Note: Solvency Capital Requirement – Standard Formula 3B6.6(1) has been amended by the PRA Rulebook: SII Firms: Solvency II Amendment (No 1) Instrument 2024 to correct an error.

PRA RULEBOOK: SOLVENCY II INSTRUMENT 2024

Powers exercised

A. The Prudential Regulation Authority ("PRA") makes this instrument in the exercise of the following powers and related provisions in the Financial Services and Markets Act 2000 ("the Act"):

(1) section 137G (The PRA's general rules);
(2) section 137T (General supplementary powers); and
(3) section 192J (Rules requiring provision of information by parent undertakings).

B. The rule-making powers referred to above are specified for the purpose of section 138G(2) (Rule-making instrument) of the Act.

PRA Rulebook: Solvency II Instrument 2024

C. The PRA makes the rules in the Annexes to this instrument.

Part	Annex
Glossary	A
Actuaries	B
Conditions Governing Business	C
External Audit	D
Financial Conglomerates	E
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Own Funds and Eligible Liabilities (CRR) Part	N
Solvency Capital Requirement – Standard Formula	O

Solvency Capital Requirement – Undertaking Specific Parameters	P
Surplus Funds	Q
Technical Provisions	R
Technical Provisions – Further Requirements	S
Third Country Branches	T
Transitional Measures Part	U
Undertakings in Difficulty	V
Valuation	W

Defined terms and cross references

D. This instrument includes (1) the use of terms that are added to the Glossary Part of the PRA Rulebook; and (2) cross references to rules that are added to the PRA Rulebook, by PRA Rulebook: Solvency II Reform Instrument 2024 and PRA Rulebook: Solvency II Reporting Reform Instrument 2024.

Templates, Annexes and instruction documents

E. The rules in this Instrument include any template, Annex or instruction document referred to in the rules. Where indicated by "here", the rules when published electronically will include a hyperlink to the appropriate document.

Commencement

F. Other than the provisions listed in G, this instrument comes into force on 31 December 2024.

G. Annex M comes into force on 2 January 2026.

Citation

H. This instrument may be cited as the PRA Rulebook: Solvency II Instrument 2024.

By order of the Prudential Regulation Committee
5 November 2024

Annex A

Amendments to the Glossary Part

In this Annex new text is underlined and deleted text is struck through.

…

aggregate maximum risk exposure

means the sum of the maximum payments, including expenses that the *special purpose vehicle* may incur, excluding expenses that meet all of the following criteria:

(1) the *special purpose vehicle* has the right to require the *undertaking* which has transferred risks to the *special purpose vehicle* to pay the expense; and

(2) 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 *undertaking* which has transferred the risks to the *special purpose vehicle*.

…

alternative valuation methods

means valuation methods that are consistent with the Valuation 2.1 and 2.2, other than those which solely use the quoted market prices for the same or similar assets or liabilities.

…

ancillary own funds

(1) (in relation to a *UK Solvency II firm* and Lloyd's) has the meaning given in Own Funds 2.3 and are determined in accordance with Own Funds 2.3 to 2.7; or

(2) (in relation to an *insurance holding company*) means an *own funds* item referred to in ~~Article 89 of the *Solvency II Directive*~~Own Funds 2.3 and 2.4, determined in accordance with (1) as if it were a *UK Solvency II firm*.~~; or~~

(3) ~~(in relation to a *third country branch undertaking*) means an *own funds* item referred to in Article 89 of the *Solvency II Directive*, determined in accordance with (1) as if it were a *UK Solvency II firm*.~~[deleted]

ancillary own funds permission

means the permission granted to a *firm* by the *PRA* pursuant to section 138BA of *FSMA* for the purpose of allowing the *firm* to take into account an item of *ancillary own funds* as part of its *own funds*.

…

basic own funds

…

(2) (in relation to an *insurance holding company*) means an *own funds* item referred to in ~~Article 88 of the *Solvency II Directive*~~Own Funds 2.2, determined in accordance with (1) as if it were a *UK Solvency II firm*.~~; or~~

(3) ~~(in relation to a *third country branch undertaking*) means an *own funds* item referred to in article 88 of the *Solvency II Directive*, determined in accordance with (1) as if it were a *UK Solvency II firm*.~~[deleted]

basic SCR

means the ~~minimum basic~~ component of the *SCR*, ~~as set out in~~calculated in accordance with Solvency Capital Requirement ~~to~~ – Standard Formula 3~~ and as supplemented by the *Solvency II Regulations*~~.

…

captive insurer

means a *UK Solvency II firm* owned by:

(1) a financial *undertaking* other than a *UK Solvency II firm*; or

(2) a *group* of *UK Solvency II firms*; or

(3) a non-financial *undertaking*;

the purpose of which is to provide insurance cover exclusively for the risks of the *undertaking* or *undertakings* to which it belongs, or of an *undertaking*, or *undertakings*, of the *group* of which that *UK Solvency II firm* is a member.

captive reinsurer

means a *UK Solvency II firm* that is a *pure reinsurer* owned by:

(1) a financial *undertaking* other than a *UK Solvency II firm*; or

(2) a *group* of UK Solvency II firms; or

(3) a non-financial *undertaking*;

the purpose of which is to provide *reinsurance* cover exclusively for the risks of the *undertaking* or *undertakings* to which it belongs or of an *undertaking* or *undertakings* of the *group* of which that *pure reinsurer* is a member.

…

classification of own funds permission

means the permission granted to a *firm* by the *PRA* pursuant to section 138BA of *FSMA* for the purpose of allowing the *firm* to include in its *Tier 1 own funds*, *Tier 2 own funds* or *Tier 3 own funds* (as the case may be) an *own funds* item that is not included in the *own funds lists*.

…

earned premiums

means the *premiums* relating to the risk covered by a *firm* during a specified time period.

…

eligible own funds

…

(3) as to compliance by a *composite firm* with the *notional life MCR*, the aggregate of the *firm's*:

(a) *Tier 1 own funds*; and

(b) *Tier 2 basic own funds*

that satisfy the limits in Own Funds 4, 4A.2 and 4A.3, as if references to the "*MCR*" in those provisions were references to the *notional life MCR*; and the limits in the *Solvency II Regulations*; and

(4) as to compliance by a *composite firm* with the *notional non-life MCR*, the aggregate of the *firm's*:

(a) *Tier 1 own funds*; and

(b) *Tier 2 basic own funds*

that satisfy the limits in Own Funds 4.2, 4A.2 and 4A.3, as if references to the "*MCR*" in those provisions were references to the *notional non-life MCR*; and the limits in the *Solvency II Regulations*.

(5) as to compliance with the *branch SCR*, means the aggregate of the *third country branch undertaking's*:

(a) *Tier 1 own funds*; and

(b) (i) *Tier 2 own funds*; and

(ii) *Tier 3 own funds*

that satisfy the limits in Own Funds 4.1, as if references to the "*SCR*" in those provisions were references to the *branch SCR*; and the limits in the *Solvency II Regulations*.[deleted]

(6) as to compliance with the *branch MCR*, means the aggregate of the *third country branch undertaking's*:

(a) *Tier 1 own funds*; and

(b) *Tier 2 basic own funds* that satisfy the limits in Own Funds 4.2 as if references to the "*MCR*" in those provisions were references to the *branch MCR*; and the limits in the *Solvency II Regulations*.[deleted]

eligible Tier 2 own funds

(1) as to compliance with a *UK Solvency II firm's SCR*, the *UK Solvency II firm's Tier 2 own funds* that satisfy the limits set out in Own Funds 4.1(1), 4A.1(1), 4A.1(3) and 4A.3and the *Solvency II Regulations*; and

(2) as to compliance with a *UK Solvency II firm's MCR*, the *firm's Tier 2 basic own funds* that satisfy the limits in Own Funds 4.2, 4A.2 and 4A.3and the *Solvency II Regulations*.

eligible Tier 3 own funds

means, as to compliance with a *UK Solvency II firm's SCR*, the *firm's Tier 3 own funds* that satisfy the limits set out in Own Funds 4.1(2) and 4A.1(2).

…

explicit maximum loss potential

means the maximum economic risk transferred by the ceding *undertaking* to the *reinsurer* under a *reinsurance contract*.

external credit assessment institution

means a *credit rating agency,* or a *central bank* issuing credit ratings which is exempt from the application of Regulation (EC) No 1060/2009 and which is included in a list of exempt *central banks* published by *Treasury* on its website.

…

finite reinsurance

means *reinsurance*:

(1) under which the *explicit maximum loss potential* arising from a significant transfer of both *underwriting risk* and timing risk exceeds the *premium* payable by the ceding *undertaking* over the duration of the contract by a limited but significant amount; and

(2) which possesses at least one of the following characteristics:

(a) explicit and material consideration of the time value of money;

(b) contractual provisions to moderate the balance of economic experience between the parties to the *reinsurance* over time to achieve the target risk transfer.

…

health catastrophe risk

means the risk of loss, or of adverse change, in the value of insurance obligations resulting 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.

health insurance obligation

means an insurance obligation that covers one or both of the following:

(1) the provision of medical treatment or care including preventive or curative medical treatment or care due to illness, accident, disability or infirmity, or financial compensation for such treatment or care; or

(2) financial compensation arising from illness, accident, disability or infirmity.

health reinsurance obligation

means a *reinsurance* obligation which arises from accepted *reinsurance* covering *health insurance obligations.*

…

income protection insurance obligation

means an insurance obligation that covers the financial compensation referred to in (2) of the definition of *health insurance obligation,* other than the financial compensation referred to in (1) of the definition of *health insurance obligation*.

income protection reinsurance obligation

means a *reinsurance* obligation which arises from accepted *reinsurance* covering *income protection insurance obligations*.

…

infrastructure assets

means physical assets, structures or facilities, systems and networks that provide or support essential public services.

infrastructure entity

means an entity or corporate *group* which, during the most recent financial year of that entity or *group* for which figures are available or in a financing proposal, derives the substantial majority of its revenues from owning, financing, developing or operating *infrastructure assets*.

…

look-through approach

means the approach to calculating the *SCR* described in Solvency Capital Requirement – Standard Formula 2.3(1).

…

medical expense insurance obligation

means an insurance obligation that covers the provision or financial compensation referred to in (1) of the definition of *health insurance obligation*.

medical expense reinsurance obligation

means a *reinsurance* obligation which arises from accepted *reinsurance* covering *medical expense insurance obligations*.

…

mortgage insurance

means credit insurance that provides cover to lenders in case their mortgage loans default.

…

non-life catastrophe risk

means the risk of loss, or of adverse change in the value of insurance obligations, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events.

non-life premium and reserve risk

means the risk of loss, or of adverse change in the value of insurance obligations, resulting from fluctuations in the timing, frequency and severity of insured events, and in the timing and amount of claim settlements.

…

NSLT health

means health *insurance business* that is not *SLT health*.

NSLT health premium and reserve risk

means the risk of loss, or of adverse change in the value of insurance obligations, resulting from fluctuations in the timing, frequency and severity of insured events, and in the timing and amount of claim settlements at the time of provisioning.

…

OECD

means the Organisation for Economic Cooperation and Development.

…

own funds

…

(2) (in relation to an *insurance holding company*) own funds determined in accordance with (1) as if it were a *UK Solvency II firm*; ~~or~~

(3) ~~(in relation to a *third country branch undertaking*) the *firm's* aggregate *basic own funds* and *ancillary own funds* as determined in accordance with (1) as if it were a *UK Solvency II firm*.~~[deleted]

own funds lists

means the lists of *Tier 1 own funds*, *Tier 2 own funds* and *Tier 3 own funds* set out in Own Funds 3A, 3D, 3F, 3H, and 3J.

…

participation

…

(in the Solvency II Firms Sector of the *PRA* Rulebook) means:

(1) the ownership, direct or by way of *control*, of 20% or more of the voting rights or capital of an *undertaking*; or

(2) where~~, in accordance with the definition of 'participating undertaking' in Regulation 2(1) of the *Solvency 2 Regulations*,~~ an *undertaking* which holds, directly or indirectly, voting rights or capital in another *undertaking* over which it effectively exercises a significant influence ~~over another *undertaking*~~.

…

qualifying infrastructure corporate investment

means an investment in an *infrastructure entity* that meets all the requirements set out in Solvency Capital Requirement – Standard Formula 3D3.

qualifying infrastructure investment

means an investment in an *infrastructure entity* that meets all the requirements set out in Solvency Capital Requirement – Standard Formula 3D2.

…

related undertaking

means, in relation to an *undertaking* ('U')

(1) any *subsidiary undertaking* of U; or

(2) any *undertaking* in which U or any of U's *subsidiary undertakings* holds a *participation*; or

(3) any *undertaking* linked to U by a *common management relationship*; or

(4) any *undertaking* linked by a *common management relationship* to an *undertaking* in (1), (2) or (3).

…

relevant legislation

…

means:

(1) *FSMA*;

(2) the *Capital Requirements Regulations*;

(3) ~~the *Solvency 2 Regulations 2015*~~[deleted];

(4) any other enactment; or

(5) any EU regulation.

…

relevant risk-free interest rate term structure

means the relevant risk-free interest rate term structure, in accordance with:

(1) Technical Provisions 5~~ and 8.3 to 8.4~~ and 8, Matching Adjustment Part, Technical Provisions – Further Requirements Part and Transitional Measures 10.2; and

…

restricted own funds

means *own funds* items that have a reduced capacity to fully absorb losses on a going-concern basis due to their lack of transferability within the *firm* for any of the following reasons:

(1) the items can only be used to cover losses on a defined portion of the *firm's contracts of insurance*;

(2) the items can only be used to cover losses in respect of certain *policyholders*; or

(3) the items can only be used to cover losses arising from particular risks or liabilities;

but does not include the value of future transfers attributable to shareholders.

...

ring-fenced fund

means an identifiable unit of assets and liabilities where the existence of a restriction on those assets in relation to those liabilities on a going concern basis gives rise to *restricted own funds*, other than a *matching adjustment portfolio*.

…

risk margin

means the portion of *technical provisions* calculated in accordance with Technical Provisions ~~4.1 to 4.2~~4A and 4B.

…

scenario analysis

means the analysis of the impact of a combination of adverse events.

…

SLT health

means health *insurance business* that is pursued on a similar technical basis to that of *long-term insurance business*.

…

~~*Solvency 2 Regulations*~~

~~means the Solvency 2 Regulations 2015 (SI 2015/575).~~

…

~~*Solvency II regulations*~~

~~means the directly applicable EU Regulations adopted in accordance with the *Solvency II Directive*, as they have effect as *retained direct EU legislation* as at 31 December 2023.~~

…

spread risk

means:

(1) the risk that a spread (that is, the difference in price or yield) between two variables will change; or

(2) in the Solvency Capital Requirement - Standard Formula Part, the Solvency Capital Requirement - General Provisions Part and the *credit risk* definition: the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of credit spreads over the risk-free interest rate term structure.

…

surplus funds

means, in relation to a *with-profits fund*, accumulated profits which have not been made available for distribution to *policyholders* and which:

(1) satisfy the criteria for classification as *Tier 1 own funds* set out in Own Funds 3.1, 3A and 3B; and

(2) are represented by the output of the calculations set out in Surplus Funds 3.

…

surrender

means all possible ways to fully or partly terminate a *policy*, including the following:

(1) voluntary termination of the *policy* with or without the payment of a surrender value;

(2) change of *firm* by the *policyholder*; or

(3) termination of the *policy* resulting from the *policyholder's* refusal to pay the *premium*.

…

Tier 1 own funds

means an item of *basic own funds* that satisfies the conditions in Own Funds 3.1, 3A and 3B.1 to 3B.13.

…

Tier 2 own funds

means an item of *own funds* that satisfies the conditions in:

(1) Own Funds 3.2(1), Own Funds 3D and 3E.1 to 3E.5; or

(2) Own Funds 3.2(2), Own Funds 3H and 3I.

Tier 3 own funds

means an item of *own funds* referred to in Own Funds 3.3 that satisfies the conditions in either:

(1) Own Funds 3F and 3G.1 to 3G.5; or

(2) Own Funds 3J.

…

undertaking specific parameters

means, for the purposes of determining the *SCR* using the *standard formula*, ~~the replacement of a subset of parameters used in the life *underwriting risk* module, non-life *underwriting risk* module or health *underwriting risk* module with~~ a parameter~~s~~ specific to a *firm*, calculated in accordance with Solvency Capital Requirement – Undertaking Specific Parameters, that replaces a standard parameter (within a subset of parameters in the life *underwriting risk* module, non-life *underwriting* risk module or health *underwriting* risk module).

…

USP firm

means a *firm* that has been granted a *USP Permission*.

USP method

in relation to a *USP firm*, means the method specified in Solvency Capital Requirement – Undertaking Specific Parameters 2.3 for calculating the *undertaking specific parameter* in respect of which the *firm* has been granted a *USP Permission*.

USP Permission

means the permission to apply an *undertaking specific parameter* granted to a *firm* by the *PRA* pursuant to section 138BA of *FSMA*.

volatility adjustment

means the adjustment to the *relevant risk-free interest rate term structure* used to calculate the *best estimate* in accordance with:

(1) Technical Provisions 8 and Technical Provisions – Further Requirements Part ~~the *Solvency II Regulations* adopted under Article 86(1)(j) of the *Solvency II Directive*~~; and

…

workers' compensation insurance obligation

means a *health insurance obligation* which arises only from accidents at work, industrial injury and occupational disease.

workers' compensation reinsurance obligation

means a *reinsurance* obligation which arises from accepted *reinsurance* covering *workers' compensation insurance obligations*.

…

Annex B

Amendments to the Actuaries Part

In this Annex new text is underlined and deleted text is struck through.

…

2 APPOINTMENT OF ACTUARIES

2.1 A *firm* must appoint an external *actuary* if it does not have the capability within the *firm* or the *firm's group* to comply with Conditions Governing Business 6~~.1 or the relevant requirements of the *Solvency II Regulations*~~.

…

Annex C

Amendments to the Conditions Governing Business Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

…

~~*explicit maximum loss potential*~~

~~means the maximum economic risk transferred by the ceding undertaking to the *reinsurer* under a contract of *reinsurance*.~~

~~*external credit assessment institution*~~

~~means a credit rating agency that is registered or certified in accordance with Regulation (EC) No 1060/2009 or a central bank issuing credit ratings which are exempt from the application of Regulation (EC) No 1060/2009.~~

~~[Note: Art. 13(40) of the *Solvency II Directive*]~~

~~*finite reinsurance*~~

~~means *reinsurance*:~~

~~(1) under which the *explicit maximum loss potential* arising from a significant transfer of both *underwriting risk* and timing risk exceeds the premium payable by the ceding *undertaking* over the duration of the contract by a limited but significant amount; and~~

~~(2) which possesses at least one of the following characteristics:~~

~~(a) explicit and material consideration of the time value of money;~~

~~(b) contractual provisions to moderate the balance of economic experience between the parties to the *reinsurance* over time to achieve the target risk transfer.~~

~~[Note: Art. 210(3) of the *Solvency II Directive*]~~

…

1A EXPERT JUDGEMENT

1A.1 Where a *firm* makes assumptions about rules relating to the valuation of assets and liabilities, *technical provisions*, *own funds*, *SCR* or *MCR* and the rules set out in the Investments Part, these assumptions must be based on the expertise of *persons* with relevant knowledge, experience and understanding of the risks inherent in the *firm's* insurance and *reinsurance* business.

1A.2 A *firm* must, taking due account of the principle of proportionality, ensure that internal users of the relevant assumptions are informed about their relevant content, their degree of reliability and their limitations. For that purpose, service providers to whom *functions* or activities have been *outsourced* must be considered to be internal users.

2 GENERAL GOVERNANCE REQUIREMENTS

2.1 A *firm* must ensure its *governing body* is ultimately responsible for the *firm's* compliance with the *PRA* rules, *FSMA*, and all applicable laws, rules, regulations and administrative provisions ~~implementing the *Solvency II Directive*~~deriving from *FSMA* that apply to *UK Solvency II firms*.

[Note: Art. 40 of the *Solvency II Directive*]

2.2 …

(3) The system of governance must include compliance with at least the following requirements ~~laid down in~~:

(a) written policy on risk-management in accordance with 2.5;

(b) Chapters 2A~~3~~ to 7;

(c) Insurance - Fitness and Propriety 2.1 to 2.3, 4.1, 4.3 and 4.4; ~~and~~

(d) Insurance – Allocation of Responsibilities 4~~.~~;

(e) Chapters 11A to 11F;

(f) risk-management system in accordance with 3.1;

(g) compliance *function* in accordance with 4.1(2);

(h) internal audit *function* in accordance with Chapter 5; and

(i) actuarial *function* in accordance with Chapter 6.

