capital requirement for market risk concentration *Conci* is equal to the loss in the basic own-funds of the insurer that would result from an instantaneous decrease in the value of the assets corresponding to the single name exposure *i* equal to the following—

$$XS_i \cdot g_i$$

where –

(a) *XS_i* is the excess exposure calculated in accordance with Regulation 75; and


(b) g_i is the risk factor for market risk concentration calculated in accordance with Regulation 77.

75 Excess exposure

(1) In this Regulation –

'ancillary services company' means a non-regulated company the principal activity of which consists of owning or managing property, managing data-processing services, health and care services or any other similar activity which is ancillary to the principal activity of one or more insurers.

(2) Pursuant to Regulation 74(3)(a) the excess exposure on a single name exposure i is equal to the following –

$$XS_i = \max\left(0; \frac{E_i}{Assets_{xl}} - CT_i\right)$$

where –

- (a) E_i denotes the exposure at default to single name exposure i;
- (b) $Assets_{xl}$ is defined in paragraph (3);
- (c) *CT_i* denotes the relative excess exposure threshold determined in accordance with Regulation 76.
- (3) Assets_{xl} is equal to the value of all assets held by the insurer considered in the equity, spread and property risk capital requirements of the market risk capital requirement, excluding the following—
 - (a) assets held in respect of life insurance contracts if the investment risk is fully borne by the policyholders;
 - (b) exposures to a counterparty which belongs to the same corporate group as the insurer, provided that all of the following conditions are met—
 - (i) the counterparty is either
 - (A) an insurer;
 - (B) an insurance holding company;
 - (C) a mixed financial holding company; or
 - (D) an ancillary services company;
 - (ii) the counterparty is subject to the same (or equivalent) risk evaluation, measurement and control procedures as the insurer;
 - (iii) the counterparty is established in the Island or the European Union; or
 - (iv) there is no current or foreseen material practical or legal impediment to the prompt transfer of own-funds or

repayment of liabilities from the counterparty to the insurer;

- (c) deferred tax assets;
- (d) intangible assets; and
- (e) assets included in the counterparty default risk capital requirement.
- (4) The exposure at default on a single name exposure *i* is reduced by the amount of the exposure at default to counterparties belonging to that single name exposure and for which the risk factor, assigned in accordance with Regulation 77, for market risk concentration is 0%.

76 Relative excess exposure thresholds

Pursuant to Regulation 75(2)(c) each single name exposure i is assigned, in accordance with the following table, a relative excess exposure threshold depending on the weighted average credit quality step of the single name exposure i, calculated in accordance with Regulation 73(5).

Credit quality step	Excess exposure threshold (CTi)
0	3.0%
1	3.0%
2	3.0%
3	1.5%
4	1.5%
5	1.5%
6 or unrated	1.5%

77 Risk factor for market risk concentration

(1) Pursuant to Regulation 74(3)(b) each single name exposure *i* is assigned, in accordance with the following table, a risk factor g_i for market risk concentration depending on the weighted average credit quality step of the single name exposure *i*, calculated in accordance with Regulation 73(5) —

CQS	0	1	2	3	4	5	6	Unrated
Risk factor g_i	12%	12%	21%	27%	73%	73%	73%	73%

(2) If a single name exposure of the insurer does not have a credit assessment by a nominated ECAI, and that single name exposure is an insurer which is supervised by an approved supervisor, and which meets its MCR, that single name exposure is assigned a risk factor g_i for market risk concentration depending on that insurer's solvency ratio in accordance with the following table—



Solvency Ratio	>196%	175%	122%	100%	≤95%
Risk factor g_i	12%	21%	27%	64.5%	73%

- (3) In respect of the table in Regulation 78(2)
 - (a) if the solvency ratio falls in between the solvency ratios set out in the table, the value of g_i is linearly interpolated from the closest values of g_i corresponding to the closest solvency ratios set out in the table;
 - (b) if the solvency ratio is lower than 95%, the risk factor g_i is equal to 73%; and
 - (c) if the solvency ratio is higher than 196%, the risk factor g_i is equal to 12%.
- (4) If a single name exposure of the insurer is an insurer which does not meet its MCR, or is not supervised by an approved supervisor, it is assigned a risk factor *g_i* for market risk concentration equal to 73%.
- (5) Single name exposures of the insurer, other than those identified in paragraphs (1) to (4) are assigned a risk factor g_i for market risk concentration of 73%.

78 Treatment of specific exposures in market concentration risk

- (1) The insurer's exposures in the form of covered bonds are assigned a relative excess exposure threshold CT_i of 15% when the following requirements are met—
 - (a) the covered bond has a credit quality step of 0 or 1;
 - (b) the covered bond must be issued by a credit institution which has its registered office in the Island or the European Union and is subject by law to special public supervision designed to protect bond-holders. In particular, sums deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of validity of the bonds, are capable of covering claims attaching to the bonds and which, in the event of failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest.
- (2) Exposures in the form of covered bonds shall be considered as single name exposures, regardless of other net exposures at default to the same counterparties.
- (3) Other net exposures at default to the same counterparties as the counterparties of exposures in the form of covered bonds shall be considered as separate single name counterparties.

- (4) The insurer's exposures to a single immovable property is assigned a relative excess exposure threshold CT_i of 10% and a risk factor g_i for market risk concentration of 12%.
- (5) The insurer's exposures to the following is assigned a risk factor g_i for market risk concentration of 0%—
 - (a) the Island's Government;
 - (b) the European Central Bank;
 - (c) EU Member States' central government and central banks denominated and funded in the domestic currency of that central government and the central bank;
 - (d) instruments issued by a multilateral development bank including—
 - (i) The International Bank for Reconstruction and Development;
 - (ii) The International Finance Corporation;
 - (iii) The Inter-American Development Bank;
 - (iv) The Asian Development Bank;
 - (v) The African Development Bank;
 - (vi) The Council of Europe Development Bank;
 - (vii) The Nordic Investment Bank;
 - (viii) The Caribbean Development Bank;
 - (ix) The European Bank for Reconstruction and Development;
 - (x) The European Investment Bank;
 - (xi) The European Investment Fund;
 - (xii) The Multilateral Investment Guarantee Agency;
 - (xiii) The International Finance Facility for Immunisation; and
 - (xiv) The Islamic Development Bank; and
 - (e) exposures to international organisations including
 - (i) The European Community;
 - (ii) The International Monetary Fund; or
 - (iii) The Bank for International Settlements.
- (6) Exposures that are fully, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in sub-paragraphs (5)(a) to (5)(d), if the guarantee meets the requirements set out in Regulation 123, are also assigned a risk factor g_i for market risk concentration of 0%.



(7) Exposures to central governments and central banks other than those referred to in sub-paragraph (5)(c) are assigned a risk factor *g_i* for market risk concentration depending on their weighted average credit quality steps, in accordance with the following table –

CQS	0	1	2	3	4	5	6	Unrated
g_i	0%	0%	12%	21%	27%	73%	73%	73%

- (8) Exposures in the form of bank deposits are assigned a risk factor *g_i* for market risk concentration of 0%, provided they meet all of the following requirements—
 - (a) the full value of the exposure is covered by a government guarantee scheme in the Island or the European Union;
 - (b) the guarantee covers the insurer without restriction; and
 - (c) there is no double counting of that guarantee in the calculation of the SCR.

79 Counterparty default risk capital requirement

(1) In this Regulation—

"counterparty default risk" in relation to the insurer is the sensitivity of any or all of its assets, liabilities and financial instruments to the default or deterioration in the credit standing of counterparties and debtors of the insurer in the 12 months following the valuation date;

"type 1 exposures " are defined in paragraph (6); and

"type 2 exposures " are defined in paragraph (7).

- (2) Exposures of the insurer to the following must be included in the calculation of the counterparty default risk capital requirement
 - (a) risk-mitigating contracts, such as reinsurance arrangements, securitisations and derivatives;
 - (b) receivables from intermediaries;
 - (c) any other credit exposures that are not covered in the spread risk capital requirement; and
 - (d) collateral or other security held by or for the account of the insurer.
- (3) For each counterparty the insurer is exposed to, the counterparty default risk capital requirement takes account of the overall counterparty risk exposure of the insurer concerned to that counterparty, irrespective of the legal form of its contractual obligations to that insurer.
- (4) The capital requirement for counterparty default risk is calculated on the basis of single name exposures in accordance with Regulation 73.



- (5) Exposures of the insurer are allocated to Type 1 and Type 2 exposures in accordance with paragraphs (6) and (7).
- (6) Type 1 exposures of the insurer include
 - (a) risk-mitigation contracts including reinsurance arrangements, special purpose vehicles, insurance securitisations and derivatives;
 - (b) cash at bank;
 - (c) deposits with ceding companies, if the number of single name exposures does not exceed 15;
 - (d) commitments received by the insurer that have been called up but are unpaid, if the number of single name exposures does not exceed 15, including—
 - (i) called up but unpaid ordinary share capital and preference shares;
 - (ii) called up but unpaid legally binding commitments to subscribe and pay for subordinated liabilities;
 - (iii) called up but unpaid initial funds, members' contributions or the equivalent basic own-fund item for mutual and mutual-type insurers;
 - (iv) called up but unpaid guarantees;
 - (v) called up but unpaid letters of credit; and
 - (vi) called up but unpaid claims that mutual or mutual-type associations may have against their members by way of a call for supplementary contributions; and
 - (e) legally binding commitments that the insurer has provided or arranged and that may create payment obligations depending on the credit standing or default on a counterparty including guarantees, letters of credit, letters of comfort that the insurer has provided.
- (7) Type 2 exposures of the insurer include exposures that are not covered in the spread risk capital requirement and that are not type 1 exposures in paragraph (6) including the following—
 - (a) receivables from intermediaries;
 - (b) policyholder debtors;
 - (c) mortgage loans that meet the requirements in Regulation 80;
 - (d) deposits with ceding insurers, if the number of single name exposures exceeds 15; and
 - (e) commitments received by an insurer that have been called up but are unpaid, if the number of single name exposures exceeds 15.



- (8) The insurer may, at its discretion, consider all exposures referred to in sub-paragraphs (7)(d) and (7)(e) as type 1 exposures, regardless of the number of single name exposures.
- (9) If a letter of credit, a guarantee or an equivalent risk mitigation technique has been provided to fully secure an exposure of the insurer and this risk mitigation technique complies with the requirements of Regulations 117 to 123, then the provider of that letter of credit, guarantee or equivalent risk mitigation technique may be considered as the counterparty on the secured exposure for the purposes of assessing the number of single name exposures.
- (10) The following credit risk exposures of the insurer must not be covered in the counterparty default risk capital requirement—
 - (a) the credit risk transferred by a credit derivative;
 - (b) the credit risk on debt issuance by special purpose vehicles reinsuring the insurer or otherwise having an arrangement with the insurer which exposes the insurer to credit risk;
 - (c) the underwriting risk of credit and suretyship insurance or reinsurance on contracts written by the insurer; and
 - (d) the credit risk of the insurer on mortgage loans that do not meet the requirements in Regulation 80.
- (11) Investment guarantees on insurance contracts provided to policyholders by a third party and for which the insurer would be liable should the third party default is treated as derivatives in the counterparty default risk capital requirement.

80 Specific treatment of Mortgage loans

(1) In this Regulation—

"mortgage loans" are retail loans secured by mortgages on residential property.

- (2) Mortgage loans are treated as type 2 exposures in the counterparty default risk capital requirement calculation provided the requirements in paragraphs below are met—
 - (a) the exposure is either to a natural person or persons or to a small or medium sized enterprise;
 - (b) the exposure is one of a significant number of exposures with similar characteristics such that the risks associated with that lending are substantially reduced;
 - (c) the total amount owed to the insurer and, if relevant, to all participations, including any exposure in default, by the counterparty or other connected third party, must not, to the

knowledge of the insurer, exceed £1 million and the insurer must take reasonable steps to acquire this knowledge;

- (d) the residential property is or will be occupied or let by the owner;
- (e) the value of the property does not materially depend upon the credit quality of the borrower;
- (f) the risk of the borrower does not materially depend upon the performance of the underlying property, but on the underlying capacity of the borrower to repay the debt from other sources, and as a consequence, the repayment of the loan does not materially depend on any cash flow generated by the underlying property serving as collateral;
- (g) for those other sources referred to in paragraph (f), the insurer must determine maximum loan-to-income ratio as part of its lending policy and obtain suitable evidence of the relevant income when granting the loan; and
- (h) all of the following requirements on legal certainty are met—
 - a mortgage or charge is enforceable in all jurisdictions that are relevant at the time of the conclusion of the credit agreement and is properly filed on a timely basis;
 - (ii) all legal requirements for establishing the pledge have been fulfilled; and
 - (iii) the protection agreement and the legal process underpinning it enable the insurer to realise the value of the protection within a reasonable timeframe.
- (3) All of the following requirements on the monitoring of property values and on property valuation must be met—
 - (a) the insurer monitors the value of the property at a minimum once every 3 years or more frequently if the market is subject to significant changes in conditions; and
 - (b) the property valuation is reviewed when information available to the insurer indicates that the value of the property may have declined materially relative to general market prices and that review is external and independent and carried out by a valuer who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process.
- (4) For the purposes of paragraph (3), the insurer may use statistical methods to monitor the value of the property and to identify property that needs revaluation.
- (5) The insurer must clearly document the types of residential property they accept as collateral and their lending policies in this regard. The insurer



must require the independent valuer of the market value of the property to document that market value in a transparent and clear manner.

- (6) The insurer must have in place procedures to monitor that the property taken as credit protection is adequately insured against the risk of damage.
- (7) The insurer must report all of the following data on losses stemming from mortgage loans to the Authority—
 - (a) losses stemming from loans that have been classified as type 2 exposures according to Regulation 79(7) in a given year; and
 - (b) overall losses in a given year.

