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

Index

Statutory Document No. 2018/0193

Insurance Act 2008

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

Laid before Tynwald:	*17 July 2018*
Coming into Operation:	*30 June 2018*

The Isle of Man Financial Services Authority makes the following Regulations under sections 12, 14, 50(1) of, and Schedule 7 to, the Insurance Act 2008, after carrying out the consultation required by section 50(3) of that Act.

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;

"**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;

"**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;

"**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 solvency regime which has been assessed by EIOPA and considered to be equivalent, (either fully, provisionally or temporarily) to the requirements of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 relating to the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (O.J. No. L335/1 17.12.09); or

(e)   any other insurance supervisory authority as may be approved by the Authority;

"**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;

"**basic own-funds**" in relation to an insurer, comprise the insurer's excess assets over its liabilities 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 add-on**" has the meaning given in regulation 52(1);

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

"**CGC**" means the Corporate Governance Code of Practice for Regulated Insurance Entities[1] and any Manx legislation from time to time amending or replacing that Code of Practice;

"**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

---

[1] SD 880/10 as amended by SD 886/10 and 2015/0317

(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;

"**counterparty default risk**" has the meaning given in regulation 81;

"**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;

"**currency risk**" has the meaning given in regulation 67;

"**disability and morbidity risk**" has the meaning given in regulation 96;

"**dormant insurer**" has the meaning given in paragraphs 1 and 3 of the Schedule;

"**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 own-funds which are eligible in meeting its SCR and MCR (as the context requires) in accordance with regulation 133;

"**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 133;

"**eligible own-funds**" in relation to the own-funds of an insurer, has the meaning given in regulation 133(2) and (3);

"**equity risk**" has the meaning given in regulation 65;

"**expense risk**" has the meaning given in regulation 98;

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

"**health catastrophe risk**" has the meaning given in regulation 116;

"**health underwriting risk**" has the meaning given in regulation 101;

"**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 133(4);

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

"**insurer**" unless the context requires otherwise, means an insurer to whom these Regulations apply as determined in accordance with regulation 4;

"**interest rate risk**" has the meaning given in regulation 62;

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

"**life catastrophe risk**" has the meaning given in regulation 100;

"**life underwriting risk**" has the meaning given in regulation 93(1);

"**long-term business**" has the meaning given in section 54 of the Act;

"**longevity risk**" has the meaning given in regulation 95;

"**loss-given-default**" means the average loss suffered by the insurer, resulting from the default of a counterparty of the insurer;

"**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;

"**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;

"**market risk**" has the meaning given in regulation 60;

"**market risk concentration**" has the meaning given in regulation 76;

"**material**" in relation to an impact, risk, assumption, asset, liability or own fund item means it is important enough to 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 given in section 12(1)(a) of the Act;

"**mortality risk**" has the meaning given in regulation 94;

"**mortgage loans**" has the meaning given in regulation 82;

"**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 and a reference to "**NSLT health underwriting risk**" should be construed with reference to regulations 101 and 111;

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

"**operational risk**" has the meaning given in regulation 58;

"**own-funds**" in relation to the own-funds of an insurer, comprises of the sum of the insurer's basic own-funds and ancillary own-funds;

"**own-fund item**" in relation to the own-funds of an insurer, is a specific capital item;

"**policyholder**" has the meaning given in section 54 of the Act;

"**property risk**" has the meaning given in regulation 66;

"**related entity**" is an entity which is either a subsidiary of the insurer, an entity in which a participation is held by the insurer in accordance with regulations 130 and 131, or an entity linked to the insurer by a relationship that requires the production of consolidated accounts;

"**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 an insurer for one or more of reasons given in regulation 144;

"**revision risk**" has the meaning given in regulation 99;

"**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 eligible own-funds equal to its SCR, over the lifetime of its insurance obligations;

"**risk mitigation technique**" is a technique used by an insurer to transfer underwriting risk. This includes techniques such as reinsurance contracts, special purpose vehicles and finite reinsurance arrangements;

"**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;

"**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;

"**single name exposures**" are—

(a)   exposures of an 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;

"**SLT health**" means health insurance business that is pursued on a similar technical basis to that of life insurance business and a reference to "SLT health underwriting risk" should be construed with reference to regulations 101 and 102;

"**Solvency Capital Requirement**" has the meaning given in section 12(1)(b) of the Act;

"**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;

"**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;

"**spread risk**" has the meaning given in regulation 69;

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

"**technical provisions**" in relation to an insurer, shall equal the sum of the best estimate of its insurance obligations, over the lifetime of those obligations, and a risk margin, and shall represent the amount that the insurer would have to pay to transfer its insurance obligations immediately to another insurer; and

"**type 1 exposures**" and "**type 2 exposures**" have the meaning given in regulation 81.

4   Application

(1)   These Regulations apply to the carrying on of insurance business of—

(a)   classes 1, 2 and 10; and

(b)   class 12 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.

(2)   Reference in paragraph (1) to a numbered class of insurance business is to be construed by a reference to the table in regulation 3(2) of the Insurance Regulations 2018[2].

5   Capital requirements

(1)   An insurer must calculate its MCR and SCR in accordance with these Regulations as are applicable to its business.

(2)   Where an insurer is a dormant insurer it may comply with its MCR and SCR by complying with the requirements of Schedule 1.

---

[2] SD 2018/0192

6   Expert judgement

(1)   Where an 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)   An insurer must, taking due account of the principles of proportionality in accordance with regulation 25, ensure that all internal users of the assumptions referred to in paragraph (1) are informed about the relevant content, degree of reliability and limitations of those assumptions.

(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)   An insurer must ensure that it obtains from its appointed actuary a written report, to be submitted to its board of directors at least annually.

(2)   The report must document all tasks that have been undertaken by the actuarial function, in particular those activities that are required by the CGC. The report must also include the results of these activities, 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, eligible own-funds and technical provisions;

(b)   best estimate assumptions used by the insurer to determine its technical provisions; and

(c)   valuation of the insurer's SCR.

(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 technical provisions and SCR.

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

8   Application

In complying with regulation 5(1), an insurer must value its assets and liabilities other than its technical provisions in accordance with this Part.

9   Valuation methodology

(1)   An insurer must recognise its assets and liabilities on its regulatory balance sheet, in accordance with a relevant accounting standard, approved by the Authority, that uses valuation methods consistent with the following valuation approach—

(a)   assets are valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction; and

(b)   liabilities are valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction.

(2)   The relevant accounting standards approved by the Authority referred to in paragraph (1) include—

(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 paragraph (1)(b), an insurer must not make any adjustment to take account of its own credit standing.

(4)   If the relevant accounting standard allows for the use of more than one valuation method, an insurer must only use valuation methods that are consistent with paragraph (1).

(5)   If the valuation methods included in the relevant accounting standard 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 an insurer does not value its assets or liabilities in its financial statements using one of the approved relevant accounting standards in paragraph (2), it may, subject to approval from the Authority, 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 paragraphs (6)(a) or (6)(b) are not met, the insurer must value its assets or liabilities, as the case may require, using the relevant 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)   An insurer must value its individual assets and liabilities separately.

10   Valuation of assets and liabilities

(1)   An insurer must, when valuing its assets and liabilities, 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.

(2)   An insurer must value its assets and liabilities based on the assumption that the insurer will pursue its business as a going concern.

(3)   An insurer must value its assets and liabilities taking into account the same principle of proportionality as for the valuation of technical provisions set out in regulation 25.

(4)   As the default valuation method, an 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, an insurer may, subject to the approval of the Authority, use an alternative valuation method, such as the 'marked-to-model' approach set out in regulation 15.

(7) When using alternative valuation methods to value assets and liabilities, an 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) If unobservable inputs are used, an 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), an 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 an insurer that may or may not be incurred, depending on the outcome of an event.

(2) An insurer must recognise contingent liabilities that are material, as liabilities when valuing its assets and liabilities in accordance regulations 9 and 10.

(3) An 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, an 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 must 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 an 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) In complying with paragraph (1), an 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 in accordance with regulation 10, and the values ascribed to assets and liabilities as recognised and valued for tax purposes.

(3) An 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

(1) 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 130 and 131 at the quoted market price in an active financial market in accordance with regulation 10(2).

(2) If the approach in paragraph (1) does not comply with the principles of proportionality in paragraph 10(3) —

(a) an 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) an insurer must value holdings in related insurers other than subsidiaries using the equity method based on recognition and

measurement of the related insurer's balance sheet consistent with the requirements of regulations 9 and 10;

(c)   if the approach in paragraph (b) is not practicable, proportionate or possible, an insurer must use an alternative valuation method in accordance with regulation 10(6), and the insurer must notify the Authority of the reason why the approach in paragraph (b) cannot be used;

(d)   an insurer must value holdings in related entities, other than those in 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 paragraph (d) is not practicable, proportionate or possible, an 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 paragraph (e) is not practicable, proportionate or possible, for related entities, other than subsidiaries of the insurer, an insurer must use an alternative valuation method in accordance with regulation 10(6).

15   Recognition of marked-to-model asset portfolios

(1)   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(5), subject to obtaining approval from the Authority, and only when all of the following conditions 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;

(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 paragraph (j);

(g) there are no policyholder options as defined in regulation 97(2) and 97(4) 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 10;

(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.

(2) 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.

(3) The marked-to-model portfolio is treated in the same way as a ring-fenced fund when determining its SCR, in accordance with regulation 121.

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

(1) When valuing its assets under regulation 10, where an insurer has ring-fenced funds, it must identify the assets and liabilities of those ring-fenced funds in accordance with the rest of this regulation.

(2)   The assets in a ring-fenced fund of an insurer are those arising from the investment of premiums received by the insurer in relation to the contracts which comprise the ring-fenced fund, along with any other payments into and assets provided to the fund.

(3)   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.

(4)   An 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 eligible own-funds.

(5)   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 143.

PART 2: VALUATION OF TECHNICAL PROVISIONS

17   Technical provisions

(1)   In complying with regulation 5, an 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 an 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)   The value of an insurer's technical provisions is equal to the sum of a best estimate determined in accordance with regulation 26 and a risk margin calculated in accordance with regulation 37.

(2)   An insurer must value the best estimate and the risk margin separately.

(3)   An insurer must determine technical provisions for each of its material ring-fenced funds, and for the remainder of its insurance obligations (the remainder must include ring-fenced funds that have not been deemed material).

(4)   When calculating its technical provisions, an 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 expense and claims inflation; and

(c)   all payments to policyholders, including future discretionary benefits, which the insurer expects to make, whether or not those payments are contractually guaranteed, unless those payments are surplus funds.

(5)   The surplus funds of an insurer can only be considered to be insurance liabilities of the insurer under paragraph (4)(c) to the extent that the surplus funds are not allocated by the insurer to Tier 1 basic own-funds in accordance with regulation 135.

(6)   An 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.

(7)   An 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 are no longer appropriate. The results of this validation must be included within the report referred to in regulation 7.

(8)   An 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.

(9)   An insurer must carry out the validation required by paragraph (7) 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)   An insurer must document the following processes, and be able to provide the documentation 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; and

(d)   the validation of its technical provisions in accordance with regulation 18(7).

(2)   For the purposes 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 its quality;

(c)   if data is not used consistently over time, an explanation of its inconsistent use and a justification; and

(d)   any data issues which are considered material to the valuation of the insurer's technical provisions.

(3)   For the purposes 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;

(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; and

(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 current calculations.

20   Recognition and de-recognition of insurance obligations

(1)   An insurer must recognise all of its insurance obligations in the calculation of its technical provisions. This includes all contracts of insurance written by the insurer for the categories of insurance business specified in regulation 4.

(2)   An 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)   An insurer must only recognise the obligations within the boundary of the contract in accordance with regulation 21.

(4)   An 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)   Under regulation 20(1) all obligations of an 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 (5), (6) and (7) as applicable, obligations which relate to insurance cover provided by an 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 premium fully reflect the risks.

(4)   Paragraph (3)(c) applies if an 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)   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)   An 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)   An 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)   An insurer must segment its insurance obligations into homogeneous risk groups when calculating its technical provisions.

(2)   The assignment of an insurance obligation 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)   Assumptions underlying the calculation of an insurer's technical provisions must be realistic and shall be considered so 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 insurer can clearly identify the circumstances under which the assumptions would be considered false;

(c)   unless otherwise provided in this regulation, 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 paragraph (1)(c), an 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)   An 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 an 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 technical provisions.

24   Future management actions

(1)   The assessment of an insurer's technical provisions, including the methods and techniques for the estimation of the future cash flows of the insurer, may take account of potential realistic future actions which may be taken by the management of the insurer.

(2)   Pursuant to paragraph (1), an assumed future management action 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)   where there is sufficient evidence that the insurer will change its practices or strategy, the assumption is consistent with the new 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)   An 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)   An insurer must be able to explain any relevant deviations in relation to 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), an 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 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 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 paragraph (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 paragraph (a);

(f)   a description of how the future management actions referred to in paragraph (a) have been reflected in the calculation of the insurer's technical provisions; and

(g)   a description of the applicable internal reporting procedures that cover the future management actions referred to in paragraph (a) included in the insurer's calculation of its technical provisions.

25   Proportionality

(1)   An 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, an insurer must carry out—

(a)   an assessment of the nature, scale and complexity of the risks underlying its insurance obligations; and

(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; and

(ii)   the results of the assessment referred to in 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(7)(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 paragraph (2)(b) is material, unless one of the following conditions is 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)   An insurer must determine the best estimate as the sum of the expected present value of its future cash-flows, using a cash flow projection.

(2)   The expected present value of future cash-flows is 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 35.