…

2.4 A *firm* must:

(1) establish, implement and maintain ~~have~~ written policies and adequate procedures in relation to at least risk management, internal control, internal audit and, where relevant, *outsourcing*;

(2) make those policies subject to prior approval of its *governing body*;

(3) ensure those policies are implemented;

(4) review those policies at least annually; and

(5) adapt those policies in view of any significant change in the system or area concerned.

[Note: Art. 41(3) of the *Solvency II Directive*]

2.4A A *firm* must establish, implement and maintain documented policies and adequate procedures to ensure that all *persons* who effectively run the *firm* or have other *key functions* are at all times fit and proper within the meaning of Insurance - Fitness and Propriety 2.

2.5 The written ~~policy~~policies on risk-management referred to in 2.4(1) must ~~comprise~~include:

(1) policies relating to the areas listed in~~points~~ (i) to (vi) in 3.1(2)(c) as set out in further detail in 3.1A and Chapter 2A; and

(2) where the *volatility adjustment* is applied, a policy on the criteria for the application of the *volatility adjustment*.

[Note: Art. 44(2) and (2a) of the *Solvency II Directive*]

…

2A SYSTEM OF GOVERNANCE

2A.1 A *firm* must ensure that:

(1) the system of governance referred to at paragraph 2.2(1) establishes, implements and maintains effective cooperation, internal reporting and communication of information at all relevant levels of the *firm*;

(2) the system of governance referred to at paragraph 2.2(1) establishes, implements and maintains effective decision-making procedures and an organisational structure which clearly specifies reporting lines, allocates *functions* and responsibilities, and takes into account the nature, scale and complexity of the risks inherent in the *firm's* business;

(3) the members of the *governing body* collectively possess the necessary qualifications, competency, skills and professional experience in the relevant areas of the business in order to effectively manage and oversee the *firm* in a professional manner;

(4) each individual member of the *governing body* has the necessary qualifications, competency, skills and professional experience to perform the tasks assigned;

(5) it employs personnel with the skills, knowledge and expertise necessary to carry out the responsibilities allocated to them properly;

(6) all personnel of the *firm* are aware of the procedures for the proper carrying out of their responsibilities;

(7) the assignment of multiple tasks to individuals and organisational units does not or is not likely to prevent the *persons* concerned from carrying out any particular *function* in a sound, honest and objective manner;

(8) it establishes information systems which produce complete, reliable, clear, consistent, timely and relevant information concerning the business activities, the commitments assumed and the risks to which the *firm* is exposed;

(9) it maintains adequate and orderly records of the *firm's* business and internal organisation;

(10) it safeguards the security, integrity and confidentiality of information, taking into account the nature of the information in question;

(11) it introduces clear reporting lines that ensure the prompt transfer of information to all *persons* who need it in a way that enables them to recognise its importance as regards their respective responsibilities; and

(12) it adopts a written *remuneration* policy in accordance with Chapter 3A.

2A.2 A *firm* must ensure that its policies on risk-management, internal control, internal audit and, where relevant, *outsourcing,* referred to in 2.4(1) clearly set out the relevant responsibilities, objectives, processes and reporting procedures to be applied, all of which must be consistent with the *firm's* overall business strategy.

2A.3 A *firm* must establish, implement and maintain a business continuity policy aimed at ensuring, in the case of an interruption to its systems and procedures, the preservation of essential data and *functions* and the maintenance of insurance and *reinsurance* activities, or, where that is not possible, the timely recovery of such data and *functions* and the timely resumption of their insurance or *reinsurance* activities.

2A.4 A *firm* must ensure that at least two natural *persons* effectively run the *firm*.

2A.5 A *firm* must ensure that effective processes and procedures are in place to prevent conflicts of interest and that potential sources of conflicts of interest are identified and procedures are established in order to ensure that those involved in the implementation of the *firm's* strategies and policies understand where conflicts of interest could arise and how such conflicts are to be addressed.

2A.6 A *firm* must monitor, and on a regular basis evaluate, the adequacy and effectiveness of its system of governance and take appropriate measures to address any deficiencies.

3 RISK MANAGEMENT

3.1 (1) A *firm* must ~~have in place~~establish, implement, and maintain an effective risk-management system comprising strategies, processes and reporting procedures necessary to identify, measure, monitor, manage and report on a continuous basis the risks, at an individual and at an aggregated level, to which it is or could be exposed, and their interdependencies.

(1A) The risk-management system must include the following:

(a) a clearly defined risk-management strategy which is consistent with the *firm's* overall business strategy. The objectives and key principles of the risk-management strategy, the approved risk tolerance limits and the assignment of responsibilities across all the activities of the *firm* must be documented;

(b) a clearly defined procedure on the decision-making process;

(c) written policies which effectively ensure the definition and categorisation of the material risks by type to which the *firm* is exposed, and the approved risk tolerance limits for each type of risk. Such policies must implement the *firm's* risk strategy, facilitate control mechanisms and take into account the nature, scope and time periods of the business and the associated risks; and

(d) reporting procedures and processes which ensure that information on the material risks faced by the *firm* and the effectiveness of the risk-management system are actively monitored and analysed and that appropriate modifications to the system are made where necessary.

(2) That risk-management system must:

(a) be effective and well integrated into the organisational structure and decision-making processes of the *firm* with proper consideration of the *persons* who have *key functions*;

(b) cover the risks to be included in the calculation of the *SCR* as set out in Solvency Capital Requirement - General Provisions 3.3(1), as well as the risks which are not, or not fully, included in the calculation thereof; and

(c) cover at least the following areas:

(i) underwriting and reserving as set out in 3.1A(1);

(ii) asset-liability management as set out in 3.1A(2);

(iii) investment risk management, in particular *derivatives*, *quasi-derivatives* and similar commitments, as set out in 3.1A(3);

(iv) *liquidity risk* and *concentration risk* management: as set out in 3.1A(4) and 3.1A(5);

(v) *operational risk* management~~;~~ as set out in 3.1A(6); and

(vi) *reinsurance* and other *risk-mitigation techniques* as set out in 3.1A(7).

(2A) A *firm* must ensure that, where appropriate, the performance of stress tests and *scenario analysis* with regard to all relevant risks faced by the *firm*, is included in its risk-management system.

(2B) A *firm* must ensure that it takes into account the information reported as part of the risk-management system in its decision-making process.

(3) Where a *firm* applies the *matching adjustment* or the *volatility adjustment* it must set up a liquidity plan projecting the incoming and outgoing cash-flows in relation to the assets and liabilities subject to those adjustments.

(4) Where a firm applies the matching adjustment, the firm must manage any risks that are identified in the analysis undertaken in accordance with Matching Adjustment 10.1.

3.1A A *firm* must ensure that the areas referred to in 3.1(2)(c) include all of the following policies:

(1) Underwriting and reserving:

(a) actions to be taken by the *firm* to assess and manage the risk of loss or of adverse change in the values of insurance and *reinsurance* liabilities, resulting from inadequate pricing and provisioning assumptions;

(b) the sufficiency and quality of relevant data to be considered in the underwriting and reserving processes, as set out in Technical Provisions - Further Requirements 4 and their consistency with the standards of sufficiency and quality; and

(c) the adequacy of claims management procedures including the extent to which they cover the overall cycle of claims.

(2) Asset-liability management:

(a) the structural mismatch between assets and liabilities and in particular the duration mismatch of those assets and liabilities;

(b) any dependency between risks of different asset and liability classes;

(c) any dependency between the risks of different insurance or *reinsurance* obligations;

(d) any off-balance sheet exposures of the *firm*; and

(e) the effect of relevant *risk-mitigation techniques* on asset-liability management.

(3) Investment risk management:

(a) actions to be taken by the *firm* to ensure that the *firm's* investments comply with the Investments Part;

(b) actions to be taken by the *firm* to ensure that the *firm's* investments take into account the nature of the *firm's* business, its approved risk tolerance limits, its solvency position, its asset-liability management policy, and its long-term risk exposure;

(c) the *firm's* own internal assessment of the *credit risk* of investment *counterparties*;

(d) where the *firm* uses *derivatives* or any other financial instrument with similar characteristics or effects, the objectives of, and strategy underlying their use and the way in which they facilitate efficient portfolio management or contribute to a reduction of risks, as well as procedures to assess the risk of such financial instruments and the principles of risk-management to be applied to them; and

(e) where appropriate in order to ensure effective risk-management, internal quantitative limits on assets and exposures, including off-balance sheet exposures.

(4) *Liquidity risk* management:

(a) actions to be taken by the *firm* to take into account both short-term and long-term *liquidity risk*;

(b) the appropriateness of the composition of the assets in terms of their nature, duration and liquidity in order to meet the *firm's* obligations as they fall due; and

(c) a plan to deal with changes in expected cash in-flows and out-flows.

(5) *Concentration risk* management: actions to be taken by the *firm* to identify relevant sources of *concentration risk* to ensure that risk concentrations remain within established limits and actions to analyse possible risks of contagion between concentrated exposures.

(6) *Operational risk* management: actions to be taken by the *firm* to assign clear responsibilities to regularly identify, document and monitor relevant *operational risk* exposures.

(7) *Reinsurance* and other insurance *risk-mitigation techniques*:

(a) actions to be taken by the *firm* to ensure the selection of suitable *reinsurance* and other *risk-mitigation techniques*;

(b) actions to be taken by the *firm* to assess which types of *risk-mitigation techniques* are appropriate according to the nature of the risks assumed and the capabilities of the *firm* to manage and control the risks associated with those techniques; and

(c) the *firm's* own assessment of the *credit risk* of the *risk-mitigation techniques*.

(8) Deferred taxes:

(a) actions related to the *firm's* selection of methods and assumptions to demonstrate the amount and recoverability of the loss-absorbing capacity of deferred taxes;

(b) involvement of the relevant *key functions* in the selection and assessment of methods and assumptions to demonstrate the amount and recoverability of the loss-absorbing capacity of deferred taxes, how the outcome of that assessment is reported to the *governing body*, including the assessment of the underlying assumptions applied for the projection of future taxable profit (for the purposes of recognising and valuing deferred taxes and making an adjustment for the loss-absorbing capacity of deferred taxes), and an explanation of any concerns about those assumptions, which must be carried out in each case by either the actuarial *function* or the risk-management *function*; and

(c) risks that the *firm* is or could be exposed to, taking into account potential future changes in its risk profile due to its business strategy or the economic and financial environment, including *operational risks* and potential changes in its loss-absorbing capacity of deferred taxes. That assessment must include the overall reliance of the solvency and financial condition on deferred taxes and its consistency with the risk-management policy.

…

3.5 (1) A *firm* must provide for a risk-management *function* that is structured in such a way as to facilitate the implementation of the risk-management system.

[Note: Art. 44(4) of the *Solvency II Directive*]

(2) The risk-management *function* referred to in 3.5(1) must undertake all of the following tasks:

(a) assisting the *governing body* and other *functions* in the effective operation of the risk-management system;

(b) monitoring the risk-management system;

(c) monitoring the general risk profile of the *firm* as a whole;

(d) detailed reporting on risk exposures and advising the *governing body* on risk-management matters, including in relation to strategic affairs such as corporate strategy, mergers and acquisitions and major projects and investments; and

(e) identifying and assessing emerging risks.

(3) The risk-management *function* must fulfil all of the following requirements:

(a) fulfil the requirements set out in 3.7;

(b) liaise closely with the users of the outputs of the *internal model*; and

(c) co-operate closely with the actuarial *function* referred to in Conditions Governing Business 6.

…

3.6A In addition to the requirements referred to in 3.6, for the purposes of the calculation of *technical provisions* and the *SCR*, a *firm* must ensure that its internal risk-management methodologies do not rely solely or automatically on external credit assessments. Where the calculation of *technical provisions* or of the *SCR* is based on external credit assessments by an *external credit assessment institution* or based on the fact that an exposure is unrated, that does not exempt a *firm* from additionally considering other relevant information.

3.6B For the purpose of assessing the appropriateness of external credit rating assessments used in the calculation of *technical provisions* and the *SCR* by way of additional assessments referred to in 3.6, a *firm* must include in its policy on risk-management the following:

(1) the scope and frequency of the additional assessments;

(2) the manner in which the additional assessments are carried out, including the assumptions on which they are based; and

(3) the frequency of the regular review of the additional assessments and the conditions requiring an ad hoc review of the additional assessments.

3.6C A *firm* must ensure that its risk-management *function* covers the additional assessments in accordance with the risk-management policy referred to in 3.6B and duly considers the results of the additional assessments in the calculation of *technical provisions* and the *SCR*.

3.6D When carrying out the additional assessments referred to in 3.6B, a *firm* must use information that is derived from reliable sources that are up to date.

3.6E (1) In accordance with 2.4, a *firm* must at least annually review the additional assessments referred to in 3.6B.

(2) A *firm* must review those additional assessments on an ad hoc basis, whenever any of the conditions under 3.6B(3) take place or if the assumptions on which those assessments are based, are no longer valid.

3.6F A *firm* must document the following:

(1) the manner in which the additional assessments referred to in 3.6B are carried out and the results of those assessments; and

(2) the extent to which the results of those additional assessments are taken into account in the calculation of *technical provisions* and the *SCR*.

…

3.8A

(1) A *firm* must ensure that the *ORSA* referred to in 3.8(1) is forward-looking and includes all of the following elements:

(a) risks the *firm* is or could be exposed to, taking into account potential future changes in its risk profile due to its business strategy or the economic and financial environment, including *operational risks*; and

(b) the nature and quality of *own funds* items or other resources appropriate to cover the risks identified in 3.8A(1)(a).

(2) The elements referred to at 3.8A(1)(a) and (b) must take the following into account:

(a) the time periods that are relevant for taking into account the risks the *firm* faces in the long term;

(b) valuation and recognition bases that are appropriate for the *firm's* business and risk profile; and

(c) the *firm's* internal control and risk-management systems and approved risk tolerance limits.

…

3.11 A *firm* must inform the *PRA* of the results of each *ORSA* in the form of an *ORSA* report ~~as part of the information reported under Reporting 2~~in accordance with Reporting 2.5A(2)(a).

[Note: Art. 45(6) of the *Solvency II Directive*]

3.12 The *ORSA* report referred to at 3.11 must include all of the following:

(1) the qualitative and quantitative results of the *ORSA* and the conclusions drawn by the *firm* from those results;

(2) the methods and main assumptions used in the *ORSA*;

(3) the information referred to at 3.8(2)(a) and a comparison between those solvency needs, the regulatory capital requirements and the *firm's own funds*; and

(4) qualitative information on, and where significant deviations have been identified a quantification of, the extent to which quantifiable risks of the *firm* are not reflected in the calculation of the *SCR*.

3A REMUNERATION POLICY

3A.1 When establishing and implementing the *remuneration* policy referred to in 2A.1(12), a *firm* must comply with all of the following principles:

(1) the *remuneration* policy and *remuneration* practices must be established, implemented and maintained in line with the *firm's* business and risk-management strategy, its risk profile, objectives, risk-management practices and the long-term interests and performance of the *firm* as a whole and must incorporate measures aimed at avoiding conflicts of interest;

(2) the *remuneration* policy must promote sound and effective risk-management and must not encourage risk-taking that exceeds the risk tolerance limits of the *firm*;

(3) the *remuneration* policy must apply to the *firm* as a whole, and contain specific arrangements that take into account the tasks and performance of the *governing body*, *persons* who effectively run the *firm* or have other *key functions* and other categories of *employees* whose professional activities have a material impact on the *firm's* risk profile;

(4) the *firm* must ensure that it establishes general principles for the *remuneration* of those categories of *employees* whose professional activities have a material impact on the *firm's* risk profile and that it oversees implementation of those general principles;

(5) there must be clear, transparent and effective governance with regard to *remuneration*, including the oversight of the *remuneration* policy;

(6) an independent *remuneration* committee must be created, if appropriate in relation to the significance of the *firm* in terms of size and internal organisation, in order to periodically

support the *governing body* in overseeing the design of the *remuneration* policy and *remuneration* practices, their implementation and operation; and

(7) the *remuneration* policy must be disclosed to each of the *firm's employees*.

3A.2 A *firm* must ensure that the specific arrangements referred to in 3A.1(3) comply with all of the following principles:

(1) where *remuneration* schemes include both fixed and variable components, such components must be balanced so that the fixed or guaranteed component represents a sufficiently high proportion of the total *remuneration* to avoid *employees* being overly dependent on the variable components and to allow the *firm* to operate a fully flexible bonus policy, including the possibility of paying no variable component;

(2) where variable *remuneration* is performance-related, the total amount of the variable *remuneration* is based on a combination of the assessment of the performance of the individual and of the business unit concerned and of the overall result of the *firm* or the *group* to which the *firm* belongs;

(3) the payment of a substantial portion of the variable *remuneration* component, irrespective of the form in which it is to be paid, must:

(a) contain a flexible, deferred component that takes account of the nature and time horizon of the *firm's* business; and

(b) that deferral period must not be less than three years and the period must be correctly aligned with the nature of the business, its risks, and the activities of the *employees* in question;

(4) financial and also non-financial criteria must be taken into account when assessing an individual's performance;

(5) the measurement of performance, as a basis for variable *remuneration*, must include a downwards adjustment for exposure to current and future risks, taking into account the *firm's* risk profile and the cost of capital;

(6) termination payments must be related to performance achieved over the whole period of activity and be designed in a way that does not reward failure;

(7) *persons* subject to the *remuneration* policy must commit to not using any personal hedging strategies or *remuneration* and liability-related insurance which would undermine the risk alignment effects embedded in their *remuneration* arrangement; and

(8) the variable part of *remuneration* of the *employees* engaged in the internal control, risk-management, compliance, internal audit, and actuarial *functions* and those business units referred to in 11A to 11F must be independent from the performance of the operational units and areas that are submitted to their control.

3A.3 A *firm* must ensure that the *remuneration* policy is designed in such a way as to take into account the internal organisation of the *firm*, and the nature, scale and complexity of the risks inherent in its business.

4 INTERNAL CONTROL

4.1 (1) A *firm* must have in place an effective internal control system.

(2) That internal control system must include:

(a) administrative and accounting procedures~~,~~;

(b) an internal control framework~~,~~;

(c) appropriate reporting arrangements at all levels of the *firm*; and

(d) a compliance *function*.

[Note: Art. 46(1) of the *Solvency II Directive*]

(3) A *firm* must ensure that its internal control system ensures:

(a) the *firm's* compliance with applicable laws, regulations and administrative provisions;

(b) the effectiveness and the efficiency of the *firm's* operations in light of its objectives; and

(c) the availability and reliability of financial and non-financial information.

4.1A

(1) A *firm* must ensure that the compliance *function* required by 4.1(2)(d) establishes a compliance policy and a compliance plan.

(2) That compliance policy must define the responsibilities, competencies and reporting duties of the compliance *function*.

(3) That compliance plan must set out the planned activities of the compliance *function* which must take into account all relevant areas of the *firm's* activities and its exposure to compliance risk.

4.2 The duties of the compliance *function* referred to in ~~4.1(2)~~4.1A(1) must include:

(1) advising the *governing body* on compliance with ~~the~~all of its obligations under *PRA* rules and *FSMA* and any other laws, rules, regulations and administrative provisions deriving from *FSMA* that apply to *UK Solvency II firms*~~implementing the *Solvency II Directive*; and~~

(1A) assessing the adequacy of the measures adopted by the *firm* to prevent non-compliance; and

(2) an assessment of the possible impact of any changes in the legal environment on the operations of the *firm* concerned and the identification and assessment of compliance risk.

[Note: Art. 46(2) of the *Solvency II Directive*]

…

4A SPECIFIC PROVISIONS - FUNCTIONS

4A.1 A *firm* must incorporate the *functions* and the associated reporting lines into its organisational structure in a way which ensures that each *function* is free from influences that may compromise the *function's* ability to undertake its duties in an objective, fair and independent manner.

4A.2 A *firm* must ensure that each *function* operates under the ultimate responsibility of, and reports to the *governing body* and must, where appropriate, co-operate with the other *functions* in carrying out their roles.

4A.3 A *firm* must ensure that any *person* performing a *function* is able to communicate at their own initiative with any *employee* and must have the necessary authority, resources and expertise, as well as unrestricted access to all relevant information necessary to carry out their responsibilities.

4A.4 A *firm* must ensure that any *person* performing a *function* promptly reports any major problem in their area of responsibility to the *governing body*.