81 Counterparty default risk capital requirement calculation

(1) Pursuant to Regulation 53(2)(b) the counterparty default risk capital requirement of the BSCR is equal to the following—

$$SCR_{default} = \sqrt{SCR_{default,1}^2 + 1.5 \cdot SCR_{default,1} \cdot SCR_{default,2} + SCR_{default,2}^2}$$

where --

- (a) SCR_{default,1} denotes the capital requirement for counterparty default risk on type 1 exposures calculated in accordance with paragraph (2); and
- (b) SCR_{default,2} denotes the capital requirement for counterparty default risk on type 2 exposures calculated in accordance with paragraph (3).
- (2) Pursuant to paragraph (1)(a), the capital requirement for counterparty default risk on type 1 exposures is determined as follows
 - (a) if the standard deviation, σ , calculated in accordance with paragraph (d), of the loss distribution of type 1 exposures is lower than or equal to 7% of the total loss-given-default on all type 1 exposures, the capital requirement for counterparty default risk on type 1 exposures is equal to the following—

$$SCR_{default,1} = 3 \cdot \sigma$$

(b) if the standard deviation, σ , calculated in accordance with paragraph (d), of the loss distribution of type 1 exposures is higher than 7% of the total loss-given-default on all type 1 exposures and lower or equal to 20% of the total loss-given-default on all type 1 exposures, the capital requirement for counterparty default risk on type 1 exposures is equal to the following—

$$SCR_{default,1} = 5 \cdot \sigma$$

- (c) if the standard deviation, σ , calculated in accordance with paragraph (d), of the loss distribution of type 1 exposures is higher than 20% of the total loss-given-default on all type 1 exposures, the capital requirement for counterparty default risk on type 1 exposures is equal to the total losses-given-default on all type 1 exposures;
- (d) the standard deviation, σ , of the loss distribution of type 1 exposures is equal to the following—

$$\sigma = \sqrt{V}$$

where V denotes the variance of the loss distribution of type 1 exposures;

- (e) pursuant to sub-paragraph (d) the variance of the loss distribution of type 1 exposures is equal to the sum of V_{inter} as calculated in paragraph (f) and V_{intra} as calculated in paragraph (g);
- (f) pursuant to sub-paragraph (e) *V*_{inter} is equal to the following—

$$V_{inter} = \sum_{(j,k)} \frac{PD_k \cdot (1 - PD_k) \cdot PD_j \cdot (1 - PD_j)}{1.25 \cdot (PD_k + PD_j) - (PD_k \cdot PD_j)} \cdot TLGD_j \cdot TLGD_k$$

where –

- (i) the sum covers all possible combinations (*j*,*k*) of different probabilities of default on single name exposures; and
- (ii) $TLGD_j$ and $TLGD_k$ denote the sum of loss-given- default on type 1 exposures, determined in accordance with Regulation 82, from counterparties bearing a probability of default PD_j and PD_k respectively determined in accordance with regulation 86;
- (g) pursuant to sub-paragraph (e), *V*_{intra} is equal to the following—

$$V_{intra} = \sum_{j} \frac{1.5 \cdot PD_j \cdot (1 - PD_j)}{2.5 - PD_j} \cdot \sum_{PD_j} LGD_i^2$$

where –

- (i) the first sum covers all different probabilities of default on single name exposures;
- (ii) the second sum covers all single name exposures that have a probability of default equal to PD_j determined in accordance with regulation 86; and
- (iii) LGD_i denotes the loss-given-default on the single name exposure *i* determined in accordance with Regulation 82.
- (3) Pursuant to paragraph (1)(b), the capital requirement for counterparty default risk on type 2 exposures is equal to the loss in the basic own-funds that would result from an instantaneous decrease in value of type 2 exposures by the following amount—



$$0.9 \cdot LGD_{receivables>3 months} + 0.15 \cdot \sum_{i} LGD_{i}$$

where –

- (a) LGD_{receivables>3 months} denotes the total loss-given-default on all receivables from intermediaries that have been due for more than 3 months;
- (b) the sum is taken on all type 2 exposures other than receivables from intermediaries that have been due for more than 3 months; and
- (c) LGD_i denotes the loss-given-default on the type 2 exposure *i* determined in accordance with Regulation 82.

82 Loss-given-default

- (1) The loss-given-default on a single name exposure is—
 - (a) equal to the sum of the loss-given-default on each of the exposures to counterparties belonging to the single name exposure if the loss given default for an exposure to a counterparty is determined in accordance with paragraphs (2) and (3); and
 - (b) net of the liabilities towards counterparties belonging to the single name exposure provided that those liabilities and exposures are set-off in the case of default of the counterparties and provided that Regulations 117 and 118 are complied with in relation to that right of set-off. However, no offsetting is allowed for if the liabilities are expected to be met before the credit exposure is cleared.
- (2) The loss-given-default on a reinsurance arrangement or insurance securitisation is equal to the following—

 $LGD_{i} = \max(0; 50\% \cdot (Recoverables_{i} + 50\% \cdot RM_{re,i}) - F \cdot Collateral_{i})$ where --

- (a) *Recoverables_i* denotes the best estimate of amounts recoverable from the reinsurance arrangement *i* or insurance securitisation and the corresponding debtors;
- (b) $RM_{re,i}$ is the risk mitigating effect on underwriting risk of the reinsurance arrangement or insurance securitisation, *i* calculated in accordance with Regulation 83;
- (c) *Collateral*_{*i*} is the risk-adjusted value of collateral in relation to the reinsurance arrangement or insurance securitisation, *i* calculated in accordance with Regulation 84; and

- (d) F is a factor to take into account the economic effect of the collateral arrangement in relation to the reinsurance arrangement or insurance securitisation in case of a credit event related to the counterparty, *i*. If in the case of the insolvency of the counterparty the determination of the insurer's proportional share of the counterparty's insolvency estate in excess of the collateral does not take into account that the insurer receives collateral, the *F* factor is 100%, or else it is 50%.
- (3) For reinsurance arrangements where 60% or more of that counterparty's assets are subject to collateral arrangements, the loss-given-default is equal to the following –

 $LGD_{i} = \max(0; 90\% \cdot (Recoverables_{i} + 50\% \cdot RM_{re,i}) - F' \cdot Collateral_{i})$

(4) The loss-given-default on a derivative is equal to the following—

 $LGD_{i} = \max(0; 90\% \cdot (Derivative_{i} + RM_{fin,i}) - F' \cdot Collateral_{i})$

where –

- (a) *Derivative*^{*i*} denotes the value of the derivative;
- (b) *RM*_{*fin,i*} denotes the risk mitigating effect on market risk of the derivative calculated in accordance with Regulation 83;
- (c) *Collateral*_{*i*} denotes the risk-adjusted value of collateral in relation to the derivative calculated in accordance with Regulation 84; and
- (d) F' is a factor to take into account the economic effect of the collateral arrangement in relation to the derivative in the case of a credit event related to the counterparty *i*. If, in the case of the insolvency of the counterparty, the determination of the insurer's proportional share of the counterparty's insolvency estate in excess of the collateral does not take into account that the insurer receives collateral, F' is 100%, otherwise F' is 90%.
- (5) The loss-given-default on a mortgage loan is equal to the following—

 $LGD_i = \max(0; Loan_i - 80\% \cdot Mortgage_i)$

where –

- (a) *Loani* denotes the value of the mortgage loan *i*; and
- (b) *Mortgage*_i denotes the risk-adjusted value of the mortgage *i* calculated in accordance with Regulation 85.
- (6) The loss-given-default on a legally binding commitment is equal to the difference between its nominal value and its value in the insurer's regulatory balance sheet.
- (7) The loss-given-default-
 - (a) on cash at bank;
 - (b) of a deposit with a ceding insurer;



- (c) of an item listed in Regulation 79(6)(d);
- (d) of a receivable from an intermediary or policyholder debtor; and
- (e) any other exposure not listed elsewhere in this Regulation,

is equal to its value.

83 Risk-mitigating effect on underwriting risk and on market risk

Pursuant to Regulations 82(2)(b) and 82(4)(b) the risk-mitigating effect on underwriting or market risks of a reinsurance arrangement, securitisation or derivative is the difference between the following capital requirements—

- (a) the hypothetical capital requirement for underwriting or market risk of the insurer that would apply if the reinsurance arrangement, securitisation or derivative did not exist; and
- (b) the capital requirement for underwriting or market risk of the insurer determined in accordance with Regulation 53.

84 Risk adjusted value of collateral

- (1) Pursuant to Regulation 82(2)(c) the risk-adjusted value of collateral provided by way of security, is equal to the difference between the value of the assets held as collateral, and the adjustment for market risk, determined in accordance with paragraph (5) provided both of the following requirements are fulfilled—
 - (a) the insurer has (or is a beneficiary under a trust where the trustee has) the right to liquidate or retain, in a timely manner, the collateral in the event of a default, insolvency or bankruptcy or other credit event relating to the counterparty; and
 - (b) the insurer has (or is a beneficiary under a trust where the trustee has) the right to liquidate or retain, in a timely manner, the collateral in the event of a default, insolvency or bankruptcy or other credit event relating to the custodian or other third party holding the collateral on behalf of the counterparty.
- (2) If the requirement in paragraph (1)(a) is met, the criteria set out in Regulation 122 are met and the requirement in paragraph (1)(b) is not met, the risk-adjusted value of a collateral provided by way of security, is equal to 90% of the difference between the value of the assets held as collateral and the adjustment for market risk.
- (3) If either the requirement in paragraph (1)(a) is not met or the requirements in Regulation 122 are not met, the risk- adjusted value of collateral provided by way of security is zero.
- (4) Pursuant to Regulation 82(2)(c) the risk-adjusted value of a collateral of which full ownership is transferred, is equal to the difference between

the value of the assets held as collateral and the adjustment for market risk provided the requirements in paragraph (5) are fulfilled.

- (5) The adjustment for market risk is the difference between the following capital requirements—
 - (a) the hypothetical capital requirement for market risk of the insurer that would apply if the assets held as collateral were not included in the calculation; and
 - (b) the hypothetical capital requirement for market risk of the insurer that would apply if the assets held as collateral were included in the calculation.
- (6) The currency risk of the assets held as collateral is calculated by comparing the currency of the assets held as collateral against the currency of the corresponding exposure.

85 Risk adjusted value of mortgage

- (1) Pursuant to Regulation 82(5) the risk-adjusted value of mortgage is equal to the difference between the value of the residential property held as mortgage, determined in accordance with paragraphs (2) and (3), and the adjustment for market risk determined in accordance with paragraph (4).
- (2) The value of the residential property held as mortgage is the market value reduced as appropriate to reflect the results of the monitoring required under Regulation 80(3) and to take account of any prior claims on the property.
- (3) Pursuant to paragraph (2), the external, independent valuation of the property must be the same or less than the market value calculated in accordance with Regulation 9(1).
- (4) Pursuant to paragraph (1) the adjustment for market risk is the difference between the following capital requirements
 - (a) the hypothetical capital requirement for market risk of the insurer that would apply if the residential property held as mortgage were not included in the calculation; and
 - (b) the hypothetical capital requirement for market risk of the insurer that would apply if the residential property held as mortgage were included in the calculation.
- (5) The currency risk of the residential property held as mortgage is calculated by comparing the currency of the residential property against the currency of the corresponding loan.

86 **Probability of default**

(1) Pursuant to Regulation 82 the probability of default on a single name exposure is equal to the average of the probabilities of default on each of



the exposures to counterparties that belong to the single name exposure, weighted by the loss-given-default in respect of those exposures.

(2) Single name exposure *i* for which a credit assessment by a nominated ECAI is available is assigned a probability of default PD_i in accordance with the following table—

Credit quality step	0	1	2	3	4	5	6
PD _i	0.002%	0.01%	0.05%	0.24%	1.20%	4.2%	4.2%

(3) Single name exposures *i* to an insurer supervised by an approved supervisor, for which a credit assessment by a nominated ECAI is not available and if this insurer meets its MCR, is assigned a probability of default PD_i depending on the insurer's solvency ratio, in accordance with the following table—

Solvency ratio	≥196%	≥175%	≥122%	≥95%	≥75%	<75%
PD _i	0.01%	0.05%	0.24%	1.2%	4.2%	4.2%

- (4) Exposures of the insurer to another insurer that does not meet its MCR or equivalent is assigned a probability of default equal to 4.2%.
- (5) The probability of default on single name exposures other than those identified in paragraphs (1) to (4) is equal to 4.2%.
- (6) If a letter of credit, a guarantee or an equivalent arrangement is provided to fully secure an exposure of the insurer and this arrangement complies with Regulations 117 to 123, the provider of that letter of credit, guarantee or equivalent arrangement may be considered as the counterparty on the secured exposure for the purposes of assessing the probability of default of a single name exposure.

87 Life underwriting risk capital requirement

(1) In this Regulation—

"**life underwriting risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from life insurance obligations, in relation to the perils covered and the processes used in the conduct of business.

- (2) Pursuant to Regulation 53(2)(c) the life underwriting risk capital requirement of the BSCR is calculated from the following capital requirements for life underwriting sub-risks—
 - (a) mortality;
 - (b) longevity risk;
 - (c) disability-morbidity risk;
 - (d) life-expense risk;

- (e) revision risk; and
- (f) life-catastrophe risk.
- (3) The capital requirement relating to life underwriting risk is the following—

$$SCR_{life} = \sqrt{\sum_{r,c} LifeCorr_{r,c} \cdot Life_r \cdot Life_c}$$

where-

(a) $Life_r$ and $Life_c$ are the capital requirements for the individual life shock scenarios according to the rows and columns of the correlation matrix *LifeCorr*; and

LifeCorr	Mortality	Longevity	Disability	Lapse	Expenses	Revision	CAT
Mortality	1	-0.25	0.25	0	0.25	0	0.25
Longevity	-0.25	1	0	0.25	0.25	0.25	0
Disability	0.25	0	1	0	0.5	0	0.25
Lapse	0	0.25	0	1	0.5	0	0.25
Expenses	0.25	0.25	0.5	0.5	1	0.5	0.25
Revision	0	0.25	0	0	0.5	1	0
CAT	0.25	0	0.25	0.25	0.25	0	1

(b) $LifeCorr_{r,c}$ are the entries of the correlation matrix LifeCorr –

88 Mortality risk capital requirement

(1) In this Regulation—

"**mortality risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level, trend, or volatility of mortality rates.