(3)   The calculation of the best estimate must—

(a)   be based upon up-to-date and credible information;

(b) use realistic assumptions in accordance with regulation 23(1); and

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

(4) With reference to paragraph (3)(a), information must only be considered to be credible if an insurer can evidence 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) An 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) With reference to paragraph (3)(c), 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) The 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 contract data, an insurer must ensure that the grouping of contracts creates homogeneous risk groups that appropriately reflect the risks of the individual contracts included in those groups, in accordance with regulation 36.

(10) An insurer must analyse the extent to which the present value of its cash flows depends 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 an 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) Risk-free interest rate term structures will be published periodically by the Authority.

(2) In relation to the use of a risk-free interest rate term 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 as a cash flow underlying the calculation of technical provisions in accordance with regulation 34 and not in an adjustment to the risk-free interest rates used to discount technical provisions.

28   Appropriate use of approximations to calculate the best estimate

If an insurer has insufficient data meeting the data quality requirements in regulation 43, and therefore cannot 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); and

(c)   it would not be practicable for the insurer to adjust data to remedy the insufficiency.

29   Comparison of best estimate against experience

(1)   An 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 must be made to either or both of the—

(a)   actuarial methods being used; or

(b)   assumptions being used.

30   Future discretionary benefits

(1)   An insurer must take into account future discretionary benefits which are expected to be made, when calculating the best estimate, whether or not those payments are contractually guaranteed.

(2)   If future discretionary benefits depend on the assets held by an insurer, the insurer must—

(a)   base the calculation of the best estimate on the assets it currently holds;

(b)   assume future changes of its asset allocation in accordance with regulation 24; and

(c)   ensure that the assumptions on the future returns of the assets are consistent with the relevant risk-free interest rate term structure in

accordance with regulation 27 and the valuation of the assets in accordance with regulation 9(1).

(3) When calculating the best estimate, the insurer must determine separately the value of any relevant future discretionary benefits.

31 Policyholder behaviour

(1) An insurer must take into account policyholder behaviour, when calculating the best estimate.

(2) An insurer must take sufficient steps to identify relevant policyholders' behaviour and make appropriate assumptions relating to the likelihood of policyholders exercising contractual options.

(3) Assumptions relating to the exercise of contractual options 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.

(4) Under paragraph (3), assumptions must be based on analysis of past policyholder behaviour and a prospective assessment of expected future policyholder behaviour.

(5) Such analysis must take into account the following—

(a) how beneficial the exercise of the options was and will be to the policyholders under circumstances at the time of exercising the option;

(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.

(6) The likelihood that policyholders will exercise contractual options will only be considered to be independent of the elements referred to in paragraph (5) where there is empirical evidence to support such an assumption.

(7) 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 there is empirical evidence to support such an assumption.

32   Contractual options and financial guarantees

(1)   When calculating the best estimate, the insurer must take into account—

(a)   all financial guarantees and contractual options included in its insurance contracts; and

(b)   all factors which may affect the likelihood that its policyholders will exercise contractual options or realise the value of financial guarantees.

(2)   An assumption made by the insurer with respect to policyholder behaviour must meet the requirements of regulation 31.

33   Cash flow projection

(1)   Under regulation 26(1), the cash flow projection to determine the insurer's best estimate must include all cash in- and out-flows required to settle its insurance obligations over their lifetime.

(2)   The cash flow projection under paragraph (1) must include all of the following cash flows, to the extent that those 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 referred to in 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 cash flow projection 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 of those obligations.

(4)   The future developments referred to in paragraph (3) must include demographic, legal, medical, technological, social, environmental and economic developments including inflation.

(5)   The cash flow projection 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)   The cash flow projection in regulation 33 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 paragraphs (1)(a) to (1)(d) must take into account overhead expenses incurred in servicing the insurance obligations.

(3)   An 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 are taken into account in the gross calculation of the best estimate.

(5)   Where an insurer is open to new business, expenses must be projected on the assumption that the insurer will continue to write new business in the future.

35   Time value of money of cash flows

(1)   Under regulation 26(2), 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 interest rate 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)   Under regulation 33 a separate cash flow projection must be carried out for each insurance contract.

(2)   If this would produce an undue burden on an insurer, in accordance with regulation 22 the insurer may carry out the projection by grouping contracts, 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 contracts that belong to the same group;

(b)   the grouping of contracts does not misrepresent the risk underlying the contracts and does not misstate their expenses; and

(c)   the grouping of contracts is likely to give approximately the same results for the best estimate calculation as a calculation on a per contract basis, in particular in relation to financial guarantees and contractual options included in the contracts.

37   Calculation of the risk margin

(1)   The risk margin must be such as to ensure that the value of the technical provisions is equivalent to the amount that an insurer would be expected to require in order to take over and meet the insurance obligations. In particular, the calculation should take the diversification of the whole portfolio into account.

(2)   The calculation of the risk margin should be based on a projection of the SCR that takes the risk mitigation of reinsurance contracts and special purpose vehicles into account.

(3)   The risk margin must be calculated by determining the cost of providing an amount of eligible own-funds equal to the insurer's SCR necessary to support the insurance obligations over the lifetime of those obligations.

(4)   An insurer's risk margin ('*RM*') must be calculated using the following formula—

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

where—

(a)   *CoC* denotes the cost-of-capital rate in accordance with paragraph (5);

(b)   *SCR_RI(t)* denotes the SCR of the reference insurer company after *t* years, determined in accordance with paragraph (7);

(c) r_{t+1} denotes the basic risk-free interest rate in the local currency (as defined in regulation 66) of the insurer for the maturity of $t + 1$ years.

(5)   The cost-of-capital rate is set at 5%.

(6)   An 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.

(7)   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 those obligations;

(c)   the reference insurer does not have any insurance obligations or eligible 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 of those obligations;

(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 to which the reference insurer is exposed;

(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 paragraph (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 paragraphs (d) and (e), adopt future management actions that are consistent with the assumed future management actions of the original insurer.

(8)   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 (7).

(9)   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.

(10)   An insurer must determine the risk margin using the approach in this regulation at least once a year.

(11)   Under paragraph (10), and in accordance with regulation 25, for subsequent quarterly calculations of the risk margin an insurer may derive the risk margin from the result of the full calculation determined in accordance with paragraph (10), without an explicit calculation of the formula referred to in paragraph (4).

38   Optional simplified calculation of the risk margin

An insurer may use simplified methods when it calculates the risk margin under regulation 37, 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)   An 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; and

(b) adjusted to take account of expected losses due to the default of the counterparty in accordance with regulations 41 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, but excluding expenses that meet both 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 an insurer 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)   An 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)   Under paragraph (1)(b), an 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)   With reference 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)   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

An insurer may calculate the adjustment for expected losses due to default of the counterparty for a specific counterparty and homogeneous risk group 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)   An insurer must have internal processes and procedures in place to ensure the completeness in accordance with paragraph (2), accuracy in accordance with paragraph (3), and appropriateness in accordance with paragraph (4) of the data used in the calculation of its technical provisions.

(2)   Data used in the calculation of an insurer's technical provisions must only be considered to be complete if both 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 an 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 an 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 they will be used;

(b) the amount and nature of the data ensures 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 them 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—

(i) 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) An 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 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, an 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.

(2)   Matters relating to the limitations of the data described in paragraph (1) must be included in the reporting of deficiencies in regulation 7(2).

(3)   Before adjustments to remedy limitations are made to it, data that does not comply with regulation 43 must be recorded and stored appropriately.

PART 3: SOLVENCY CAPITAL REQUIREMENT

45   Solvency Capital Requirement

(1)   An insurer must calculate its SCR on the presumption that the insurer will pursue its business as a going concern.

(2)   An insurer's SCR has been calibrated to ensure all quantifiable risks to which the insurer is exposed are taken into account.

(3)   Pursuant to paragraph (2), an insurer's SCR covers unexpected losses relating to existing business of the insurer.

(4)   An insurer's 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)   In complying with regulation 5, an insurer must—

(a)   determine its SCR using the standard formula approach in regulation 51; and

(b)   apply any 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)   An insurer can take account of the effect of any risk mitigation techniques which meet the requirements of regulation 122 in the calculation of its SCR, provided that credit risk and other risks arising from the use of such techniques are properly reflected.

(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)   If 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 the 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 a 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)   An insurer must calculate its SCR using scenario based calculations, where each scenario represents a risk under the standard formula approach in regulation 51.

(3)   A scenario applies an instantaneous stress to the assets, liabilities and technical provisions of the insurer.

(4)   If the application of a scenario results in a reduction in an insurer's basic own-funds, then the insurer is required to hold an amount of capital equal to the reduction. Such an amount is the capital requirement for that risk.

(5)   If the application of a scenario results in an increase in an insurer's basic own-funds then the insurer is not required to hold capital for that risk and the capital requirement is zero.

(6)   When applying the stresses underlying a scenario an insurer —

(a)   should 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)   must distinguish dynamic hedging strategies and future management actions from rolling hedge arrangements;

(c)   must not change the risk margin included in the insurer's technical provisions;

(d)   must not change the value of the insurer's deferred tax assets and liabilities;

(e) must not change the value of future discretionary benefits included in the insurer's technical provisions; and

(f) must allow for the impact of the scenario on the value of any risk mitigation technique in use by the insurer.

(7) Following the application of a scenario an insurer—

(a) can allow for recovery in its portfolio of business (if applicable);

(b) can take account of any future management actions that may be taken after the application of the scenario, as long as the management action complies with the requirements of regulation 24; and

(c) must take account of any material adverse impact of a scenario or management actions, if applicable, on the likelihood that policyholders will exercise contractual options.

(8) An insurer may use simplified methods to recalculate its technical provisions allowing for the impact of a scenario provided that the simplified method does not lead to a material misstatement of the insurer's capital requirements.

48 Basis risk

(1) In this Part, basis risk arises from the situation in which a risk exposure covered by a risk mitigation technique, referred to regulation 46, does not correspond completely to the risk exposure of the insurer.

(2) In particular, 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 an insurer.

(3) If there is a material currency mismatch risk for a risk mitigation technique used against an underwriting risk exposure, an insurer may still take into account the risk mitigation technique in determining its SCR, provided that the risk mitigation technique complies with regulations 123, 124(3), 124(5) and 125, and the currency risk is not already included in the currency risk capital requirement.

(4) An insurer must allow for currency mismatch risk, for each foreign currency (as defined in regulation 66) it is exposed to, in the respective underwriting risk capital requirement by adding 25% of the difference between the following to the standard formula capital requirement for that risk exposure —

(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 67; and

(b)   the capital requirement for the relevant underwriting risk.

(5)   If the risk mitigation technique covers more than one underwriting risk, the calculation in paragraph (4) must be 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 paragraph (5) must not exceed 25% of the capacity of that risk mitigation technique.

49   Use of external credit assessments

(1)   Where the standard formula approach requires the use of an external credit assessment to calculate a capital requirement, an insurer must use an external credit assessment meeting the requirements of this regulation.

(2)   The external credit assessment must be issued by an ECAI approved by the Authority. An insurer can nominate one or more ECAIs for this purpose subject to the requirements of paragraph (3).

(3)   When using credit assessments from its nominated ECAI, an 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, subject to 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; or

(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 an insurer (including type 2 securitisation and resecuritisation positions as defined in regulation 73), 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 an 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 insurer's 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 an 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)   The nominated external credit assessment 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.

(2)   Where an external credit assessment is not available a credit quality step of 5 should be assigned, unless stated otherwise in these Regulations.

51   Solvency Capital Requirement - standard formula approach

(1)   Under regulation 45(5)(a), the insurer's SCR using the standard formula approach is 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 56; and

(c) SCR_{op_UL} and SCR_{op_nonUL} are determined in accordance with regulation 58.

(2)   If an insurer has material ring-fenced funds, determined in accordance with regulation 145, or has marked-to–model portfolios, the insurer must determine its SCR using the approach set out in regulation 121.

52   Solvency Capital Requirement - capital add-on

(1)   Under regulation 45(5)(b) 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 an insurer's—

(a)   risk profile deviates significantly from the assumptions underlying the standard formula approach in regulation 51; or

(b)   systems of governance deviate significantly from the requirements of the CGC, and –

(i)   those deviations prevent the insurer from being able to properly identify, measure, monitor, manage and report the risks that it is or could be exposed to; and

(ii)   the application of other measures is in itself unlikely to improve the deficiencies sufficiently within an appropriate time-frame.

(2)   The imposition of a capital add-on by the Authority will be on an exceptional basis and used only as a measure of last resort, when other supervisory measures are ineffective or inappropriate.

(3)   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.

(4)   The Authority will communicate its decision to impose a capital add-on in writing to the insurer, stating its reasons.

(5)   The Authority may vary or revoke a capital add-on in accordance with this regulation.

(6)   The capital add-on will have a numerically positive value and an insurer must provide the Authority with all information it requires to determine such an amount.

(7)   The methodology used to determine the capital add-on in the circumstances mentioned in paragraph (1)(a) must comply with regulation 45(4).

(8)   In the circumstances mentioned in 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.

(9)   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. 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.

(10)   If a capital add-on applies to an 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, within a timeframe agreed with the Authority.

53   Basic Solvency Capital Requirement

(1)   The BSCR referred to in regulation 51(1)(a) is an aggregation of the capital requirements for a set of 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 risk.

(3)   An insurer's BSCR is determined 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) $SCR_{intangibles}$ 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   Proportionality

(1)   For the purpose of regulations 71, 86, 87, 88, and 90, an insurer must determine whether the simplified calculation is proportionate to the nature, scale and complexity of the risks by carrying out an assessment which must include all of the following:

(a)   an assessment of the nature, scale and complexity of the risks underlying its insurance obligations; and

(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; and

(ii)   the results of the assessment referred to in paragraph 25(2)(a).