5 INTERNAL AUDIT

…

5.2 A *firm* must ensure that the internal audit *function* referred to in 5.1 includes all of the following tasks:

(1) establishes, implements and maintains an audit plan setting out the audit work to be undertaken in the upcoming years, taking into account all activities and the complete system of governance of the *firm*;

(2) takes a risk-based approach in deciding its priorities;

(3) reports the audit plan to the *governing body*;

(4) issues recommendations based on the result of work carried out in accordance with 5.2(1) and submits a written report on its findings and recommendations to the *governing body* on at least an annual basis; and

(5) verifies compliance with the decisions taken by the *governing body* on the basis of those recommendations referred to in 5.2(4).

5.3 A *firm* must ensure that any *person* carrying out the internal audit *function* does not assume responsibility for any other *function*.

5.4 Notwithstanding 5.3, and in particular by respecting the principle of proportionality, a *firm* may allow the *person*s carrying out the internal audit *function* to carry out other *key functions*, where all of the following conditions are met:

(1) this is appropriate with respect to the nature, scale and complexity of the risks inherent in the *firm's* business;

(2) no conflict of interest arises for the *person*s carrying out the internal audit *function*; and

(3) the costs of maintaining *persons* for the internal audit *function* that do not carry out other *key function*s would impose costs on the *firm* that would be disproportionate with respect to the total administrative expenses.

6 ACTUARIAL FUNCTION

…

6.2 A *firm* must provide for an actuarial *function* that, in coordinating the calculation of the *technical provisions*, includes all of the following tasks:

(1) applies methodologies and procedures to assess the sufficiency of *technical provisions* and to ensure that their calculation is consistent with the requirements set out in the Technical Provisions Part and the Valuation Part;

(2) assesses the uncertainty associated with the estimates made in the calculation of *technical provisions*;

(3) ensures that any limitations of data used to calculate *technical provisions* are properly dealt with;

(4) ensures that the most appropriate approximations for the purposes of calculating the *best estimate* are used in cases referred to in Technical Provisions 12.2;

(5) ensure that homogeneous risk groups of insurance and *reinsurance* obligations are identified for an appropriate assessment of the underlying risks;

(6) consider relevant information provided by financial markets and generally available data on *underwriting risks* and ensure that it is integrated into the assessment of *technical provisions*;

(7) compare and justify any material differences in the calculation of *technical provisions* from year to year; and

(8) ensure that an appropriate assessment is provided of options and guarantees included in *contracts of insurance*.

6.3 A *firm* must ensure that the actuarial *function* assesses whether the methodologies and assumptions used in the calculation of the *technical provisions* are appropriate for the specific *lines of business* of the *firm* and for the way the business of the *firm* is managed, having regard to the available data.

6.4 A *firm* must ensure that the actuarial *function* assesses whether the information technology systems used in the calculation of *technical provisions* sufficiently support the actuarial and statistical procedures.

6.5 (1) A *firm* must ensure that the actuarial *function*, when comparing *best estimates* against experience, reviews the quality of past *best estimates* and uses the insights gained from this assessment to improve the quality of current calculations.

(2) That comparison of *best estimates* against experience must include comparisons between observed values and the estimates underlying the calculation of the *best estimate*, in order to draw conclusions on the appropriateness, accuracy and completeness of the data and assumptions used, as well as on the methodologies applied in the *firm's* calculations.

6.6 A *firm* must ensure that:

(1) information submitted to the *governing body* on the calculation of the *technical provisions* includes at least a reasoned analysis on the reliability and adequacy of its calculations and on the sources and the degree of uncertainty of the estimate of the *technical provisions*;

(2) the analysis referred to at 6.6(1) is supported by a sensitivity analysis that includes an investigation of the sensitivity of the *technical provisions* to each of the major risks underlying the obligations which are covered in the *technical provisions*; and

(3) the actuarial *function* clearly states and explains any concerns it may have concerning the adequacy of *technical provisions*.

6.7. A *firm* must ensure that the opinion on the overall underwriting policy to be expressed by the actuarial *function* referred to in 6.1(1)(g) at least includes conclusions regarding the following considerations:

(1) sufficiency of the *premiums* to be earned to cover future claims and expenses, notably taking into consideration the underlying risks (including *underwriting risks*), and the impact of options and guarantees included in *contracts of insurance* on the sufficiency of *premiums*;

(2) the effect of inflation, legal risk, change in the composition of the *firm's* portfolio, and of systems which adjust the *premiums* that *policyholders* pay upwards or downwards depending on their claims history (bonus-malus systems) or similar systems, implemented in specific homogeneous risk groups; and

(3) the progressive tendency of a portfolio of *contracts of insurance* to attract or retain *policyholders* with a higher risk profile (anti-selection).

6.8 A *firm* must ensure that the opinion on the adequacy of *reinsurance* arrangements to be expressed by the actuarial *function* in accordance with 6.1(1)(h) includes analysis on the adequacy of the following:

(1) the *firm's* risk profile and underwriting policy;

(2) *reinsurance* providers taking into account their credit standing;

(3) the expected cover under stress scenarios in relation to the underwriting policy; and

(4) the calculation of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*.

6.9

(1) A *firm* must ensure that the actuarial *function* produces a written report to be submitted to the *governing body*, at least annually.

(2) The report referred to at 6.9(1) must:

(a) document all tasks that have been undertaken by the actuarial *function* and their results; and

(b) clearly identify any deficiencies and give recommendations as to how such deficiencies should be remedied.

7 OUTSOURCING

7.1 If a *firm outsources* a *function* or any insurance or *reinsurance* activity, it remains fully responsible for discharging all of its obligations under the *PRA* rules ~~and~~, *FSMA* and any other laws, rules, regulations and administrative provisions ~~adopted in accordance with the *Solvency II Directive*~~deriving from *FSMA* that apply to *UK Solvency II firms*.

[Note: Art. 49(1) of the *Solvency II Directive*]

7.1A A *firm* which *outsources* or proposes to *outsource* a *function* or an insurance or *reinsurance* activity to a service provider must establish a written *outsourcing* policy which takes into account the impact of *outsourcing* on its business and the reporting and monitoring arrangements to be implemented in cases of *outsourcing*.

7.2 A *firm* must not *outsource* a critical or important operational *function* or activity in such a way as to lead to any of the following:

(1) materially impairing the quality of the *firm's* system of governance;

(2) unduly increasing the *operational risk*;

(3) impairing the ability of the *supervisory authorities* to monitor the *firm's* compliance with its obligations; or

(4) undermining continuous and satisfactory service to *policyholders*.

[Note: Art. 49(2) of the *Solvency II Directive*]

7.2A Where the *firm* and the service provider are members of the same *group*, the *firm* must, when *outsourcing* any critical or important operational *functions* or activities, take into account the extent to which the *firm* controls the service provider or has the ability to influence its actions.

7.3 A *firm* must, in a timely manner, notify the *PRA* prior to the *outsourcing* of critical or important *functions* or activities as well as of any subsequent material developments with respect to those *functions* or activities.

[Note: Art. 49(3) of the *Solvency II Directive*]

7.4 Without prejudice to 7.1 to 7.3, a *firm outsourcing* a *function* or an insurance or *reinsurance* activity must take the necessary steps to ensure that the following conditions are satisfied:

(1) the service provider must co-operate with the *PRA* and, where relevant, any other *supervisory authority* of the *firm* in connection with the *function* or activity that is the subject of the *outsourcing*;

(2) the *firm*, its auditors, the *PRA* and, where relevant, any other *supervisory authority* of the *firm* must have effective access to data related to the *functions* or activities that are the subject of the *outsourcing*; and

(3) the *PRA* and, where relevant, any other *supervisory authority* of the *firm* must have effective access to the business premises of the service provider and must be able to exercise those rights of access.

[Note: Art. 38(1) of the *Solvency II Directive*]

7.5 When choosing a service provider for any critical or important operational *functions* or activities, a *firm* must ensure that:

(1) a detailed examination is performed to ensure that the potential service provider has the ability, capacity, and any authorisation required by law to deliver the required *functions* or activities satisfactorily, taking into account the *firm's* objectives and needs;

(2) the service provider has adopted all means to ensure that no actual or potential conflict of interests jeopardizes the fulfilment of the needs of the *firm*;

(3) a written agreement is entered into between the *firm* and the service provider which clearly defines the respective rights and obligations of that *firm* and the service provider;

(4) the general terms and conditions of the *outsourcing* agreement are clearly explained to, and authorised by, the *firm's governing body*;

(5) the *outsourcing* does not entail the breaching of any applicable laws or regulatory requirements, in particular with regard to data protection; and

(6) the service provider is subject to the same conditions on the safety and confidentiality of information relating to the *firm* or to its *policyholders* that are applicable to that *firm*.

7.6 A *firm* must ensure that the terms and conditions of the written agreement referred to in 7.5(3) are consistent with the *firm's* obligations as provided for in 7.1, 7.2 and 7.2A.

7.7 The written agreement referred to in 7.5(3) must clearly state all of the following requirements:

(1) the duties and responsibilities of both parties involved;

(2) the service provider's commitment to comply with all applicable laws, regulatory requirements and guidance, as well as policies approved by the *firm*, and to co-operate with the *PRA* with regard to the *outsourced function* or activity;

(3) the service provider's obligation to disclose any development which may have a material impact on its ability to carry out the *outsourced functions* and activities effectively and in compliance with applicable laws and regulatory requirements;

(4) a notice period for the termination of the contract by the service provider which is long enough to enable the *firm* to find an alternative solution;

(5) that the *firm* is able to terminate the arrangement for *outsourcing* where necessary without detriment to the continuity and quality of its provision of services to *policyholders*;

(6) that the *firm* reserves the right to be informed about the *outsourced functions* and activities and their performance by the services provider as well as a right to issue general guidelines and individual instructions at the address of the service provider, as to what has to be taken into account when performing the *outsourced functions* or activities;

(7) that the service provider must protect any confidential information relating to the *firm* and its *policyholders*, *employees*, contracting parties and all other *persons*;

(8) that the *firm*, its external auditor and the *PRA* have effective access to all information relating to the *outsourced functions* and activities including carrying out on-site inspections of the business premises of the service provider;

(9) that, where appropriate and necessary for the purposes of supervision, the *PRA* may address questions directly to the service provider to which the service provider must reply;

(10) that the *firm* may obtain information about the *outsourced* activities and may issue instructions concerning the *outsourced* activities and *functions*;

(11) the terms and conditions, where applicable, under which the service provider may sub-outsource any of the *outsourced functions* and activities; and

(12) that the service provider's duties and responsibilities deriving from its written agreement with the *firm* must remain unaffected by any sub-outsourcing taking place.

7.8 A *firm* that is *outsourcing* critical or important operational *functions* or activities must fulfil all of the following requirements:

(1) ensure that relevant aspects of the service provider's risk-management and internal control systems are adequate to ensure compliance with 7.2(1) and (2);

(2) adequately take account of the *outsourced* activities in its risk-management and internal control systems to ensure compliance with 7.2(1) and (2);

(3) verify that the service provider has the necessary financial resources to perform the additional tasks in a proper and reliable way, and that all personnel of the service provider who will be involved in providing the *outsourced functions* or activities are sufficiently qualified and reliable; and

(4) ensure that the service provider has adequate contingency plans in place to deal with emergency situations or business disruptions and periodically tests backup facilities where necessary, taking into account the *outsourced functions* and activities.

…

11 STATISTICAL DATA

11.1 [Deleted]

11A ALTERNATIVE METHODS FOR VALUATION

11A.1 Where *alternative valuation methods* are used, a *firm* must:

(1) identify the assets and liabilities to which that valuation approach applies;

(2) justify the use of that valuation approach for the assets and liabilities referred to in 11A.1(1);

(3) document the assumptions underlying that valuation approach;

(4) assess the valuation uncertainty of the assets and liabilities referred to in 11A.1(1); and

(5) regularly compare the adequacy of the valuation of the assets and liabilities referred to in 11A.1(1) against experience.

11B VALUATION OF TECHNICAL PROVISIONS — VALIDATION

11B.1

(1) A *firm* must validate the calculation of *technical provisions*, in particular by comparison against experience as referred to in 4.4 and Technical Provisions 13, at least once a year and when there are indications that the data, assumptions or methods used in the calculation or the level of the *technical provisions* are no longer appropriate.

(2) The validation referred to in 11B.1(1) must cover the following:

(a) the appropriateness, completeness and accuracy of data used in the calculation of *technical provisions* as set out in Technical Provisions - Further Requirements 4;

(b) the appropriateness of any grouping of policies in accordance with Technical Provisions - Further Requirements 19;

(c) the remedies to limitations of the data referred to in Technical Provisions - Further Requirements 5;

(d) the appropriateness of approximations referred to in Technical Provisions - Further Requirements 6 for the purposes of calculating the *best estimate*;

(e) the adequacy and realism of assumptions used in the calculation of *technical provision*s for the purposes of meeting the requirements in Technical Provisions - Further Requirements 7 to 11;

(f) the adequacy, applicability and relevance of the actuarial and statistical methods applied in the calculation of *technical provisions*; and

(g) the appropriateness of the level of the *technical provisions* as referred to in Chapter 14 of the Technical Provisions Part necessary to comply with the *firm's technical provisions* as set out in Technical Provisions 2.1 to 2.3.

11B.2 For the purposes of 11B.1(2)(d), a *firm* must assess the impact of changes in the assumptions on future management actions on the valuation of the *technical provisions*. Where changes in an assumption on future management action have a significant impact on the *technical provisions*, a *firm* must be able to explain the reasons for this impact and how the impact is taken into account in its decision-making process.

11B.3 A *firm* must ensure that the validation referred to in 11B.1(1) is:

(1) carried out separately for homogeneous risk groups.

(2) carried out separately for the *best estimate*, the *risk margin* and *technical provisions* calculated according to the market value of financial instruments which reliably replicate future cash-flows in accordance with Technical Provisions - Further Requirements 22.

(3) carried out separately for *technical provisions* where the *matching adjustment* is applied.

(4) in relation to the *best estimate*, carried out separately for the gross *best estimate* and amounts recoverable from *reinsurance* contracts and *special purpose vehicles*.

(5) in relation to *general insurance and reinsurance obligations*, carried out separately for *premium* provisions and provisions for claims outstanding.

11C VALUATION OF TECHNICAL PROVISIONS — DOCUMENTATION

11C.1 A *firm* must ensure that it documents the following processes:

(1) the collection of data and analysis of its quality and other information that relates to the calculation of *technical provisions*;

(2) the choice of assumptions used in the calculation of *technical provisions*, in particular the choice of relevant assumptions about the allocation of expenses;

(3) the selection and application of actuarial and statistical methods for the calculation of *technical provisions*; and

(4) the validation of *technical provisions*.

11C.2 For the purposes of 11C.1(1), the *firm* must ensure that the documentation includes:

(1) a directory of the data used in the calculation of the *technical provisions*, specifying their source, characteristics and usage;

(2) the specification for the collection, processing and application of data referred to in Technical Provisions - Further Requirements 4.3(5); and

(3) where data is not used consistently over time in the calculation of *technical provisions*, a description of the inconsistent use and its justification.

11C.3 For the purposes of 11C.1(2), a *firm* must ensure that the documentation includes:

(1) a directory of all the relevant assumptions that the calculation of *technical provisions* is based upon; this must include assumptions on future management actions;

(2) a justification for the choice of the assumptions underlying the calculation of *technical provisions*;

(3) a description of the inputs on which the choice is based;

(4) the objectives of the choice and the criteria used for determining the appropriateness of this choice;

(5) any material limitations in the choice made;

(6) a description of the processes in place to review the choice of assumptions;

(7) a justification for the changes of assumptions from one period to another and an estimation of the impact of material changes; and

(8) the relevant deviations from assumptions about future management actions referred to in Technical Provisions - Further Requirements 8.2.

11D INTERNAL CONTROL OF VALUATION OF ASSETS AND LIABILITIES

11D.1 A *firm* must have:

(1) effective systems and controls to ensure that valuation estimates of their assets and liabilities are reliable and appropriate to ensure compliance with the Valuation Part; and

(2) a process for regularly verifying that market prices or valuation model inputs are appropriate and reliable.

11D.2 A *firm* must establish, implement, maintain, and document clearly defined policies and procedures for the process of valuation, including the description and definition of roles and responsibilities of the personnel involved with the valuation, the relevant models, and the sources of information to be used.

11D.3 A *firm* must be able to, upon request by the *PRA*, undertake an external, independent valuation or verification of the value of material assets and liabilities.

11D.4 A *firm* must fulfil all of the following requirements:

(1) provide sufficient resources, both in terms of quality and quantity, to develop, calibrate, approve and review valuation approaches used for solvency purposes;

(2) establish internal control processes which include all of the following:

(a) an independent review and verification on a regular basis of the information, data, and assumptions which are used in the valuation approach, its results, and the suitability of the valuation approach with respect to valuation of the items referred to in 11A.1(1); and

(b) oversight by the *persons* who effectively run the *firm* of the internal processes for approval of those valuations and the process in place to take account of any external, independent valuation or verification of the value of material assets or liabilities.

11E RISK MANAGEMENT IN FIRMS PROVIDING LOANS AND/OR MORTGAGE INSURANCE OR REINSURANCE

11E.1 Where a *firm* engages in the activity of providing loans, it must ensure that it has written policies to ensure all of the following:

(1) that credit-granting is based on sound and well-defined criteria and that the process for approving, amending, renewing and refinancing credits is clearly established;

(2) that the *firm* has internal methodologies that enables it to assess the *credit risk* of exposures to individual obligors and at the portfolio level;

(3) that the ongoing administration and monitoring of the loan portfolios, including for identifying and managing problematic credits, and for making adequate value adjustments, is operated through effective systems; and

(4) that the diversification of the loan portfolios is adequate given the target markets and overall investment strategy of the *firm*.

11E.2 Where a *firm* engages in *mortgage insurance* (including *reinsurance*), it must base its underwriting on sound and well-defined criteria and comply with the requirements referred to in 11E.1 (2), (3) and (4) with regard to the mortgage loans underlying its insurance and *reinsurance* obligations.

11F RISK MANAGEMENT FOR QUALIFYING INFRASTRUCTURE INVESTMENTS OR QUALIFYING INFRASTRUCTURE CORPORATE INVESTMENTS

11F.1 A *firm* must conduct adequate due diligence prior to making a *qualifying infrastructure investment* or a *qualifying infrastructure corporate investment*, including all of the following:

(1) a documented assessment of how the *infrastructure entity* satisfies the criteria set out in Solvency Capital Requirement – Standard Formula 3D2 and 3D3, which has been subject to a validation process, carried out by *persons* that are free from influence from those *persons* responsible for the assessment of the criteria, and have no potential conflicts of interest with those *persons*; and

(2) a confirmation that any financial model for the cash-flows of the *infrastructure entity* has been subject to a validation process carried out by *persons* that are free from influence from those *persons* responsible for the development of the financial model and have no potential conflicts of interest with those *persons*.

11F.2 A *firm* with a *qualifying infrastructure investment* or a *qualifying infrastructure corporate investment* must regularly monitor and perform stress tests on the cash-flows and collateral values supporting the *infrastructure entity*. Any stress tests must be commensurate with the nature, scale and complexity of the risk inherent in the infrastructure project.

11F.3 A *firm* should ensure that the stress testing considers risks arising from non-infrastructure activities, but the revenues generated by such activities must not be taken into account when determining whether the *infrastructure entity* is able to meet its financial obligations.

11F.4 Where a *firm* holds material *qualifying infrastructure investments* or *qualifying infrastructure corporate investments*, it must, when establishing the written procedures referred to in 2.4(1) include provisions for an active monitoring of such investments during the construction phase, and for a maximisation of the amount covered from such investments in case of a work-out scenario.

11F.5 A *firm* with a *qualifying infrastructure investment* or a *qualifying infrastructure corporate investment* in bonds or loans must set up its asset-liability management to ensure that, on an ongoing basis, it is able to hold the investment to maturity.

…

Annex D

Amendments to the External Audit Part

In this Annex, the new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.3 In this Part, the following definitions shall apply:

…

~~*group supervisor*~~

~~means the *PRA* in accordance with regulation 26 of The *Solvency 2 Regulations*.~~

…

4 DUTIES ON THE EXTERNAL AUDITOR

4.1 …

(2) produce a report that includes an opinion addressed to the *governing body* confirming that the *relevant elements of the SFCR* are prepared in all material respects in accordance with the *PRA* rules ~~and *Solvency II Regulations*~~ on which it is based;

…

4.2 …

(2) information has been prepared in accordance with:

(a) *PRA* rules other than the Reporting Part~~those implementing the *Solvency II Directive*~~; or

(b) *UK* law other than law deriving from *FSMA* that applies to *UK Solvency II firms*~~the *Solvency II Regulations*~~,

…

Annex E

Amendments to the Financial Conglomerates Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.4

…

~~*delegated acts*~~

~~means Commission Delegated Regulation (EU) 2015/35 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), as it has effect as *retained direct EU legislation* as at 31 December 2023.~~

…

sectoral rules

means, in relation to a *financial sector*, the following rules and requirements relating to the prudential supervision of *regulated entities* within that *financial sector*:

…

(6) references to the *PRA's* sectoral rules are to sectoral rules in the form of rules, and as applicable, the *CRR*~~, and *delegated acts*~~.