- (2) Pursuant to Regulation 87(2)(a) the mortality risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent increase of 15% in the mortality rates used by the insurer for the calculation of its technical provisions.
- (3) The resulting stressed mortality rates determined in accordance with paragraph (2) must not exceed a value of 1.
- (4) The increase in mortality rates must only apply to the insurer's insurance contracts for which an increase in mortality rates leads to an increase in technical provisions without the risk margin.
- (5) Assumptions in relation to the identification of insurance policies for which an increase in mortality rates leads to an increase in technical provisions without the risk margin include—



- (a) multiple insurance policies in respect of the same insured person may be treated as if they were one insurance policy; and
- (b) if the calculation of technical provisions is based on groups of policies the identification of the policies for which technical provisions increase under an increase of mortality rates may also be based on those groups of policies instead of single policies, provided that it yields a result that is not materially different.
- (6) With regard to reinsurance obligations, the identification of the policies for which technical provisions increase under an increase in mortality rates must apply to the underlying insurance policies only and is carried out in accordance with paragraphs (4) and (5).

89 Longevity risk capital requirement

(1) In this Regulation –

"**longevity risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level, trend, or volatility of mortality rates.

- (2) Pursuant to Regulation 87(2)(b) the longevity risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent decrease of 20% in the mortality rates used by the insurer for the calculation of its technical provisions.
- (3) The decrease in mortality rates must only apply to those insurance policies for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin.
- (4) Assumptions in relation to the identification of insurance policies for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin are in accordance with Regulation 88(5) and 88(6).

90 Disability and morbidity capital requirement

(1) In this Regulation—

"disability and morbidity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level of disability, sickness and morbidity rates.

(2) Pursuant to Regulation 87(2)(c) the disability and morbidity risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic own-funds of an insurer that would result from the combination of the following changes—

- (a) an increase of 35% in the disability and morbidity rates that are used by the insurer in the calculation of its technical provisions to reflect the disability and morbidity experience in the 12 months following the valuation date;
- (b) an increase of 25% in the disability and morbidity rates that are used by the insurer in the calculation of its technical provisions to reflect the disability and morbidity experience for all months after the 12 months following the valuation date; and
- (c) a decrease of 20% in the disability and morbidity recovery rates used by the insurer in the calculation of its technical provisions in respect of the 12 months following the valuation date and for all years thereafter.
- (3) The increase or decrease in disability and morbidity inception rates must be applied to all inception rates used by the insurer in the calculation of its technical provisions, irrespective of the time period that the rates refer to.
- (4) The resulting stressed mortality rates determined in accordance with paragraph (2) must not exceed a value of 1.
- (5) The decrease to recovery rates must not be applied to recovery rates with a value of 1, if this merely reflects the fact that the benefit payments end after a contractually fixed period.

91 Lapse risk capital requirement

(1) In this Regulation—

"lapse risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the expected exercise rates of policyholder options;

"policyholder options", are as set out in paragraphs (2) to (4); and

"discontinuance" means the exercising by the policyholder of the relevant policyholder options.

- (2) Policyholder options include the following-
 - (a) all legal or contractual policyholder rights to fully or partly terminate, surrender, restrict or suspend insurance cover or permit the policyholder to lapse; and
 - (b) all legal and contractual policyholder rights to fully or partially establish renew, increase, extend or resume the insurance and reinsurance cover.
- (3) For the purposes of sub-paragraph (2)(b), the change in the option exercise rate is applied to the rate reflecting that the relevant option is not exercised.



- (4) In relation to reinsurance contracts the relevant options are the following—
 - (a) the rights referred to in paragraph (2) of the policyholders of the reinsurance contracts;
 - (b) the rights referred to in paragraph (2) of the policyholders of the insurance contracts underlying the reinsurance contracts; and
 - (c) if the reinsurance contracts cover insurance contracts that will be written in the future, the right of the potential policyholders not to conclude those insurance contracts.
- (5) Pursuant to Regulation 87(2)(d) the lapse risk capital requirement of the life underwriting risk capital requirement is equal to the largest of the following capital requirements—
 - (a) the capital requirement for the risk of a permanent increase in lapse rates determined in accordance with paragraph (6);
 - (b) the capital requirement for the risk of a permanent decrease in lapse rates determined in accordance with paragraph (8); or
 - (c) the capital requirement for mass lapse risk determined in accordance with paragraph (10).
- (6) Pursuant to sub-paragraph (5)(a) the capital requirement for the risk of a permanent increase in lapse rates is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent increase of 50% in the exercise rates of the relevant policyholder options.
- (7) Pursuant to paragraph (6), in any event, the increased option exercise rates must not exceed 100% and the increase in option exercise rates must only apply to those relevant options for which the exercise of the option would result in an increase of the insurer's technical provisions without the risk margin.
- (8) Pursuant to sub-paragraph (5)(b) the capital requirement for the risk of a permanent decrease in lapse rates is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent decrease of 50% in the exercise rates of the relevant policyholder options.
- (9) Pursuant to paragraph (8), in any event, the decrease in option exercise rates must not exceed 20% and the decrease in option exercise rates must only apply to those relevant options for which the exercise of the option would result in an increase of the insurer's technical provisions without the risk margin.
- (10) Pursuant to sub-paragraph (5)(c) the capital requirement for mass lapse risk is equal to the loss in basic own-funds of the insurer that would result from a combination of the following instantaneous events—

- (a) the discontinuance of 40% of the insurance policies for which discontinuance would result in an increase of technical provisions without the risk margin; and
- (b) if reinsurance contracts cover insurance contracts that will be written in the future, the decrease of 40% of the number of those future insurance contracts used in the calculation of technical provisions.
- (11) Pursuant to paragraph (10), for the purposes of determining the loss in basic own-funds of the insurer under the events referred to in subparagraphs (10)(a) and (10)(b), the insurer must base the calculation on the type of discontinuance that most negatively affects the basic ownfunds of the insurer on a per policy basis.

92 Expense risk capital requirement

(1) In this Regulation—

"**expense risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level or trend of the expenses incurred in servicing insurance contracts.

- (2) Pursuant to Regulation 87(2)(d) the expense risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from the combination of the following instantaneous permanent changes—
 - (a) an increase of 10% in the amount of expenses taken into account in the calculation of the insurer's technical provisions; and
 - (b) an increase of in the expense inflation rate used by the insurer in the calculation of its technical provisions by an absolute value of 1%.
- (3) With regard to reinsurance obligations, an insurer must apply those changes to its own expenses and, if relevant, to the expenses of the cedant.

93 Revision risk capital requirement

(1) In this Regulation—

"revision risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from fluctuations in the level or trend of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured.

(2) Pursuant to Regulation 87(2)(e) the revision risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic



own-funds that would result from an instantaneous permanent increase of 3% in the amount of annuity benefits only on annuity insurance obligations if the benefits payable under the underlying insurance policies could increase as a result of changes in the legal environment or in the state of health of the person insured.

94 Life catastrophe risk capital requirement

(1) In this Regulation—

"**life catastrophe risk**", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from the significant uncertainty of pricing and provisioning assumptions related to extreme or irregular events.

- (2) Pursuant to Regulation 87(2)(f) the revision risk capital requirement of the life underwriting risk capital requirement is equal to the loss in basic own-funds that would result from an instantaneous absolute addition of 0.15% to the mortality rates that are used by the insurer in the calculation of its technical provisions to reflect the mortality experience in the 12 months following the valuation date.
- (3) The life catastrophe risk shock scenario must be calculated allowing for insurance obligations that are contingent on mortality or longevity, i.e. if an increase in mortality rates can lead to either an increase or a decrease in technical provisions without the risk margin, and hence must take into account the assumptions in Regulation 88(5) and 88(6).

95 Health underwriting risk capital requirement

(1) In this Regulation—

"health underwriting risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from health insurance obligations, whether it is pursued on a similar technical basis to that of life insurance or not, following from both the perils covered and the processes used in the conduct of business.

- (2) Pursuant to Regulation 53(2)(d) the health underwriting risk capital requirement of the BSCR is calculated from the following capital requirements for health underwriting sub-risks—
 - (a) NSLT health insurance underwriting risks;
 - (b) SLT health insurance underwriting risks; and
 - (c) health catastrophe risk.
- (3) The capital requirement for health underwriting risk is equal to the following—

$$SCR_{Health} = \sqrt{\sum_{r,c} HCorr_{r,c} \cdot SCR_r \cdot SCR_c}$$

where -

- (a) the sum covers all possible combinations (r,c) of the capital requirements set out in sub-paragraph (4);
- (b) *SCR_r* and *SCR_c* denote the capital requirements for risk capital requirement *r* and *c* respectively; and
- (4) $HCorr_{r,c}$ are the entries of the correlation matrix HCorr –

HCorr	SLT	NSLT	Catastrophe
SLT	1	0.5	0.25
NSLT	0.5	1	0.25
Catastrophe	0.25	0.25	1

- (5) An insurer must apply—
 - (a) the NSLT health underwriting risk capital requirement to the health insurance and reinsurance obligations included in the NSLT segments below —

Segment	Explanation
A: Medical expense insurance	An obligation of the insurer that covers the
and proportional reinsurance	provision or financial compensation arising from
	illness, accident, disability or infirmity, where the
	underlying business is pursued on a NSLT basis,
	other than obligations included in segment C.
	An obligation of the insurer that covers the
P. In some protection	financial compensation arising from illness,
b: Income protection	accident, disability or infirmity, where the
	underlying business is pursued on a NSLT basis,
reinsurance	other than obligations included in segments A
	and C.
C: Workers' compensation	An obligation of the insurer that covers the
insurance and proportional	provision or financial compensation arising from
reinsurance	illness, accident, disability or infirmity and that
	arises only from to accidents at work, industrial
	injury and occupational disease where the
	underlying business is pursued on a NSLT basis.
D. Non-proportional health	Non-proportional reinsurance obligations of the
reinsurance	insurer relating to insurance obligations included
	in segments A, B, and C.

- (b) the SLT health underwriting risk capital requirement to health insurance and reinsurance obligations other than those in sub-paragraph (a); and
- (c) the health catastrophe risk capital requirement to all health insurance and reinsurance obligations.

96 SLT Health underwriting risk capital requirement

- Pursuant to Regulation 95(2)(b) the SLT health underwriting risk capital requirement of the health underwriting capital requirement must consist of all of the following capital requirements—
 - (a) STL health mortality risk determined in accordance with Regulation 97;
 - (b) STL health longevity determined in accordance with Regulation 98;
 - (c) STL health disability-morbidity determined in accordance with Regulation 99;
 - (d) STL health expense risk determined in accordance with Regulation 102;
 - (e) STL health revision risk determined in accordance with Regulation 103; and
 - (f) SLT health lapse risk determined in accordance with Regulation 104.
- (2) The capital requirement for SLT health underwriting risk is equal to the following –

$$SCR_{SLTHealth} = \sqrt{\sum_{r,c} HealthCorr_{r,c}^{SLT} \cdot Health_{r}^{SLT} \cdot Health_{c}^{SLT}}$$

where –

- (a) the sum denotes all possible combinations (*r*,*c*) of the capital requirements set out in paragraph (1);
- (b) $Health_r^{SLT}$ and $Health_c^{SLT}$ are the capital requirements for the individual health SLT shock scenarios according to the rows and columns of the correlation matrix $HealthCorr^{SLT}$; and
- (c) $HealthCorr_{r,c}^{SLT}$ are the entries of the correlation matrix $HealthCorr^{SLT}$ —



<i>HealthCorr^{SLT}</i>	Mortality	Longevity	Disability	Lapse	Expenses	Revision
Mortality	1	-0.25	0.25	0	0.25	0
Longevity	-0.25	1	0	0.25	0.25	0.25
Disability	0.25	0	1	0	0.5	0
Lapse	0	0.25	0	1	0.5	0
Expenses	0.25	0.25	0.5	0.5	1	0.5
Revision	0	0.25	0	0	0.5	1

97 SLT Health mortality risk capital requirement

(1) In this Regulation—

"SLT health mortality risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level, trend, or volatility of mortality rates.

- (2) Pursuant to Regulation 96(1)(a) the SLT health mortality risk capital requirement of the SLT health underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent increase of 15% in the mortality rates used by the insurer for the calculation of its technical provisions.
- (3) The resulting stressed mortality rates determined in accordance with paragraph (2) shall not exceed a value of 1.
- (4) The increase in mortality rates must only apply to the insurer's insurance contracts for which an increase in mortality rates leads to an increase in technical provisions without the risk margin.
- (5) Further to paragraph (4), the identification of insurance policies for which an increase in mortality rates leads to an increase in technical provisions without the risk margin shall be based on the assumptions in Regulation 88(5) and 88(6).

98 SLT Health longevity risk capital requirement

(1) In this Regulation—

"SLT health longevity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level, trend, or volatility of mortality rates.

(2) Pursuant to Regulation 96(1)(b) the SLT health longevity risk capital requirement of the SLT health underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent decrease of 20% in the mortality rates used by the insurer for the calculation of its technical provisions.



- (3) The resulting stressed mortality rates determined in accordance with paragraph (2) shall not exceed a value of 1.
- (4) The decrease in mortality rates must only apply to those insurance policies for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin.
- (5) Assumptions in relation to the identification of insurance policies for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin shall be based on the assumptions in Regulation 88(5) and 88(6).

99 SLT Health disability-morbidity risk capital requirement

(1) In this Regulation—

"SLT health disability-morbidity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level of medical expenses and income protection disability-morbidity risk.

- (2) Pursuant to Regulation 96(1)(c) the SLT health disability-morbidity risk capital requirement of the SLT health underwriting risk capital requirement is equal to the sum of the following—
 - (a) the capital requirement for SLT health medical expense disabilitymorbidity risk determined in accordance with regulation 100; and
 - (b) the capital requirement for SLT health income protection disability-morbidity risk determined in accordance with regulation 101.
- (3) The insurer must apply—
 - (a) the scenarios underlying the calculation of the capital requirement for SLT health medical expense disability-morbidity risk only to SLT health medical expense insurance obligations; and
 - (b) the scenarios underlying the calculation of the capital requirement for SLT health income protection disability-morbidity risk only to SLT health income protection insurance obligations.

100 SLT Health medical expense disability-morbidity risk capital requirement

(1) In this Regulation—

"SLT health medical expense disability-morbidity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level or trend of the medical expenses incurred in servicing SLT health medical expense disability-morbidity insurance contracts.