(2)   A simplified calculation must not be considered to be proportionate to the nature, scale and complexity of the risks where the error referred to in paragraph (1)(b) leads to a misstatement of an insurer's SCR that could influence the decision-making or the judgement of the user of the information relating to the insurer's SCR, unless the simplified calculation leads to a SCR which exceeds the SCR that results from the standard calculation.

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

(1)   The adjustment for the loss-absorbing capacity of an insurer's technical provisions and deferred taxes referred to in regulation 51(1)(b) 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 56; and

(b)   the adjustment for the loss-absorbing capacity of deferred taxes determined in accordance with regulation 57.

(2)   The adjustment for the loss-absorbing capacity of an 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.

(3)   The 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 an insurer can establish that a reduction in those benefits can be used to cover its unexpected losses when they arise.

(4)   The risk mitigating effect provided by relevant future discretionary benefits of insurance contracts can be determined by comparing the value of future discretionary benefits under each scenario to an insurer's best-estimate of those benefits.

(5)   The risk mitigating effect provided by future discretionary benefits can be no higher than the sum of an insurer's technical provisions and deferred taxes relating to those future discretionary benefits.

56   Adjustment for the loss absorbing capacity of technical provisions calculation

(1)   The adjustment to an insurer's SCR for the loss-absorbing capacity of technical provisions referred to in regulation 55(1)(a)55(1)(a) is equal to the following—

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

where—

(a) $nBSCR$ denotes the net BSCR; and

(b) FDB denotes the best estimate of future discretionary benefits.

(2)   The $nBSCR$ is calculated in accordance with regulation 53, with the exception that the requirement in regulation 47(6)(e) is waived, allowing an insurer to change the value of future discretionary benefits included in its technical provisions when applying the scenarios.

(3)   For the purposes of paragraph (2), an insurer must take into account all legal, regulatory or contractual restrictions in the distribution of future discretionary benefits.

(4)   For each specific risk scenario, r, if the capital requirement, SCR_r and net capital requirement, $nSCR_r$ are derived from different stresses within the scenario, then SCR_r must be calculated using the same underlying stresses as $nSCR_r$.

57   Adjustment for the loss absorbing capacity of deferred taxes

(1)   The adjustment to an insurer's SCR for the loss-absorbing capacity of deferred taxes referred to in regulation 55(1)(b) is equal to the change in the value of an insurer's deferred taxes resulting from an instantaneous loss of an amount equal to the following—

(a)   the insurer's BSCR determined in accordance with regulation 53;

(b)   the adjustment for the loss-absorbing capacity of technical provisions determined in accordance with regulation 56; and

(c)   the capital requirement for operational risk determined in accordance with regulation 58.

(2)   For the purpose of paragraph (1), and subject to paragraphs (3) to (6), deferred taxes must be valued in accordance with regulation 13.

(3)   Where the loss referred to in paragraph (1) would result in an increase in an insurer's deferred tax assets, the insurer must not utilise this increase for the purpose of this adjustment unless it can demonstrate that future profits will be available in accordance regulation 13(3), taking into account the magnitude of the loss referred to in paragraph (1) and its impact on the insurer's current and future financial situation.

(4)   For the purpose of paragraph (1), 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 in accordance with paragraph (1) results in a positive change of an insurer's deferred taxes, the adjustment is nil.

(6)   If it is necessary to allocate the loss referred to in paragraph (1) to its causes in order to calculate the adjustment for the loss-absorbing capacity of an insurer's deferred taxes, the insurer must allocate the loss to the risks that are captured by the BSCR in regulation 53(2). The allocation must be consistent with the contribution of the specific risk to the BSCR.

58   Operational risk capital requirement

(1)   In these Regulations—

"**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)   With reference to regulation 51, the operational risk capital requirement of the SCR consists of two elements—

$$SCR_{op\_UL} \text{ and } SCR_{op\_nonUL}$$

where—

(a) SCR_{op_UL} is the operational risk capital requirement in respect of an insurer's insurance obligations with unit-linked and index-linked benefits —

$$SCR_{op\_UL} = EXP_{UL}$$

where

EXP_{UL} is the value of expenses incurred by the insurer for insurance obligations with unit-linked and index-linked benefits in the twelve months before to the valuation date, excluding acquisition expenses and renewal commission; and

(b) SCR_{op_nonUL} is the operational risk capital requirement for the insurer's other insurance obligations not included in SCR_{op_UL} —

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

where—

(i) $Op_{premiums} = 0.04 \cdot Earn_{nonUL} + \max(0, 0.04 \cdot (Earn_{nonUL} - 1.2 \cdot pEarn_{nonUL}))$

(ii) $Earn_{nonUL}$ is the premium earned by the insurer in the 12 month period preceding the valuation date, for insurance obligations not included in SCR_{op_UL}. Reinsurance premiums must not be deducted;

(iii) $pEarn_{nonUL}$ is the premium earned by the insurer in the 12 month period that commenced 24 months before the valuation date for insurance obligations not included in SCR_{op_UL}. Reinsurance premiums must not be deducted;

(iv) $Op_{provisions} = 0.0045 * \max(0, TP_{nonUL})$; and

(v) TP_{nonUL} is the insurer's technical provisions for insurance obligations not included in SCR_{op_UL}.

(3) For the purpose of paragraph (2)(v), technical provisions must not include the risk margin and must be calculated without deduction of recoverables from reinsurance contracts and special purpose vehicles.

59 Intangible asset capital requirement

With reference to regulation 53(2)(e) the intangible asset risk capital requirement of the BSCR is —

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

where—

$V_{intangibles}$ denotes the amount of intangible assets as recognised and valued in accordance with regulation 12.

60 Market risk capital requirement

(1) In these Regulations—

"**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) With reference to regulation 53(2) an insurer's market risk capital requirement is derived from the sub-risk capital requirements —

(a) interest rate risk;

(b) equity risk;

(c) property risk;

(d) spread risk;

(e) currency risk; and

(f) market risk concentration.

(3) The capital requirement for market risk is —

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

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	A	A	A	0.25	0
Equity	A	1	0.75	0.75	0.25	0
Property	A	0.75	1	0.5	0.25	0
Spread	A	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 in regulation 62 is derived from paragraph 62(2)(a).

(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 130 and 131, the market risk capital requirement of the participation must be determined in accordance with regulation 120.

61 Look-through approach

(1) An insurer must assess the economic substance of the market risk exposure inherent in all of its investments, including collective investment vehicles and 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) both actively managed funds and passively managed funds equally;

   (c) indirect exposures to underwriting risk; and

   (d) indirect exposures to counterparty risk.

(3) The look-through approach does not apply to investments of an insurer in related entities, which must instead be 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, an 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) Taking due account of the principles of proportionality in regulation 54, the full look-through requirements of paragraph (1) may be waived and instead the market risk capital requirement may be calculated on the basis of the target underlying asset allocation of a 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 purposes of paragraph (6), homogeneous data groupings may be used, provided they are applied in a prudent and proportionate manner.

(8)   If an insurer cannot apply the approaches in paragraphs (1) and (6), the collective investment entity or fund must be treated as equity type 2 in the equity risk capital requirement calculation in regulation 65.

62   Interest rate risk capital requirement

(1)   In these Regulations—

"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)   Under regulation 60, an insurer's interest rate risk capital requirement is equal to the larger of—

(a)   the sum, over all currencies, of the capital requirement for the risk of an increase in the term structure of interest rates for a given currency, as calculated in accordance with regulation 63; or

(b)   the sum, over all currencies, of the capital requirement for the risk of a decrease in the term structure of interest rates for a given currency, as calculated in accordance with regulation 64.

63   Increase in the term structure of interest rates

(1)   Under regulation 62(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 an 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 t (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 interest rates, for each maturity t specified in the table above.

(3)   The stressed 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 stressed 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) and are not subject to paragraphs (b) and (c), $S^{up}(t)$ must be determined using linear interpolation;

(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 must be at least one percentage point.

(7)   The impact of the increase in the term structure of basic risk-free interest rates on the value of participations of an insurer in financial and credit

institutions, determined in accordance with regulations 130 and 131, must be considered only on the value of the participations that are not deducted from the insurer's basic own-funds.

(8)   Further to paragraph (7), the part deducted from an insurer's basic own-funds must be considered only to the extent that such impact increases the insurer's basic own-funds.

64   Decrease in the term structure of interest rates

(1)   Under regulation 62(2)(b), 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 an 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 t (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 interest rates, for each maturity t specified in the table above.

(2)   The stressed 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)   If the basic risk free interest rate is negative, the stressed basic interest rate is equal to the basic risk free interest rate.

(4)   For maturities that are—

(a)   not specified in the table in paragraph (1) and not subject to paragraphs (b) and (c), the value of the increase must be determined by linear interpolation;

(b)   shorter than 1 year, $S^{down}(t)$ is 75%; and

(c)   longer than 90 years, $S^{down}(t)$ is 20%.

(5)   The impact on the value of participations of an insurer in financial and credit institutions, determined in accordance with regulations 130 and 131, of the decrease in the term structure of basic risk-free interest rates must be 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 an insurer's basic own-funds must be considered only to the extent that such impact increases the insurer's basic own-funds.

65   Equity risk capital requirement

(1)   In these Regulations—

"**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.

(2)   In this regulation –

"**type 1 equities**" comprise equities listed in stock exchanges in the countries which are members of the EEA or the 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 and indirect exposures allocated by the insurer to type 2 equities through use of the approach set out in regulation 61(8), unless that asset is included in the—

(i)   interest rate risk capital requirement defined in regulation 62;

(ii)   property risk capital requirement defined in regulation 66; or

(iii)   spread risk capital requirement defined in regulation 69.

(3)   Under regulation 60 an insurer's equity risk capital requirement is derived from the capital requirement for type 1 equities and the capital requirement for type 2 equities.

(4)   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 the individual equity risk types, 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

(5)   Pursuant to (4)(a) the capital requirement for type 1 and type 2 equities is—

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

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) $VolUp_i$ 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; and

(iii) $EquityShock_i$ is the loss of the insurer' basic own-funds 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**
EquityShock$_i$	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) *VolDown$_i$* 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*; and

(iii) *EquityShock$_i$* is as defined in paragraph (b)(iii).

66 Property risk capital requirement

(1) In these Regulations—

"**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) Under regulation 60 an insurer's property risk capital requirement is equal to the insurer's loss in basic own-funds resulting from an instantaneous decrease of 25% in the value of immovable property.

67 Currency risk capital requirement

(1) In these Regulations—

"**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.

(2) In this regulation and regulation 68 —

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

"foreign currency group" means a group of foreign currencies;

"local currency" means the pound sterling, or the Manx pound as defined in the Currency Act 1992; and

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

(3)   For this regulation, an investment of an insurer in—

(a)   a type 1 or 2 equity which is listed on multiple stock exchanges operating with different currencies is sensitive to the currency of the equity's main listing;

(b)   a type 2 equity which is not listed is sensitive to the currency of the country in which the issuer of the equity has its main operations; and

(c)   immovable property is sensitive to the currency of the country in which the property is located.

(4)   An insurer must assign its foreign currency exposures to the foreign currency groups below—

Foreign Currency Group Table 1			
1	**2**	**3**	**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					

(5)   Under regulation 60 an insurer's currency risk capital requirement is —

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

where—

(a) *Market$_{fx,r}$*, *Market$_{fx,c}$* are the currency risk capital requirements for each foreign currency group, as calculated in paragraph (7), according to the rows and columns of the correlation matrix *CurrencyCorr*; 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

(6) If an insurer is exposed to currency risk in relation to one or more of the currencies within a foreign currency group, it must calculate its capital requirement for currency risk for that foreign currency group in accordance with paragraph (7).

(7) The capital requirement for currency risk of a foreign currency group, 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 base currency (as set out in paragraph (10)); and

(b) the capital requirement for the risk of a decrease in value of the foreign currency group against the base currency (as set out in paragraph (10)).

(8) With reference to paragraph (7)(a), the capital requirement for the risk of an increase in value of a foreign currency group against the base currency is equal to an insurer's loss in basic own-funds resulting from an instantaneous increase of 25% in the value of the foreign currency group against the base currency.

(9) With reference to paragraph (7)(b), the capital requirement for the risk of a decrease in value of a foreign currency group against the base currency

is equal to an insurer's loss in basic own-funds resulting from an instantaneous decrease of 25% in the value of the foreign currency group against the base currency.

(10)   For the purposes of paragraph (7), the base currency is the local currency, unless an insurer can meet the requirements of paragraph (11).

(11)   If an insurer has a material exposure to a foreign currency group, which for the purposes of paragraph (12) 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 (12) are met, the insurer can use foreign currency group C as the base currency for the purpose of the calculation in paragraph (7). In this situation the local currency exposure should be substituted for foreign currency group C in the capital requirement calculation.

(12)   The conditions referred to in paragraph (11) 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 would continue to exceed the present value of future cash outflows following the application of the more adverse of the stresses in the scenario set out in paragraph (7), applied to foreign currency group C against the local currency.

(13)   If an 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 the foreign currency group in which the exposure must be included.

68   Currency risk capital requirement optional simplification

(1)   An insurer has the option to replace the capital requirement calculation for currency risk set out in regulation 67(6) to 67(13) with the approach set out in paragraphs (2) to (5) of this regulation.

(2)   If an insurer is exposed to currency risk in relation to one or more foreign currencies, it must calculate its capital requirement for currency risk as the sum of the capital requirements for each foreign currency exposure, determined in accordance with paragraph (3).