…

Annex 2 - Capital Adequacy Calculations for Financial Conglomerates

…

6 Table: PART 4: Definitions used in this Annex

…

Solo capital resources requirement: insurance sector	6.4	(1)	The *solo capital resources requirement* of an *undertaking* in the *insurance sector* is:	
			(d)	in respect of any *undertaking* which is not within (a) to (c), the capital resources requirement calculated according to the rules for the calculation of the solo capital resources requirement applicable to that *undertaking* for the purposes of the calculation referred to in Group Supervision~~ and Chapter I of Title II of the *delegated acts*~~ or, if no rules are applicable for that calculation under Group Supervision~~ and Chapter I of Title II of the *delegated acts*~~, in accordance

				with the *SCR Rules*.
...				

…

Annex F

Amendments to the Group Supervision Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

...

1.2 In this Part, the following definitions shall apply:

…

group specific parameter

means, for the purposes of determining the *group SCR* using the *standard formula*, a parameter specific to a *group*, calculated in accordance with Group Supervision 11A, that replaces a standard parameter (within a subset of parameters in the life *underwriting risk* module, non-life *underwriting risk* module or health *underwriting risk* module).

…

GSP firm

means a *firm* that has a been granted a *GSP Permission*.

GSP method

means the method for calculating the *group specific parameter* in respect of which the *firm* has been granted a *GSP Permission*, determined in accordance with 11A.

GSP Permission

means the permission to apply a *group specific parameter* granted to a *firm* by the *PRA* pursuant to section 138BA of *FSMA*.

…

~~*related undertaking*~~

~~means, in relation to an *undertaking* ("U"):~~

~~(1) any *subsidiary undertaking* of U; or~~

~~(2) any *undertaking* in which U or any of U's *subsidiary undertakings* holds a *participation*; or~~

~~(3) any *undertaking* linked to U by a *common management relationship*; or~~

~~(4) any *undertaking* linked by a *common management relationship* to an *undertaking* in (1), (2) or (3).~~

…

4 GROUP SOLVENCY: GENERAL PROVISIONS

...

4.4 …

(3) take the measures necessary to achieve, within six *months* (or such longer period as the *group* is permitted by the *PRA* pursuant to section 138A or 138BA of *FSMA* as the case may be~~may determine~~) from the observation of non-compliance with the *group SCR*, the

re-establishment of the level of *eligible own funds* covering the *group SCR* or the reduction of the risk profile to ensure compliance with the *group SCR*; and

(4) ~~if the *PRA* has extended the period referred to in (3) by reason of the declaration:~~

(a) ~~(before *IP completion day*) by *EIOPA*; or~~[deleted]

(b) ~~(on or after *IP completion day*) by the *PRA* pursuant to regulation 4A of the *Solvency 2 Regulations*,~~[deleted]

if the *PRA* has extended the period referred to in (3) by reason of the declaration by the *PRA* of an *exceptional adverse situation* affecting the *group*, submit a progress report to the *PRA* every three *months* setting out the measures taken and the progress made to re-establish the level of *own funds* covering the *group SCR* or to reduce the risk profile to ensure compliance with the *group SCR*.

…

5 GROUP SOLVENCY: FREQUENCY OF CALCULATIONS

...

5.2 ...

(3) ~~Upon request by the *group supervisor*, where there is evidence to suggest that the risk profile of the *group* has altered significantly since the date on which the group Solvency Capital Requirement was last reported, the *group SCR* must be recalculated without delay and reported to the *group supervisor*.~~[Deleted]

5.2A Where there is evidence to suggest that the risk profile of the *group* has altered significantly since the date on which the *group SCR* was last reported, *relevant insurance group undertakings* must be able to, upon request by the *group supervisor*, recalculate the *group SCR* without delay and report it to the *group supervisor*.

5.3 ...

(3) ~~Upon request by the *group supervisor*, where there is evidence to suggest that the risk profile of the *group* has altered significantly since the date on which the group Solvency Capital Requirement was last reported, the *group SCR* must be recalculated without delay and reported to the *group supervisor*.~~[Deleted]

5.4 Where there is evidence to suggest that the risk profile of the *group* has altered significantly since the date on which the *group SCR* was last reported, *relevant insurance group undertakings* must be able to, upon request by the *group supervisor*, recalculate the *group SCR* without delay and report it to the *group supervisor*.

6 GROUP SOLVENCY: NOTIFICATION OF ISSUANCE OF OWN FUNDS ITEMS BY GROUP MEMBER

6.1 ...

(2) This Chapter does not apply in respect of the following:

(a) any item which a *firm* intends to include within the *basic own funds* forming the *own funds eligible for the group SCR* of the *firm's group* that is not covered by the lists of *own funds* items set out in the *own funds lists*~~the *Solvency II Regulations*~~, but which may be included in the *basic own funds* forming the *own funds eligible for the group*

SCR only if the *firm* has received a *classification of own funds permission*~~the *PRA's* approval~~; and

…

6.2 …

(2) When giving notice, a *firm* must:

...

(g) for any item referred to in Own Funds 4A.3(1)~~Article 82(3) of the *delegated act* (including after *IP completion day* the relevant national law provision)~~, provide a draft of a properly reasoned independent accounting opinion from an appropriately qualified individual as to the item's treatment in the financial statements of the *group* member issuing the proposed item and of the *group*;

…

9 GROUP SOLVENCY: ELIMINATION OF DOUBLE USE OF ELIGIBLE OWN FUNDS AND INTRA-GROUP CREATION OF CAPITAL AND VALUATION

…

9.6 Any *eligible own funds* of a *related Solvency II undertaking* of the *participating Solvency II undertaking* for which the solvency of a *group* is calculated that are subject to ~~prior authorisation~~permission from the *supervisory authority* of the *related Solvency II undertaking*, by an *ancillary own funds permission* or in accordance with ~~regulation 44 of the *Solvency 2 Regulations* or~~ *Solvency II EEA implementing measures* implementing Article 90 of the *Solvency II Directive*, must be included in the calculation of the group solvency only in so far as they have been duly authorised by that *supervisory authority*.

…

10 GROUP SOLVENCY: APPLICATION OF THE CALCULATION METHODS

…

10.3 …

(3) In cases where an *intermediate holding company* holds subordinated debt or other *eligible own funds* subject to limitation in accordance with Own Funds 4 and 4A~~or any applicable *Solvency II Regulations*~~, they must be recognised as *eligible own funds* up to the amounts calculated by application of the limits in Own Funds 4 and 4A~~or any applicable *Solvency II Regulations*~~ to the total *eligible own funds* outstanding at the level of the *group* as compared to the *group SCR*.

(4) Any *eligible own funds* of an *intermediate holding company*, which would require ~~prior authorisation~~permission from a *supervisory authority* by an *ancillary own funds permission* or in accordance with ~~regulation 44 of the *Solvency 2 Regulations* or~~ *Solvency II EEA implementing measures* implementing Article 90 of the *Solvency II Directive*, ~~may~~must not be included in the calculation of the group solvency of the *group* ~~only in so far as they have been duly authorised by the *group supervisor*~~unless a *firm* has permission from the *supervisory authority* to do so pursuant to section 138BA of *FSMA* or *Solvency II EEA implementing measures* implementing Article 90 of the *Solvency II Directive*, and only to the extent of its permission.

…

11A METHOD 1: GROUP SPECIFIC PARAMETERS

11A.1 A *firm* must not apply a *group specific parameter* unless it is a *GSP firm*.

11A.2 A *GSP firm* must not revert back to using the standard parameter in respect of which it has a *GSP Permission*.

11A.3 A *GSP firm* must calculate a *group specific parameter* by replacing a standard parameter set out in Solvency Capital Requirement – Undertaking Specific Parameters 2.3 by the parameter specific to the *group*.

11A.4 Data used to calculate a *group specific parameter* must satisfy the criteria set out in Solvency Capital Requirement – Undertaking Specific Parameters 3 at the level of the *group*.

11A.5 A *GSP method* used to calculate the *group specific parameter* in respect of which the *GSP firm* has a *GSP Permission* must correspond to the applicable *USP method* set out in Solvency Capital Requirement – Undertaking Specific Parameter 2.3.

11A.6 For the purposes of this Chapter, the Solvency Capital Requirement – Undertaking Specific Parameters Part must be read with the following modifications:

(1) a reference to '*undertaking specific parameter*' is to be interpreted as a reference to '*group specific parameter*';

(2) a reference to '*USP firm*' is to be interpreted as a reference to a '*GSP firm*';

(3) a reference to '*USP method*' is to be interpreted as a reference to '*GSP method'*; and

(4) a reference to '*USP Permission*' is to be interpreted as a reference to '*GSP Permission'*.

…

17 RISK MANAGEMENT AND INTERNAL CONTROL

17.1 (1) Where 2.1(1) or 2.1(2) applies, the following requirements apply with any necessary changes at the level of the *group*:

(1a) Conditions Governing Business 1A;

(a) Conditions Governing Business 2.2 to 2.6;

(a1) Conditions Governing Business 2A.1 to 2A.6;

(b) Conditions Governing Business 3;

(b1) Conditions Governing Business 3A;

(c) Conditions Governing Business ~~4.1 to 4.2~~4;

(c1) Conditions Governing Business 4A;

(d) Conditions Governing Business 5;

(e) Conditions Governing Business 6;

(f) Conditions Governing Business ~~7.1 to 7.3~~7;

(f1) Conditions Governing Business 11A to 11F;

(g) Fitness and Propriety 2.1 to 2.3, 4.1, 4.3 and 4.4;

(h) Allocation of Responsibilities 4; and

(i) Key Function Holder – Notifications 2 to 6, in accordance with 17.4.

(2) Without prejudice to (1), the ~~risk management and internal control systems~~effective system of governance and reporting procedures must be implemented consistently in all

the *undertakings* included in the scope of *group* supervision under 2.2(1) and 2.2(2) so that ~~those~~the effective system~~s~~ of governance and reporting procedures can be controlled at the level of the *group*.

(3) Without prejudice to (1), the internal control ~~mechanisms~~system must include at least the following:

(a) adequate mechanisms as regards group solvency to identify and measure all material risks incurred and to appropriately relate *eligible own funds* to risks; and

(b) sound reporting and accounting procedures to monitor and manage the intra-group transactions and the risk concentration.

17.2 (1) Where 2.1(1) or 2.1(2) applies, a *participating Solvency II undertaking* that is a *firm*, or if there is none, the *UK holding company* or the *relevant insurance group undertakings*, must undertake at the level of the *group* the *ORSA* assessment required by Conditions Governing Business 3.8 to ~~3.11~~3.12.

…

(3) Where the *participating Solvency II undertaking*, the *UK holding company* or the *relevant insurance group undertakings* (as appropriate) so decide, and subject to the agreement of the *group supervisor*, they may undertake any assessments required by Conditions Governing Business 3.8 to ~~3.11~~3.12 at the level of the *group* and at the level of any *subsidiary undertaking* in the *group* at the same time, and may produce a single document covering all the assessments to satisfy the requirement to provide an *ORSA* report in Conditions Governing Business 3.11 and 3.12.

(4) Where the *group* exercises the option provided in (3), it must submit the *ORSA* report~~document~~ to all *supervisory authorities* concerned at the same time.

(5) The exercise of the option provided in (3) does not exempt the *subsidiary undertakings* concerned from the obligation to ensure that the requirements of Conditions Governing Business 3.8 to ~~3.11~~3.12 are met.

[Note: Art. 246(1) to (4) of the *Solvency II Directive*]

…

20 THIRD COUNTRIES

…

20.4 Where the *parent undertaking* referred to in 2.1(3) is itself a *subsidiary undertaking* of an *insurance holding company* or *mixed financial holding company* which does not have its head office in the *UK* or Gibraltar or a *third country insurance undertaking* or a *third country reinsurance undertaking*, 20.1 applies at the level of ~~either:~~the ultimate *parent undertaking* which is an *insurance holding company* or *mixed financial holding company* which does not have its head office in the *UK* or Gibraltar or a *third country insurance undertaking* or a *third country reinsurance undertaking*.

(1) ~~the ultimate *parent undertaking* which is an *insurance holding company* or *mixed financial holding company* which does not have its head office in the *UK* or Gibraltar or a *third country insurance undertaking* or a *third country reinsurance undertaking*; or~~[deleted]

(2) ~~such other *parent undertaking* as the *PRA* may determine in accordance with Regulation 36A of the *Solvency 2 Regulations*.~~[deleted]

…

Annex G

Amendments to the Investments Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

original lender

has the meaning given in Securitisation 1.3.

originator

has the meaning given in Securitisation 1.3.

sponsor

has the meaning given in Securitisation 1.3.

…

6 REPACKAGED LOANS

6.1 A *firm* must ensure that the requirements set out in Article 6 of Chapter 2, Chapter 3 and Chapter 4 of the Securitisation Part~~the Solvency II Regulations~~, that need to be met by *undertakings* that repackage loans into tradable securities and other financial instruments in order for a *firm* to be allowed to invest in such securities or instruments, are met in respect of securities or instruments held by the *firm* that were:

…

7 REQUIREMENT FOR INVESTMENTS IN A SECURITISATION

7.1 Where a *firm* becomes aware that the *originator*, *sponsor* or *original lender* fails to comply with the risk retention requirements set out in either Article 6 of Chapter 2 or in Chapter 3 of the Securitisation Part, or a *firm* becomes aware that the due diligence requirements set out in either Article 5(1), (2), (3) and (4) of Chapter 2 or in Chapter 3 of the Securitisation Part are not being complied with, it shall inform the *PRA* immediately.

Annex H

Amendments to the Lloyd's Part

In this Annex new text is underlined and deleted text is struck through.

…

10 SOLVENCY II REGULATIONS [DELETED]

10.1 ~~In complying with requirements imposed on it in the Solvency II Firms Sector of the *PRA* Rulebook, the *Society* must ensure that any relevant provision of the *Solvency II Regulations* is applied in order to achieve the same effect as that provision of the *Solvency II Regulations* would have (that is, conforming with the requirements of the relevant provision) when applied to a *UK Solvency II firm*.~~[Deleted]

10.2 ~~In complying with requirements imposed on it in the Solvency II Firms Sector of the *PRA* Rulebook, a *managing agent* must, in relation to each *syndicate* managed by it and for each *syndicate year*, ensure that any relevant provision of the *Solvency II Regulations* is applied in order to achieve the same effect as that provision of the *Solvency II Regulations* would have (that is, conforming with the requirements of the relevant provision) when applied to a *UK Solvency II firm*.~~[Deleted]

…

Annex I

Amendments to the Insurance Special Purpose Vehicles Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

…

multi-arrangement special purpose vehicle

~~has the meaning given in Article 2 of the Commission Implementing Regulation (EU) 2015/462.~~

means a *UK ISPV* which assumes risks under more than one separate contractual arrangement from one or more *undertakings*.

qualifying holding

means a direct or indirect holding in an *undertaking* which represents 10% or more of the capital or of the voting rights or which makes it possible to exercise a significant influence over the management of that *undertaking*.

…

2 ~~GENERAL PROVISIONS~~SOLVENCY REQUIREMENTS

2.1 A *UK ISPV* must ensure that at all times:

(1) it is fully funded; and

(2) if it is a *multi-arrangement special purpose vehicle*, each *group of cells* (if any) is fully funded.

2.2 In order to be considered fully funded a *UK ISPV* must satisfy all of the following requirements:

(1) the assets of the *UK ISPV* are recognised and valued in accordance with Valuation 2;

(2) the *UK ISPV* has at all times assets the value of which is equal to or exceeds the *aggregate maximum risk exposure* and the *UK ISPV* is able to pay the amounts it is liable for as they fall due; and

(3) the proceeds of the debt issuance or other financing mechanism are fully paid-in.

2.3 A *UK ISPV* must satisfy the requirements in 2.2 taking into account all of the following:

(1) the liquidity risk of the *UK ISPV*;

(2) the quantifiable risks of the *UK ISPV*; and

(3) the arrangements for holding assets in the *UK ISPV*.

2.4 The *UK ISPV* must:

(1) report on the matters referred to in 2.3(1) and 2.3(2) and demonstrate to the *PRA* that it satisfies the requirements set out in 2.2, in the report referred to in 5A.2; and

(2) be able to demonstrate to the *PRA* that it satisfies the requirements set out in 2.2, if requested to do so.

2.5 Payments relating to existing *contracts of insurance* and *reinsurance contracts*, that are expected to be received in the future by the *UK ISPV* from the *undertaking* that has transferred risk to the *UK ISPV*, may be included in the assets of the *UK ISPV*, provided that all of the following requirements are met:

(1) the future liabilities of the *UK ISPV* to the providers of debt or finance only arise subject to the receipt of the payments from the *undertaking* that has transferred risk to the *UK ISPV*;

(2) where the *undertaking* which has transferred risks to the *UK ISPV* is:

(a) a *UK Solvency II firm* or Lloyd's, there is no scenario under which the *basic own funds* of the *undertaking* would be negatively affected by the payment not being received by the *UK ISPV*;

(b) a *third country insurance undertaking*, there is no scenario under which the *basic own funds* of the *undertaking*, determined as if it were a *UK Solvency II firm*, would be negatively affected by the payment not being received by the *UK ISPV*;

(3) the *UK ISPV* continues to meet the conditions set out in 2.2 in the event that the payments from the *undertaking* that has transferred risk to the *UK ISPV* are not received; and

(4) the payments do not relate to expenses that are excluded from the *aggregate maximum risk exposure*.

2.6 A *UK ISPV* must invest all its assets in accordance with all of the following requirements:

(1) with respect to the whole portfolio of assets, *UK ISPVs* shall only invest in assets and instruments whose risk the *UK ISPV* can properly identify, measure, monitor, manage, control and report;

(2) assets shall be invested in such a manner as to ensure the security, quality, liquidity and profitability of the portfolio as a whole. In addition, the localisation of those assets shall be such as to ensure their availability;

(3) all assets shall be invested in a manner appropriate to the nature and duration of the *UK ISPV's* liabilities. All assets shall be invested in the best interest of the *undertakings* transferring risks to the *UK ISPV*;

(4) the use of *derivative* instruments shall be possible insofar as they contribute to a reduction of risks or facilitate efficient portfolio management;

(5) investments and assets which are not admitted to trading on a *regulated market* shall be kept to prudent levels;

(6) assets shall be properly diversified in such a way as to avoid excessive reliance on any particular asset, *issuer* or *group* of *undertakings*, or geographical area and excessive accumulation of risk in the portfolio as a whole; and

(7) investments in assets issued by the same *issuer*, or by *issuers* belonging to the same *group*, shall not expose the *UK ISPV* to excessive risk concentration.

2A GENERAL CONDITIONS

2A.1 A *UK ISPV* must ensure that the following conditions are satisfied at all times:

(1) the *UK ISPV* only assumes risks from an *undertaking* through *reinsurance contracts* or assumes insurance risks through similar arrangements;

(2) where the *UK ISPV* assumes risks from more than one *undertaking*, the solvency of the *UK ISPV* is not adversely affected by winding-up proceedings of any one of those *undertakings*; and

(3) the *UK ISPV* has not determined, on the basis of an assessment carried out in accordance with 2C.5, that any shareholder or member having a *qualifying holding* in the *UK ISPV* fails to satisfy the criteria set out in 2C.5(1) to 2C.5(4).

2A.2 A *UK ISPV* must be able to demonstrate to the *PRA* that it meets the requirements set out in 2.1 to 2.6, 2A.1, Chapter 2B, 2C.1 to 2C.6, 2C.8 to 2C.10 and 5A.1 to 5A.5.

2B MANDATORY CONTRACT CONDITIONS

2B.1 A *UK ISPV* must ensure that the contractual arrangements relating to the transfer of risk from an *undertaking* to the *UK ISPV* ensure that the *UK ISPV* is at all times fully funded in accordance with 2.2 to 2.5.

2B.2 A *UK ISPV* must ensure that the contractual arrangements relating to the transfer of risk from an *undertaking* to the *UK ISPV* and from the *UK ISPV* to the providers of debt or financing shall ensure all of the following:

(1) the transfer of risk is effective in all circumstances; and

(2) the extent of risk transfer is clearly defined and incontrovertible.