- (2) Pursuant to Regulation 99(2)(a) the SLT health expense disabilitymorbidity risk capital requirement of the SLT disability-morbidity underwriting risk capital requirement is equal to the larger of the following capital requirements—
 - (a) the capital requirement for the increase of medical payments determined in accordance with paragraph (3); and
 - (b) the capital requirement for the decrease of medical payments determined in accordance with paragraph (4).
- (3) Pursuant to sub-paragraph (2)(a) the capital requirement for the increase of medical payments is equal to the loss in basic own-funds of the insurer that would result from the following combination of instantaneous permanent changes—
 - (a) an increase of 5% in the amount of medical payments taken into account in the calculation of the insurer's technical provisions; or
 - (b) an increase in the inflation rate of medical payments (expressed as a percentage) used by the insurer for the calculation of its technical provisions by an absolute value of 1%.
- (4) Pursuant to sub-paragraph (2)(b) the capital requirement for the decrease of medical payments is equal to the loss in basic own-funds of the insurer that would result from the following combination of instantaneous permanent changes—
 - (a) a decrease of 5% in the amount of medical payments taken into account in the calculation of the insurer's technical provisions; or
 - (b) a decrease in the inflation rate of medical payments (expressed as a percentage) used by the insurer for the calculation of its technical provisions by an absolute value of 1%.

101 SLT Health income protection disability-morbidity risk capital requirement

(1) In this Regulation—

"SLT health income protection disability-morbidity risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level of disability, sickness and morbidity rates.

- (2) Pursuant to Regulation 99(2)(b) the SLT health income protection disability-morbidity risk capital requirement of the SLT disabilitymorbidity underwriting risk capital is equal to the loss in basic ownfunds of the insurer that would result from the following combination of instantaneous permanent changes—
 - (a) an increase of 35% in the disability and morbidity rates that are used by the insurer in the calculation of its technical provisions to



reflect the disability and morbidity in the 12 months following the valuation date;

- (b) an increase of 25% in the disability and morbidity rates that are used by the insurer in the calculation of its technical provisions to reflect the disability and morbidity in the years after the 12 months following the valuation date;
- (c) if the disability and morbidity recovery rates used by the insurer in the calculation of its technical provisions are lower than 50%, a decrease of 20% in those rates; and
- (d) if the disability and morbidity persistency rates used by the insurer in the calculation of its technical provisions are equal or lower than 50%, an increase of 20% in those rates.
- (3) The resulting stressed disability and morbidity rates determined in accordance with paragraph (2) shall not exceed a value of 1.

102 SLT Health expense risk capital requirement

(1) In this Regulation—

"SLT health expense risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the level or trend of the expenses incurred in servicing SLT health insurance contracts.

- (2) Pursuant to Regulation 96(1)(d) the SLT health expense risk capital requirement of the SLT health underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from the following combination of instantaneous permanent changes—
 - (a) an increase of 10% in the amount of expenses taken into account in the calculation of the insurer's technical provisions; and
 - (b) an increase to the expense inflation rate (expressed as a percentage) used by the insurer for the calculation of its technical provisions by an absolute value of 1%.
- (3) With regard to reinsurance obligations, an insurer must apply those changes to its own expenses and, if relevant, to the expenses of the ceding insurer.

103 SLT Health revision risk capital requirement

(1) In this Regulation—

"revision risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from fluctuations in the level or trend of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured. (2) Pursuant to Regulation 96(1)(e) the SLT health revision risk capital requirement of the SLT health underwriting risk capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent increase of 4% in the amount of annuity benefits, only on SLT health annuity insurance obligations if the benefits payable under the underlying insurance policies could increase as a result of changes in inflation, the legal environment or the state of health of the person insured.

104 SLT Health lapse risk capital requirement

(1) In this Regulation—

"SLT health lapse risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the expected exercise rates of policyholder options in respect of SLT health products;

"policyholder options", are as set out in Regulation 91(2) to 91(4); and

"discontinuance" means the exercising by the policyholder of any of the relevant policyholder options.

- (2) Pursuant to Regulation 96(1)(f) the SLT health lapse risk capital requirement of the SLT health underwriting risk capital requirement is equal to the largest of the following capital requirements—
 - (a) the risk of a permanent increase in SLT health lapse rates determined in accordance with paragraph (3);
 - (b) the risk of a permanent decrease in SLT health lapse rates determined in accordance with paragraph (5); or
 - (c) SLT health mass lapse risk determined in accordance with paragraph (7).
- (3) Pursuant to sub-paragraph (2)(a) the capital requirement for the risk of a permanent increase in SLT health lapse rates is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent increase of 50% in the exercise rates of the relevant policyholder options.
- (4) Pursuant to paragraph (3), in any event, the increased option exercise rates must not exceed 100% and the increase in option exercise rates must only apply to those relevant options for which the exercise would result in an increase of the insurer's technical provisions without the risk margin.
- (5) Pursuant to sub-paragraph (2)(b) the capital requirement for the risk of a permanent decrease in SLT health lapse rates is equal to the loss in basic own-funds of the insurer that would result from an instantaneous permanent decrease of 50% in the option exercise rates of the relevant policyholder options.



- (6) Pursuant to paragraph (5), in any event, the decrease in option exercise rates must not exceed 20% and the decrease in option exercise rates must only apply to those relevant options for which the exercise would result in a decrease of the insurer's technical provisions without the risk margin.
- (7) Pursuant to sub-paragraph (2)(c) the capital requirement for SLT health mass lapse risk is equal to the loss in basic own-funds of the insurer that would result from a combination of the following instantaneous events—
 - (a) the discontinuance of 40% of the insurer's insurance contracts for which discontinuance would result in an increase of technical provisions without the risk margin; and
 - (b) if the reinsurance contract covers insurance or reinsurance contracts that will be written in the future, the decrease of 40% of the number of those future insurance or reinsurance contracts used in the calculation of the technical provisions.
- (8) The events referred to in sub-paragraph (7)(a) must apply uniformly to all insurance contracts concerned.
- (9) In relation to reinsurance contracts the event referred to in subparagraph (7)(a) must apply to the underlying insurance contracts.
- (10) For the purposes of determining the loss in basic own-funds of the insurer under the event referred to in sub-paragraph (7)(a), the insurer must base the calculation on the type of discontinuance that most negatively affects the basic own-funds of the insurer on a per policy basis.

105 NSLT Health underwriting risk capital requirement

- (1) Pursuant to Regulation 95(2)(a) the NSLT health underwriting risk capital requirement of the health underwriting capital requirement of the BSCR must consist of all of the following capital requirements—
 - (a) NSLT health premium and reserve risk determined in accordance with Regulation 106; and
 - (b) NSLT health lapse risk determined in accordance with Regulation 109.
- (2) The capital requirement for NSLT health underwriting risk is equal to the following—

$$SCR_{NSLTHealth} = \sqrt{(Health_{pr}^{NonSLT})^2 + (Health_{lapse}^{NonSLT})^2}$$

where –

(a) *Health*^{*NonSLT*} denotes the capital requirement for NSLT health premium and reserve risk; and

(b) *Health*^{NonSLT}_{lapse} denotes the capital requirement for NSLT health lapse risk.

106 NSLT Health premium and reserve risk capital requirement

Pursuant to Regulation 105(1)(a) the capital requirement for NSLT health premium and reserve risk component of the NSTL Health risk capital requirement is equal to the following—

$$Health_{pr}^{NonSLT} = \theta \cdot \sigma_{NonSLT} \cdot V_{NonSLT}$$

where –

- (a) θ is equal to 3;
- (b) *V* is the volume measure for NSLT health insurance obligations determined in accordance with Regulation 107; and
- (c) σ is the combined standard deviation for NSLT health premium and reserve risk determined in accordance with Regulation 108.

107 Volume measure for NSLT Health premium and reserve risk

(1) In this Regulation—

"**earned premiums**", means the premiums relating to the risk covered by the insurer during the relevant time period.

- (2) Pursuant to Regulation 106(b) the volume measure for NSLT health premium and reserve risk is equal to the sum of the volume measures for premium and reserve risk of the NSLT segments set out in Regulation 95(5)(a).
- (3) For all NSLT segments the volume measure of a particular segment *s* is equal to the following—

$$V_s = V_{(prem,s)} + V_{(res,s)}$$

where –

- (a) $V_{(prem,s)}$ denotes the volume measure for premium risk of segment *s* determined in accordance with paragraph (3); and
- (b) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment *s* determined in accordance with paragraph (8).
- (4) For all NSLT segments the volume measure for premium risk of a particular segment *s* is equal to the following—

$$V_{(prem,s)} = \max(P_s; P_{(last,s)}) + FP_{(existing,s)} + FP_{(future,s)}$$

where -

(a) *Ps* denotes an estimate of the premiums to be earned by the insurer in the segment *s* during the 12 months following the valuation date;



- (b) $P_{(last,s)}$ denotes the premiums earned by the insurer in the segment *s* during the 12 months before the valuation date;
- (c) *FP*_(existing,s) denotes the expected present value of premiums to be earned by the insurer in the segment *s* in the years after the 12 months following the valuation date for existing contracts; and
- (d) $FP_{(future,s)}$ denotes the expected present value of premiums to be earned by the insurer in the segment *s* for contracts where the initial recognition date falls in the 12 months following the valuation date but excluding the premiums to be earned during the 12 months after the initial recognition date.
- (5) For all NSLT segments an insurer may, as an alternative to the calculation set out in paragraph (3), choose to calculate the volume measure for premium risk of a particular segment s in accordance with the following formula—

$$W_{(prem,s)} = P_s + FP_{(existing,s)} + FP_{(future,s)}$$

provided that all of the following conditions are met-

- (a) the management of the insurer has decided that the insurer's earned premiums in the segment s during the 12 months following the valuation date will not exceed P_{s} ;
- (b) the insurer has established effective control mechanisms to ensure that the limits on earned premiums referred to in sub-paragraph (a) will be met; and
- (c) the insurer has informed the Authority about the decision referred to in sub-paragraph (a) and the reasons for it.
- (6) For the purposes of paragraph (5), the terms P_s , $FP_{(existing,s)}$ and $FP_{(future,s)}$ are denoted in accordance with sub-paragraphs (4)(a) to (4)(d).
- (7) For the purposes of the calculations set out in paragraphs (4) and (5), the premiums used shall be net, after deduction of premiums for reinsurance contracts unless the premium for a reinsurance contract meets one of the following conditions—
 - (a) the reinsurance premium cannot be taken into account in the calculation of amounts recoverable from reinsurance contracts and special purpose vehicles in Regulation 39; or
 - (b) the reinsurance contract for which the premium is payable, does not meet the requirements as risk mitigation techniques.
- (8) For all NSLT segments the volume measure for reserve risk of a particular segment is equal to the insurer's best estimate for the provision for claims outstanding for the segment, after deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles.

(9) The volume measure referred to in paragraph (8) must not be a negative amount.

108 Standard deviation for NSLT health premium and reserve risk

(1) Pursuant to sub-Regulation 106(c) the standard deviation for NSLT health premium and reserve risk is equal to the following—

$$\sigma_{NSLT} = \frac{1}{V_{NSLT}} \sqrt{\sum_{r,c} CorrS_{r,c} \cdot \sigma_r \cdot V_r \cdot \sigma_c \cdot V_c}$$

where –

- (a) V_{NLST} is the sum of the volume measure V_s over all segments, *s*, determined for each segment in accordance with Regulation 107(3);
- (b) the sum includes all possible combinations of risk group (*r*,*c*) in the form (segment, *s*);
- (c) V_r and V_c are the volume measures for premium and reserve risk of segments r and c respectively determined in accordance with Regulation 107(4) and 107(8);
- (d) σ_r and σ_c are the standard deviations for non-life premium and reserve risk of segments *s* and *t* respectively determined in accordance with par
- (e) agraph (2); and
- (f) $CorrS_{r,c}$ are the entries of the correlation matrix CorrS
 - (i) A = NSTL Health medical expense insurance and proportional reinsurance;
 - (ii) B = NSLT Health income protection insurance and proportional reinsurance;
 - (iii) C = NSLT Health workers' compensation insurance and proportional reinsurance;
 - (iv) D = NSLT Health non-proportional health reinsurance;

CorrS	Α	В	С	D
Α	1	0.5	0.5	0.5
В	0.5	1	0.5	0.5
С	0.5	0.5	1	0.5
D	0.5	0.5	0.5	1

(2) The standard deviation for NSLT health premium and reserve risk of a particular segment *s* is equal to the following—



$$\sigma_{s} = \frac{\sqrt{\left(\sigma_{(prem,s)} \cdot V_{(prem,s)}\right)^{2} + \left(\sigma_{(prem,s)} \cdot V_{(res,s)} \cdot V_{(prem,s)} \cdot \sigma_{(res,s)}\right) + \left(\sigma_{(res,s)} \cdot V_{(res,s)}\right)^{2}}{V_{(prem,s)} + V_{(res,s)}}$$

where -

- (a) $\sigma_{(prem,s)}$ denotes the standard deviation for NSLT health premium risk of segment *s* determined in accordance with paragraph (3);
- (b) $\sigma_{(res,s)}$ denotes the standard deviation for NSLT health reserve risk of segment *s* determined in accordance with paragraph (6);
- (c) $V_{(prem,s)}$ denotes the volume measure for premium risk of segment *s* determined in accordance with Regulation 107(4); and
- (d) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment *s* determined in accordance with Regulation 107(8).
- (3) For all NSLT segments the standard deviation for NSLT health premium risk of a particular segment is equal to the product of the standard deviation for NSLT health gross premium risk of the segment determined in accordance with paragraph (5) and the adjustment factor for non-proportional reinsurance determined in accordance with paragraph (4).
- (4) For all segments the adjustment factor referred to in paragraph (3) for non-proportional reinsurance is equal to 100%.
- (5) The standard deviation for NSLT health gross premium risk for each segment are—

Segment, s	Standard deviation for premium			
	risk (gross of reinsurance)			
А	5.0%			
В	8.5%			
С	8.0%			
D	17.0%			

(6) The standard deviation for NSLT health reserve risk net of reinsurance for each segment are —

Segment, s	Standard deviation for reserve risk
	(net of reinsurance)
А	5%
В	14%
С	11%
D	20%

109 NSLT Health lapse risk capital requirement

(1) In this Regulation –

"NSLT health lapse risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from changes in the expected exercise rates of policyholder options in respect of NSLT health products;

"policyholder options", are as set out in Regulation 91(2) to 91(4); and

"**discontinuance**" means the exercising by the policyholder of the relevant policyholder options.