(3)   The capital requirement for currency risk of a foreign currency exposure 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; and

(b)   the capital requirement for the risk of a decrease in value of the foreign currency against the insurer's reporting currency.

(4)   Under paragraph (3)(a), the capital requirement for the risk of an increase in value of a foreign currency against an insurer's reporting currency is equal to the insurer's loss in basic own-funds resulting from an instantaneous increase of 25% in the value of the foreign currency against the reporting currency.

(5)   Under paragraph (3)(b), the capital requirement for the risk of a decrease in value of a foreign currency against an insurer's reporting currency is equal to the insurer's loss in basic own-funds resulting from an instantaneous decrease of 25% in the value of the foreign currency against the reporting currency.

69   Spread risk capital requirement

(1)   In these Regulations—

"**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)   Under regulation 60 an insurer's spread risk capital requirement is—

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

where—

(a) $Market_{sp}^{bonds}$ is the capital requirement for spread risk of bonds and loans as defined in regulation 70;

(b) $Market_{sp}^{securitisation}$ is the capital requirement for spread risk on securitisation positions as defined in regulation 73; and

(c) $Market_{sp}^{cd}$ is the capital requirement for spread risk on credit derivatives as defined in regulation 74.

70   Spread risk on bonds and loans

(1)   Under regulation 69(2)(a), the spread risk on bonds and loans capital requirement, $Market_{sp}^{bonds}$, is equal to an insurer's loss in basic own-funds resulting from an instantaneous relative decrease of *stress_i* in the value of each bond or loan *i*, other than mortgage loans meeting the requirements in regulation 82, including bank deposits other than cash at bank referred to in regulation 81.

(2)   An insurer must determine 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, dur_i must be 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 72 and for which a credit assessment by a nominated ECAI is available must be assigned a risk factor $stress_i$ depending on the credit quality step of the counterparty and the modified duration dur_i of the bond or loan i according to the following table—

Dur_i	Credit quality step					
	0	**1**	**2**	**3**	**4**	**5, 6**
≤ 5	$0.9\% \cdot dur_i$	$1.1\% \cdot dur_i$	$1.4\% \cdot dur_i$	$2.5\% \cdot dur_i$	$4.5\% \cdot dur_i$	$7.5\% \cdot dur_i$
$5 < dur \leq 10$	$4.5\% + 0.5\% \cdot (dur_i - 5)$	$5.5\% + 0.6\% \cdot (dur_i - 5)$	$7.0\% + 0.7\% \cdot (dur_i - 5)$	$12.5\% + 1.5\% \cdot (dur_i - 5)$	$22.5\% + 2.5\% \cdot (dur_i - 5)$	$37.5\% + 4.2\% \cdot (dur_i - 5)$
$10 < dur \leq 15$	$7.0\% + 0.5\% \cdot (dur_i - 10)$	$8.5\% + 0.5\% \cdot (dur_i - 10)$	$10.5\% + 0.5\% \cdot (dur_i - 10)$	$20.0\% + 1.0\% \cdot (dur_i - 10)$	$35.0\% + 1.8\% \cdot (dur_i - 10)$	$58.5\% + 0.5\% \cdot (dur_i - 10)$
$15 < dur \leq 20$	$9.5\% + 0.5\% \cdot (dur_i - 15)$	$11.0\% + 0.5\% \cdot (dur_i - 15)$	$13.0\% + 0.5\% \cdot (dur_i - 15)$	$25.0\% + 1.0\% \cdot (dur_i - 15)$	$44.0\% + 0.5\% \cdot (dur_i - 15)$	$61.0\% + 0.5\% \cdot (dur_i - 15)$
> 20	$12.0\% + 0.5\% \cdot (dur_i - 20)$	$13.4\% + 0.5\% \cdot (dur_i - 20)$	$15.5\% + 0.5\% \cdot (dur_i - 20)$	$30.0\% + 0.5\% \cdot (dur_i - 20)$	$46.6\% + 0.5\% \cdot (dur_i - 20)$	$63.5\% + 0.5\% \cdot (dur_i - 20)$

(6)   Bonds and loans which are not listed as a specific exposure in regulation 72, 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 $stress_i$ depending on the duration dur_i of the bond or loan i according to the following table—

Dur_i	$Stress_i$
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 72, for which a credit assessment by a nominated ECAI is not available and for which debtors have posted collateral are assigned a risk factor $stress_i$ 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, $stress_i$ is equal to half of the risk factor that would be determined in accordance with paragraph (6);

(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 (6) would result in a value of the bond or loan i that is lower than the risk-adjusted value of the collateral, $stress_i$ is equal to the average of the following—

(i)   the risk factor determined in accordance with paragraph (6); and

(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 (6) 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, $stress_i$ is determined in accordance with paragraph (6).

(8)   The risk-adjusted value of the collateral is calculated in accordance with regulations 89 and 90.

71   Simplified calculation for spread risk on bonds and loans

(1)   Where regulation 54 is complied with, and upon prior approval from the Authority, an insurer may calculate the capital requirement for spread risk referred to in regulation 70 of this Regulation as follows:

$$Market_{sp}^{bonds} = MV^{bonds} \cdot \left[\sum_i \%MV_i^{bonds} \cdot stress_i \right.$$
$$\left. + \%MV_{no\,rating}^{bonds} \cdot \min\left(1; dur_{no\,rating} \cdot 0.03\right) \right] + \Delta\,Liab_{ul}$$

where—

(a) MV^{bonds} is the total market value of the assets subject to capital requirements for spread risk on bonds and loans;

(b) $\%MV_i^{bonds}$ is the proportion of the portfolio of the assets subject to a capital requirement for spread risk on bonds and loans with credit quality step i, where a credit assessment by a nominated ECAI is available for those assets;

(c) $stress_i$ is a function of the credit quality step i and of the modified duration denominated in years of the assets subject to a capital requirement for spread risk on bonds and loans with credit quality step i, set out in paragraph (2);

(d) $\%MV_{no\,rating}^{bonds}$ is the proportion of bond and loans portfolio for which no credit quality step is available;

(e) dur_i and $dur_{no\ rating}$ is the modified duration denominated in years of the assets subject to a capital requirement for spread risk on bonds and loans where no credit assessment by a nominated ECAI is available; and

(f) $\Delta Liab_{ul}$ denotes the increase in the technical provisions less risk margin for policies where the policyholders bear the investment risk with embedded options and guarantees that would result from an instantaneous decrease in the value of the assets subject to the capital requirement for spread risk on bonds of—

$$MV^{bonds} \cdot \left[\sum_i \%MV_i^{bonds} \cdot stress_i \right.$$

$$\left. + \%MV_{no\ rating}^{bonds} \cdot \min\left(1; dur_{no\ rating} \cdot 0.03\right) \right]$$

(2) For the purpose of (1)(c), $stress_i$ for each credit quality step i, must be equal to $dur_i \cdot b_i$ where dur_i is the modified duration denominated in years of the assets subject to a capital requirement for spread risk on bonds and loans with credit quality step i, and b_i is determined in accordance with the following table—

Credit quality step	0	1	2	3	4	5, 6
b_i	0.9%	1.1%	1.4%	2.5%	4.5%	7.5%

(3) dur_i referred to in paragraphs (1)(e) and (2) must not be lower than 1 year.

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

(1) An 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 $stress_i$ according to the following table—

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

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

(a) the Isle of Man Government;

(b) the European Central Bank;

(c) the central government or central bank of an EU Member State, denominated and funded in the domestic currency of that Member State; and

(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.

(3) The following exposures in the form of bonds and loans are also assigned a risk factor of $stress_i$ of 0%—

(a) exposures to international organisations including—

(i) the European Community;

(ii) the International Monetary Fund; and

(iii) the Bank for International Settlements ; or

(b) exposures that are fully, unconditionally and irrevocably guaranteed by the European Investment Bank or the European Investment Fund.

(4) Exposure in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in paragraphs (2)(a) to (2)(d), if the guarantee meets the requirements set out in regulation 129, must also be assigned a risk factor $stress_i$ of 0%.

(5) Exposures in the form of bonds and loans issued by central governments and central banks other than those referred to in paragraph (2)(c), 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 $stress_i$ depending on the credit quality step and the duration of the exposure according to the following table—

		Credit quality step									
		0 and 1		2		3		4		5 and 6	
Dur_i	$Stress_i$	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i	a_i	b_i
≤ 5	$b_i \cdot dur_i$	-	0%	-	1.1%	-	1.4%	-	2.5%	-	4.5%
5 < dur ≤ 10	$a_i + b_i \cdot (dur_i - 5)$	0%	0%	5.5%	0.6%	7.0%	0.7%	12.5%	1.5%	22.5%	2.5%
10 < dur ≤ 15	$a_i + b_i \cdot (dur_i - 10)$	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%

(6)   Exposures to bonds or loans issued by an insurer 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 $stress_i$ 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

(7)   If the solvency ratio of an insurer falls in between the solvency ratios set out in the table in paragraph (6), the value of $stress_i$ is linearly interpolated from the closest values of $stress_i$ corresponding to the closest solvency ratios set out in paragraph (6).

(8)   If the solvency ratio is lower than 75%, $stress_i$ is equal to the factor corresponding to the credit quality steps 5 and 6.

(9)   If the solvency ratio is higher than 196%, $stress_i$ is the same as the factor corresponding to the credit quality step 1.

(10)   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 $stress_i$ according to the following table—

Duration (years)	$Stress_i$
Up to 5	$7.5\% \cdot dur_i$
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	$Min[63.5\% + 0.5\% \cdot (dur_{i_i} - 20); 1]$

73   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 special purpose entity" or "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 4

(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, which 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 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—

   (i)   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 cm^3 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; or

(vi) credit card receivables;

(i) 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 credit-impaired 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 register 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 loan 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 paragraphs (h)(v) and (h)(vi);

(r)   in the case of securitisations where the underlying exposures are residential loans referred to in 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—

          (i)   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; and

(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 are 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 qualify as type 1 securitisation positions if they meet the requirements set out in paragraphs (2)(a), (2)(c), (2)(d), (2)(h), (2)(j) and (2)(k).

(5)   Under regulation 69(2)(b) an insurer's spread risk on securitisation positions 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 (9); and

(c)   the capital requirement for resecuritisation positions calculated in accordance with paragraph (11).

(6)   Under paragraph (5)(a), an insurer's capital requirement for spread risk on type 1 securitisation positions is equal to the insurer's loss in basic own-funds resulting from an instantaneous permanent decrease in the value of each type 1 securitisation position i held by the insurer, due to the application of the risk factor $stress_i$.

(7)   The risk factor $stress_i$, for type 1 securitisation positions which do not meet the requirements of paragraph (8) is —

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

where—

(a) dur_i denotes the modified duration of securitisation position i denominated in years; and

(b) b_i must be 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, and the guarantee meets the requirements set out in regulation 129, must be assigned a risk factor $stress_i$ of 0%.

(9)   Under paragraph (5)(b) an insurer's capital requirement for spread risk on type 2 securitisation position is equal to the insurer's loss in basic own-funds resulting from an instantaneous permanent decrease in the value of each type 2 securitisation position i held by the insurer, due to the application of the risk factor, $stress_i$.

(10)   The risk factor $stress_i$ for type 2 securitisation positions is —

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

where—

(a) dur_i denotes the modified duration of securitisation position i denominated in years; and

(b) b_i must be 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)   Under paragraph (5)(c), an insurer's capital requirement for spread risk on resecuritisation positions is equal to the insurer's loss in basic own-funds resulting from an instantaneous permanent decrease in the value of each resecuritisation position i, due to the application of the risk factor, $stress_i$.

(12)   The risk factor, $stress_i$, for resecuritisation positions is—

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

where—

(a) dur_i denotes the modified duration of resecuritisation position i denominated in years; and

(b) b_i must be 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 dur_i must not be less than 1 year.

74   Spread risk on credit derivatives

(1)   Under regulation 69(2)(c) an insurer's capital requirement for spread risk on credit derivatives (other than those referred to in paragraphs (4) and (5)), $Market_{sp}^{cd}$ is equal to the higher of the following capital requirements—

(a)   the insurer's loss in basic own-funds resulting from an instantaneous increase in absolute terms of the credit spread of the instruments underlying the credit derivatives in accordance with paragraphs (2) and (3); 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 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)   For the purposes of 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 not available is 5 basis points.

(4)   The capital requirement for spread risk on credit derivatives which are part of an 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 regulations 72(2) and 72(3) is nil.

75   Single name counterparty exposure

(1)   When determining a single name exposure of an insurer in Regulation 76 —

(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.

(2)   An insurer's exposure at default to a counterparty is the sum of its exposures to that counterparty.

(3)   An 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.

(4)   The weighted average credit quality step on a single name exposure of an 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.

76 Market risk concentration capital requirement

(1) In these Regulations—

"**market risk concentration**", 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.

(2) Under regulation 60 an insurer's market risk concentration capital requirement is calculated on the basis of single name exposures and is equal to the following—

$$Market_{conc} = \sqrt{\sum_i \left(Conc_i^2\right)}$$

where—

(a) the sum covers all single name exposures i; and

(b) $Conc_i$ 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 $Conc_i$ is equal to an insurer's loss in basic own-funds resulting 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 77; and

(b) g_i is the risk factor for market risk concentration calculated in accordance with regulation 79.

77 Excess exposure

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.

(1) Under regulation 76(3)(a) the excess exposure on a single name exposure i is equal to the following—

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

where—

(a) E_i denotes an insurer's exposure at default to single name exposure i;

(b) $Assets_{xl}$ is defined in paragraph (2);

(c) CT_i denotes the relative excess exposure threshold determined in accordance with regulation 78.