2B.3 The transfer of risk shall not be effective in all circumstances where there are connected transactions which could undermine the effective transfer of risk.

2B.4 A *UK ISPV* must ensure that the contractual arrangements relating to the transfer of risk from an *undertaking* to the *UK ISPV* and from that *UK ISPV* to the providers of debt or finance shall ensure all of the following:

(1) the claims of the providers of debt or financing mechanisms are at all times subordinated to the payment obligations of the *UK ISPV* to the *undertaking*;

(2) no payments are made to the providers of debt or financing, if following those payments, the *UK ISPV* would no longer be fully funded;

(3) the providers of debt or finance to the *UK ISPV* have no rights of recourse to the assets of the *undertaking*; and

(4) the providers of debt or finance to the *UK ISPV* have no rights to apply for the winding-up of the *UK ISPV*.

2C SYSTEM OF GOVERNANCE

2C.1 A *UK ISPV* must ensure that all *persons* who effectively run the *UK ISPV* shall at all times fulfil the requirements set out in Insurance – Fitness and Propriety 2.1, 2.2 and 2.3(1).

2C.2 A *UK ISPV* must notify the *PRA* of the identity of the *persons* who effectively run the *UK ISPV* and must be able to demonstrate to the *PRA* that those *persons* meet the requirements set out in Insurance – Fitness and Propriety 2.1, 2.2 and 2.3(1).

2C.3 A *UK ISPV* must notify the *PRA* of any changes in the identity of the *persons* who effectively run the *UK ISPV* and provide the *PRA* with all information needed to assess whether any new *persons* appointed to run the *UK ISPV* are fit and proper in accordance with the requirements in Insurance – Fitness and Propriety 2.1, 2.2 and 2.3(1).

2C.4 A *UK ISPV* must notify the *PRA* if any of the *persons* who effectively run a *UK ISPV* have been replaced because they no longer fulfil the requirements set out in Insurance – Fitness and Propriety 2.1, 2.2 and 2.3(1).

2C.5 A *UK ISPV* must take reasonable steps to keep under assessment whether shareholders or members having a *qualifying holding* in that *UK ISPV* are fit and proper, taking into account all of the following criteria:

(1) the reputation and integrity of the shareholder or member having a *qualifying holding* in the *UK ISPV*;

(2) the financial soundness of the shareholder or member having a *qualifying holding* in the *UK ISPV*;

(3) the level of influence that the shareholder or member having a *qualifying holding* in the *UK ISPV* will exercise over the *UK ISPV*; and

(4) whether there are reasonable grounds to suspect that, in connection with the *qualifying holding* of the shareholder or member having a *qualifying holding* in the *UK ISPV*, money laundering or terrorist financing within the meaning of regulation 3(1) of the Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017 is being or has been committed or attempted, or that the *qualifying holding* could increase that risk.

2C.6 A *UK ISPV* must notify the *PRA* of the identity of the *persons* who are its shareholders or members having a *qualifying holding*.

2C.7 A *UK ISPV* must notify the *PRA* as soon as it becomes aware that any shareholder or member having a *qualifying holding* may not be fit and proper, taking into account the criteria in 2C.5.

2C.8 A *UK ISPV* must have an effective system of governance which provides for the sound and prudent management of the *UK ISPV* and which is appropriate to the nature, scale and complexity of the risks it assumes and the *regulated activity* for which it is authorised.

2C.9 The system of governance of a *UK ISPV* must include:

(1) written policies:

(a) in relation to at least risk management, internal control, administrative and accounting procedures and, where relevant, *outsourcing*;

(b) including policies relating to the areas set out in Conditions Governing Business 3.1(2)(c) to the extent that these are relevant taking into account the *regulated activity* for which the *UK ISPV* is authorised;

(2) effective internal controls to ensure that the mandatory contract conditions in Chapter 2B and the requirements in 2.2 to 2.6 are fulfilled on an ongoing basis; and

(3) an effective risk-management system comprising processes and reporting procedures necessary to identify, measure, monitor, manage and report, on an ongoing basis the risks to which the *UK ISPV* could be exposed.

2C.10 A *UK ISPV* must ensure that the policies referred to in 2C.9(1) are implemented effectively.

…

4 MULTI-ARRANGEMENT SPECIAL PURPOSE VEHICLES

4.1 This Chapter only applies to a *multi-arrangement special purpose vehicle*.

4.2 A *multi-arrangement special purpose vehicle* must be a *UK protected cell company*.

…

4.5 A *multi-arrangement special purpose vehicle* must be able to demonstrate to the *PRA* on request that its solvency cannot be adversely affected by the winding-up proceedings of any

one of the *undertakings* transferring risks to it and that the *multi-arrangement special purpose vehicle* can maintain the solvency requirement referred to in 2.2 to 2.5 at all times.

4.6 When demonstrating that the *multi-arrangement special purpose vehicle's* solvency cannot be adversely affected by the winding-up proceedings of any one of the *undertakings* transferring risk to it, the *multi-arrangement special purpose vehicle* must provide sufficient supporting evidence to allow the *PRA* to assess the *multi-arrangement special purpose vehicle's* overall *aggregate maximum risk exposure* and the *aggregate maximum risk exposure* of each individual contractual arrangement relating to the transfer of risk from an *undertaking*.

4.7 A *multi-arrangement special purpose vehicle* must be able to demonstrate to the *PRA* on request sufficient supporting evidence that it satisfies the conditions set out in 2.2 to 2.5 and Chapter 2B taking into account each individual contractual arrangement in order to determine whether the *multi-arrangement special purpose vehicle* complies with the solvency requirements.

…

5A SUPERVISORY REPORTING

5A.1 A *UK ISPV* must submit to the *PRA* such information as is necessary for the purposes of the *PRA's* supervision of the *UK ISPV*.

5A.2 A *UK ISPV* must report all of the following information to the *PRA*:

(1) the value of the assets of the *UK ISPV* valued in accordance with Valuation 2, distinguished by material class and a description of the basis, methods and assumptions used for their valuation;

(2) the *aggregate maximum risk exposure* of the *UK ISPV* and a description of the basis, methods and assumptions used for the determination of the *aggregate maximum risk exposure*;

(3) conflicts of interest between the *UK ISPV*, the *undertakings* and the providers of debt or finance; and

(4) significant transactions entered into by the *UK ISPV* during the last reporting period.

5A.3 A *UK ISPV* must submit the report referred to in 5A.2 at least annually.

5A.4 A *UK ISPV* must submit the report referred to in 5A.2 no later than 14 weeks after the *UK ISPV's* financial year end.

5A.5 A *UK ISPV* must immediately inform the *PRA* of any changes that could affect the compliance by the *UK ISPV* with 2.2 to 2.6, Chapter 2A, Chapter 2B, 2C.1 to 2C.6 and 2C.8 to 2C.10.

5A.6 As part of the reporting referred to in 5A.2, a *UK ISPV* must submit annually to the *PRA* quantitative information using the templates set out in 6.3 and in accordance with the instructions in 6.4, and comprising:

(1) content of submission, as specified in template SPV.01.01, according to the instructions under the reference SPV.01.01;

(2) basic information on the *UK ISPV*, as specified in template SPV.01.02, according to the instructions under the reference SPV.01.02;

(3) balance sheet data of the *UK ISPV*, distinguishing the material classes of assets, liabilities and equity items, including debt or other financing mechanism issued, as specified in template SPV.02.01, according to the instructions under the reference SPV.02.01;

(4) off-balance sheet data of the *UK ISPV*, as specified in template SPV.02.02, according to the instructions under the reference SPV.02.02;

(5) risks assumed regarding each individual contractual arrangement relating to the transfer of risk from an *undertaking*, as specified in template SPV.03.01, according to the instructions under the reference SPV.03.01; and

(6) list of debt securities or other financing mechanism issued regarding each individual contractual arrangement relating to the transfer of risk from an *undertaking*, as specified in template SPV.03.02, according to the instructions under the reference SPV.03.02.

5A.7 As part of the reporting referred to in 5A.2, a *UK ISPV* must submit annually to the *PRA* qualitative information covering the following:

(1) an adequate description of the basis, methods and assumptions used for the valuation of the assets;

(2) an adequate description of the basis, methods and assumptions used for the determination of the *aggregate maximum risk exposure*;

(3) details of any conflicts of interest between the *UK ISPV*, the *undertakings* transferring risk to the *UK ISPV* and the providers of debt or finance;

(4) details of any significant transactions entered into by the *UK ISPV* during the last reporting period;

(5) information to demonstrate that the *UK ISPV* continues to be fully funded, including:

(a) a description of the risks, including liquidity risks and quantifiable risks, assumed by the *UK ISPV*; and

(b) information on the debt instruments issued or other financing mechanism entered into;

(6) if the *UK ISPV* has not continuously complied with the requirement to be fully funded during the reporting period, the *UK ISPV* shall report any relevant information on that non-compliance and its rectification in order to comply with 2.2 to 2.5 during the reporting period; and

(7) qualitative information on any changes that could affect the *UK ISPV's* compliance with the requirements set out in 2.2 to 2.6, Chapter 2A, Chapter 2B, 2C.1 to 2C.6 and 2C.8 to 2C.10.

5A.8 When describing the risks assumed, as required by 5A.7, a *UK ISPV* must provide information on:

(1) whether the risks assumed are mainly risks under *contracts of long-term insurance* or risks under *contracts of general insurance*;

(2) what types of trigger events apply to those risks;

(3) whether a trigger event occurred in the reporting period, triggering a claim against the *UK ISPV's* assets;

(4) whether any amounts arising from a claim were paid out in the reporting period, and if that is the case, how much has been paid out to date and whether the trigger event has negatively affected the *UK ISPV's* liquidity; and

(5) whether the *UK ISPV's* risk profile has changed materially since the previous reporting period or from the original terms and conditions as communicated to the *PRA* upon authorisation.

5A.9 When providing information on debt instruments issued or other financing mechanism entered into as required by 5A.7, a *UK ISPV* must report on the following:

(1) the proceeds of the debt issuance or other financing mechanism and whether they have been fully paid-in regarding each individual contractual arrangement relating to the transfer of risk from an *undertaking*;

(2) the types of tiers of the financing mechanism, specifying the tranches or tiers, including information on external ratings received or internal ratings used for issued debt instruments and which, if any, *external credit assessment institutions* were used;

(3) the reasons why the financial arrangements are regarded as sufficiently robust to ensure continued protection of potential claims of the *undertaking* transferring risk to the *UK ISPV*, to maintain its ability to meet amounts it is liable for as they fall due and to ensure the pay-out structure of debt or financing mechanisms; and

(4) any debt instruments that have been cancelled, bought back or redeemed, partially or in full, since those instruments were issued and separately for the current reporting period.

5A.10 A *UK ISPV* must submit the quantitative content of the report referred to in 5A.6, and the qualitative content of the report referred to in 5A.7, to the *PRA* in an electronic format.

5A.11 A *UK ISPV* must submit all monetary data from the report referred to in 5A.6 in the *UK ISPV's* currency of reporting. For that purpose, other currencies shall be converted into the currency of reporting, using the applicable exchange rate at the end of the reporting period.

5A.12 A *UK ISPV* must submit numeric values as facts according to the following formats:

(1) data points with the data type 'Monetary' shall be reported using a minimum precision equivalent to units; and

(2) data points with the data type 'Integer' shall be reported using no decimals and a precision equivalent to units.

6 FORMS

…

6.3 The templates referred to in 5A.6 are the following:

(1) template SPV.01.01 can be found here;

(2) template SPV.01.02 can be found here;

(3) template SPV.02.01 can be found here;

(4) template SPV.02.02 can be found here;

(5) template SPV.03.01 can be found here; and

(6) template SPV.03.02 can be found here.

6.4 The instructions referred to in 5A.6 can be found here.

Annex J

Amendments to the Matching Adjustment Part

In this Annex new text is underlined and deleted text is struck through.

…

2 ELIGIBILITY TO APPLY A MATCHING ADJUSTMENT

…

2.4

…

(2) For the purpose of (1) the increase in mortality rates shall only apply to those *policies* for which the increase in mortality rates leads to an increase in *technical provisions*, taking into account the following:

(a) multiple *policies* in respect of the same insured *person* may be treated as if they were one *policy*; and

(b) where the calculation of *technical provisions* is based on groups of *policies* as referred to in ~~Article 35 of Commission Delegated Regulation (Solvency II) 2015/35~~Technical Provisions – Further Requirements 20.1, the identification of the *policies* for which *technical provisions* increase under an increase of mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result which is not materially different.

…

5 ASSETS WITH CASH FLOWS WHICH ARE NOT FIXED

…

5.4 In assessing asset cash-flows for the purposes of 5.3, a *firm* must:

(1) base the best estimate of the cash-flows on the contractual payments of the asset;

(2) use assumptions consistent with the economics of the asset; and

(3) where expert judgment is used in determining the cash-flows, ensure that it is subject to the level of controls specified in ~~Article 2 of Commission Delegated Regulation (Solvency II) 2015/35~~Conditions Governing Business 1A.1 and 1A.2.

…

7 INTERNAL CREDIT ASSESSMENTS AND CREDIT RATINGS

…

7.4 The use of *credit ratings* in the calculation of the *matching adjustment* shall be in line with the specifications set out in ~~Articles 4 - 6 of the Commission Delegated Regulation (EU) 2015/35~~Solvency Capital Requirement – Standard Formula 1A to 1C and Commission Implementing Regulation 2016/1800.

…

Annex K

Amendments to the Minimum Capital Requirement Part

1 APPLICATION ~~AND DEFINITIONS~~

…

1.2 In this Part, the following definitions shall apply: [Note: there are currently no Part specific definitions]

~~*captive insurer*~~

~~means a *UK Solvency II firm* owned by:~~

~~(1) a financial *undertaking* other than a *UK Solvency II firm*; or~~

~~(2) a *group* of *UK Solvency II firms*; or~~

~~(3) a non-financial *undertaking*;~~

~~the purpose of which is to provide insurance cover exclusively for the risks of the undertaking or undertakings to which it belongs, or of an *undertaking*, or *undertakings*, of the *group* of which that *UK Solvency II firm* is a member.~~

~~[Note: Art. 13.2 of the *Solvency II Directive*]~~

~~*captive reinsurer*~~

~~means a *UK Solvency II firm* that is a *pure reinsurer* owned by:~~

~~(1) a financial *undertaking* other than a *UK Solvency II firm*; or~~

~~(2) a *group* of *UK Solvency II firms*; or~~

~~(3) a non-financial *undertaking*;~~

~~the purpose of which is to provide *reinsurance* cover exclusively for the risks of the *undertaking* or *undertakings* to which it belongs or of an *undertaking* or *undertakings* of the *group* of which that *pure reinsurer* is a member.~~

~~[Note: Art.13(5) of the *Solvency II Directive*]~~

...

Annex L

Amendments to the Own Funds Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

...

1.2 In this Part, the following definitions shall apply:

Additional Tier 1 instrument

means capital instruments which meet all of the applicable conditions and requirements set out in Chapter 3 and Chapter 6 of Part Two of *CRR*.

Common Equity Tier 1 instrument

means capital instruments which meet all of the applicable conditions and requirements set out in Chapter 2 and Chapter 6 of Part Two of *CRR*.

…

restricted Tier 1 own funds

means the items referred to in 3A.1.1(c), 3A.1.1(e) and 3A.1(2).

Tier 2 instrument

means capital instruments which meet all of the applicable conditions and requirements set out in Chapter 4 and Chapter 6 of Part Two of *CRR*.

2 DETERMINATION OF OWN FUNDS

2.1 A *firm's own funds* comprise the sum of its *basic own funds* and subject to 2.5, *ancillary own funds*.

[Note: Art. 87 of the *Solvency II Directive*]

…

2.5 When determining its *own funds*, a *firm* must not take into account any item of *ancillary own funds* unless, subject to 2.6, it has received an *ancillary own funds permission* in respect of that item specifying~~the *PRA's* approval of~~ either:

(1) a monetary amount for the relevant item of *ancillary own funds*; or

(2) the method by which to determine the amount of the relevant item of *ancillary own funds*, together with the amount determined in accordance with that method for a specified time period.

[Note: Art. 90(1) and (3) of the *Solvency II Directive*]

2.6 Where, in respect of an *ancillary own funds* item, a *firm* has received ~~approval~~an *ancillary own funds permission*:

(1) that specifies a monetary amount, in accordance with~~under~~ 2.5(1), the *firm*~~it~~ may only include that item in its *own funds* ~~the item of *ancillary own funds* for an amount~~ up to the monetary amount set out in the *ancillary own funds permission*~~approved~~; or

(2) that specifies a method by which to determine a monetary amount in accordance with~~under~~ 2.5(2), the *firm*~~it~~ may only include that item in its *own funds* ~~the item of *ancillary own funds*~~ up to the monetary amount that has been determined by~~using~~ the method set

out in~~approved~~, and only for the time period specified by, the *ancillary own funds permission*~~for which approval is granted~~.

[Note: Art. 90(3) of the *Solvency II Directive*]

…

3 CLASSIFICATION OF OWN FUNDS INTO TIERS

…

3.4 (1) In class in classifying its *own funds* items, a *firm* must refer to the *own funds lists*~~lists of own funds items set out in the Solvency II Regulations~~.

(2) A *firm* must not include an *own funds* item in its *Tier 1 own funds*, *Tier 2 own funds* or *Tier 3 own funds* if that *own funds* item is not covered by the *own funds lists*~~lists referred to in (1)~~, unless it has received a *classification of own funds permission* in respect of that item~~the PRA's approval~~.

(3) ~~When seeking approval to classify an *own funds* item referred to in (2) in its *Tier 1 own funds*, *Tier 2 own funds* or *Tier 3 own funds*, a *firm* must demonstrate that the *own funds* item satisfies the criteria laid down in 3.1 to 3.3 for that classification.~~[Deleted]

[Note: Art. 95 of the *Solvency II Directive*]

3.4A Notwithstanding that a *firm* has received a *classification of own funds permission*, *basic own funds* items not included in the *own funds lists* may only be classified as *Tier 1 own funds* where they are fully paid in.

…

3.7 (1) A *firm* must not classify as *Tier 1 own funds*:

(a) paid-in ordinary share capital and related share premium account; or

(b) paid-in initial fund, member's contribution or the equivalent *basic own funds* for a *mutual*

unless the *firm* has the right to cancel and withhold dividends or other distributions in respect of those items at any time prior to payment, (and exercises that right) in the circumstances specified in 3B.1(12)~~the Solvency II Regulations~~.

(2) A *firm* must not classify as *Tier 2 basic own funds*:

(a) ordinary share capital and related share premium account; or

(b) initial fund, member's contribution or the equivalent *basic own funds* for a *mutual*

unless the *firm* has the right to defer dividends or other distributions in respect of those items at any time prior to payment, (and exercises that right) in the circumstances specified in 3E.1(8)~~the Solvency II Regulations~~.

[Note: Art. 93 and Art. 94 of the *Solvency II Directive*]

3A TIER 1 – LIST OF OWN FUNDS ITEMS

3A.1 The following *basic own funds* items shall be deemed to substantially possess the characteristics set out in 3.5, taking into consideration the features set out in 3.6, and a *firm* must classify them as *Tier 1 own funds*, where the following items display all of the features set out in 3B:

(1) the part of excess of assets over liabilities, valued in accordance with 2 of the Valuation Part and Technical Provisions Part, comprising the following items:

(a) paid-in ordinary share capital and the related share premium account;

(b) paid-in initial funds, members' contributions or the equivalent *basic own funds* item for *mutual* and *mutual*-type *undertakings*;

(c) paid-in subordinated *mutual* member accounts;

(d) *surplus funds* that are not considered as insurance and *reinsurance* obligations in accordance with 2.1 of the Surplus Funds Part;

(e) paid-in *preference shares* and the related share premium account; and

(f) a reconciliation reserve calculated in accordance with 3C;

(2) paid-in subordinated liabilities valued in accordance with 2 of the Valuation Part.