- (2) Pursuant to Regulation 105(1)(b) the capital requirement for NSLT health lapse risk component of the NSLT health capital requirement, is equal to the loss in basic own-funds of the insurer that would result from the combination of the following instantaneous events—
 - (a) the discontinuance of 40% of the insurer's insurance contracts for which discontinuance would result in an increase of the insurer's technical provisions without the risk margin; and
 - (b) if reinsurance contracts cover insurance that will be written in the future, the decrease of 40% of the number of those future insurance contracts used in the calculation of the insurer's technical provisions.
- (3) The events referred to in paragraph (2) must apply uniformly to all insurance contracts concerned.
- (4) In relation to reinsurance contracts the event referred to in subparagraph (2)(a) must apply to the underlying insurance contracts.
- (5) For the purposes of determining the loss in basic own-funds of the insurer under the event referred to in sub-paragraph (2)(a), the insurer must base the calculation on the type of discontinuance that most negatively affects the basic own-funds of the insurer on a per policy basis.

110 Health catastrophe risk capital requirement

(1) In this Regulation—

"Health catastrophe risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from the significant uncertainty of pricing and provisioning assumptions related to outbreaks of major epidemics, as well as the unusual accumulation of risks under such extreme circumstances.

(2) Pursuant to Regulation 95(2)(c) the health catastrophe risk capital requirement of the health underwriting capital requirement of the BSCR is equal to the following—

$$SCR_{CATHealth} = \sqrt{Health_{massaccident}^{2} + Health_{concentration}^{2} + Health_{pandemic}^{2}}$$



where –

- (a) *Health_{massaccident}* denotes the capital requirement for health catastrophe mass accident risk determined in accordance with Regulation 111;
- (b) *Health*_{concentration} denotes the capital requirement for health catastrophe accident concentration risk determined in accordance with Regulation 112; and
- (c) Health_{pandemic} denotes the capital requirement for health catastrophe pandemic risk determined in accordance with Regulation 113.
- (3) An insurer must apply—
 - (a) the mass accident risk capital requirement to health insurance obligations other than workers' compensation insurance obligations (as defined in Regulation 95(5)(a));
 - (b) the accident concentration risk capital requirement to workers' compensation insurance obligations and to group income protection insurance obligations (as defined in Regulation 95(5)(a)); and
 - (c) the pandemic risk capital requirement to health insurance obligations other than workers' compensation insurance obligations (as defined in Regulation 95(5)(a)).

111 Health catastrophe mass accident risk capital requirement

(1) Pursuant to Regulation 110(2)(a) the heath catastrophe mass accident risk capital requirement of the health catastrophe capital requirement is equal to the following—

$$Health_{massaccident} = \sqrt{\sum_{c} Health_{ma,c}^{2}}$$

where -

- (a) the sum includes all countries that the insurer has insurance obligations in; and
- (b) *Health*_{ma,c} denotes the capital requirement for mass accident risk for country c determined in accordance with paragraph (2).
- (2) The capital requirement for the risk of a catastrophic mass accident in a particular country *c* is equal to the loss in basic own-funds of the insurer that would result from an instantaneous loss of an amount that, before deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles is calculated as follows—

$$L_{ma,c} = r_c \cdot \sum_e x_e \cdot E_{(e,c)}$$

where –

- (a) r_c = ratio of persons affected by the mass accident in country c determined in accordance with paragraph (4);
- (b) x_e = ratio of persons that will be affected by event type e as the result of the accident determined in accordance with paragraph (5); and
- (c) $E_{(e,c)}$ = sum insured of the insurer for event type *e* in country *c* determined in accordance with paragraph (3).
- (3) In respect of paragraph (2)(c) for all event types and all countries, the sum insured of an insurer for a particular event type e in a particular country s is equal to the following—

$$E_{(e,c)} = \sum_{i} SI_{(e,i)}$$

where –

- (a) the sum includes all insured persons *i* of the insurer who are insured against event type *e* and are inhabitants of country *c*; and
- (b) $SI_{(e,i)}$ denotes the value of the benefits payable for the insured person *i* in case of event type *e* determined in accordance with paragraph (6).
- (4) In respect of paragraph (2)(a) the ratios r_c for each country are given below –

Country c	Rc
Austria	0.30%
Belgium	0.25%
Bulgaria	0.30%
Croatia	0.40%
Cyprus	1.30%
Czech Republic	0.10%
Denmark	0.35%
Estonia	0.45%
Finland	0.35%
France	0.05%
Germany	0.05%
Greece	0.30%
Hungary	0.15%
Iceland	2.45%
Ireland	0.95%
Italy	0.05%
Latvia	0.20%
Lithuania	0.20%
Luxembourg	1.05%


Malta	2.15%
Netherlands	0.15%
Norway	0.25%
Poland	0.10%
Portugal	0.30%
Romania	0.15%
Slovakia	0.30%
Slovenia	0.40%
Spain	0.10%
Sweden	0.25%
Switzerland	0.25%
United Kingdom	0.05%
Other Countries	0.45%

(5) In respect of paragraph (2)(b) the event types e to be considered in the mass accident scenario, and the corresponding ratios x_e are as follows—

Event type <i>e</i>	x _e
Death caused by an accident	10.0%
Permanent disability caused by an accident	1.5%
Disability lasting 10 years, caused by an accident	5.0%
Disability lasting 12 months, caused by an accident	13.5%
Medical treatment caused by an accident	30.0%

- (6) In respect of the benefits as referred to in sub-paragraph (3)(b)
 - (a) the value of the benefit is the sum insured or if the insurance contract provides for recurring benefit payments the best estimate of the benefit payments in case of event type *e*;
 - (b) if the benefits of an insurance contract depend on the nature or extent of an injury resulting from event *e*, the calculation of the value of the benefits is based on the maximum benefits obtainable under the contract that are consistent with the event; and
 - (c) for medical expense insurance obligations the value of the benefits is based on an estimate of the average amounts paid in case of event *e*, assuming the insured person is disabled for the duration specified and taking into account the specific guarantees the obligations include.
- (7) If Regulation 25 is complied with, an insurer may calculate the value of the benefit payable to an insured person referred to in paragraph (3) based on homogenous risk groups, provided that the grouping of policies complies with Regulation 36.

112 Health catastrophe accident concentration risk capital requirement

(1) Pursuant to Regulation 110(2)(b) the heath catastrophe accident concentration risk capital requirement of the health catastrophe capital requirement is equal to the following—

$$Health_{concentration} = \sqrt{\sum_{c} Health_{con,c}^{2}}$$

where -

- (a) the sum includes all countries *c* where the insurer has insurance obligations; and
- (b) $Health_{con,c}$ denotes the capital requirement for accident concentration risk for country *c* determined in accordance with paragraph (2).
- (2) For all countries the capital requirement for health catastrophe accident concentration risk of country *c* is equal to the loss in basic own-funds of the insurer that would result from an instantaneous loss of an amount that, before deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, is calculated as follows—

$$L_{ma,c} = \sum_{e} x_{e} \cdot E_{(e,c)}$$

where –

- (a) x_e = ratio of persons that will be affected by event type e as the result of the accident determined in accordance with paragraph (4); and
- (b) $E_{(e,c)}$ = sum insured of the insurer for concentration group C_c for event type *e* in country *c* and is defined as—

$$E_{(e,c)} = \sum_{i} SI_{(e,i)}$$

where –

- (i) *C*^{*c*} denotes the largest accident risk concentration of the Insurer in country *c*;
- (ii) $SI_{(e,i)}$ denotes the value of the benefits payable to each insured person *i* in group C_c in case of event *e* determined in accordance with paragraph (3); and
- (iii) the sum is over all insured persons i who are insured against event e and are members of the group C_c .
- (3) In respect of the benefits as referred to in sub-paragraph (2)(b)(ii)
 - (a) if the benefits of an insurance contract depend on the nature or extent of the injury resulting from event *e*, the calculation of the



value of the benefits is based on the maximum benefits obtainable under the contract, that are consistent with the event; and

- (b) for medical expense insurance obligations the value of the benefits is based on an estimate of the average amounts paid in case of event *e*, assuming the insured person is disabled for the duration specified and taking into account the specific guarantees the obligations include.
- (4) The event types e to be considered in the accident concentration scenario, and the corresponding ratios x_e are as follows—

Event type <i>e</i>	x _e
Death caused by an accident	10.0%
Permanent disability caused by an accident	1.5%
Disability lasting 10 years, caused by an accident	5.0%
Disability lasting 12 months, caused by an accident	13.5%
Medical treatment caused by an accident	30.0%

(5) If Regulation 25 is complied with, the insurer may calculate the value of the benefits payable by the insurer for the insured person based on homogenous risk groups, provided that the grouping of policies complies with the requirements set out in Regulation 36.

113 Health catastrophe pandemic risk capital requirement

(1) In this Regulation—

"Health catastrophe pandemic risk", in relation to an insurer, is the sensitivity of the values of any or all of its assets, liabilities and financial instruments (as applicable) to risks arising from a pandemic resulting in a large number of non-lethal claims.

(2) Pursuant to Regulation 110(2)(c) the health catastrophe pandemic risk capital requirement of the health catastrophe capital requirement is equal to the loss in basic own-funds of the insurer that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, is calculated as follows—

$$L_p = 0.000075 \cdot E$$

Where E is the insurer's pandemic exposure to income protection contracts determined in accordance with paragraph (3).

(3) The income protection pandemic exposure of an insurer is equal to the following—

$$E=\sum_i E_i$$

where -

- (a) the sum includes all insured persons *i* covered by income protection insurance obligations other than workers' compensation insurance obligations (as defined in Regulation 95(5)(a));
- (b) E_i denotes the value of the benefits payable by the insurer, for the insured person *i* in case of a permanent work disability caused by an infectious disease, determined in accordance with sub-paragraph (c) below; and
- (c) The value of the benefits E_i is
 - (i) the sum insured; or
 - (ii) if the contract provides for recurring benefit payments, the best estimate of the benefit payments assuming that the insured person is permanently disabled and will not recover.

114 Treatment of participations in the calculation of the SCR

- (1) Pursuant to Regulation 59, when determining the relevant market capital requirements for the equity and subordinated liability components of a participation of the insurer in a related entity, determined in accordance with Regulations 124 and 125, the insurer must—
 - (a) apply the interest and spread risk scenarios set out in Regulations
 61 and 68 respectively, to subordinated liability holdings of the insurer in the related entity;
 - (b) apply the relevant equity risk capital requirements to equity holdings of the insurer in the related entity, such as ordinary or preference share capital, as set out in Regulation 64; and
 - (c) apply additional market risk scenarios, such as currency risk, if appropriate.

115 Determining the SCR for ring-fenced funds and marked-to-model portfolios

- (1) If an insurer has a material ring-fenced fund determined in accordance with Regulation 139, or a marked-to-model portfolio, the insurer must calculate a notional SCR for each ring-fenced fund and marked-to-model portfolio as well as a notional SCR for the insurer's portfolio excluding ring-fenced funds and marked-to-model portfolios.
- (2) Pursuant to paragraph (1), the insurer must include all non-material ring-fenced fund's assets and liabilities within the remaining part of the insurer's portfolio (excluding ring-fenced funds and marked-to-model portfolios).



- (3) The insurer must carry out these calculations before making any adjustment to its own-funds required by Regulation 137, to avoid circularity in the calculation.
- (4) The notional SCR for each of the insurer's ring-fenced funds and marked-to model portfolios is calculated in accordance with Regulation 51, with the exception that for risk scenarios involving multiple stresses, the stress that has the most negative impact on the insurer's basic ownfunds as a whole must be used to determine the capital requirement for each ring-fenced fund or marked-to-model portfolio and the residual portfolio under that scenario.
- (5) Pursuant to paragraph (4), the stress that has the most negative impact on the insurer's basic own-funds as a whole under a scenario, is determined by aggregating the capital requirement for each stress within that scenario, for each ring-fenced fund or marked-to-model portfolio and the residual portfolio and then considering which stress determines the capital requirement under that scenario.
- (6) The notional SCR for each ring-fenced fund and marked-to-model portfolio must be calculated net of the mitigating effect of future discretionary benefits in accordance with regulation 55.
- (7) If profit participation exists, assumption of the insurer relating to the variation of future bonus rates have to be realistic and have due regard to the impact of the shock at the level of the ring-fenced fund and to any contractual, legal or statutory requirements governing the profit participation mechanism.
- (8) The relevant downward adjustment of the notional SCR for the lossabsorbing capacity of technical provisions shall not exceed, in relation to a particular ring-fenced fund or marked-to-model portfolio, the amount of future discretionary benefits within that fund.
- (9) The notional SCR for each ring-fenced fund and marked-to-model portfolio is determined by aggregating the capital requirements for each risk, using the correlation matrix in Regulation 51.
- (10) The insurer must calculate its overall SCR, as the sum of the notional SCRs for each of the ring-fenced funds and marked-to-model portfolios and the SCR of the insurer's portfolio excluding the ring-fenced funds marked-to-model portfolios.
- (11) Pursuant to paragraph (10) the insurer must assume that there is no diversification of risks between the notional SCRs and the SCR of the insurer excluding the ring-fenced funds and marked-to-model portfolios, or between the notional SCRs of the ring-fenced funds and marked-to-model portfolios.
- (12) If the calculations in this Regulation result in negative notional SCRs, these notional SCRs must be set to zero before being aggregated with positive notional SCRs.

116 Risk Mitigation techniques, methods and assumptions

- (1) If an the insurer transfers its underwriting risks using reinsurance contracts or special purpose vehicles that meet the requirements set out in Regulations 117, 119 and 121, and if these arrangements provide for protection in several of the scenario-based calculations set out in Regulation 51, the risk-mitigating effects of these contractual arrangements must be allocated to its scenario-based calculations in a manner that, without double-counting, captures the economic effect of the protections provided.
- (2) If the insurer transfers its underwriting risks using finite reinsurance, these contracts are recognised in the insurer's scenario based calculations set out in Regulation 51 only to the extent underwriting risk is transferred to the counterparty of the contract.
- (3) Pursuant to the previous paragraph, finite reinsurance, or similar arrangements, if the lack of effective risk transfer is comparable to that of finite reinsurance, must not be taken into account for the purposes of determining the volume measures for premium and reserve risk in accordance with in Regulation 107.