(2) $Assets_{xl}$ is equal to the value of all assets held by an 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, the United Kingdom or the European Union; and

(iv) there is no current or foreseen material practical or legal impediment to the prompt transfer of eligible 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.

(3) 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 for which the risk factor, assigned in accordance with regulation 79, for market risk concentration is 0%.

78 Relative excess exposure thresholds

Under regulation 77(1)(c), each single name exposure i must be 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 75(4).

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%

79   Risk factor for market risk concentration

(1)   Under regulation 76(3)(b) each single name exposure *i* must be assigned a risk factor g_i for market risk concentration depending on the weighted average credit quality step of the single name exposure *i* determined under regulation 75(4), in accordance with the following table—

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

(2)   If a single name exposure of an 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 must be 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)   For the purpose of the table in paragraph (2)—

(a)   if the solvency ratio falls in between the solvency ratios set out in the table, the value of g_i must be 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 an insurer is an insurer which does not meet its MCR, or is not supervised by an approved supervisor, it must be assigned a risk factor g_i for market risk concentration equal to 73%.

(5)   If a single name exposure of an insurer does not have a credit assessment by a nominated ECAI, and that single name exposure is a credit institution

or a financial institution then that exposure must be assigned a risk factor g_i of 64.5%.

(6) Single name exposures of an insurer, other than those identified in paragraphs (1) to (5) must be assigned a risk factor g_i for market risk concentration of 73%.

80 Treatment of specific exposures in market risk concentration

(1) An insurer's exposures in the form of covered bonds must be 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; and

    (b) the covered bond must be issued by a credit institution which has its registered office in the Isle of Man, the United Kingdom 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) An insurer's exposure to a single immovable property must be assigned a relative excess exposure threshold CT_i of 10% and a risk factor g_i for market risk concentration of 12%.

(5) An insurer's exposures to the following must be assigned a risk factor g_i for market risk concentration of 0%—

    (a) the Isle of Man Government;

    (b) the European Central Bank;

    (c) the central government or central bank of an EU Member State denominated and funded in the domestic currency of that Member State;

    (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; and

    (iii) the Bank for International Settlements.

(6) Exposures that are fully, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in paragraphs (5)(a) to (5)(d), and the guarantee meets the requirements of regulation 129, must be 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 paragraph (5)(c) must be 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
g_i	0%	0%	12%	21%	27%	73%	73%

(8) Exposures in the form of bank deposits must be 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 insurer's SCR.

81   Counterparty default risk capital requirement

(1)   In these Regulations—

"counterparty default risk " in relation to an 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" has the meaning given in paragraph (6); and

"type 2 exposures" has the meaning given in paragraph (7).

(2)   Exposures of an 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 an 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 75.

(5)   Exposures of an insurer are allocated to type 1 and type 2 exposures in accordance with paragraphs (6) and (7).

(6)   Type 1 exposures of an 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 an 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 82;

(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) An insurer may, at its discretion, consider all exposures referred to in 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 an insurer and this risk mitigation technique complies with the requirements of regulations 123 to 129, 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 an 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 82.

(11) Investment guarantees on insurance contracts provided to policyholders by a third party and for which an insurer would be liable should the third party default must be treated as derivatives in the counterparty default risk capital requirement.

82 Specific treatment of mortgage loans

(1) In these Regulations—

"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 an 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), an 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—

(i)   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 an 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), an insurer may use statistical methods to monitor the value of the property and to identify property that needs revaluation.

(5)   An insurer must clearly document the types of residential property it accepts as collateral and its lending policies in this regard.

(6)   An insurer must require the independent valuer of the market value of the property to document that market value in a transparent and clear manner.

(7)   An insurer must have in place procedures to monitor that the property taken as credit protection is adequately insured against the risk of damage.

(8)   An 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 81(7) in a given year; and

(b)   overall losses in a given year.

83   Counterparty default risk capital requirement calculation

(1)   Under regulation 53(2)(b) an insurer's counterparty default risk capital requirement is equal to the following—

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

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)   Under paragraph (1)(a), an insurer's 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 insurer's total loss-given-default on all type 1 exposures, the capital requirement for counterparty default risk on type 1 exposures is—

$$SCR_{default,1} = 3 \cdot σ$$

(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 insurer's 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—

$$SCR_{default,1} = 5 \cdot σ$$

(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 insurer's total loss-given-default on all type 1 exposures, the capital requirement for counterparty default risk on type 1 exposures is equal to the insurer's total loss-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—

$$σ = \sqrt{V}$$

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

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

(f)   pursuant to 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 the insurer's loss-given-default on type 1 exposures, determined in accordance with regulation 84, from counterparties bearing a probability of default PD_j and PD_k respectively determined in accordance with regulation 92;

(g)   pursuant to 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 92; and

    (iii) LGD_i denotes the insurer's loss-given-default on the single name exposure *i* determined in accordance with regulation 84.

(3)   Under paragraph (1)(b), an insurer's capital requirement for counterparty default risk on type 2 exposures is equal to the insurer's loss in basic own-funds resulting 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 insurer's total loss-given-default on exposures to counterparties reference in regulation 81(7)(a), 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, that were included in (a); and

(c) LGD_i denotes the insurer's loss-given-default on the type 2 exposure *i* determined in accordance with regulation 84.

84   Loss-given-default

(1)   An insurer's loss-given-default on a single name exposure is—

(a)   equal to the sum of the insurer's loss-given-default for each exposure 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 123 and 124 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)   An insurer's loss-given-default on a reinsurance arrangement or insurance securitisation is —

$$LGD_i = \max\left(0; 50\% \cdot \left(Recoverables_i + 50\% \cdot RM_{re,i}\right) - F \cdot Collateral_i\right)$$

where—

(a) $Recoverables_i$ denotes the insurer's 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 85;

(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 89; 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 insurer's loss-given-default is—

$$LGD_i = \max\left(0; 90\% \cdot \left(Recoverables_i + 50\% \cdot RM_{re,i}\right) - F' \cdot Collateral_i\right)$$

(4)   An insurer's loss-given-default on a derivative is —

$$LGD_i = \max\left(0; 90\% \cdot \left(Derivative_i + RM_{fin,i}\right) - F' \cdot Collateral_i\right)$$

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 85;

(c)   *Collateral$_i$* denotes the risk-adjusted value of collateral in relation to the derivative calculated in accordance with regulation 89; 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)   An insurer's loss-given-default on a mortgage loan is —

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

where—

(a)   *Loan$_i$* denotes the value of the mortgage loan *i*; and

(b) $Mortgage_i$ is the risk-adjusted value of the mortgage *i* calculated in accordance with regulation 91.

(6)   An insurer's 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)   An insurer's loss-given-default—

(a)   on cash at bank;

(b)   of a deposit with a ceding insurer;

(c)   of an item listed in regulation 81(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 the value of the exposure.

85   Risk-mitigating effect on underwriting risk and market risk

Under regulations 84(2)(b) and 84(4)(b), the risk-mitigating effect of a reinsurance arrangement, securitisation or derivative on an insurer's underwriting risks and market risks, must be determined as the difference between the following capital requirements—

(a)   the insurer's hypothetical capital requirement for underwriting risk or market risk that would apply if the reinsurance arrangement, securitisation or derivative did not exist; and

(b)   the insurer's capital requirement for underwriting risk or market risk determined in accordance with regulation 53.

86   Simplified calculation of the risk mitigating effect on underwriting risk and market risk

(1)   Where regulation 54 is complied with, an insurer may calculate the risk-mitigating effect on underwriting and market risk of a reinsurance arrangement, securitisation or derivative referred to in regulation 85 as the difference between the following capital requirements—

(a)   the sum of the hypothetical capital requirement for the sub-modules of the underwriting and market risk modules of the insurer affected by the risk-mitigating technique, as if the reinsurance arrangement, securitisation or derivative did not exist;

(b)   the sum of the capital requirements for the sub-modules of the underwriting and market risk modules of the insurer affected by the risk-mitigating technique.

87   Simplified calculation of the risk mitigating effect for reinsurance arrangements or securitisations

(1)   Where regulation 54 is complied with, and upon prior approval from the Authority, an insurer may calculate the risk-mitigating effect on underwriting risk of a reinsurance arrangement or securitisation referred to in regulation 85 as follows—

$$RM_{re,all} \cdot \frac{Recoverables_i}{Recoverables_{all}}$$

where—

(a) $RM_{re,all}$ is the risk mitigating effect on underwriting risk of the reinsurance arrangements and securitisations for all counterparties calculated in accordance with paragraph (2);

(b) $Recoverables_i$ is the best estimate of amounts recoverable from the reinsurance arrangement or securitisation and the corresponding debtors for counterparty i; and

(c) $Recoverables_{all}$ is the best estimate of amounts recoverable from the reinsurance arrangements and securitisations and the corresponding debtors for all counterparties.

(2)   The risk mitigating effect on underwriting risk of the reinsurance arrangements and securitisations for all counterparties referred to in paragraph (1) is the difference between the following capital requirements—

(a)   the hypothetical capital requirement for underwriting risk of the insurer as if none of the reinsurance arrangements and securitisations exist;

(b)   the capital requirement for underwriting risk of the insurer.

88   Simplified calculation of the risk mitigating effect for proportional reinsurance arrangements

(1)   Where regulation 54 is complied with, and upon prior approval from the Authority, an insurer may calculate the risk-mitigating effect on underwriting risk j of a proportional reinsurance arrangement for a counterparty i referred to in regulation 85 as follows—

$$\frac{Recoverables_i}{BE - Recoverables_{all}} \cdot SCR_j$$

where—

(a) BE is the best estimate of obligations gross of the amounts recoverable;

(b) $Recoverables_i$ is the best estimate of amounts recoverable from the proportional reinsurance arrangement and the corresponding debtors for counterparty i;

(c) $Recoverables_{all}$ is the best estimate of amounts recoverable from the proportional reinsurance arrangements and the corresponding debtors for all counterparties; and

(d) SCR_j is the capital requirement for underwriting risk j of the insurer.

89   Risk adjusted value of collateral

(1)   Under regulation 84(2)(c) the risk-adjusted value of collateral provided by way of security, must be 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)   an 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 128 are met and the requirement in paragraph (1)(b) is not met, the risk-adjusted value of a collateral provided by way of security, must be 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 128 are not met, the risk- adjusted value of collateral provided by way of security must be zero.

(4)   Under regulation 84(2)(c), the risk-adjusted value of a collateral of which full ownership is transferred, must be 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 must be the difference between the following capital requirements—

(a)   an insurer's hypothetical capital requirement for market risk that would apply if the assets held as collateral were not included in the calculation; and

(b)   the insurer's hypothetical capital requirement for market risk 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.

90   Simplified calculation of the risk-adjusted value of collateral to take into account the economic effect of the collateral

(1)   Where regulation 54 is complied with, and upon prior approval from the Authority, and where the counterparty requirement and the third party requirement referred to in regulation 89(1) are both met, an insurer may, for the purposes of regulation 89, calculate the risk-adjusted value of a collateral provided by way of security as referred to in regulation 84(2)(c), as —

$$Collateral = 0.85 \cdot MarketValue_{Collateral}$$

(2)   Where regulations 54 and 128 of this Regulation are complied with, and where the counterparty requirement referred to in regulation 89(1)) is met and the third party requirement referred to in regulation 89(1) is not met, an insurer may, for the purposes of regulation 89, calculate the risk-adjusted value of a collateral provided by way of security as referred to in regulation 84(2)(c), as—

$$Collateral = 0.75 \cdot MarketValue_{Collateral}$$

91   Risk adjusted value of mortgage

(1)   Under regulation 84(5), the risk-adjusted value of mortgage must be 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 must be the market value reduced as appropriate to reflect the results of the monitoring required under regulation 82(3) and to take account of any prior claims on the property.

(3) 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) The adjustment for market risk referred to in paragraph (1) is the difference between the following capital requirements—

(a) an insurer's hypothetical capital requirement for market risk that would apply if the residential property held as mortgage were not included in the calculation; and

(b) the insurer's hypothetical capital requirement for market risk 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.

92   Probability of default

(1) Under regulation 84, 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 an insurer's loss-given-default in respect of those exposures.

(2) Single name exposures i, for which a credit assessment by a nominated ECAI is available, must be 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 but where that insurer meets its MCR, must be assigned a probability of default PD_i depending on the insurer's solvency ratio, in accordance with the following table—

Solvency ratio	≥196%	≥175%	≥150%	≥125%	≥122%	≥100%	≥95%	≥75%	<75%
PD_i	0.01%	0.05%	0.1%	0.2%	0.24%	0.5%	1.2%	4.2%	4.2%

(4) Exposures of an insurer to another insurer that does not meet its MCR or equivalent must be assigned a probability of default of 4.2%.

(5)   Exposures of an insurer to a bank, incorporated in the Isle of Man and licensed under the Financial Services Act 2008 to conduct deposit taking activity, for which a credit assessment by a nominated ECAI is not available, must be assigned a probability of default of 0.5%.

(6)   The probability of default on single name exposures other than those identified in paragraphs (1) to (5) must be assigned a probability of default of 4.2%.

(7)   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 123 to 129, 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.

93   Life underwriting risk capital requirement

(1)   In these Regulations—

"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)   Under regulation 53(2)(c), an insurer's life underwriting risk capital requirement is derived from the following life underwriting sub-risk capital requirements —

(a)   mortality risk;

(b)   longevity risk;

(c)   disability and morbidity risk;

(d)   lapse risk;

(e)   expense risk;

(f)   revision risk; and

(g)   life catastrophe risk.