3B TIER 1 – FEATURES DETERMINING CLASSIFICATION

3B.1 The features referred to in 3A are the following:

(1) the *basic own funds* item:

(a) in the case of items referred to in 3A.1(1)(a) and 3A.1(1)(b), ranks after all other claims in the event of winding-up proceedings regarding the *firm*; and

(b) in the case of *restricted Tier 1 own funds*, ranks to the same degree as, or ahead of, the items referred to in 3A.1(1)(a) and 3A.1(1)(b), but after items listed in 3D and 3F that display the features set out in 3E and 3G respectively and after the claims of all *policyholders* and non-subordinated creditors;

(2) the *basic own funds* item does not include features which may cause the insolvency of the *firm* or may accelerate the process of the *firm* becoming insolvent;

(3) the *basic own funds* item is immediately available to absorb losses;

(4) the *basic own funds* item absorbs losses at least once there is non-compliance with the *SCR* and does not hinder the recapitalisation of the *firm*;

(5) the *basic own funds* item, in the case of *restricted Tier 1 own funds*, possesses one of the following principal loss absorbency mechanisms to be triggered at the trigger event specified in 3B.10 and complies with the conditions set out in 3B.9:

(a) the nominal or principal amount of the *basic own funds* item is written down as set out in 3B.5 and 3B.6;

(b) the *basic own funds* item automatically converts into a *basic own funds* item listed in 3A.1(1)(a) or 3A.1(1)(b) as set out in 3B.7 and 3B.8; or

(c) a principal loss absorbency mechanism that achieves an equivalent outcome to the principal loss absorbency mechanisms set out in 3B.1(5)(a) or 3B.1(5)(b);

(6) the *basic own funds* item meets one of the following criteria:

(a) in the case of items referred to in 3A.1(1)(a) and 3A.1(1)(b), the item is undated or, where the *firm* has a fixed maturity, is of the same maturity as the *firm*; or

(b) in the case of *restricted Tier 1 own funds* items, the item is undated or the first contractual opportunity to repay or redeem the *basic own funds* item does not occur before five years from the date of issuance;

(7) a *restricted Tier 1 own funds* item may only allow for repayment or redemption of that item between 5 and 10 years after the date of issuance where the *firm's SCR* is exceeded by an appropriate margin taking into account the solvency position of the *firm* including the *firm's* medium-term capital management plan;

(8) the *basic own funds* item, in the case of items referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2), is only repayable or redeemable at the option of the *firm* and provides that the repayment or redemption of the *basic own funds* item is subject to the *firm* receiving prior permission from the *PRA*;

(9) the *basic own funds* item, in the case of items referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2), does not include any incentives to repay or redeem that item that increase the likelihood that a *firm* will repay or redeem that *basic own funds* item where it has the option to do so;

(10) the *basic own funds* item, in the case of items referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2), provides for the suspension of repayment or redemption of that item where there is non-compliance with the *SCR* or repayment or redemption would lead to such non-compliance until:

(a) the *firm* complies with the *SCR*; and

(b) the repayment or redemption would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3B.1(11);

(11) notwithstanding 3B.1(10), the *basic own funds* item may allow for repayment or redemption of that item where the *firm* does not comply with the *SCR* or repayment or redemption would lead to such non-compliance, only where all of the following conditions are met:

(a) the *firm* has received prior permission from the *PRA* to repay or redeem that item;

(b) the item is to be exchanged for or converted into another *Tier 1 own funds* item of at least the same quality; and

(c) the *MCR* will be complied with after the repayment or redemption;

(12) the *basic own funds* item meets one of the following criteria:

(a) in the case of items referred to in 3A.1(1)(a) and 3A.1(1)(b), either the legal or contractual arrangements governing the *basic own funds* item or legislation applicable in the *UK* allow for the cancellation of distributions in relation to that item where there is non-compliance with the *SCR* or the distribution would lead to such non-compliance until:

(i) the *firm* complies with the *SCR*; and

(ii) the distribution would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3B.1(13);

(b) in the case of *restricted Tier 1 own funds* items, the terms of the contractual arrangement governing the *basic own funds* item provide for the cancellation of distributions in relation to that item where there is non-compliance with the *SCR* or the distribution would lead to such non-compliance until:

(i) the *firm* complies with the *SCR*; and

(ii) the distribution would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3B.1(13);

(13) notwithstanding 3B.1(12), the *basic own funds* item may allow for a distribution to be made where the *firm* does not comply with the *SCR* or the distribution on a *basic own funds* item would lead to such non-compliance, only where this provision is subject to all of the following conditions:

(a) the *firm* has received prior permission from the *PRA* that the distribution can be made;

(b) the distribution would not further weaken the solvency position of the *firm*; and

(c) the *MCR* will be complied with after the distribution is made;

(14) the *basic own funds* item, in the case of items referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2), provides the *firm* with full flexibility over the distributions on the *basic own funds* item in accordance with the conditions set out in 3B.3 or 3B.4; and

(15) the *basic own funds* item is free from encumbrances and is not connected with any other transaction, which when considered with the *basic own funds* item, could result in that *basic own funds* item not complying with 3.1.

3B.2 For the purposes of 3B, the exchange or conversion of a *basic own funds* item into another *Tier 1 own funds* item or the repayment or redemption of a *Tier 1 own funds* item out of the proceeds of a new *basic own funds* 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 receiving prior permission from the *PRA*.

3B.3 For the purposes of 3B.1(14), in the case of *basic own funds* items referred to in 3A.1(1)(a) and 3A.1(1)(b), the item provides full flexibility over distributions only where all of the following conditions are met:

(1) there is no preferential distribution treatment regarding the order of distribution payments and the terms of the contractual arrangement governing the *own funds* item do not provide preferential rights to the payment of distributions;

(2) distributions are paid out of distributable items;

(3) the level of distributions is not determined on the basis of the amount for which the *own funds* item was purchased at issuance and there is no cap or other restriction on the maximum level of distribution;

(4) notwithstanding 3B.3(3), in the case of instruments issued by *mutual* and *mutual*-type *undertakings*, 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 funds* items;

(5) there is no obligation for a *firm* to make distributions;

(6) non-payment of distributions does not constitute an event of default by the *firm*; and

(7) the cancellation of distributions imposes no restrictions on the *firm*.

3B.4 For the purposes of 3B.1(14), in the case of *restricted Tier 1 own funds* items, the item provides full flexibility over distributions only where all of the following conditions are met:

(1) distributions are paid out of distributable items;

(2) the *firm* has full discretion at all times to cancel distributions in relation to the *own funds* item for an unlimited period and on a non-cumulative basis and the *firm* may use the cancelled payments without restriction to meet its obligations as they fall due;

(3) there is no obligation to substitute the distribution by a payment in any other form;

(4) there is no obligation to make distributions in the event of a distribution being made on another *own funds* item;

(5) non-payment of distributions does not constitute an event of default by the *firm*; and

(6) the cancellation of distributions imposes no restrictions on the *firm*.

3B.5 For the purposes of 3B.1(5)(a), the nominal or principal amount of the *basic own funds* item must be written down in such a way that all of the following are reduced:

(1) the claim of the holder of that item in the event of winding-up proceedings;

(2) the amount required to be paid on repayment or redemption of that item; and

(3) the distributions paid on that item.

3B.6 For the purposes of 3B.1(5)(a), the provisions governing the write-down of the nominal or principal amount of the *basic own funds* item must provide for all of the following:

(1) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(3) and a partial write-down would be sufficient to re-establish compliance with the *SCR*, there is a partial write-down of the nominal or principal amount for an amount that is at least sufficient to re-establish compliance with the *SCR*;

(2) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(3) and a partial write-down would not be sufficient to re-establish compliance with the *SCR*, the nominal or principal amount as determined at the time of original issuance of the *basic own funds* item is written down at least on a linear basis in a manner which ensures that full write-down will occur when 75% coverage of the *SCR* is reached, or prior to that event;

(3) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(1) or 3B.10(2), the nominal or principal amount is written down in full; and

(4) following a write-down in accordance with 3B.6(2) ('the initial write-down'):

(a) if the trigger event specified in 3B.10 subsequently occurs in the circumstances described in 3B.10(1) or 3B.10(2), the nominal or principal amount is written down in full;

(b) if, by the end of the period of three *months* from the date of the trigger event that resulted in the initial write-down, no trigger event has occurred in the circumstances described in 3B.10(1) or 3B.10(2) but the solvency ratio has deteriorated further, the nominal or principal amount as determined at the time of original issuance of the *basic own funds* item is written down further in accordance with 3B.6(2) to reflect that further deterioration in the solvency ratio; and

(c) a further write-down is made in accordance with 3B.6(4)(b) for each subsequent deterioration in the solvency ratio at the end of each subsequent period of three *months* until the *firm* has re-established compliance with the *SCR*.

For the purposes of 3B.6(4), the 'solvency ratio' means the ratio of *eligible own funds* (to cover a *firm's SCR*) and the *firm's SCR* using the latest available values.

3B.7 For the purposes of 3B.1(5)(b), the provisions governing the conversion into *basic own funds* items listed in 3A.1(1)(a) or 3A.1(1)(b) must specify either of the following:

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

(2) a range within which the instruments will convert into the *basic own funds* item listed in 3A.1(1)(a) or 3A.1(1)(b).

3B.8 For the purposes of 3B.1(5)(b), the provisions governing the conversion into *basic own funds* items listed in 3A.1(1)(a) or 3A.1(1)(b) must provide for all of the following:

(1) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(3) and a partial conversion would be sufficient to re-establish compliance with the *SCR*, there is a partial conversion of the item for an amount that is at least sufficient to re-establish compliance with the *SCR*;

(2) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(3) and a partial conversion would not be sufficient to re-establish compliance with the *SCR*, the item is converted in such a way that the remaining nominal or principal amount of the item decreases at least on a linear basis ensuring that full conversion will occur when 75% coverage of the *SCR* is reached, or prior to that event;

(3) if the trigger event specified in 3B.10 has occurred in the circumstances described in 3B.10(1) or 3B.10(2), the item is converted in full; and

(4) following a conversion in accordance with 3B.8(2) ('the initial conversion'):

(a) if the trigger event specified in 3B.10 subsequently occurs in the circumstances described in 3B.10(1) or 3B.10(2), the item is converted in full;

(b) if, by the end of the period of three *months* from the date of the trigger event that resulted in the initial conversion, no trigger event has occurred in the circumstances described in 3B.10(1) or 3B.10(2) but the solvency ratio has deteriorated further, the item is converted further in accordance with 3B.8(2) to reflect that further deterioration in the solvency ratio; and

(c) a further conversion is made in accordance with 3B.8(4)(b) for each subsequent deterioration in the solvency ratio at the end of each subsequent period of three *months* until the *firm* has re-established compliance with the *SCR*.

For the purposes of 3B.8(4), the 'solvency ratio' has the same meaning as it has for the purposes of 3B.6.

3B.9 The nominal or principal amount of the *basic own funds* item must absorb losses at the trigger event. Loss absorbency resulting from the cancellation of, or a reduction in, distributions does not constitute a principal loss absorbency mechanism in accordance with 3B.1(5).

3B.10 The trigger event referred to in 3B.1(5) is significant non-compliance with the *SCR*. Non-compliance with the *SCR* is considered significant for these purposes where any of the following conditions is met:

(1) the amount of *own funds* items eligible to cover the *SCR* is equal to or less than 75% of the *SCR*;

(2) the amount of *own funds* items eligible to cover the *MCR* is equal to or less than *MCR*; or

(3) compliance with the *SCR* is not re-established within a period of three *months* from the date when non-compliance with the *SCR* was first observed.

A *firm* may specify, in the provisions governing the instrument, one or more trigger events in addition to the events referred to in 3B.10(1) to 3B.10(3).

3B.11 For the purposes of 3B.1(4), 3B.1(10) and 3B.1(12), references to the *SCR* must be read as references to the *MCR* where non-compliance with the *MCR* occurs before non-compliance with the *SCR*.

3B.12 Notwithstanding the requirement in 3B.1(5) for the principal loss absorbency mechanism to be triggered at the trigger event specified in 3B.10, the *basic own funds* item may provide for the principal loss absorbency mechanism not to be triggered at that event only where this provision is subject to all of the following conditions:

(1) the trigger event occurs in the circumstances described in 3B.10(3);

(2) there have been no previous trigger events in the circumstances described 3B.10(1) or 3B.10(2); and

(3) the *firm* has received prior permission from the *PRA* to waive the triggering of the principal loss absorbency mechanism on the basis of the following information:

(a) projections provided to the *PRA* by the *firm* when that *firm* submits the recovery plan required by 4.4(2) of the Group Supervision Part and 3.1(2) of the Undertakings in Difficulty Part, demonstrate that triggering the principal loss absorbency mechanism in that case would be very likely to give rise to a tax liability that would have a significant adverse effect on the *firm's* solvency position; and

(b) a certificate issued by the *firm's* statutory auditors certifying that all of the assumptions used in the projections are realistic.

3B.13 Notwithstanding the requirement in 3B.1(6)(b), the *basic own funds* item may allow for repayment or redemption earlier than that period where the following conditions are met:

(1) the *firm's SCR*, after the repayment or redemption, will be exceeded by an appropriate margin taking into account the solvency position of the *firm*, including the *firm's* medium-term capital management plan; and

(2) the circumstances are as described in (a) or (b), either;

(a) there is a change in the regulatory classification of the *basic own funds* item which would be likely to result in its exclusion from the *own funds* or reclassification as a lower tier of *own funds* and both of the following conditions are met;

(i) the *PRA* considers such a change to be sufficiently certain; and

(ii) the *firm* demonstrates to the satisfaction of the *PRA* that the regulatory reclassification of the *basic own funds* item was not reasonably foreseeable at the time of its issuance; or

(b) there is a change in the applicable tax treatment of the *basic own funds* item which the *firm* demonstrates to the satisfaction of the *PRA*:

(i) is material; and

(ii) was not reasonably foreseeable at the time of its issuance.

3B.14 A *firm* must not:

(1) redeem or repay a *basic own funds* item referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2);

(2) redeem or repay a *basic own funds* item referred to in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(c), 3A.1(1)(e), and 3A.1(2) when redemption or repayment has been suspended in the circumstances referred to in 3B.1(10);

(3) make a distribution under a *basic own funds* item in the circumstances referred to in 3B.1(12); or

(4) redeem or repay a *basic own funds* item in the circumstances set out in 3B.13,

unless, in each case, it has received prior permission from the *PRA* pursuant to section 138BA of *FSMA*.

3B.15 For the purposes of 3B, a *firm* may only:

(1) exchange or convert a *Tier 1 own funds* item into another *Tier 1 own funds* item; or

(2) repay or redeem a *Tier 1 own fund* item out of the proceeds of a new *basic own funds* item of at least the same quality,

without it being deemed as a repayment or redemption, if the *firm* has received prior permission from the *PRA* pursuant to section 138BA of *FSMA* for the exchange, conversion, repayment or redemption (as applicable).

3B.16 A *firm* must treat significant non-compliance with the *SCR* (as defined in 3B.10) as a trigger event for the principal loss absorbency mechanism referred to in 3B.1(5) unless it has received prior permission from the *PRA* pursuant to section 138BA of *FSMA* not to treat that non-compliance as a trigger event.

3C RECONCILIATION RESERVE

3C.1 The reconciliation reserve referred to in 3A.1(1)(f) equals the total excess of assets over liabilities reduced by all of the following:

(1) the amount of own *shares* held by the *firm*;

(2) foreseeable dividends, distributions and charges;

(3) the *basic own funds* items included in 3A.1(1)(a) to (e), 3D.1(1) and 3F.1(1);

(4) any *basic own funds* item not included in 3A.1(1)(a) to (e), 3D.1(1) and 3F.1(1), in respect of which a *firm* has a *classification of own funds permission*;

(5) the *restricted own funds* items that meet one of the following requirements:

(a) exceed the notional *SCR* in the case of *matching adjustment portfolios* and *ring-fenced funds* determined in accordance with 3L.1; or

(b) that are excluded in accordance with 3L.2; and

(6) the amount of *participations* held in financial and credit institutions as referred to in 3K.6 deducted in accordance with 3K, to the extent that this is not already included in 3C.1(1) to (5).

3C.2 The reconciliation reserve may be positive or negative.

3C.3 A *firm* is not required to determine whether, and to what extent, the reconciliation reserve displays the features set out in 3B by assessing features of the assets and liabilities that are included in computing the excess of assets over liabilities or the underlying items in the *firm's* financial statements.

3D TIER 2 BASIC OWN FUNDS – LIST OF OWN FUNDS ITEMS

3D.1 The following *basic own funds* items shall be deemed to substantially possess the characteristics set out in 3.5(2), taking into consideration the features set out in 3.6, and a *firm* must classify them as *Tier 2 own funds* where the following items display all of the features set out in 3E:

(1) the part of excess of assets over liabilities, valued in accordance with 2 of the Valuation Part and Technical Provisions Part, comprising the following items:

(a) ordinary share capital and the related share premium account;

(b) initial funds, members' contributions or the equivalent *basic own funds* item for *mutual* and *mutual*-type *undertakings*;

(c) subordinated *mutual* member accounts;

(d) *preference shares* and the related share premium account; and

(2) subordinated liabilities valued in accordance with 2 of the Valuation Part.

3E TIER 2 BASIC OWN FUNDS – FEATURES DETERMINING CLASSIFICATION

3E.1 The features referred to in 3D must be either those set out in 3E.1(1) to (10) or those set out in 3E.1(11):

(1) the *basic own funds* item ranks after the claims of all *policyholders* and non-subordinated creditors;

(2) the *basic own funds* item does not include features which may cause the insolvency of the *firm* or may accelerate the process of the *firm* becoming insolvent;

(3) the *basic own funds* item is undated or has an original maturity of at least 10 years or the first contractual opportunity to repay or redeem the *basic own funds* item does not occur before 5 years from the date of issuance;

(4) the *basic own funds* item is only repayable or redeemable at the option of the *firm* and provides that repayment or redemption of the *basic own funds* item is subject to the *firm* receiving prior permission from the *PRA*;

(5) the *basic own funds* item may include limited incentives to repay or redeem that *basic own funds* item, provided that these do not occur before 10 years from the date of issuance;

(6) the *basic own funds* item provides for the suspension of repayment or redemption of that item where there is non-compliance with the *SCR* or repayment or redemption would lead to such non-compliance until:

(a) the *firm* complies with the *SCR*; and

(b) the repayment or redemption would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3E.1(7);

(7) notwithstanding 3E.1(6), the *basic own funds* item may allow for the repayment or redemption of that item where there is non-compliance with the *SCR* or repayment or redemption would lead to such non-compliance, where all of the following conditions are met:

(a) the *firm* has received prior permission from the *PRA* to repay or redeem that item;

(b) the item is to be exchanged for or converted into another *Tier 1 own funds* or *Tier* 2 *basic own funds* item of at least the same quality; and

(c) the *MCR* will be complied with after the repayment or redemption;

(8) the *basic own funds* item meets one of the following criteria:

(a) in the case of items referred to in 3D.1(1)(a) and (b), either the legal or contractual arrangements governing the *basic own funds* item or legislation applicable in the *UK* allow for the distributions in relation to that item to be deferred where there is non-compliance with the *SCR* or the distribution would lead to such non-compliance until:

(i) the *firm* complies with the *SCR*; and

(ii) the distribution would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3E.1(9); or

(b) in the case of items referred to in 3D.1(1)(c), 3D.1(1)(d) and 3D.1(2), the terms of the contractual arrangement governing the *basic own funds* item provide for the distributions in relation to that item to be deferred where there is non-compliance with the *SCR* or the distribution would lead to such non-compliance until:

(i) the *firm* complies with the *SCR;* and

(ii) the distribution would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3E.1(9);

(9) notwithstanding 3E.1(8), the *basic own funds* item may allow for a distribution to be made where there is non-compliance with the *SCR* or the distribution on a *basic own funds* item would lead to such non-compliance, only where this provision is subject to all of the following conditions:

(a) the *firm* has received prior permission from the *PRA*;

(b) the distribution would not further weaken the solvency position of the *firm*; and

(c) the *MCR* will be complied with after the distribution is made;

(10) the *basic own funds* item is free from encumbrances and is not connected with any other transaction, which when considered with the *basic own funds* item, could result in that *basic own funds* item not complying with 3.2(1).

(11) the *basic own funds* item is a *Tier 1 own funds* item that displays the features set out in 3B that are relevant for a *restricted Tier 1 own funds* item, but exceeds the limit set out in 4A.3.

3E.2 For the purposes of 3E, the exchange or conversion of a *basic own funds* item into another *Tier 1 own funds* item or *Tier 2 basic own funds* item or the repayment or redemption of a *Tier 2 basic own funds* item out of the proceeds of a new *basic own funds* 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 receiving prior permission from the *PRA*.

3E.3 For the purposes of 3E.1(6) and 3E.1(8), references to the *SCR* must be read as references to the *MCR* where non-compliance with the *MCR* occurs before non-compliance with the *SCR*.