117 Qualitative criteria for risk mitigation techniques

- (1) When calculating its capital requirements in accordance with Regulation 53, the insurer must only take into account its risk-mitigation techniques that meet the following qualitative criteria—
 - (a) the contractual arrangements of the risk mitigation techniques, including transfer of risk, are legally effective and enforceable in all relevant jurisdictions;
 - (b) the insurer has taken all appropriate steps to ensure the effectiveness of the risk-mitigation technique and its adequacy and appropriateness to address the risks related to that risk-mitigation technique;
 - (c) the insurer is able to monitor the effectiveness of the riskmitigation technique and the related risks on an ongoing basis;
 - (d) the insurer has, in the event of a default, insolvency or bankruptcy or other credit event set out in the transaction documentation for the arrangement, of a counterparty a direct claim on that counterparty; and
 - (e) there is no double counting of risk-mitigation effects in the insurer's own-funds and in the calculation of its SCR.
- (2) Only risk-mitigation techniques that are in force for at least 12 months following the valuation date and that meet the qualitative criteria set out in this Regulation may be fully taken into account in the insurer's capital requirements. In all other cases, the risk-mitigation effect of risk-



mitigation techniques that are in force for a period shorter than 12 months and that meet the qualitative criteria set out in this Regulation may be taken into account in the capital requirements in proportion to the length of time involved for the shorter of the full term of the risk exposure or the period that the risk-mitigation technique is in force.

- (3) If contractual arrangements governing the risk-mitigation techniques will be in force for a period shorter than the next 12 months and the insurer intends to replace that risk-mitigation technique at the time of its expiry with a similar arrangement, the risk-mitigation technique may be fully taken into account in the insurer's capital requirements provided all of the following qualitative criteria are met—
 - (a) the insurer has a written and in force governance procedure on the replacement of that risk-mitigation technique;
 - (b) the replacement of the risk-mitigation technique must not take place more often than every 3 months;
 - (c) the replacement of the risk-mitigation technique is not conditional on any future event, that is outside of the control of the insurer;
 - (d) if the replacement of the risk-mitigation technique is conditional on any future event, that is within the control of the insurer, then the conditions must be clearly documented in the written policy referred to in sub-paragraph (a);
 - (e) the replacement of the risk-mitigation technique is realistic and consistent with its current business practice and business strategy;
 - (f) the risk that the risk-mitigation technique cannot be replaced due to an absence of liquidity in the market is not material;
 - (g) the risk that the cost of replacing the risk-mitigation technique increases during the 12 months following the valuation date is reflected in the capital requirements; and
 - (h) the replacement of the risk-mitigation technique would not be contrary to requirements that apply to future management actions.

118 Effective Transfer of Risk

- (1) A risk-mitigation technique may only be fully taken into account in the insurer's capital requirements if it provides for effective risk transfer of the risk in question to a party other than the insurer.
- (2) For this purpose, in order for a risk-mitigation technique to be regarded as providing effective risk transfer, it must meet all of the requirements of this Regulation.
- (3) The contractual arrangements governing the risk-mitigation technique must ensure that the extent of the cover provided to the insurer by the

risk-mitigation technique and the transfer of the insurer's risk are clearly defined and incontrovertible.

- (4) The contractual arrangement must not result in material basis risk in accordance with Regulation 48 or in the creation of other risks, unless this is adequately reflected in the calculation of the insurer's capital requirements.
- (5) Pursuant to Regulation 117(1)(a) the determination that the contractual arrangements and transfer of risk is legally effective and enforceable in all relevant jurisdictions and must, as applicable, take into account matters including the following—
 - (a) whether the contractual arrangement is subject to any condition that could undermine the effective transfer of the insurer's risk, the fulfilment of which is outside the direct control of the insurer; and
 - (b) whether there are any connected transactions that could undermine the effective transfer of the insurer's risk.

119 Reinsurance risk mitigation techniques

- (1) If the insurer transfers its underwriting risks using reinsurance contracts, in order for it to take into account the risk-mitigation technique in its capital requirements the qualitative criteria set out in Regulations 117 and 118 and those set out in this Regulation must be met.
- (2) In the case of reinsurance contracts the counterparty must be one of the following—
 - (a) an insurer that complies with the Solvency Capital Requirement of an authorised supervisor; or
 - (b) an insurer, who doesn't comply with sub-paragraph (a), that has been assigned to credit quality step 3 or better.
- (3) If a counterparty to a reinsurance contract is an insurer that ceases to hold eligible own-funds to meet its SCR after the reinsurance contract has been entered into, the protection offered by the risk-mitigation technique may be partially recognised by the insurer, provided that the insurer can demonstrate to its board of directors
 - (a) that the counterparty has submitted a realistic recovery plan to its supervisory authorities; and
 - (b) the counterparty can restore compliance with its SCR within the timeframe defined in the relevant regulations of its supervisory authority.
- (4) Pursuant to paragraph (3), the effect of the risk-mitigation technique is reduced by the percentage by which the solvency ratio falls below 100%.



120 Financial risk mitigation techniques

- (1) If the insurer transfers its risk using financial risk mitigation techniques, including transfers through the purchase or issuance of financial instruments, in order for the risk-mitigation technique to be taken into account by the insurer in determining its capital requirements, other than in the cases referred to in Regulation 119, the qualitative criteria provided in this Regulation must be met, in addition to the qualitative criteria set out in Regulations 117 and 118.
- (2) The risk-mitigation technique shall be consistent with the insurer's written and in-force governance procedure on risk management relevant to the insurer's use of financial risk mitigation techniques.
- (3) The insurer must be able to value the relevant assets, liabilities that are subject to the risk mitigation technique and, if the risk-mitigation technique includes the use of financial instruments, the financial instruments, reliably in accordance with Regulation 9.
- (4) Pursuant to paragraph (3), if the risk-mitigation technique includes the use of financial instruments, the financial instruments must have a credit quality that has been assigned to credit quality step 3 in accordance with Regulation 50, or better.
- (5) If the risk-mitigation technique is not a financial instrument, the counterparties other than the insurer to the risk-mitigation technique must have a credit quality that has been assigned to credit quality step 3 in accordance with Regulation 50, or better.

121 Additional qualifying criteria for risk mitigation techniques

- (1) In the event that the qualitative criteria in Regulations 119(1), 120(3) and 120(4) are not met, the insurer must only take into account the riskmitigation techniques when calculating its capital requirements if one of the following criteria is met—
 - (a) the risk-mitigation technique meets the qualitative criteria set out in Regulations 117 and 118 and Regulations 120(1) and 120(2) and collateral arrangements exist that meet the criteria provided in Regulation 122;
 - (b) the risk-mitigation technique is accompanied by another riskmitigation technique, where the other technique when viewed in combination with the first technique meets the qualitative criteria in Regulations 117 and 118, Regulations 120(1) and 120(2), and where the counterparties to the other technique meet the criteria provided in Regulations 119(1), 120(3) and 120(4).
- (2) For the purposes of sub-paragraph (1)(a), if the value of the collateral determined in accordance with Regulation 9(1), is less than the total risk

exposure, the collateral arrangement must only be taken into account to the extent that the collateral covers that risk exposure.

122 Risk mitigation using collateral arrangements

- (1) In the calculation of the BSCR defined in Regulation 53, collateral arrangements must only be recognised if, in addition to the qualitative criteria in Regulations 117 and 118, the following criteria are met—
 - (a) the insurer transferring the risk must have the right to liquidate or retain, in a timely manner, the collateral in the event of a default, insolvency or bankruptcy or other credit event of the counterparty;
 - (b) there is sufficient certainty as to the protection achieved by the collateral because of either of the following—
 - (i) the collateral is of sufficient credit quality, sufficient liquidity and is sufficiently stable in value; and
 - the collateral is guaranteed by a counterparty, other than a counterparty referred to in Regulation 78(8) and 75(3) that has been assigned a risk factor for concentration risk of 0%;
 - (c) there is no material positive correlation between the credit quality of the counterparty to collateral arrangement and the value of the collateral; and
 - (d) the collateral offered under the arrangement is not securities issued by the insurer's counterparty or a participation of that counterparty.
- (2) If a collateral arrangement of the insurer involves collateral being held by a custodian or other third party, the insurer must ensure that all of the following criteria are met—
 - (a) the relevant custodian or other third party segregates the assets held as collateral from its own assets;
 - (b) the segregated assets are held by a deposit-taking institution that has a credit quality that has been assigned to credit quality step 3 in accordance with Regulation 50, or better;
 - (c) the segregated assets are individually identifiable and can only be changed or substituted with the consent of the insurer or a person acting as a trustee in relation to the insurer's interest in those assets;
 - (d) the insurer has (or is a beneficiary under a trust where the trustee has) the right to liquidate or retain, in a timely manner, the segregated assets in the event of a default, insolvency or bankruptcy or other credit event relating to the custodian or other



third party holding the collateral on behalf of the relevant counterparty; and

(e) the segregated assets must not be used to pay, or to provide collateral in favour of, a person other than the insurer or as directed by the insurer.

123 Risk mitigation using guarantees

- (1) In the calculation of the BSCR in Regulation 53, guarantees used by an insurer to mitigate the risk of a counterparty defaulting on its obligations shall only be recognised where explicitly referred to in this Regulation, and if in addition to the qualitative criteria in Regulations 117 and 118, all of the following criteria are met—
 - (a) the credit protection provided by the guarantee is direct from the counterparty providing the protection (the 'guarantor') to the insurer;
 - (b) the extent of the credit protection offered under the guarantee is clearly defined and incontrovertible;
 - (c) the guarantee does not contain any clause, the fulfilment of which is outside the direct control of the insurer, that—
 - (i) would allow the guarantor to cancel the protection unilaterally;
 - (ii) would increase the effective cost of protection as a result of a deterioration in the credit quality of the protected exposure;
 - (iii) could prevent the guarantor from being obliged to pay out in a timely manner in the event that the counterparty of the exposure covered by the guarantee ('the original obligor'), defaults on its obligations due; and
 - (iv) could allow guarantor to reduce the duration of the guarantee;
 - (d) on the default, insolvency or bankruptcy or other credit event of the original obligor, the insurer has the right to pursue, in a timely manner, the guarantor for any monies due under the claim that is covered by the guarantee and the payment by the guarantor must not be subject to the insurer first having to pursue the original obligor;
 - (e) the guarantee is an explicitly documented obligation assumed by the guarantor; and
 - (f) the guarantee fully covers all types of regular payments the original obligor is expected to make in respect of the claim.

124 Identifying participations by virtue of share ownership

- (1) For the purpose of valuing the assets and liabilities of the insurer in accordance with Regulation 14, the insurer must treat holdings in a related entity as a participation if the insurer's share ownership, directly or by way of control, in that related entity meets the following criteria—
 - (a) the insurer's percentage holding of voting rights in the related entity represents at least 20% of that related entity's total voting rights; and
 - (b) the insurer's percentage holding of all classes of share capital issued by the related entity represents at least 20% of that related entity's issued share capital;
- (2) If the participation is in a related entity who is an insurer that is subject to these Regulations or the solvency regime of an approved supervisor, the assessments under sub-paragraph (1)(a) only relate to paid--up ordinary share capital whilst participations under sub-paragraph (1)(b) relate to both paid-up ordinary share capital and paid-up preference shares.

125 Identifying participations by virtue of the exertion of dominant or significant influence by the insurer

- (1) For the purpose of valuing the assets and liabilities of the insurer in accordance with Regulation 14, the insurer must treat holdings in a related entity as a participation if the insurer is deemed to be able to exert a dominant or significant influence over that related entity.
- (2) The insurer is deemed to be able to exert a dominant or significant influence over the related entity if
 - (a) the insurer has shareholdings of the related entity that either currently meets the requirements of Regulation 124, or could potentially meet these requirement in future if the insurer has the right to increase its shareholdings through the holding of options, warrants or similar instruments or having any other contractual rights to the same or similar effect;
 - (b) if the related entity is a mutual or mutual-type entity, the insurer holds membership rights and has the potential to increase those rights;
 - (c) the insurer has representation or right to establish representation on the board of directors of the related entity;
 - (d) the insurer has involvement in policy-making processes, including decision making about dividends or other distributions of the related entity;



- (e) there are material transactions between the insurer and related entity;
- (f) there is interchange of managerial personnel between the insurer and the related entity;
- (g) there is provision of essential technical information between the insurer and the related entity; or
- (h) there is management on a unified basis of the insurer and the related entity.

PART 4: MINIMUM CAPITAL REQUIREMENT

126 Minimum Capital Requirement

- (1) Pursuant to Regulation 5, the insurer must hold at all times, eligible basic own-funds of an amount that is equal to or greater than its Minimum Capital requirement ("MCR") determined in accordance with this Regulation.
- (2) The insurer's MCR is equal to the following –

$$MCR = \max(MCR_{SCR}; FMCR)$$

where –

- (a) *MCR_{SCR}* denotes the insurer's MCR derived from its SCR, determined in accordance with paragraph (3); and
- (b) *FMCR* denotes the absolute floor of the insurer's MCR and is set to £3 million.
- (3) The MCR_{SCR} is equal to the following –

$$MCR_{SCR} = \max(0.35 \cdot SCR; 0.25 \cdot SCR_{noMA})$$

where –

- (a) *SCR* is the insurer's SCR determined in accordance with Part 3 of these Regulations;
- (b) *SCRnoMA* is the insurer's SCR determined in accordance with Part 3 of these Regulations with the exception that the insurer must not allow for the impact of future management actions as defined in Regulation 24;
- (4) If the *FMCR* as defined in paragraph (2)(b), determines the insurer's MCR, the insurer must, as soon as is practicable, notify the Authority of this and provide to the Authority information allowing a proper understanding of the reasons why.