(3)   The capital requirement for life underwriting risk is —

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

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

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

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

94 Mortality risk capital requirement

(1) In these Regulations—

"**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) Under regulation 93(2)(a) an insurer's mortality risk capital requirement is the insurer's loss in basic own-funds resulting 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 those insurance contracts for which an increase in mortality rates leads to an increase in technical provisions without the risk margin.

(5) An insurer may use the following assumptions to identify insurance contracts for which an increase in mortality rates leads to an increase in technical provisions without the risk margin —

　　(a) multiple insurance contracts in respect of the same insured person may be treated as if they were one insurance contract; and

　　(b) if the calculation of technical provisions is based on groups of contracts the identification of the contracts for which technical provisions increase under an increase of mortality rates may also be based on those groups of contracts instead of single contracts, provided that it yields a result that is not materially different.

(6) With regard to reinsurance obligations, the identification of the contracts for which technical provisions increase under an increase in mortality rates must apply to the underlying insurance contracts only and is carried out in accordance with paragraphs (4) and (5).

95 Longevity risk capital requirement

(1) In these Regulations—

"**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) Under regulation 93(2)(b), an insurer's longevity risk capital requirement is the insurer's loss in basic own-funds resulting 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 contracts for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin.

(4) An insurer may use the following assumptions to identify insurance contracts for which a decrease in mortality rates leads to an increase in technical provisions without the risk margin —

(a) multiple insurance contracts in respect of the same insured person may be treated as if they were one insurance contract; and

(b) if the calculation of technical provisions is based on groups of contracts, the identification of the contracts for which technical provisions increase under an decrease of mortality rates may also be based on those groups of contracts instead of single contracts, provided that it yields a result that is not materially different.

(5) With regard to reinsurance obligations, the identification of the contracts for which technical provisions increase under an decrease in mortality rates must apply to the underlying insurance contracts only and is carried out in accordance with paragraphs (3) and (4).

96   Disability and morbidity capital requirement

(1) In these Regulations—

"**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) Under regulation 93(2)(c), an insurer's disability and morbidity risk capital requirement is the insurer's loss in basic own-funds resulting 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 an 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.

97 Lapse risk capital requirement

(1) In these Regulations—

"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;

(2) In this regulation, **""policyholder options"**, are as set out in paragraphs (2) and (4) and "discontinuance" means the exercising by the policyholder of the relevant policyholder options.

(3) 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.

(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)   Under regulation 93(2)(d), an insurer's lapse risk capital requirement is 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 (11).

(6)   Under paragraph (5)(a) the capital requirement for the risk of a permanent increase in lapse rates is an insurer's loss in basic own-funds resulting from an instantaneous permanent increase of 50% in the exercise rates of the relevant policyholder options.

(7)   Under 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 an insurer's technical provisions without the risk margin.

(8)   Under paragraph (5)(b), an insurer's capital requirement for the risk of a permanent decrease in lapse rates is the insurer's loss in basic own-funds resulting from an instantaneous permanent decrease of 50% in the exercise rates of the relevant policyholder options.

(9)   Under 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)   For the purposes of paragraph (3)(b), the change in the option exercise rate referred to in paragraphs (6) and (8) is applied to the rate reflecting that the relevant option is not exercised.

(11)   Pursuant to paragraph (5)(c), an insurer's capital requirement for mass lapse risk is the insurer's loss in basic own-funds resulting from a combination of the following instantaneous events—

(a)   the discontinuance of 40% of the insurance contracts 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.

(12)   Under paragraph (11), for the purposes of determining the loss in basic own-funds of an insurer under the events referred to in paragraphs (11)(a)

and (11)(b), 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 contract basis.

98   Expense risk capital requirement

(1)   In these Regulations—

"**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)   Under regulation 93(2)(e), an insurer's expense risk capital requirement is the insurer's loss in basic own-funds resulting 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 the changes referred to in paragraph (2) to its own expenses and, if relevant, to the expenses of the cedant.

99   Revision risk capital requirement

(1)   In these Regulations—

"**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)   Under regulation 93(2)(f), an insurer's revision risk capital requirement is the insurer's loss in basic own-funds resulting 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 contracts could increase as a result of changes in the legal environment or in the state of health of the person insured.

100   Life catastrophe risk capital requirement

(1)   In these Regulations—

"**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) Under regulation 93(2)(g), an insurer's life catastrophe risk capital requirement is the insurer's loss in basic own-funds resulting 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, 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 regulations 94(5) and 94(6).

101 Health underwriting risk capital requirement

(1) In these Regulations—

   "**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) Under regulation 53(2)(d), an insurer's health underwriting risk capital requirement is derived from the following capital requirements for health underwriting sub-risks—

   (a)   NSLT health underwriting risks;

   (b)   SLT health underwriting risks; and

   (c)   health catastrophe risk.

(3) An insurer's capital requirement for health underwriting risk is —

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

   where—

   (a)   the sum covers all possible combinations (r,c) of the capital requirements set out in 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 and proportional reinsurance	An obligation of the insurer that covers the provision of 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.
B: Income protection insurance and proportional reinsurance	An obligation of the insurer that covers the provision of financial compensation arising from illness, accident, disability or infirmity, where the underlying business is pursued on a NSLT basis, other than obligations included in segments A and C.
C: Workers' compensation insurance and proportional reinsurance	An obligation of the insurer that covers the provision of financial compensation arising from 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 reinsurance	Non-proportional reinsurance obligations of the 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 paragraph (a); and

(c)   the health catastrophe risk capital requirement to all health insurance and reinsurance obligations.

102   SLT health underwriting risk capital requirement

(1)   Under regulation 101(2)(b), an insurer's SLT health underwriting risk capital requirement of the health underwriting capital requirement must consist of all of the following capital requirements—

(a)   SLT health mortality risk determined in accordance with regulation 103;

(b)   SLT health longevity determined in accordance with regulation 104;

(c)   SLT health disability-morbidity determined in accordance with regulation 105;

(d)   SLT health expense risk determined in accordance with regulation 108;

(e)   SLT health revision risk determined in accordance with regulation 109; and

(f)   SLT health lapse risk determined in accordance with regulation 110.

(2)   The capital requirement for SLT health underwriting risk is —

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

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 $HealthCorr^{SLT}$ —

$HealthCorr^{SLT}$	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

103   SLT health mortality risk capital requirement

(1)   In these Regulations—

"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)   Under regulation 102(1)(a), an insurer's SLT health mortality risk capital requirement is the insurer's loss in basic own-funds resulting 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 an 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 contracts 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 regulations 94(5) and 94(6).

104   SLT health longevity risk capital requirement

(1)   In these regulations—

"**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)   Under regulation 102(1)(b), an insurer's SLT health longevity risk capital requirement is the insurer's loss in basic own-funds resulting 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 contracts 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 contracts 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 regulations 95(4) and 95(5).

105   SLT health disability and morbidity risk capital requirement

(1)   In these Regulations—

"**SLT health 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 medical expenses and income protection disability-morbidity risk.

(2) Under regulation 102(1)(c), an insurer's SLT health disability-morbidity risk capital requirement of is the sum of —

    (a) the insurer's capital requirement for SLT health medical expense disability-morbidity risk, determined in accordance with regulation 106; and

    (b) the insurer's capital requirement for SLT health income protection disability-morbidity risk, determined in accordance with regulation 107.

(3) An 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.

106 SLT health medical expense disability and morbidity risk capital requirement

(1) In these Regulations—

    "**SLT health medical expense 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 or trend of the medical expenses incurred in servicing SLT health medical expense disability-morbidity insurance contracts.

(2) Under regulation 105(2)(a), an insurer's SLT health expense disability-morbidity risk capital requirement is the larger of —

    (a) the insurer's capital requirement for the increase of medical payments determined in accordance with paragraph (3); and

    (b) the insurer's capital requirement for the decrease of medical payments determined in accordance with paragraph (4).

(3) Under paragraph (2)(a) an insurer's capital requirement for the increase of medical payments is the insurer's loss in basic own-funds resulting 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; and

    (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)   Under paragraph (2)(b), an insurer's capital requirement for the decrease of medical payments is the insurer's loss in basic own-funds resulting 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; and

(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%.

107   SLT health income protection disability-morbidity risk capital requirement

(1)   In these Regulations—

"**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)   Under regulation 105(2)(b), an insurer's SLT health income protection disability-morbidity risk capital requirement is the insurer's loss in basic own-funds resulting 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) must not exceed a value of 1.

108   SLT health expense risk capital requirement

(1)   In these Regulations—

"**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)   Under regulation 102(1)(d), an insurer's SLT health expense risk capital requirement is the insurer's loss in basic own-funds resulting 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.

109   SLT health revision risk capital requirement

(1)   In these Regulations—

"**SLT health 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)   Under regulation 102(1)(e), an insurer's SLT health revision risk capital requirement is the insurer's loss in basic own-funds resulting 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 contracts could increase as a result of changes in inflation, the legal environment or the state of health of the person insured.

110   SLT health lapse risk capital requirement

(1)   In these Regulations—

"**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;

(2)   In this regulation, "**policyholder options**" are as set out in regulations 97(2) and 97(4) and "**discontinuance**" has the same meaning as regulation 97(1).

(3)   Under regulation 102(1)(f), an insurer's SLT health lapse risk capital requirement is the largest of —

(a)   the risk of a permanent increase in SLT health lapse rates determined in accordance with paragraph (4);

(b) the risk of a permanent decrease in SLT health lapse rates determined in accordance with paragraph (6); or

(c) SLT health mass lapse risk determined in accordance with paragraph (8).

(4) Under paragraph (3)(a) an insurer's capital requirement for the risk of a permanent increase in SLT health lapse rates is the insurer's loss in basic own-funds resulting from an instantaneous permanent increase of 50% in the exercise rates of the relevant policyholder options.

(5) Under paragraph (4), 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.

(6) Under paragraph (3)(b), an insurer's capital requirement for the risk of a permanent decrease in SLT health lapse rates is the insurer's loss in basic own-funds resulting from an instantaneous permanent decrease of 50% in the option exercise rates of the relevant policyholder options.

(7) Under paragraph (6), 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.

(8) Under paragraph (3)(c), an insurer's capital requirement for SLT health mass lapse risk is the insurer's loss in basic own-funds resulting 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.

(9) The events referred to in paragraph (8)(a) must apply uniformly to all insurance contracts concerned.

(10) In relation to reinsurance contracts the event referred to in paragraph (8)(a) must apply to the underlying insurance contracts.

(11) For the purposes of determining an insurer's loss in basic own-funds under the event referred to in paragraph (8)(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 contract basis.

111 NSLT health underwriting risk capital requirement

(1) Under regulation 101(2)(a), an insurer's NSLT health underwriting risk capital requirement must consist of all of the following capital requirements—

(a) NSLT health premium and reserve risk, determined in accordance with regulation 112; and

(b) NSLT health lapse risk, determined in accordance with regulation 115.

(2) An insurer's capital requirement for NSLT health underwriting risk is—

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

where—

(a) $Health_{pr}^{NonSLT}$ denotes the capital requirement for NSLT health premium and reserve risk; and

(b) $Health_{lapse}^{NonSLT}$ denotes the capital requirement for NSLT health lapse risk.

112 NSLT health premium and reserve risk capital requirement

Under regulation 111(1)(a), an insurer's capital requirement for NSLT health premium and reserve risk is —

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

where—

(a) θ is equal to 3;

(b) V is the volume measure for NSLT health insurance obligations determined in accordance with regulation 113; and

(c) σ is the combined standard deviation for NSLT health premium and reserve risk determined in accordance with regulation 114.

113 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) Under regulation 112(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 an insurer's NSLT segments set out in regulation 101(5)(a).

(3) For all NSLT segments, the volume measure of a particular segment s is—

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

where—

(a) $V_{(prem,s)}$ denotes the volume measure for premium risk of segment s determined in accordance with paragraph (4); and

(b) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment s determined in accordance with paragraph (8).

(4)   For all of an insurer's NSLT segments, the volume measure for premium risk of a particular segment s is —

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

where—

(a) P_s 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 preceding 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 its NSLT segments an insurer may, as an alternative to the calculation set out in paragraph (4), choose to calculate the volume measure for premium risk of a particular segment s in accordance with the following formula—

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

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 paragraph (a) will be met; and

(c)   the insurer has informed the Authority about the decision referred to in 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 paragraphs (4)(a) to (4)(d).

(7)   For the purposes of the calculations set out in paragraphs (4) and (5), an insurer must use net premiums, 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 of a risk mitigation technique.

(8) For all of an insurer's 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.

114   Standard deviation for NSLT health premium and reserve risk

(1) Under regulation 112(c), the standard deviation for NSLT health premium and reserve risk is —

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

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 113(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 regulations 113(4), 113(5) and 113(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 paragraph (2); and

(e) $CorrS_{r,c}$ are the entries of the correlation matrix $CorrS$—

(i) A = NSLT 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	A	B	C	D
A	1	0.5	0.5	0.5
B	0.5	1	0.5	0.5
C	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 —

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

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 0;

(c) $V_{(prem,s)}$ denotes the volume measure for premium risk of segment s determined in accordance with regulation 113(4) to 113(7); and

(d) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment s determined in accordance with regulation 113(8).

(3) For all of an insurer's NSLT segments, the standard deviation for NSLT health premium risk of a particular segment is 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 is —

Segment, s	Standard deviation for premium risk (gross of reinsurance)
A	5.0%
B	8.5%
C	8.0%
D	17.0%

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

Segment, *s*	Standard deviation for reserve risk (net of reinsurance)
A	5%
B	14%
C	11%
D	20%

115 NSLT health lapse risk capital requirement

(1) In these Regulations—

"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;

(2) In this regulation, **"policyholder options"** are as set out in regulations 97(2) and 97(4) and "discontinuance" has the same meaning as regulation 97(1).