3E.4 For the purposes of 3E.1(5), a *firm* may only treat incentives to redeem in the form of an interest rate step-up associated with a call option as limited where 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:

(1) 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis; and

(2) 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

3E.5. Notwithstanding the requirement in 3E.1(3), the *basic own funds* item may allow for repayment or redemption before five years where the following conditions are met:

(1) the *firm's SCR*, after the repayment or redemption, will be exceeded by an appropriate margin, taking into account the solvency position of the *firm*, including the *firm's* medium-term capital management plan; and

(2) the circumstances are as described in (a) or (b), either;

(a) there is a change in the regulatory classification of the *basic own funds* item which would be likely to result in its exclusion from the *own funds* or reclassification as a lower tier of *own funds*; and

(i) the *PRA* considers such a change to be sufficiently certain; and

(ii) the *firm* demonstrates to the satisfaction of the *PRA* that the regulatory reclassification of the *basic own funds* item was not reasonably foreseeable at the time of its issuance; or

(b) there is a change in the applicable tax treatment of the *basic own funds* item which the *firm* demonstrates to the satisfaction of the *PRA*:

(i) is material; and

(ii) was not reasonably foreseeable at the time of its issuance.

3E.6 A *firm* must not:

(1) redeem or repay a *Tier 2 basic own funds* item;

(2) redeem or repay a *Tier 2 basic own funds* item when redemption or repayment has been suspended in the circumstances referred to in 3E.1(6);

(3) make a distribution under a *Tier 2 basic own funds* item in the circumstances referred to in 3E.1(8); or

(4) redeem or repay a *basic own funds* item in the circumstances set out in 3E.5,

unless, in each case, it is has received prior permission from the *PRA* pursuant to section 138BA of *FSMA*.

3E.7 For the purposes of 3E, a *firm* may only:

(1) exchange or convert a *basic own funds* item into another *Tier 1 own funds* item or *Tier 2 basic own funds* item; or

(2) repay or redeem a *Tier 2 basic own funds* item out of the proceeds of a new *basic own funds* item of at least the same quality,

without it being deemed as a repayment or redemption, if the *firm* has received prior permission from the *PRA* pursuant to section 138BA of *FSMA* for the exchange, conversion, repayment or redemption (as applicable).

3F TIER 3 BASIC OWN FUNDS – LIST OF OWN FUNDS ITEMS

3F.1 The following *basic own funds* items shall be deemed to possess the characteristics set out in 3.5(2), taking into consideration the features set out in 3.6, and a *firm* must classify them as *Tier 3 own funds* where the following items display all of the features set out in 3G:

(1) the part of excess of assets over liabilities, valued in accordance with the Valuation Part, comprising the following items:

(a) subordinated *mutual* member accounts;

(b) *preference shares* and the related share premium account; and

(c) an amount equal to the value of net deferred tax assets;

(2) subordinated liabilities valued in accordance with 2 of the Valuation Part.

3G TIER 3 BASIC OWN FUNDS – FEATURES DETERMINING CLASSIFICATION

3G.1 The features referred to in 3F are the following:

(1) the *basic own funds* item, in the case of items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), ranks after the claims of all *policyholders* and non-subordinated creditors;

(2) the *basic own funds* item does not include features which may cause the insolvency of the *firm* or may accelerate the process of the *firm* becoming insolvent;

(3) the *basic own funds* item, in the case of items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), is undated or has an original maturity of at least five years, where the maturity date is the first contractual opportunity to repay or redeem the *basic own funds* item;

(4) the *basic own funds* item, in the case of items referred to in points 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), is only repayable or redeemable at the option of the *firm* and provides that the repayment or redemption of the *basic own funds* item is subject to the *firm* receiving prior permission from the *PRA*;

(5) the *basic own funds* item, in the case of items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), may include limited incentives to repay or redeem that *basic own funds* item;

(6) the *basic own funds* item, in the case of items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), provides for the suspension of repayment or redemption where there is non-compliance with the *SCR* or repayment or redemption would lead to such non-compliance until:

(a) the *firm* complies with the *SCR*; and

(b) the repayment or redemption would not lead to non-compliance with the *SCR*,

other than in the circumstances set out in 3G.1(7);

(7) notwithstanding 3G.1(6), the *basic own funds* item may allow for the repayment or redemption of that item where there is non-compliance with the *SCR* or repayment or redemption would lead to such non-compliance, only where all the following conditions are met:

(a) the *firm* has received prior permission from the *PRA* that it can repay or redeem that item;

(b) the item is to be exchanged for or converted into another *Tier 1 own funds* item, *Tier 2 basic own funds* item or Tier 3 *basic own funds* item of at least the same quality; and

(c) the *MCR* will be complied with after the repayment or redemption;

(8) the *basic own funds* item, in the case of items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2), provides for the deferral of distributions in relation to that item where there is non-compliance with the *MCR* or the distribution would lead to such non-compliance until:

(a) the *firm* complies with the *MCR*; and

(b) the distribution would not lead to non-compliance with the *MCR*; and

(9) the *basic own funds* item is free from encumbrances and is not connected with any other transaction, which could undermine the features that the item is required to possess in accordance with 3G.

3G.2 For the purposes of 3G, the exchange or conversion of a *basic own funds* item into another *Tier 1 own funds* item, *Tier 2 basic own funds* item or Tier 3 *basic own funds* item or the repayment or redemption of a Tier 3 *basic own funds* item out of the proceeds of a new *basic own funds* 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 receiving prior permission from the *PRA*.

3G.3 For the purposes of 3G.1(6), references to the *SCR* must be read as references to the *MCR* where non-compliance with the *MCR* occurs before non-compliance with the *SCR*.

3G.4 For the purposes of 3G.1(5), a *firm* may only treat incentives to redeem in the form of an interest rate step-up associated with a call option as limited where 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:

(1) 100 basis points, less the swap spread between the initial index basis and the stepped-up index basis; and

(2) 50% of the initial credit spread, less the swap spread between the initial index basis and the stepped-up index basis.

3G.5 Notwithstanding the requirement in 3G.1(3), the *basic own funds* item may allow for repayment or redemption before five years after the date of issuance where the following conditions are met:

(1) the *firm's SCR*, after the repayment or redemption, will be exceeded by an appropriate margin, taking into account the solvency position of the *firm*, including the *firm's* medium-term capital management plan; and

(2) the circumstances are as described in (a) or (b), either;

(a) there is a change in the regulatory classification of the *basic own funds* item which would be likely to result in its exclusion from the *own funds* or reclassification as a lower tier of *own funds*; and

(i) the *PRA* considers such a change to be sufficiently certain; and

(ii) the *firm* demonstrates to the satisfaction of the *PRA* that the regulatory reclassification of the *basic own funds* item was not reasonably foreseeable at the time of its issuance; or

(b) there is a change in the applicable tax treatment of the *basic own funds* item which the *firm* demonstrates to the satisfaction of the *PRA*:

(i) is material; and

(ii) was not reasonably foreseeable at the time of its issuance.

3G.6 A *firm* must not:

(1) redeem or repay any *basic own funds* items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2);

(2) redeem or repay any *basic own funds* items referred to in 3F.1(1)(a), 3F.1(1)(b) and 3F.1(2) when redemption or repayment has been suspended in the circumstances referred to in 3G.1(6); or

(3) redeem or repay a *basic own funds* item in the circumstances set out in 3G.5,

unless, in each case, it is has received prior permission from the *PRA* pursuant to section 138BA of *FSMA*.

3G.7 For the purposes of 3G, a *firm* may only:

(1) exchange or convert a *basic own funds* item into another *Tier 1 own funds* item, *Tier 2 basic own funds* item or Tier 3 *basic own funds* item; or

(2) repay or redeem a Tier 3 *basic own funds* item out of the proceeds of a new *basic own funds* item of at least the same quality,

without it being deemed as a repayment or redemption, if the *firm* has received prior permission from the *PRA* pursuant to section 138BA of *FSMA* for the exchange, conversion, repayment or redemption (as applicable).

3H TIER 2 ANCILLARY OWN FUNDS – LIST OF OWN FUNDS ITEMS

3H.1 The following *ancillary own funds* items shall be deemed to substantially possess the characteristics set out in 3.5(2), taking into consideration the features set out in 3.6, and a *firm* must, provided it has received an *ancillary own funds permission* in respect of any of the following items of *ancillary own funds* items, classify them as *Tier 2 own funds*, where they display all of the features set out in 3I:

(1) unpaid and uncalled ordinary share capital callable on demand;

(2) unpaid and uncalled initial funds, members' contributions or the equivalent *basic own funds* item for *mutual* and *mutual*-type *undertakings*, callable on demand;

(3) unpaid and uncalled *preference shares* callable on demand;

(4) a legally binding commitment to subscribe and pay for subordinated liabilities on demand;

(5) letters of credit and guarantees which are held in trust for the benefit of insurance creditors by an independent trustee and provided by *credit institutions*;

(6) letters of credit and guarantees provided that the items can be called up on demand and are clear of encumbrances;

(7) any future claims which *mutual* or *mutual*-type associations of shipowners with variable contributions solely insuring risks listed in paragraphs 6, 12 and 17 of Schedule 1 to the *Regulated Activities Order* may have against their members by way of a call for supplementary contributions, within the following 12 *months*;

(8) any future claims which *mutual* or *mutual*-type associations may have against their members by way of a call for supplementary contributions, within the following 12 *months*, provided that a call can be made on demand and is clear of encumbrances; and

(9) other legally binding commitments received by the *firm*, provided that the item can be called up on demand and is clear of encumbrances.

3I TIER 2 ANCILLARY OWN FUNDS – FEATURES DETERMINING CLASSIFICATION

3I.1 A *firm* must not classify as *Tier 2 own funds*, any *ancillary own funds* items listed in 3H that do not display the features of a *basic own funds* item classified as *Tier 1 own funds* items in accordance with 3A and 3B once that *ancillary own funds* item has been called up and paid in.

3J TIER 3 ANCILLARY OWN FUNDS – LIST OF OWN FUNDS ITEMS

3J.1 If:

(1) a *firm* has received an *ancillary own funds permission* in respect of an *ancillary own funds* item; and

(2) that item does not display all of the features set out in 3I,

then the *firm* must classify that item as Tier 3 *ancillary own funds*.

3K TREATMENT OF PARTICIPATIONS IN THE DETERMINATION OF BASIC OWN FUNDS

3K.1 A *firm* must, for the purpose of determining its *basic own funds*, reduce its *basic own funds* by the full value of *participations*, as referred to in 3K.6, in a financial and credit institution that exceeds 10% of items included in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(d) and 3A.1(1)(f).

3K.2 For the purpose of determining its *basic own funds*, a *firm* must reduce its *basic own funds* by the part of the value of all *participations*, as referred to in 3K.6, in financial and credit institutions, other than *participations* referred to in 3K.1, to the extent the aggregate value exceeds 10% of items included in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(d) and 3A.1(1)(f).

3K.3 Notwithstanding 3K.1 and 3K.2, a *firm* must not deduct strategic *participations* as referred to in Solvency Capital Requirement – Standard Formula 3D10 which are included in the calculation of the *group* solvency on the basis of method 1 as set out in the Financial Conglomerates Part or on the basis of method 1 as set out in 11 of the Group Supervision Part.

3K.4 A *firm* must apply the deductions set out in 3K.2 on a pro-rata basis to all *participations* to which 3K.2 refers.

3K.5 A *firm* must make the deductions set out in 3K.1 and 3K.2 from the corresponding tier in which the *participation* has increased the *own funds* of the *related undertaking* as follows:

(1) holdings of *Common Equity Tier 1* items of financial and credit institutions must be deducted from the items included in 3A.1(1)(a), 3A.1(1)(b), 3A.1(1)(d) and 3A.1(1)(f);

(2) holdings of *Additional Tier 1 instruments* of financial and credit institutions must be deducted from the *Tier 1 own funds* items that display the features set out in 3B that are relevant for *restricted Tier 1 own funds* items; and

(3) holdings of *Tier 2 instruments* of financial and credit institutions must be deducted from the *basic own funds* items included in 3D.

3K.6 *Participations* in financial and credit institutions must comprise the following:

(1) *participations* which the *firm* holds in:

(a) *credit institutions* and *financial institutions*;

(b) *investment firms*; and

(2) subordinated claims and instruments referred to in Articles 61 to 63 of *CRR* which a *firm* holds in respect of the entities defined in 3K.6(1) in which it holds a *participation*.

3L ADJUSTMENT FOR RING-FENCED FUNDS AND MATCHING ADJUSTMENT PORTFOLIOS

3L.1 Subject to 3L.2, for the purposes of calculating the reconciliation reserve, a *firm* must reduce the excess of assets over liabilities referred to in 3C by the amount of *restricted own funds* items within a *ring-fenced fund* or *matching adjustment portfolio* in excess of the notional *SCR* of the *ring-fenced fund* or *matching adjustment portfolio*.

Where the *firm* calculates the *SCR* using the *standard formula*, it must calculate the notional *SCR* of a *ring-fenced fund* or *matching adjustment portfolio* in accordance with Solvency Capital Requirement – Standard Formula 9.1.

Where the *firm* calculates the *SCR* using an *internal model*, it must calculate the notional *SCR* of a *ring-fenced fund* or *matching adjustment portfolio* using that *internal model*, as if the *firm* pursued only the business included in the *ring-fenced fund* or *matching adjustment portfolio*.

3L.2 Where the assets, the liabilities and the risk within a *ring-fenced fund* are not material, a *firm* may reduce the reconciliation reserve by the total amount of *restricted own funds* items.

…

4A ELIGIBILITY AND LIMITS APPLICABLE TO TIERS 1, 2 AND 3

4A.1. As far as compliance with the *SCR* is concerned, a *firm* must ensure that:

(1) *Tier 1 own funds* items account for at least 50% of the *SCR*;

(2) *Tier 3 own funds* items account for less than 15% of the *SCR*; and

(3) the sum of the amounts of *Tier 2 own funds* items and *Tier 3 own funds* items do not account for more than 50% of the *SCR*.

4A.2. As far as compliance with the *MCR* is concerned, a *firm* must ensure that:

(1) *Tier 1 own funds* items account for at least 80% of the *MCR*; and

(2) *Tier 2 own funds* items do not account for more than 20% of the *MCR*.

4A.3 For the purposes of 4A.1(1) and 4A.2(1), the sum of the following *basic own funds* items must make up less than 20% of the total amount of *Tier 1 own funds* items:

(1) *Tier 1 own funds* items that display the features set out in 3B that are relevant for *restricted Tier 1 own funds* items; and

(2) items that are included in *Tier 1 own funds* under the transitional arrangement set out in Transitional Measures 4.1.

4A.4 A *firm* must apply the quantitative limits set out in 4A to *own funds* items in respect of which it has received a *classification of own funds permission*.

5 NOTIFICATION OF ISSUANCE OF OWN FUNDS ITEMS

5.1 This Chapter does not apply in respect of the following:

(1) any item which a *firm* intends to include within its *basic own funds* that is not included~~covered by the lists of *own funds* items set out~~ in the *own funds lists*~~*Solvency II Regulations*~~ but in respect of which ~~may be included in its *basic own funds* only if~~ the *firm* would need to receive a *classification of own funds permission*~~has received the *PRA's* approval~~; and

(2) any item which a *firm* in respect of which a *firm* would need to receive an *ancillary own funds permission*~~intends to include within its *ancillary own funds*~~.

5.2

…

(e) for any item referred to in 4A.3~~Article 82(3) of the *delegated act*~~, provide a draft of a properly reasoned independent accounting opinion from an appropriately qualified individual as to the item's treatment in the *firm's* financial statements;

…

Annex M

Amendments to the Own Funds Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

...

1.2 In this Part, the following definitions shall apply:

…

legacy paid-in preference shares

means paid-in *preference shares* that meet the following conditions:

(1) the instruments were issued prior to 18 January 2015;

(2) on 31 December 2015, the instruments could be used as:

(a) core tier one capital in accordance with stage A (Core tier one capital) of the capital resources table at GENPRU 2 Annex 1 of the *PRA Handbook* as at 31 December 2015;

(b) perpetual non-cumulative preference shares in accordance with stage B (Perpetual non-cumulative preference shares) of the capital resources table at GENPRU 2 Annex 1 of the *PRA Handbook* as at 31 December 2015;

(c) innovative tier one capital in accordance with GENPRU 2.2 of the *PRA Handbook* as at 31 December 2015; or

(d) upper tier two capital in accordance with stage G (Upper tier two capital) of the capital resources table at GENPRU 2 Annex 1 of the *PRA Handbook* as at 31 December 2015;

(3) the instruments are not otherwise included as *Tier 1 own funds*, *Tier 2 own funds*, or *Tier 3 own funds* in accordance with Own Funds 3.1 to 3.4.

…

3B TIER 1 – FEATURES DETERMINING CLASSIFICATION

…

3B.17

(1) Paragraph (2) applies where a *firm* has *legacy paid-in preference shares* in issue.

(2) For a period of up to 25 years from 2 January 2026, for the purposes of 3B.1(4) and (14) and 3B.3(3), in the case of *basic own funds* items referred to in 3A.1(1)(a), a *firm* should disregard:

(a) the terms of those *legacy paid-in preference shares*; and

(b) for *basic own funds* items referred to in 3A.1(1)(a), any terms governing the *basic own funds* items which prevent or cancel the declaration or payment of distributions where distributions on *legacy paid-in preference shares* are in arrears.

…

Annex N

Amendments to the Own Funds and Eligible Liabilities (CRR) Part

In this Annex new text is underlined and deleted text is struck through.

…

ARTICLE 18 CAPITAL INSTRUMENTS OF THIRD COUNTRY INSURANCE AND REINSURANCE UNDERTAKINGS FOR THE PURPOSES OF ARTICLE 36(3) OF THE CRR

1. Holdings of capital instruments of third country insurance and reinsurance undertakings that are situated in a third country which is not an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation~~subject to a solvency regime that either before *IP completion day*, has been assessed as non-equivalent to that laid down in Title I, Chapter VI of Directive 2009/138/EC according to the procedure set out in Article 227 of that Directive and there has not, in respect of the supervisory regime of that third country, been a later determination of equivalence by the *Treasury* under Article 379A of the Solvency II Delegated Regulation (EU) 2015/35 or by the *PRA* under regulation 19 of the Solvency 2 Regulations 2015, or that has not been assessed,~~ shall be deducted as follows:

   …

2. Where ~~the solvency regime of~~ the third country is an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation, including the third country's rules on own funds,~~ has:~~

   (a) ~~before *IP completion day*, been assessed as equivalent to that laid down in Title I, Chapter VI of Directive 2009/138/EC according to the procedure set out in Article 227 of that Directive and that assessment has not, on or after *IP completion day*, been revoked by the *Treasury*; or~~[deleted]

   (b) ~~on or after *IP completion day*, been assessed as equivalent to that laid down in the laws of the *United Kingdom* that implemented Title I, Chapter VI of Directive 2009/138/EC according to the procedure set out in Article 379A of the Solvency II Delegated Regulation (EU) 2015/35, or, where assessed as equivalent by the *PRA* according to the procedure in regulation 19 of the Solvency 2 Regulations 2015,~~[deleted]

   holdings of capital instruments of the third-country insurance or reinsurance undertakings shall be treated as holdings of capital instruments of insurance or reinsurance undertakings within the meaning of 'insurance undertaking' and 'reinsurance undertaking' in section 417(1) of *FSMA*.

…

Note: Solvency Capital Requirement – Standard Formula 3B6.6(1) has been amended by the PRA Rulebook: SII Firms: Solvency II Amendment (No 1) Instrument 2024 to correct an error

Annex O

Amendments to the Solvency Capital Requirement – Standard Formula Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

...

1.2 In this Part, the following definitions shall apply:

bankruptcy remote

in relation to *client* assets, means that effective arrangements exist which ensure that those assets will not be available to the creditors of a *CCP* or of a *clearing member* in the event of the insolvency of that *CCP* or *clearing member* respectively, or that the assets will not be available to the *clearing member* to cover losses it incurred following the default of a *client* other than those that provided those assets.

basis risk

means the risk resulting from the situation in which the exposure covered by the *risk-mitigation technique* does not correspond to the risk exposure of the *UK Solvency II firm*.

CCP

means a CCP as defined in point (1) of Article 2 of Regulation (EU) No 648/2012 of the European Parliament and of the Council.