PART 5: OWN-FUNDS

127 Eligibility

- (1) Pursuant section 12(2) of the Act, the insurer's eligible capital resources shall include only its eligible own-funds.
- (2) An insurer's eligible own-funds comprise the sum of its—
 - (a) basic own-funds that meet the relevant requirements of this Part; and
 - (b) ancillary own-funds approved by the Authority in accordance with this Part.
- (3) Own-funds of the insurer other than those referred to in paragraph (1) are not eligible capital resources for the purposes of section 12(2) of the Act (and as such they may be referred to in these Regulations as "ineligible" for that purpose).
- (4) Pursuant to paragraph (2), to be an eligible own-fund item, the item must be -
 - (a) permanently available;
 - (b) subordinated; and
 - (c) pursuant to sub-paragraphs (a) and (b), of sufficient duration including the absence of
 - (i) incentives to redeem;
 - (ii) mandatory servicing costs;
 - (iii) encumbrances; or
 - (iv) any other factor,

that might prejudice, or appear to prejudice, the own-fund item's permanent availability or subordination.

- (5) In paragraph (4) -
 - "**permanently available**" means that the item is available, or can be called up on demand, to fully absorb losses of the insurer on a going-concern basis, as well as in the case of winding-up of the insurer and permanent availability shall be construed accordingly;
 - "**subordinated**" means, in the case of winding-up of the insurer, the total amount of the item is available to absorb losses of the insurer and the repayment of the item is refused to its holder until all other obligations of the insurer, including its insurance obligations towards policyholders, have been met and subordination shall be construed accordingly;



- "sufficient duration" means, when assessing the extent to which ownfund items possess the characteristics set out in sub-paragraphs (4)(a) and (4)(b), currently and in the future, due consideration shall be given to the duration of the item, in particular whether the item is dated or not. If an own-fund item is dated, the relative duration of the item as compared to the duration of the relevant insurance obligations of the insurer shall be considered;
- "incentives to redeem" includes whether the item is free from requirements or incentives to redeem its nominal sum; and
- **"mandatory servicing costs"** includes whether the item is free from mandatory fixed charges payable by the insurer.
- (6) The separate elements of the insurer's own-funds ("own-fund items") shall each be classified as Tier 1, Tier 2, Tier 3 or as ineligible in accordance with this Part.
- (7) The classification of an own-fund item under this Part, shall determine the degree to which it is eligible in meeting the insurer's—
 - (a) SCR as follows—
 - subject to paragraph (8), Tier 1 own-funds must comprise
 50% or more of the insurer's overall own-funds in meeting its SCR;
 - (ii) Tier 3 own-funds may comprise up to (but not including)15% of the insurer's overall own-funds in meeting its SCR;
 - (iii) the sum of Tier 2 and Tier 3 own-funds may comprise up to and including 50% of the insurer's overall own-funds in meeting its SCR;
 - (iv) all other funds of the insurer are ineligible in meeting its SCR;
 - (b) MCR as follows—
 - subject to paragraph (8), Tier 1 own-funds must comprise
 80% or more of the insurer's overall own-funds in meeting
 its MCR;
 - (ii) Tier 2 own-funds may comprise up to and including 20% of the insurer's overall own-funds in meeting its MCR; and
 - (iii) Tier 3 and all other funds of the insurer are ineligible in meeting its MCR.
- (8) Within the amount referred to in sub-paragraphs (7)(a)(i) and (7)(b)(i) respectively, the sum of the following basic own-fund items may comprise up to (but not including) 20% of the total amount of Tier 1 items (as applicable)—
 - (a) items referred to in Regulation 129(1)(a)(iii);
 - (b) items referred to in Regulation 129(1)(a)(v);

- (c) items referred to in Regulation 129(1)(b);
- (9) The classification of particular own-fund items of the insurer shall be as-
 - (a) specified in this Part; or
 - (b) approved by the Authority in accordance this Part.

128 Basic own-funds

- (1) The insurer's basic own-funds consist of the following items-
 - (a) the excess of its assets over liabilities; and
 - (b) its subordinated liabilities.
- (2) The amounts in paragraph (1)(a) and (1)(b) must be valued in accordance with Regulation 10.
- (3) The excess amount in paragraph (1)(a) must be reduced by the amount of own shares held by the insurer, including direct and indirect holdings.
- (4) Basic own-funds are classified into tiers as set out in the remainder of this Part.

129 Tier 1 basic own-funds – List of own-fund items

- (1) The following basic own-fund items of the insurer, that meet the eligibility requirements in Regulation 127(4), are classed as Tier 1, if those items display all of the features set out in Regulation 130—
 - (a) the part of the insurer's excess of assets over liabilities, comprising (if applicable) its—
 - (i) paid-up ordinary share capital and the related share premium account;
 - (ii) paid-up initial funds, members' contributions or the equivalent basic own-fund item for mutual and mutual-type entities;
 - (iii) paid-up subordinated mutual member accounts;
 - (iv) surplus funds, as defined in Regulation 18, that are not considered as insurance liabilities;
 - (v) paid-up preference shares and the related share premium account; and
 - (vi) the reconciliation reserve as defined in Regulation 137;
 - (b) paid-up subordinated liabilities.

130 Tier 1 basic own-funds – Features determining classification

(1) The features determining Tier 1 basic own-fund items are —



- (a) the basic own-fund item does not include features that may cause the insolvency of the insurer or may accelerate the process of the insurer becoming insolvent;
- (b) The basic own-fund item is
 - (i) immediately available to absorb losses and;
 - (ii) absorbs losses immediately if there is non-compliance with the SCR and does not hinder the recapitalisation of the insurer;
- (c) the basic own-fund item only allows for a distribution to be made if there is non-compliance with the SCR or the distribution on a basic-own-fund item would lead to such non-compliance, if all of the following conditions are met—
 - (i) the Authority has exceptionally waived the cancellation of distributions;
 - (ii) the distribution does not further weaken the solvency position of the insurer;
 - (iii) the MCR is complied with after the distribution is made.
- (d) the basic own-fund item is free from encumbrances and is not connected with any other transaction, that when considered with the basic own-fund item, could result in that basic own-fund item not complying with Regulation 127(4).
- (e) For basic own-fund items referred to in Regulations 129(1)(a)(i) and 129(1)(a)(ii)
 - (i) the basic own-fund item ranks after all other claims in the event of winding-up proceedings regarding an insurer;
 - (ii) the item is undated or, if the insurer has a fixed maturity, is of the same maturity as the insurer;
 - (iii) either the legal or contractual arrangements governing the basic own-fund item or Manx legislation allows for the cancellation of distributions in relation to that item if there is non-compliance with the SCR or the distribution would lead to such non-compliance until the insurer complies with the SCR and the distribution would not lead to noncompliance with the SCR;
- (f) For basic own-fund items referred to in Regulations 129(1)(a)(iii)and 129(1)(a)(v) and Regulation 129(1)(b) —
 - the basic own-fund item ranks to the same degree as, or ahead of, the item referred to in Regulations 129(1)(a)(i) and 129(1)(a)(ii) but after Tier 2 and Tier 3 own-fund items and after the claims of all policyholders and nonsubordinated creditors;

- (ii) The basic own-fund item possesses one of the following principal loss absorbency mechanisms to be triggered at the trigger event specified in paragraph (8)
 - (A) the nominal or principal amount of the basic own-fund item is written down as set out in paragraph (5);
 - (B) the basic own-fund item automatically converts into a basic own-fund item listed in Regulations 129(1)(a)(i) and 129(1)(a)(ii) as set out in paragraph (6); or
 - (C) a principal loss absorbency mechanism that achieves an equivalent outcome to the principal loss absorbency mechanisms set out in sub-paragraphs
 (A) and (B) above;
- (iii) the item is undated; the first contractual opportunity to repay or redeem the basic own-fund item does not occur before 5 years from the date of issuance;
- (iv) the basic own-fund item may only allow for repayment or redemption of that item between 5 and 10 years after the date of issuance if the insurer's SCR is exceeded by an appropriate margin taking into account the solvency position of the insurer including the insurer's mediumterm capital management plan;
- (v) the terms of the contractual arrangement governing the basic own-fund item provide for the cancellation of distributions in relation to that item if there is noncompliance with the SCR or the distribution would lead to such non-compliance until the insurer complies with the SCR and the distribution would not lead to noncompliance with the SCR;
- (g) For basic own-fund items referred to in Regulations 129(1)(a)(i), 129(1)(a)(ii), 129(1)(a)(iii), 129(1)(a)(v) and Regulation 129(1)(b)
 - the basic own-fund item is only repayable or redeemable at the option of the insurer and the repayment or redemption of the basic own-fund item is subject to prior approval from the Authority;
 - the basic own-fund item does not include incentives to repay or redeem that item that increases the likelihood that the insurer will repay or redeem that basic own-fund item if it has the option to do so;
 - (iii) the basic own-fund item provides for the suspension of repayment or redemption of that item if there is non-



compliance with the SCR or repayment or redemption would lead to such non-compliance until the insurer complies with the SCR and the repayment or redemption would not lead to non-compliance with the SCR;

- (iv) pursuant to sub-paragraph (iii), the basic own-fund item may only allow for repayment or redemption of that item if there is non-compliance with the SCR or repayment or redemption would lead to such non-compliance, if all of the following conditions are met—
 - (A) the Authority has exceptionally waived the suspension of repayment or redemption of that item;
 - (B) the item is exchanged for or converted into another Tier 1 own-fund item of at least the same quality; and
 - (C) the MCR is complied with after the repayment or redemption.
- (v) the basic own-fund item provides the insurer with full flexibility over the distributions of the basic own-fund item;
- (2) The exchange or conversion of a basic own-fund item into another Tier 1 basic own-fund item or the repayment or redemption of a Tier 1 own-fund item out of the proceeds of a new basic own-fund item of at least the same quality must not be deemed to be a repayment or redemption, provided that the exchange, conversion, repayment or redemption is subject to the approval of the Authority.
- (3) For the purposes of sub-paragraph (1)(g)(v), in the case of basic ownfund items referred to in Regulations 129(1)(a)(i) and 129(1)(a)(ii), full flexibility over the distributions is provided if all of the following conditions are met—
 - (a) there is no preferential distribution treatment regarding the order of distribution payments and the terms of the contractual arrangement governing the own-fund item do not provide preferential rights to the payment of distributions;
 - (b) distributions are paid out of distributable items;
 - (c) the level of distributions is not determined on the basis of the amount for which the own-fund item was purchased at issuance and there is no cap or other restriction on the maximum level of distribution;
 - (d) notwithstanding sub-paragraph (c), in the case of instruments issued by a mutual and mutual-type insurer, a cap or other restriction on the maximum level of distribution may be set,

provided that cap or other restriction is not an event linked to distributions being made, or not made, on other own-fund items;

- (e) there is no obligation for the insurer to make distributions;
- (f) non-payment of distributions does not constitute an event of default of the insurer;
- (g) the cancellation of distributions imposes no restrictions on the insurer.
- (4) For the purposes of sub-paragraph (1)(g)(v), in the case of basic own-fund items referred to in Regulations 129(1)(a)(iii) and 129(1)(a)(v) and Regulation 129(1)(b) full flexibility over the distributions is provided if all of the following conditions are met—
 - (a) distributions are paid out of distributable items;
 - (b) the insurer has full discretion at all times to cancel distributions in relation to the own-fund item for an unlimited period and on a non-cumulative basis and the insurer may use the cancelled payments without restriction to meet its obligations as they fall due;
 - (c) there is no obligation to substitute the distribution by a payment in any other form;
 - (d) there is no obligation to make distributions in the event of a distribution being made on another own-fund item;
 - (e) non-payment of distributions does not constitute an event of default of the insurer;
 - (f) the cancellation of distributions imposes no restrictions on an Insurer.
- (5) For the purposes of paragraph (1)(f)(ii)(A), the nominal or principal amount of the basic own-fund item is written down in such a way that all of the following are reduced—
 - (a) the claim of the holder of that item in the event of winding-up proceedings;
 - (b) the amount required to be paid on repayment or redemption of that item;
 - (c) the distributions paid on that item.
- (6) For the purposes of paragraph (1)(f)(ii)(B), the provisions governing the conversion into basic own-fund items listed in Regulations 129(1)(a)(i) and 129(1)(a)(ii) must specify either of the following
 - (a) the rate of conversion and a limit on the permitted amount of conversion;



- (b) a range within which the instruments will convert into the basic own-fund item listed in Regulations 129(1)(a)(i) and 129(1)(a)(ii).
- (7) The nominal or principal amount of the basic own-fund item must absorb losses at the trigger event. Loss absorbency resulting from the cancellation of, or a reduction in, distributions must not be deemed to be sufficient to be considered to be a principal loss absorbency mechanism in accordance with paragraph (1)(f)(ii)(A).
- (8) The trigger event referred to in paragraph (1)(f)(ii) is significant noncompliance with the SCR. For the purposes of this paragraph, noncompliance with the SCR is considered significant if one or more of the following conditions are met—
 - (a) the amount of own-fund items eligible to cover the SCR is equal to or less than the 75% of the SCR;
 - (b) the amount of own-fund items eligible to cover the MCR is equal to or less than MCR;
 - (c) compliance with the SCR is not re-established within a period of 3 months of the date when non-compliance with the SCR was first observed.
- (9) The insurer may specify, in the provisions governing the instrument, one or more trigger events in addition to the events referred to in sub-paragraphs (8)(a) to (8)(c).
- (10) For the purposes of sub-paragraphs (1)(b)(i), (1)(e)(iii), (1)(f)(v) and (1)(g)(iii) of paragraph (1), references to the SCR is read as references to the MCR if non-compliance with the MCR occurs before non-compliance with the SCR.
- (11) The assessment of whether an individual own-fund item is of sufficient duration must be based on the original maturity of that item. The average duration of the insurer's total own-funds, taking into account the remaining maturity of all own-fund items, shall not be significantly lower than the average duration of the insurer's liabilities.
- (12) The insurer must also assess whether the total amount of own-funds is of a sufficient duration as part of its own risk and solvency assessment, taking into account both the original and remaining maturity of all ownfund items and of all insurance and reinsurance liabilities.

131 Tier 2 basic own-funds – List of own-fund items

The following basic own-fund items of the insurer, that meet the eligibility requirements in Regulation 127(4), and are classified as Tier 2 if they display all of the features set out in Regulation 132-

(a) the part excess of assets over liabilities comprising the following items—



- (i) ordinary share capital and the related share premium account;
- (ii) initial funds, members' contributions or the equivalent basic own-fund item for a mutual or mutual-type insurer;
- (iii) subordinated mutual member accounts;
- (iv) preference shares and the related share premium account;
- (b) subordinated liabilities.