(3) Under regulation 111(1)(b), an insurer's capital requirement for NSLT health lapse risk, is the insurer's loss in basic own-funds resulting 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.

(4) The events referred to in paragraph (2) must apply uniformly to all insurance contracts concerned.

(5) In relation to reinsurance contracts the event referred to in paragraph (3)(a) must apply to the underlying insurance contracts.

(6) For the purposes of determining an insurer's loss in basic own-funds under the event referred to in paragraph (3)(a), the insurer must base the calculation on the type of discontinuance that most negatively affects the insurer's basic own-funds on a per contract basis.

116 Health catastrophe risk capital requirement

(1) In these Regulations—

"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) Under regulation 101(2)(c), an insurer's health catastrophe risk capital requirement is —

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

where—

(a) $Health_{massaccident}$ denotes the insurer's capital requirement for health catastrophe mass accident risk, determined in accordance with regulation 117;

(b) $Health_{concentration}$ denotes the insurer's capital requirement for health catastrophe accident concentration risk, determined in accordance with regulation 118; and

(c) $Health_{pandemic}$ denotes the insurer's capital requirement for health catastrophe pandemic risk, determined in accordance with regulation 119.

(3) An insurer must apply—

(a) the mass accident risk capital requirement to health insurance obligations other than workers' compensation insurance obligations (as set out in regulation 101(5)(a));

(b) the accident concentration risk capital requirement to workers' compensation insurance obligations and to group income protection insurance obligations (as set out in regulation 101(5)(a)); and

(c) the pandemic risk capital requirement to health insurance obligations other than workers' compensation insurance obligations (as set out in regulation 101(5)(a)).

117 Health catastrophe mass accident risk capital requirement

(1) Under regulation 116(2)(a), an insurer's heath catastrophe mass accident risk capital requirement is —

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

where—

(a) the sum includes all countries that the insurer has insurance obligations in; and

(b) $Health_{ma,c}$ denotes the insurer's capital requirement for mass accident risk for country c, determined in accordance with paragraph (2).

(2)   An insurer's capital requirement for the risk of a catastrophic mass accident in a particular country c is the insurer's loss in basic own-funds resulting 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 —

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

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	R_c
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 e	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 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 contracts complies with regulation 36.

118   Health catastrophe accident concentration risk capital requirement

(1)   Under regulation 116(2)(b), an insurer's heath catastrophe accident concentration risk capital requirement is—

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

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 an insurer's capital requirement for health catastrophe accident concentration risk of country c is the insurer's loss in basic own-funds resulting 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 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 e	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, an 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 contracts complies with the requirements set out in regulation 36.

119 Health catastrophe pandemic risk capital requirement

(1) In these Regulations—

"**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) Under regulation 116(2)(c), an insurer's health catastrophe pandemic risk capital requirement is the loss in the insurer's basic own-funds resulting 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—

$$E = \sum_i E_i$$

where—

(a) the sum includes all insured persons i covered by the insurer's income protection insurance obligations other than workers' compensation insurance obligations (as defined in regulation 101(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 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.

120 Treatment of participations in the calculation of the SCR

(1) Under regulation 60, when determining the relevant market capital requirements for the equity and subordinated liability components of a participation of the insurer in a related entity, an insurer must—

(a) apply the interest rate and spread risk scenarios, in regulations 62 and 69 respectively, to subordinated liability holdings of the insurer in the related entity;

(b) apply the relevant equity risk scenarios, in regulation 65, to equity holdings of the insurer in the related entity, such as ordinary or preference share capital; and

(c) apply additional market risk scenarios, such as currency risk, if appropriate.

121 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 145, or a marked-to-model portfolio, the insurer must calculate a notional SCR for each ring-fenced fund, marked-to-model portfolio and the residual.

(2) An insurer's SCR is the sum of the notional SCRs for each ring-fenced fund, marked-to-model portfolio and the residual.

(3) If the ring-fenced fund, marked-to-model portfolio or the residual is determined to have a negative notional SCR, the notional SCR must be set to zero before being aggregated with positive notional SCRs in the SCR calculation in paragraph (2).

(4) With reference to paragraph (1), if the insurer has determined it has a non-material ring-fenced fund, the assets and liabilities of that ring-fenced arrangement must still be included within the residual of the insurer's portfolio.

(5) An insurer must determine its notional SCRs before making any adjustment to its basic own-funds required by regulation 143, to avoid circularity in the calculation.

(6) An insurer must calculate its notional SCRs 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 own-funds as a whole must be used to determine the insurer's capital requirement under that scenario, for each ring-fenced fund, marked-to–model portfolio and the residual.

(7) With reference to paragraph (6), 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, across each ring-fenced fund, marked-to-model portfolio and the residual and then considering which stress determines the capital requirement under that scenario.

(8) The notional SCRs must be calculated net of the mitigating effect of future discretionary benefits in accordance with regulation 56.

(9)   If profit participation exists, an insurer's assumptions relating to the variation of future bonus rates must 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.

(10)   For each ring-fenced fund, marked-to-model portfolio and the residual, the relevant downward adjustment of the notional SCR for the loss-absorbing capacity of technical provisions must not exceed the amount of future discretionary benefits within that fund.

122   Risk mitigation techniques, methods and assumptions

(1)   If an insurer transfers its underwriting risks using reinsurance contracts or special purpose vehicles that meet the requirements of regulations 123, 125 and 127, and if these arrangements provide the insurer with protection against the events in the scenario-based calculations in regulation 51, the risk-mitigating effects of these arrangements must be allocated to the scenario-based calculations in a manner that, without double-counting, captures the economic effect of the protections provided.

(2)   If an insurer transfers its underwriting risks using finite reinsurance, these contracts must only be recognised in the insurer's scenario based calculations in regulation 51, to the extent underwriting risk is transferred to the counterparty of the contract.

(3)   Finite reinsurance, or similar arrangements for which 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 113.

123   Qualitative criteria for risk mitigation techniques

(1)   An insurer must only allow for a risk mitigation technique in its capital requirement calculations if that technique meets the following qualitative criteria —

(a)   the contractual arrangement of the risk mitigation technique, including transfer of risk, is 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 risk mitigation technique and the related risks on an ongoing basis;

(d)   the insurer has, in the event of a default, insolvency or bankruptcy of a counterparty or in the event of another credit event of a

counterparty specified in the transaction documentation for the arrangement, a direct claim on that counterparty; and

(e)   there is no double counting of risk mitigation effects in the insurer's eligible own-funds and in the calculation of its SCR.

(2)   To be fully taken account of in an insurer's capital requirement calculations, as well as meeting the criteria in paragraph (1), the risk mitigation effect of the risk mitigation technique must remain in force for at least 12 months following the valuation date.

(3)   If the risk mitigation technique meets the requirements of paragraph (1), but will only be in force for a period shorter than 12 months, subject to it meeting the requirements of paragraph (4), it may only be taken into account in the insurer's capital requirement calculations, 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.

(4)   If the risk mitigation technique will only be in force for a period shorter than 12 months but an 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 requirement calculations 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 procedure referred to in paragraph (a);

(e)   the replacement of the risk mitigation technique is realistic and consistent with the insurer's 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.

124 Effective transfer of risk

(1) A risk mitigation technique may only be fully taken into account in an insurer's capital requirement calculations 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 arrangement governing the risk mitigation technique must ensure that the extent of the cover provided to an 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 an insurer's capital requirements.

(5) Under regulation 123(1)(a) the determination that the contractual arrangement and transfer of risk are legally effective and enforceable in all relevant jurisdictions must, as applicable, take into account the following—

(a) whether the contractual arrangement is subject to any condition that could undermine the effective transfer of an 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.

125 Reinsurance risk mitigation techniques

(1) If an insurer transfers its underwriting risks using reinsurance contracts, the qualitative criteria set out in regulations 123, 124 and this regulation must be met in order for the insurer to allow for the technique in its capital requirement calculations.

(2) The counterparty to the reinsurance contract must be one of the following—

(a) an insurer who meets its SCR under these Regulations or an equivalent approach in the jurisdiction of an approved supervisor; or

(b) an insurer, who doesn't comply with 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 an 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) In the circumstances of paragraph (3), the effect of the risk mitigation technique must be reduced by the percentage by which the solvency ratio falls below 100%.

126 Financial risk mitigation techniques

(1) If an insurer transfers its risks using financial risk mitigation techniques, such as the purchase or issuance of financial instruments, the qualitative criteria set out in regulations 123, 124 and this regulation must be met order for the insurer to allow for the technique in its capital requirement calculations.

(2) The risk mitigation technique must be consistent with an insurer's written and in-force governance procedure on risk management relevant to the insurer's use of financial risk mitigation techniques.

(3) An insurer must be able to value the relevant assets and 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) If the risk mitigation technique includes the use of financial instruments, the financial instrument must have a credit quality step of 3 or better, assigned in accordance with regulation 50.

(5) If the risk mitigation technique is not a financial instrument, the counterparties to the risk mitigation technique must have a credit quality step of 3 or better, assigned in accordance with regulation 50.

127 Additional qualifying criteria for risk mitigation techniques

(1) In the event that the qualitative criteria in regulations 125(1), 126(3) and 126(4) are not met, an insurer must only take into account the risk mitigation technique 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 123, 124, 126(1) and 126(2) and collateral arrangements exist that meet the criteria provided in regulation 128; or

(b)   the risk mitigation technique is accompanied by another risk mitigation technique, where the other technique when viewed in combination with the first technique meets the qualitative criteria in regulations 123, 124, 126(1) and 126(2), and where the counterparties to the other technique meet the criteria provided in regulations 125(1), 126(3) and 126(4).

(2)   For the purposes of 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.

128   Risk mitigation using collateral arrangements

(1)   In the calculation of the BSCR determined in accordance with regulation 53, collateral arrangements must only be recognised if, in addition to the qualitative criteria in regulations 123 and 124, 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; or

(ii)   the collateral is guaranteed by a counterparty, other than a counterparty referred to in regulation 80(8) and 77(2) 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 an 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 step of 3 or better, assigned in accordance with regulation 50;

(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.

129 Risk mitigation using guarantees

(1)   In the calculation of the BSCR under regulation 53, guarantees used by an insurer to mitigate the risk of a counterparty defaulting on its obligations are only recognised if, in addition to the qualitative criteria in regulations 123 and 124, 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.

130   Identifying participations by virtue of share ownership

(1)   For the purpose of valuing the assets and liabilities of an 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 which is either an insurer subject to these Regulations or to the solvency regime of an approved supervisor, the assessments under paragraph (1)(a) only relate to paid up ordinary share capital whilst participations under paragraph (1)(b) relate to both paid-up ordinary share capital and paid-up preference shares.

131   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 an 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)   An insurer is deemed to be able to exert a dominant or significant influence over the related entity if —

(a)   the insurer has shareholdings in the related entity that either currently meet the requirements of regulation 130, or could potentially meet those requirements 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

132   Minimum capital requirement

(1)   An insurer must hold, at all times, eligible basic own-funds of an amount that is equal to or greater than its MCR, determined in accordance with this regulation.

(2)   An insurer's MCR is —

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

where—

(a) MCR_{SCR} is determined in accordance with paragraph (3); and

(b) $FMCR$ is the absolute floor of the MCR and is £3 million.

(3) MCR_{SCR} is —

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

where—

(a) SCR is the insurer's SCR determined in accordance with Part 3 of these Regulations; and

(b) SCR_{noMA} is the insurer's SCR determined in accordance with Part 3 of these Regulations, with the exception that the insurer must not allow for any future management actions as defined in regulation 24;

(4)   If the $FMCR$ as defined in paragraph (2)(b) determines an insurer's MCR, the insurer must, as soon as is practicable, notify the Authority that this is the case and provide the Authority with sufficient information to enable the Authority to understand why this is the case.

PART 5: OWN-FUNDS

133 Eligibility

(1)   An insurer's eligible capital resources are its eligible own-funds.

(2)   For the purpose of these Regulations, an insurer's 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)   To be classed as 'eligible' an own-fund item must be—

(a)   permanently available;

(b)   subordinated;

(c)   of sufficient duration; and

(d)   absent 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, subordination or sufficiency of duration.

(4)   Other capital resources of an insurer that do not meet the requirements of paragraphs (2) and (3) are not eligible capital resources (and as such they may be referred to in these Regulations as "ineligible" for that purpose).

(5)   In paragraph (3) —

"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 own-fund items possess the characteristics set out in paragraphs (3)(a) and (3)(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 must 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) An insurer's eligible own-fund items are each classified as Tier 1, Tier 2, Tier 3 or as ineligible in accordance with this Part.

(7) The classification of an eligible own-fund item of an insurer under this Part determines the degree to which that item is eligible in meeting the insurer's—

    (a) SCR as follows—

        (i) subject to paragraph (8), 50% or more of the eligible own-funds used by the insurer to meet its SCR must be classified as Tier 1;

        (ii) if applicable, the remainder of the eligible own-funds used by the insurer to meet its SCR, can be classified as either Tier 2 or Tier 3, subject to the restriction in paragraph (iii);

        (iii) up to (but not including) 15% of the eligible own-funds used by the insurer to meet its SCR can be classified Tier 3; and

    (b) MCR as follows—

        (i) subject to paragraph (8), 80% or more of the eligible own-funds used by the insurer to meet its MCR must be classified as Tier 1;

        (ii) if applicable, the remainder of the eligible own-funds used by the insurer to meet its MCR must be classified as Tier 2; and

        (iii) eligible own-funds of the insurer that are classified as Tier 3 are ineligible for meeting its MCR.

(8) Within the amount referred to in 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 eligible own-fund items (as applicable)—

    (a) items referred to in regulation 135(1)(a)(iii);

    (b) items referred to in regulation 135(1)(a)(v); and

    (c) items referred to in regulation 135(1)(b);

(9) The classification of particular own-fund items of the insurer into Tier 1, Tier 2 and Tier 3 is as—

    (a) specified in this Part; or

(b)   approved by the Authority in accordance with this Part.

134   Basic own-funds

(1)   An insurer's basic own-funds consist of—

(a)   the excess of its assets over liabilities; and

(b)   its subordinated liabilities.

(2)   The amounts in paragraphs (1)(a) and (1)(b) must be valued in accordance with regulation 10.

(3)   The amount in paragraph (1)(a) must be reduced by the amount of any own shares held by the insurer, including direct and indirect holdings.

(4)   Basic own-fund items are classified into Tiers as set out in the remainder of this Part.

135   Tier 1 basic own-funds – list of own-fund items

(1)   Where an insurer holds one of the basic own-fund items listed in paragraphs (a) or (b), the insurer must classify the item as Tier 1, if the item meets the eligibility requirements in regulation 133(3) and displays all of the features set out in regulation 136—

(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 that are not considered as insurance liabilities;

(v)   paid-up preference shares and the related share premium account;

(vi)   the reconciliation reserve as determined in accordance with regulation 143; and

(vii)   any other item that has been approved by the Authority in accordance with regulation 146; or

(b)   paid-up subordinated liabilities.

136   Tier 1 basic own-funds – features determining classification

(1)   The features determining a Tier 1 basic own-fund item of an insurer 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 immediately available to absorb the insurer's losses;

(c) the basic own-fund item absorbs such losses at least once an insurer is not in compliance with its SCR and does not hinder the recapitalisation of the insurer;

(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 133(3);

(e) for basic own-fund items referred to in regulations 135(1)(a)(i) and 135(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; and

    (iii) either the legal or contractual arrangements governing the basic own-fund item or Manx legislation allow for the cancellation of distributions in relation to that item if the insurer is not in compliance with its SCR, or the distribution would lead to such non-compliance until the insurer complies with its SCR and the distribution would not lead to non-compliance with its SCR;

(f) for basic own-fund items referred to in regulations 135(1)(a)(iii) and 135(1)(a)(v) and Regulation 135(1)(b) —

    (i) the basic own-fund item ranks to the same degree as, or ahead of, the item referred to in regulations 135(1)(a)(i) and 135(1)(a)(ii) but after Tier 2 and Tier 3 basic own-fund items and after the claims of all policyholders and non-subordinated 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 135(1)(a)(i) and 135(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 heads (A) and (B) above;

    (iii)   the item is undated;

    (iv)   the first contractual opportunity to repay or redeem the basic own-fund item does not occur before 5 years from the date of issuance;

    (v)   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 an insurer's SCR is exceeded by a margin deemed appropriate by the Authority, taking into account the solvency position of the insurer including the insurer's medium-term capital management plan; and

    (vi)   the terms of the contractual arrangement governing the basic own-fund item provide for the cancellation of distributions in relation to that item if the insurer is not in compliance with its SCR, or the distribution would lead to such non-compliance, until the insurer complies with its SCR and the distribution would not lead to non-compliance with its SCR;

  (g)   for basic own-fund items referred to in regulations 135(1)(a)(i), 135(1)(a)(ii), 135(1)(a)(iii), 135(1)(a)(v) and regulation 135(1)(b) —

    (i)   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;

    (ii)   the basic own-fund item does not include incentives to repay or redeem that item in a way 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 the insurer is not in compliance with its SCR, or repayment or redemption would lead to such non-compliance until the insurer complies with its SCR, and the repayment or redemption would not lead to non-compliance with its SCR; and

    (iv)   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 will not be deemed to be a repayment or redemption, if the exchange, conversion, repayment or redemption is subject to the approval of the Authority.

(3) For the purposes of paragraph (1)(g)(iv), in the case of basic own-fund items referred to in regulations 135(1)(a)(i) and 135(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 only;

(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 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; and

(g) the cancellation of distributions imposes no restrictions on the insurer.

(4) For the purposes of paragraph (1)(g)(iv), in the case of basic own-fund items referred to in regulations 135(1)(a)(iii) and 135(1)(a)(v) and regulation 135(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; and

(f)   the cancellation of distributions imposes no restrictions on the 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; and

(c)   any 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 135(1)(a)(i) and 135(1)(a)(ii) must specify either of the following—

(a)   the rate of conversion and a limit on the permitted amount of conversion; or

(b)   a range within which the instruments will convert into the basic own-fund item listed in regulations 135(1)(a)(i) and 135(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 the insurer being significantly not in compliance with its SCR. For the purposes of this paragraph, an insurer's non-compliance with its SCR is considered significant if one or more of the following conditions are met—

(a)   the amount of an insurer's own-fund items eligible to cover its SCR is equal to or less than the 75% of its SCR;

(b)   the amount of insurer's own-fund items eligible to cover its MCR is equal to or less than its MCR; or

(c)   SCR compliance is not re-established within a period of 3 months of the date when the insurer being not in compliance with its SCR was first observed.

(9)   An insurer may specify, in the provisions governing the instrument, one or more trigger events in addition to the events referred to in paragraphs (8)(a) to (8)(c).

(10)   For the purposes of paragraphs (1)(c) (1)(e)(iii), (1)(f)(vi) and (1)(g)(iii), references to the insurer's SCR are read as references to its MCR if non-compliance with its MCR occurs before non-compliance of its 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 including any extension if applicable. The average duration of an insurer's total own-funds, taking into account the remaining maturity of all own-fund items, must not be significantly lower than the average duration of the insurer's liabilities.

(12)   An 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 own-fund items and of all insurance and reinsurance liabilities.

137   Tier 2 basic own-funds – list of own-fund items

Where an insurer holds one of the basic own-fund items listed in paragraphs (a) or (b), the insurer must classify the item as Tier 2, if the item meets the eligibility requirements in regulation 133(3) and displays all of the features set out in regulation 138 —

(a)   the 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; and

(v)   any other item that has been approved by the Authority in accordance with regulation 146; or

(b)   subordinated liabilities.

138   Tier 2 basic own-funds – features determining classification

(1)   The features determining a Tier 2 basic own-fund item of an insurer 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;

(e) 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 come into effect 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 in circumstances where the insurer is not in compliance with its SCR, or the repayment or redemption would lead to such non-compliance until an insurer complies with its SCR, and the repayment or redemption would not lead to non-compliance with its SCR;

(h) the basic own-fund item meets one of the following criteria—

    (i) in the case of items referred to in regulations 137(a)(i) and 137(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 the insurer is not in compliance with its SCR, or the distribution would lead to such non-compliance until the insurer complies with its SCR and the distribution would not lead to non-compliance with its SCR; or

    (ii) in the case of items referred to in regulations 137(a)(iii), 137(a)(iv) and 137(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 the insurer is not in compliance with its SCR, or the distribution would lead to such non-compliance until the insurer complies with its SCR and the distribution would not lead to non-compliance with its SCR;

(i) 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 paragraph (a); and

(j) the basic own-fund item displays the Tier 1 features set out in regulation 136 that are relevant for Tier 1 basic own-fund items referred to in regulations 135(1)(a)(iii) and 135(1)(a)(v) and regulation 135(1)(b), but exceeds the limit set out in regulation 133(8).

(2) 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 will not be deemed to be a repayment or

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

(3)   For the purposes of paragraphs (1)(g) and (1)(h), references to the insurer's SCR are read as references to its MCR if non-compliance with its MCR occurs before non-compliance its SCR.

(4)   For the purposes of paragraph (1)(g), an 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; and

(b)   50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

139   Tier 2 ancillary own-funds

(1)   If an insurer has ancillary own-funds listed in paragraph (2) that have been approved by the Authority in accordance with regulation 147, the insurer must classify the ancillary own-funds as Tier 2 if they meet the following requirements —

(a)   the ancillary own-fund item meets the eligibility requirements in regulation 133(3);

(b)   the ancillary own-fund item is not a basic own-fund item, as determined in accordance with regulation 134; and

(c)   the ancillary own-fund item can be called up by the insurer to absorb its losses,.

(2)   Tier 2 ancillary own-funds of an insurer 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; and

(c)   any other legally binding commitments provided to the insurer.

(3)   In order for an ancillary own-fund item as described in paragraph (2)(a) to be classified as Tier 2, once it has been called up and paid in it must display the features of a basic own-fund item classified in Tier 1 in accordance with regulations 135 and 136.

140   Tier 3 basic own-funds– list of own-fund items

Where an insurer holds one of the basic own-fund items listed in paragraphs (a) or (b), the insurer must classify the item as Tier 3, if the item meets the eligibility

requirements in regulation 133(3) and displays all of the features set out in regulation 141 —

  (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; and

      (iv)   any other item that has been approved by the Authority in accordance with regulation 146; or

  (b)   subordinated liabilities.

141   Tier 3 basic own-funds– features determining classification

  (1)   The features determining a Tier 3 basic own-fund item 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; and

  (c)   in the case of items referred to in regulations 140(a)(i), 140(a)(ii) and 140(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, and 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 in the circumstance where the insurer is not in compliance with its SCR, or repayment or redemption would lead to such non-compliance until the insurer complies with its SCR, and the repayment or

redemption would not lead to non-compliance with its SCR; and

   (vi)   the basic own-fund item provides for the deferral of distributions in the circumstance where the insurer is not in compliance with its MCR, or the distribution would lead to such non-compliance until the insurer complies with its MCR, and the distribution would not lead to non-compliance with its MCR.

(2)   The exchange or conversion of a basic own-fund item into another Tier 1, Tier 2 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 will 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 paragraph (1)(c)(v), references to an insurer's SCR are read as references to its MCR if non-compliance with its MCR occurs before non-compliance with its SCR.

(4)   For the purposes of paragraph (1)(c)(iv), an 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; and

   (b)   50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

142   Tier 3 ancillary own-funds

(1)   If an insurer has ancillary own-funds listed in paragraph 139(2) that have been approved by the Authority in accordance with regulation 147, the insurer must classify the ancillary own-funds as Tier 3 if they do not display all of the features referred to in regulation 139(3).

143   Reconciliation reserve

(1)   The reconciliation reserve is an insurer's total excess of assets over liabilities reduced by —

   (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 135(1)(a)(i) to 135(1)(a)(v), and regulations 137(a) and 140(a); and

(d)   the amount by which the value of the insurer's restricted own-fund items, determined in accordance with regulation 144, exceed the notional SCR of the associated ring-fenced fund or marked-to-model portfolio, determined in accordance with regulation 121.

(2)   If a ring-fenced fund is not deemed material in accordance with regulation 145, and hence an insurer does not calculate a notional SCR, the insurer must reduce the excess assets over liabilities by the total amount of restricted own-fund items in respect of that ring-fenced fund.

(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)   The expected profit included in future premiums is the expected present value of future cash flows resulting from an 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 contract.

(5)   The determination of whether, and to what extent, the reconciliation reserve displays the features set out in regulation 136 must amount to more than just an assessment of the features of the assets and liabilities that are included in computing the excess of assets over liabilities or the underlying items in an insurer's financial statements.

144   Restricted own-funds

(1)   Restricted own-funds of an insurer have a lack of transferability within an 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; or

(c)   the items can only be used to cover losses arising from particular risks or liabilities of the insurer.

(2)   An insurer must identify the nature of restrictions affecting its own-funds and the liabilities in respect of the contracts, policyholders or risks for which those own-funds can only be used.

(3)   At a minimum, the following must be classified as restricted own-fund items—

(a)   own-funds within a ring-fenced fund as recognised in accordance with regulation 16; and

      (b)   own-funds within a marked-to-model portfolio, as determined in accordance with regulation 15.

(4)   Restricted own-fund items must not include the value of future transfers attributable to shareholders.

145   Materiality of a ring-fenced fund

(1)   An 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 ring-fenced 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.

146   Authority's approval of the assessment and classification of basic own-fund items

(1)   The classification of eligible own-funds of an insurer that are not included in the list of basic own-funds items in regulations 135, 137, or 140, but that meet the requirements of regulations 133, 134, 136, 138 and 141, are subject to the approval of the Authority.

(2)   The inclusion of basic own-fund items subject to the approval of the Authority in accordance with this regulation is subject to quantitative limits set out in regulation 133(7).

(3)   Own-fund items referred to in paragraph (1) that do not meet the requirements of this regulation are ineligible for the purposes of meeting the insurer's SCR and MCR.

147   Approval of ancillary own-funds

(1)   With reference to regulations 139 and 142, the—

      (a)   amount ascribed to an ancillary own-fund item;

     (b)   the classification of an ancillary own-fund item as Tier 2 or Tier 3; and

     (c)   the degree to which an ancillary own-fund item may be taken into account by the insurer in meeting its SCR and MCR (as applicable),

are 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 for the purposes of meeting the insurer's SCR and MCR.

(3)   The amount ascribed to an ancillary own-fund item as referred to in paragraph (1)(a) is 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.

PART 6: REVOCATIONS

148   Revocation

(1)   The Insurance (Valuation of Long Term Liabilities) Regulations 2007[3] are revoked.

(2)   The Insurance (Valuation of Long Term Liabilities) (Amendment) Regulations 2015 are revoked.

MADE 28 JUNE 2018

K. BADGEROW
Chief Executive

G.F. KARRAN
Chairman, Isle of Man Financial Services Authority

---

[3] SD 960/07

SCHEDULE

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

(This note is not part of the Regulations)

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") under section 12 of the Insurance Act 2008. The Regulations include requirements for the valuation of corresponding assets and liabilities.