132 Tier 2 basic own-funds – Features determining classification

- (1) The features determining Tier 2 basic own-fund items are—
 - (a) the basic own-fund item ranks after the claims of all policyholders and non-subordinated creditors of the insurer;
 - (b) the basic own-fund item does not include features that may cause the insolvency of the insurer or may accelerate the process of the insurer becoming insolvent;
 - (c) the basic own-fund item is undated or has an original maturity of at least 10 years;
 - (d) the first contractual opportunity to repay or redeem the basic own-fund item does not occur before 5 years from the date of issuance;
 - the basic own-fund item is only repayable or redeemable at the option of the insurer and the repayment or redemption of the basic own-fund item is subject to prior approval by the Authority;
 - (f) the basic own-fund item may include limited incentives to repay or redeem that basic own-fund item, provided that these do not occur before 10 years from the date of issuance;
 - (g) the basic own-fund item provides for the suspension of repayment or redemption of that item if there is non- compliance with the SCR or repayment or redemption would lead to such non-compliance until an insurer complies with the SCR and the repayment or redemption would not lead to non-compliance with the SCR;
 - (h) the basic own-fund item meets one of the following criteria
 - (i) in the case of items referred to in Regulations 131(a)(i) and 131(a)(ii), either the legal or contractual arrangements governing the basic own-fund item or Manx legislation allow for the distributions in relation to that item to be deferred if there is non-compliance with the SCR or the distribution would lead to such non-compliance until the



insurer complies with the SCR and the distribution would not lead to non-compliance with the SCR;

- (ii) in the case of items referred to in Regulations 131(a)(iii),131(a)(iv) and 131(b) the terms of the contractual arrangement governing the basic own-fund item provide for the distributions in relation to that item to be deferred if there is non-compliance with the SCR or the distribution would lead to such non-compliance until the insurer complies with the SCR and the distribution would not lead to non-compliance with the SCR;
- the basic own-fund item may only allow for a distribution to be made if there is non-compliance with the SCR or the distribution on a basic-own-fund item would lead to such non-compliance, if all of the following conditions are met—
 - (i) the Authority has exceptionally waived the deferral of distributions;
 - (ii) the payment does not further weaken the solvency position of the insurer;
 - (iii) the MCR is complied with after the distribution is made.
- (j) the basic own-fund item is free from encumbrances and is not connected with any other transaction, that when considered with the basic own-fund item, could result in that basic own-fund item not complying with (a).
- (k) the basic own-fund item displays the Tier 1 features set out in Regulation 130 that are relevant for Tier 1 basic own-fund items referred to in Regulations 129(1)(a)(iii) and 129(1)(a)(v) and Regulation 129(1)(b), but exceeds the limit set out in Regulation 127(8).
- (2) Pursuant to sub-paragraph (1)(g), the basic own-fund item may only allow for the repayment or redemption of that item if there is non-compliance with the SCR or repayment or redemption would lead to such non-compliance, if all of the following conditions are met—
 - (a) the Authority has exceptionally waived the suspension of repayment or redemption of that item;
 - (b) the item is exchanged for or converted into another Tier 1 or Tier 2 basic own-fund item of at least the same quality;
 - (c) the MCR is complied with after the repayment or redemption.
- (3) The exchange or conversion of a basic own-fund item into another Tier 1 or Tier 2 basic own-fund item or the repayment or redemption of a Tier 2 basic own-fund item out of the proceeds of a new basic own-fund item of at least the same quality must not be deemed to be a repayment or

redemption, provided that the exchange, conversion, repayment or redemption is subject to the approval of the Authority.

- (4) For the purposes of sub-paragraphs (1)(h) and (1)(i), references to the SCR is read as references to the MCR if non-compliance with the MCR occurs before non-compliance with the SCR.
- (5) For the purposes of sub-paragraph (1)(g), the insurer must consider incentives to redeem in the form of an interest rate step-up associated with a call option as limited if the step-up takes the form of a single increase in the coupon rate and results in an increase in the initial rate that is no greater than the higher of the following amounts
 - (a) 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis;
 - (b) 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

133 Tier 2 ancillary own-funds

- (1) The insurer's Tier 2 ancillary own-funds consist of own-funds that meet the eligibility requirements in Regulation 127(4), other than basic ownfunds defined in Regulation 128, that can be called up by the insurer to absorb losses and that have been approved by the Authority in accordance with Regulation 141.
- (2) Tier 2 ancillary own-funds shall comprise the following items to the extent they are not basic own-funds items
 - (a) unpaid share capital or initial fund that has not been called up by the insurer;
 - (b) letters of credit or guarantees provided to the insurer;
 - (c) any other legally binding commitments provided to the insurer.
- (3) In order to be classified as Tier 2, the ancillary own-fund item must display the features of a basic own-fund item classified in Tier 1 in accordance with Regulations 129 and 130, once that item has been called up and paid in.

134 Tier 3 basic own-funds- List of own-fund items

The following basic own-fund items of the insurer that meet the eligibility requirements in Regulation 127(4) and if the following items display all of the features set out in Regulation 135-

- (a) the part excess of assets over liabilities, comprising the following items—
 - (i) subordinated mutual member accounts;
 - (ii) preference shares and the related share premium account;

- (iii) an amount equal to the value of net deferred tax assets.
- (b) subordinated liabilities.

135 Tier 3 basic own-funds– Features determining classification

- (1) The features determining Tier 3 basic own-fund items are
 - (a) the basic own-fund item does not include features that may cause the insolvency of the insurer or may accelerate the process of the insurer becoming insolvent;
 - (b) the basic own-fund item is free from encumbrances and is not connected with any other transaction, that could undermine the features that the item is required to possess in accordance with this Regulation.
 - (c) In the case of items referred to in Regulations 134(a)(i), 134(a)(ii) and 134(b)
 - (i) the basic own-fund item ranks after the claims of all policyholders and non-subordinated creditors of the insurer;
 - (ii) the basic own-fund item is undated or has an original maturity of at least 5 years, where the maturity date is the first contractual opportunity to repay or redeem the basic own-fund item;
 - (iii) the basic own-fund item is only repayable or redeemable at the option of the insurer and the repayment or redemption of the basic own-fund item is subject to prior approval by the Authority;
 - (iv) the basic own-fund item may include limited incentives to repay or redeem that basic own-fund item;
 - (v) the basic own-fund item provides for the suspension of repayment or redemption if there is non-compliance with the SCR or repayment or redemption would lead to such non-compliance until the insurer complies with the SCR and the repayment or redemption would not lead to noncompliance with the SCR;
 - (vi) the basic own-fund item provides for the deferral of distributions if there is non-compliance with the MCR or the distribution would lead to such non-compliance until the insurer complies with the MCR and the distribution would not lead to non-compliance with the MCR;
- (2) Pursuant to sub-paragraph (1)(c)(v), the basic own-fund item may only allow for the repayment or redemption of that item if there is non-

compliance with the SCR or repayment or redemption would lead to such non- compliance, if all the following conditions are met—

- (a) the Authority has exceptionally waived the suspension of repayment or redemption of that item;
- (b) the item is exchanged for or converted into another Tier 1, Tier 2 basic own-fund item or Tier 3 basic own-fund item of at least the same quality;
- (c) the MCR is complied with after the repayment or redemption.
- (3) The exchange or conversion of a basic own-fund item into another Tier 1, Tier 2 basic own-fund item or Tier 3 basic own-fund item or the repayment or redemption of a Tier 3 basic own-fund item out of the proceeds of a new basic own-fund item of at least the same quality must not be deemed to be a repayment or redemption, provided that the exchange, conversion, repayment or redemption is subject to the approval of the Authority.
- (4) For the purposes of sub-paragraph (1)(c)(v), references to the SCR is read as references to the MCR if non-compliance with the MCR occurs before non-compliance with the SCR.
- (5) For the purposes of sub-paragraph (1)(c)(iv), the insurer must consider incentives to redeem in the form of an interest rate step-up associated with a call option as limited if the step-up takes the form of a single increase in the coupon rate and results in an increase in the initial rate that is no greater than the higher of the following amounts
 - (a) 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis;
 - (b) 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

136 Tier 3 ancillary own-funds

(1) Ancillary own-fund items that have been approved by the Authority in accordance with Regulation 141 that do not display all of the features set out in Regulation 133(3) are classified as Tier 3 ancillary own-funds.

137 Reconciliation reserve

- (1) The reconciliation reserve equals the insurer's total excess of assets over liabilities reduced by all of the following—
 - (a) the amount of own shares held by the insurer, both direct and indirect holdings;
 - (b) foreseeable dividends, distributions and charges from the insurer;



- (c) the basic own-fund items included in Regulations 129(1)(a)(i) to 129(1)(a)(v), and Regulations 131(a) and 134(a);
- (d) the basic own-fund items not included in sub-paragraph (c) that have been approved by the Authority in accordance with Regulation 140;
- (e) if the insurer has restricted own-funds as determined in Regulation 138, the amount by which the value of the insurer's restricted own-fund items exceed the notional SCR of the associated ring-fenced fund or marked-to-model portfolio, determined in accordance with Regulation 115;
- (2) Pursuant to paragraph (1)(e), if a ring-fenced fund is not deemed material in accordance with Regulation 139, the insurer may reduce the reconciliation reserve by the total amount of restricted own-fund items in respect of ring-fenced funds.
- (3) The excess of assets over liabilities referred to in paragraph (1) includes the amount that corresponds to the expected profit included in future premiums.
- (4) Pursuant to paragraph (3) the expected profit included in future premiums is the expected present value of future cash flows resulting from the insurer including in its technical provisions, premiums relating to existing contracts that are expected to be received in the future, but that may not be received for any reason other than because the insured event has occurred, regardless of the legal or contractual rights of the policyholder to discontinue the policy.
- (5) The determination of whether, and to what extent, the reconciliation reserve displays the features set out in Regulation 130 must not amount to an assessment of the features of the assets and liabilities that are included in computing the excess of assets over liabilities
- (6) or the underlying items in the insurer's financial statements.

138 Restricted own-funds

(1) In this Regulation –

'restricted own-funds' means own-funds that have a reduced capacity to absorb losses on a going concern basis due to their lack of transferability within the insurer for one or more of the following reasons —

- (a) the items can only be used to cover losses on a defined portion of the insurer's insurance or reinsurance contracts;
- (b) the items can only be used to cover losses in respect of certain policyholders of the insurer;
- (c) the items can only be used to cover losses arising from particular risks or liabilities of the insurer.

- (2) The insurer must identify the nature of restrictions affecting its assets and basic own-funds within its business and the liabilities in respect of the contracts, policyholders or risks for which those assets and basic own-funds can be used.
- (3) Pursuant to paragraph (2), at a minimum the following are considered to be restricted own-fund items—
 - (a) assets, liabilities and own-funds belonging to ring-fenced funds as recognised in Regulation 16;
 - (b) assets, liabilities and own-funds belonging to a portfolio for which the insurer uses the marked-to-model asset valuation approach to determine the value of those assets and liabilities, as defined in Regulation 15.
- (4) Restricted own-fund items must not include the value of future transfers attributable to shareholders.

139 Materiality of a ring-fenced fund

- (1) Pursuant to Regulation 137(2) the insurer must consider the materiality of a ring-fenced fund of the insurer by assessing—
 - (a) the nature of the risks arising from or covered by the ring-fenced fund;
 - (b) the nature of the assets and liabilities within the ring-fenced fund including the following
 - (i) the amount of restricted own-funds within the ring-fenced fund;
 - (ii) volatility of these those amounts over time; and
 - (iii) proportion of its total own-funds represented by restricted own-funds;
 - (c) the proportion of the insurer's total assets and SCR that the ringfenced fund represents, both individually for each ring-fenced fund and on a combined basis with the insurer's other ring-fenced funds; and
 - (d) the likely impact of the ring-fenced fund on the calculation of the insurer's SCR due to the reduced scope for risk diversification.

140 Authority's approval of the assessment and classification of basic ownfund items

(1) The classification of a potential basic own-fund item of the insurer that is not included in the list of basic own-funds items in Regulations 129, 131, and 134, but that meets the requirements of Regulations 127, 128, 130, 132 and 135 is subject to the approval of the Authority.



- (2) The inclusion of basic own-fund items approved by the Authority in accordance with this paragraph is subject to quantitative limits set out in Regulation 127(7).
- (3) Pursuant to paragraph (1), a prospective basic own-fund item that has not received the Authority's approval are ineligible in meeting the insurer's SCR and MCR.

141 Approval of ancillary own-funds

- (1) Pursuant to Regulations 133 and 136, the-
 - (a) amount ascribed to an ancillary own-fund item; and
 - (b) the degree to which it may be taken into account by the insurer in meeting its SCR and MCR (as applicable),

is subject to the approval of the Authority.

- (2) A prospective ancillary own-fund item that has not received the Authority's approval shall be ineligible in meeting the insurer's SCR and MCR.
- (3) An ancillary own-fund item may be approved by the Authority as either Tier 2 or Tier 3 (not Tier 1), as may be specified by the Authority.
- (4) Pursuant to sub-paragraph (1)(a), the amount ascribed to an ancillary own-fund item shall be either—
 - (a) a monetary amount for each ancillary own-fund item; or
 - (b) a method to be used to determine the amount of each ancillary own-fund item, in which case approval of the amount determined in accordance with that method shall be granted for a specified period of time.

MADE

FRED SMITH *Minister for the Treasury*

SCHEDULE 1

CAPITAL REQUIREMENTS FOR DORMANT INSURERS

- (1) A dormant insurer is an insurer that, although authorised under the Act, is not carrying on insurance business.
- (2) No dormant insurer may carry on insurance business without the approval of the Authority.
- (3) Any dormant insurer that carries on insurance business is no longer a dormant insurer and, at a minimum, will be in breach of the requirement of paragraph (2).
- (4) The SCR and MCR for a dormant insurer is to maintain assets in excess of its liabilities.

Explanatory Note:

These Regulations apply to long-term insurance business and impose requirements for the calculation of the minimum capital requirement ("MCR") and solvency capital requirement ("SCR") pursuant to section 12 of the Insurance Act 2008 (as amended). This includes requirements for the valuation of corresponding assets and liabilities.