CCP-related transaction

means a contract or a transaction listed in of Article 301(1) of the Counterparty Credit Risk (CRR) Part between a *client* and a *clearing member* that is directly related to a contract or a transaction listed in that paragraph between that *clearing member* and a *CCP*.

clearing member

means a clearing member as defined in point (14) of Article 2 of Regulation (EU) No 648/2012.

client

means a client as defined in point (15) of Article 2 of Regulation (EU) No 648/2012 or an *undertaking* that has established indirect clearing arrangements with a *clearing member* in accordance with Article 4(3) of that Regulation.

collateral arrangement

means an arrangement under which a collateral provider does one of the following:

(1) transfers full ownership of the collateral to the collateral taker for the purposes of securing or otherwise covering the performance of a relevant obligation; or

(2) provides 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.

continuity options

means all legal or contractual *policyholder* rights which allow that *policyholder* to fully or partly establish, renew, increase, extend or resume insurance or *reinsurance* cover.

covered bond

means a bond that is issued by a *credit institution* which has its registered office in the *UK* or an *EEA State* and is subject by law to special public supervision designed to protect bondholders and in particular protection under which sums deriving from the issue of the bond must be invested in conformity with the law in assets which, during the whole period of validity of the bond, are capable of covering claims attaching to the bond 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.

currency risk

means the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of currency exchange rates.

disability-morbidity risk

means the risk of loss, or of adverse change, in the value of insurance obligations, resulting from changes in the level, trend or volatility of disability, sickness and morbidity rates.

discontinuance

means, in relation to an insurance *policy*, *surrender*, lapse without value, making a *contract of insurance* paid-up, automatic non-forfeiture provisions or exercising other *discontinuity options* or not exercising *continuity options*.

discontinuity options

means all legal or contractual *policyholder* rights which allow that *policyholder* to fully or partly terminate, *surrender*, decrease, restrict or suspend insurance cover or permit the insurance *policy* to lapse.

equity risk

means the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of equities.

health underwriting risk

means

(1) *expense risk*;

(2) *NSLT health premium and reserve risk*; and

(3) *health catastrophe risk*.

interest-rate risk

means the sensitivity of the values of assets, liabilities and financial instruments to changes in the term structure of interest rates, or in the volatility of interest rates.

lapse risk

means the risk of loss, or of adverse change, in the value of insurance obligations, resulting from changes in the level or volatility of the rates of policy lapses, terminations, renewals and surrenders.

life-catastrophe risk

means the risk of loss, or of adverse change, in the value of insurance obligations, resulting from the significant uncertainty of pricing and provisioning assumptions related to extreme or irregular events.

market risk concentrations

means the additional risks to a *firm* stemming either from lack of diversification in the asset portfolio or from large exposure to default risk by a single issuer of securities or a *group* of related issuers.

pool exposure of type A

means the risk ceded by a *firm* to a *pooling arrangement* where the *firm* is not a party to that *pooling arrangement*.

pool exposure of type B

means the risk ceded by a *firm* to another member of a *pooling arrangement*, where the *firm* is a party to that *pooling arrangement*.

pool exposure of type C

means the risk ceded by a *firm* which is a party to a *pooling arrangement* to another *firm* which is not a member of that *pooling arrangement*.

pooling arrangement

means an arrangement whereby several *undertakings* which are *UK Solvency II undertakings*, *third country insurance undertakings* or *third country reinsurance undertakings* agree to share identified insurance risks in defined proportions, but the parties insured by the members of the pooling arrangement are not themselves members of the pooling arrangement.

property risk

means the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of *real estate*.

resecuritisation

has the meaning given in Securitisation 1.2.

securitisation

has the meaning given in Securitisation 1.2.

securitisation position

has the meaning given in Securitisation 1.2.

senior securitisation position

means a senior *securitisation* position within the meaning of Article 242(6) of the *CRR*.

standard equity capital charge

means the standard capital requirement for ~~equity risk~~ *equity risk* calculated in accordance with 3D~~the *Solvency II Regulations*~~ before any *symmetric adjustment* is applied.

STS securitisation

means:

(1) an STS securitisation as defined by regulation 9 of the Securitisation Regulations; 2024 (SI 2024/102);

(2) an overseas STS securitisation as defined by regulation 12(2) of the Securitisation Regulations 2024 (SI 2024/102); or

(3) a qualifying EU securitisation as defined by regulation 12(3) of the Securitisation Regulations 2024 (SI 2024/102).

symmetric adjustment

means the symmetric adjustment that may be applied to the *standard equity capital charge* in accordance with 3D.12~~the *Solvency II Regulations*~~.

UK Solvency II undertaking

means a *UK Solvency II firm* or Lloyd's.

1A GENERAL REQUIREMENTS ON THE USE OF CREDIT ASSESSMENTS

1A.1 A *firm* may use an external credit assessment for the calculation of the *SCR* in accordance with the *standard formula* only where it has been issued by an *external credit assessment institution* or endorsed by an *external credit assessment institution* in accordance with Regulation (EC) No 1060/2009.

1A.2 *A firm* must nominate one or more *external credit assessment institutions* to be used for the calculation of the *SCR* according to the *standard formula*.

1A.3 A *firm* must use credit assessments consistently and must not use such assessments selectively.

1A.4 When using credit assessments, a *firm* must comply with all of the following requirements:

(1) where a *firm* decides to use the credit assessments produced by a nominated *external credit assessment institution* for a certain class of items, it must use those credit assessments consistently for all items belonging to that class;

(2) where a *firm* decides to use the credit assessments produced by a nominated *external credit assessment institution*, it must use them in a continuous and consistent way over time;

(3) a *firm* must only use nominated *external credit assessment institution* credit assessments that take into account all amounts of principal and interest owed to it;

(4) subject to 1C.1, where only one credit assessment is available from a nominated *external credit assessment institution* for a rated item, a *firm* must use that credit assessment to determine the capital requirements for that item;

(5) where two credit assessments are available from nominated *external credit assessment institutions* and they correspond to different parameters for a rated item, a *firm* must use the assessment generating the higher capital requirement;

(6) where more than two credit assessments are available from nominated *external credit assessment institutions* for a rated item, a *firm* must use the two assessments generating the two lowest capital requirements, provided that:

(a) if the two lowest capital requirements are different, the *firm* must use the assessment generating the higher capital requirement of those two credit assessments; and

(b) if the two lowest capital requirements are the same, the *firm* must use the assessment generating that capital requirement; and

(7) where available, a *firm* must use both solicited and unsolicited credit assessments.

1A.5 Where an item is part of the larger or more complex exposures of a *firm*, the *firm* must produce its own internal credit assessment of the item and allocate it to a *credit quality step*, provided that where the *firm's* own internal credit assessment generates a lower capital requirement than the one generated by the credit assessments available from nominated *external credit assessment institutions*, then the *firm's* own internal credit assessment must not be taken into account for the purposes of this Part.

1A.6 For the purposes of 1A.5, the larger or more complex exposures of a *firm* must include *securitisation positions* as referred to in 3D21.8 and 3D21.9 and *resecuritisation* positions.

1B ISSUERS AND ISSUE CREDIT ASSESSMENT

1B.1 Where a credit assessment exists for a specific issuing program or facility to which the item constituting the exposure belongs, a *firm* must use that credit assessment.

1B.2 Where no directly applicable credit assessment exists for a certain item, but a credit assessment exists for a specific issuing program or facility to which the item constituting the exposure does not belong or a general credit assessment exists for the *issuer*, a *firm* must use that credit assessment in either of the following cases:

(1) it produces the same or higher capital requirement than would otherwise be the case and the exposure in question ranks pari passu or junior in all respects to the specific issuing program or facility or to senior unsecured exposures of that *issuer*, as relevant; or

(2) it produces the same or lower capital requirement than would otherwise be the case and the exposure in question ranks pari passu or senior in all respects to the specific issuing program or facility or to senior unsecured exposures of that *issuer*, as relevant.

In all other cases, a *firm* must treat the exposure as if there is no credit assessment by a nominated *external credit assessment institution* available for it.

1B.3 A *firm* must not use credit assessments for *issuers* within a corporate *group* as the credit assessment for another *issuer* within the same corporate *group*.

1C DOUBLE CREDIT RATING FOR SECURITISATION POSITIONS

1C.1 Notwithstanding 1A.4(4), where only one credit assessment is available from a nominated *external credit assessment institution* for a *securitisation position*, a *firm* must not use that credit assessment and the *firm* must derive the capital requirements for that item as if no credit assessment by a nominated *external credit assessment institution* is available.

2 STRUCTURE OF THE SCR STANDARD FORMULA

…

2.2 Notwithstanding 2.1, a *firm* with a *ring-fenced fund* (other than a *ring-fenced fund* in respect of which the reconciliation reserve has been reduced by the total amount of *restricted own funds* items in accordance with Own Funds 3L.2) or *matching adjustment portfolio* must make an adjustment to the calculation of its *SCR* following the method set out in 9.

2.3

(1) A *firm* must calculate its *SCR* on the basis of each of the underlying assets of *collective investment undertakings* and other investments packaged as funds.

(2) Subject to (6), a *firm* must also apply the *look-through approach* to the following:

(a) indirect exposures to *market risk* other than *collective investment undertakings* and investments packaged as funds;

(b) indirect exposures to *underwriting risk*; and

(c) indirect exposures to *counterparty* risk.

(3) Subject to 7.2, if a *firm* cannot apply the *look-through approach* to *collective investment undertakings* or investments packaged as funds, a *firm* may calculate its *SCR* on the basis of the target underlying asset allocation or, if the target underlying asset allocation is not available to the *firm*, on the basis of the last reported asset allocation, of the *collective investment undertaking* or fund, provided that, in either case:

(a) the underlying assets are managed in accordance with that target allocation or last reported asset allocation, as applicable; and

(b) exposures and risks are not expected to vary materially over a short period of time.

(4) For the purposes of the calculation in (3), a *firm* may use data groupings provided that they:

(a) enable all relevant sub-modules and scenarios of the *standard formula* to be calculated in a prudent manner; and

(b) do not apply to more than 20% of the total value of the *firm's* assets.

(5) For the purposes of determining the percentage of assets where data groupings are used as referred to in (4)(b), a *firm* must not take into account underlying assets of the *collective investment undertaking*, or the investments packaged as funds, backing unit-linked liabilities or *index-linked liabilities* for which the *market risk* is borne by the *policyholders*.

(6) (2) does not apply to investments in *related undertakings*, other than investments in respect of which all of the following requirements are met:

(a) the main purpose of the *related undertaking* is to hold and manage assets on behalf of the *participating undertaking*;

(b) the *related undertaking* supports the operations of the *participating undertaking* related to investment activities, following a specific and documented investment mandate; and

(c) the *related undertaking* does not carry on any significant business other than investing for the benefit of the *participating undertaking*.

2A ANNEXES

1. The Annexes referred to in 3A, 3C and 7 can be found here.

3 THE BASIC SCR

3.1 …

(1) …

(c) the ~~health *underwriting risk*~~ *health underwriting risk* module;

…

(e) the ~~counterparty~~*counterparty* default risk module; ~~and~~

(2) …

(a) 'SCRi' and 'SCRj' denote the non-life *underwriting risk* module, the life *underwriting risk* module, the ~~health *underwriting risk*~~*health underwriting risk* module, the *market risk* module and the ~~counterparty~~*counterparty* default risk module;

…

(d) …

; and

(3) include a risk module for intangible asset risk, and a *firm* must calculate this in accordance with the following formula:

$$BasicSCR = \sqrt{\sum_{i,j} Corr_{i,j} \cdot SCR_i \cdot SCR_j} + SCR_{intangibles}$$

where:

(a) in the summation, $Corr_{i,j}$, SCR_i and SCR_j are specified as set out in (2); and

(b) $SCR_{intangibles}$ denotes the capital requirement for intangible asset risk referred to in 3F1.

…

3.2A For the purposes of calculating the capital requirements in 3.1(1) for non-life *underwriting risk*, life *underwriting risk* and *health underwriting risk*, a *firm* must apply:

(1) the non-life *underwriting risk* module to non-life insurance and *reinsurance* obligations other than *health insurance obligations* and *health reinsurance obligations*;

(2) the life *underwriting risk* module to life insurance and *reinsurance* obligations other than *health insurance obligations* and *health reinsurance obligations*; and

(3) the *health underwriting risk* module to *health insurance obligations* and *health reinsurance obligations*.

...

3.3A

(1) Where the calculation of a module or sub-module of the *basic SCR* is based on the impact of a scenario on the *basic own funds* of a *firm*, the *firm* must make all of the following assumptions in that calculation:

(a) the scenario does not change the amount of the *risk margin* included in *technical provisions*;

(b) the scenario does not change the value of deferred tax assets and liabilities;

(c) the scenario does not change the value of *future discretionary benefits* included in *technical provisions*; and

(d) no management actions are taken by the *firm* during the scenario.

(2) In calculating *technical provisions* arising as a result of determining the impact of a scenario on its *basic own funds* as referred to in (1), a *firm* must not change the value of *future discretionary benefits*, and must take account of all of the following:

(a) without prejudice to (1)(d), future management actions following the scenario, provided they comply with Technical Provisions – Further Requirements 8; and

(b) any material adverse impact of the scenario or the future management actions referred to in (a) on the likelihood that *policyholders* will exercise options relating to *contracts of insurance*.

(3) A *firm* may use simplified methods to calculate the *technical provisions* arising as a result of determining the impact of a scenario as referred to in (1), provided that the simplified

method does not lead to a misstatement of the *SCR* that could influence the decision-making or the judgement of the user of the information relating to the *SCR*, unless the simplified calculation produces an *SCR* which exceeds the *SCR* that results from the calculation according to the *standard formula*.

(4) In calculating the assets and liabilities arising as a result of determining the impact of a scenario as referred to in (1), a *firm* must take account of the impact of the scenario on the value of any relevant risk mitigation instruments held by the *firm* which comply with 3G2, 3G3 and 3G5 to 3G9.

(5) Where the scenario would result in an increase in its *basic own funds*, a *firm* must base the calculation of the module or sub-module on the assumption that the scenario has no impact on its *basic own funds*.

…

3.6 For the purposes of 3.1(1)(a), the capital requirement for the non-life *underwriting risk* module is a combination of the capital requirements for ~~at least~~ the following sub-modules:

(1) ~~a~~the ~~non-life premium and reserve risk~~*non-life premium and reserve risk* sub-module covering *non-life premium and reserve risk*~~the risk of loss, or of adverse change in the value of insurance liabilities, resulting from fluctuations in the timing, frequency and severity of insured events, and in the timing and amount of claim settlements; and~~

(2) ~~a~~the ~~non-life catastrophe risk~~*non-life catastrophe risk* sub-module covering *non-life catastrophe risk*~~the risk of loss, or of adverse change in the value of insurance liabilities, resulting from significant uncertainty of pricing and provisioning assumptions related to extreme or exceptional events.~~; and

(3) the non-life *lapse risk* sub-module covering non-life *lapse risk*.

3.6A

(1) A *firm* must calculate the capital requirement for non-life *underwriting risk* in accordance with the following formula:

$$SCR_{non-life} = \sqrt{\Sigma_{i,j} CorrNL_{(i,j)} \cdot SCR_i \cdot SCR_j}$$

where:

(a) the sum covers all possible combinations (*i*, *j*) of the sub-modules set out in 3.6;

(b) $CorrNL_{(i,j)}$ denotes the correlation coefficient for non-life *underwriting risk* for sub-modules *i* and *j*; and

(c) SCR_i and SCR_j denote the capital requirements for risk sub-modules *i* and *j*, respectively.

(2) The correlation coefficient $CorrNL_{(i,j)}$ referred to in (1) denotes the item set out in row *i* and column *j* of the following correlation matrix:

j i	**Non-life premium and reserve**	**Non-life catastrophe**	**Non-life lapse**
Non-life premium and reserve	1	0.25	0
Non-life catastrophe	0.25	1	0
Non-life lapse	0	0	1

…

3.8 The life *underwriting risk* module must be calculated as:

(1) a combination of the capital requirements for the following sub-modules

(a) ~~mortality risk~~*mortality risk*

(b) ~~longevity risk~~*longevity risk*;

(c) ~~disability-morbidity risk~~*disability-morbidity risk*;

(d) life ~~expense risk~~*expense risk*;

(e) ~~revision risk~~*revision risk*;

(f) ~~lapse risk~~*lapse risk*; and

(g) ~~life catastrophe risk~~*life-catastrophe risk*;

(2) …

where: 'SCRi' and 'SCRj' denote the ~~mortality risk~~*mortality risk* sub-module, the ~~longevity risk~~*longevity risk* sub-module, the ~~disability-morbidity risk~~*disability-morbidity risk* sub-module, the life ~~expense risk~~*expense risk* sub-module, the ~~revision risk~~*revision risk* sub-module, the ~~lapse risk~~*lapse risk* sub-module and the ~~life catastrophe risk~~*life-catastrophe risk* sub-module; ~~and~~

'i,j' means that the sum of the different terms should cover all possible combinations of 'i' and 'j'~~.~~; and

'$Corr_{i,j}$' denotes the correlation coefficient for life *underwriting risk* for sub-modules *i* and *j*.

(3) The correlation coefficient $Corr_{i,j}$ referred to in (2) must be equal to the item set out in row *i* and column *j* of the following correlation matrix:

j i	**Mortality**	**Longevity**	**Disability**	**Life expense**	**Revision**	**Lapse**	**Life catastrophe**
Mortality	1	–0.25	0.25	0.25	0	0	0.25
Longevity	–0.25	1	0	0.25	0.25	0.25	0
Disability	0.25	0	1	0.5	0	0	0.25
Life expense	0.25	0.25	0.5	1	0.5	0.5	0.25
Revision	0	0.25	0	0.5	1	0	0
Lapse	0	0.25	0	0.5	0	1	0.25
Life catastrophe	0.25	0	0.25	0.25	0	0.25	1

3.9 For the purposes of 3.8:

(1) the ~~mortality risk~~*mortality risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level, trend or volatility of mortality rates, where an increase in the mortality rate leads to an increase in the value of insurance liabilities~~*mortality risk*;

(2) the ~~longevity risk~~*longevity risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level, trend or volatility of mortality rates, where a decrease in the mortality rate leads to an increase in the value of insurance liabilities~~*longevity risk*;

(3) the ~~disability-morbidity risk~~*disability-morbidity risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level, trend or volatility of disability, sickness and morbidity rates~~*disability-morbidity risk*;

(4) the life-~~expense risk~~*expense risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level, trend or volatility of the expenses incurred in servicing contracts of insurance or reinsurance contracts~~life *expense risk*;

(5) the ~~revision risk~~*revision risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level, trend or volatility of the revision rates applied to annuities, due to changes in the legal environment or in the state of health of the person insured~~*revision risk*;

(6) the ~~lapse risk~~*lapse risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from changes in the level or volatility of the rates of policy lapses, terminations, renewals and surrenders~~*lapse risk*; and

(7) the ~~life-catastrophe risk~~*life-catastrophe risk* sub-module covers ~~the risk of loss, or of adverse change, in the value of insurance liabilities, resulting from the significant uncertainty of pricing and provisioning assumptions related to extreme or irregular events~~*life-catastrophe risk*.

3.10 For the purposes of 3.1(1)(c):

(1) a *firm* must calculate the capital requirement for the ~~health *underwriting risk*~~*health underwriting risk* module …; and

(2) the ~~health *underwriting risk*~~*health underwriting risk* module must cover at least *health underwriting risk*.~~the risk of loss, or of adverse change, in the value of insurance liabilities resulting from:~~

(a) ~~changes in the level, trend, or volatility of the expenses incurred in servicing contracts of insurance or reinsurance contracts;~~[deleted]

(b) ~~fluctuations in the timing, frequency and severity of insured events, and in the timing and amount of *claim* settlements at the time of provisioning; and~~[deleted]

(c) ~~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.~~[deleted]

…

3.10A

(1) The *health underwriting risk* module must consist of all of the following sub-modules:

(a) the *NSLT health* insurance *underwriting risk* sub-module;

(b) the *SLT health* insurance *underwriting risk* sub-module; and

(c) the *health catastrophe risk* sub-module.

(2) A *firm* must calculate the capital requirement for *health underwriting risk* in accordance with the following formula:

$$SCR_{health} = \sqrt{\sum_{i,j} CorrH_{(i,j)} \cdot SCR_i \cdot SCR_j}$$

where:

(a) the sum covers all possible combinations (*i* , *j*) of the sub-modules set out in (1);

(b) $CorrH_{(i,j)}$ denotes the correlation coefficient for *health underwriting risk* for sub-modules *i* and *j*; and

(c) SCR_i and SCR_j denote the capital requirements for risk sub-modules *i* and *j*, respectively.

(3) The correlation coefficient $CorrH_{(i,j)}$ referred to in (2) denotes the item set out in row *i* and column *j* of the following correlation matrix:

i j	**NSLT health underwriting**	**SLT health underwriting**	**Health catastrophe**
NSLT health underwriting	1	0.5	0.25
SLT health underwriting	0.5	1	0.25
Health catastrophe	0.25	0.25	1

3.10B A *firm* must apply:

(1) the *NSLT health underwriting risk* sub-module to *health insurance obligations* and *health reinsurance obligations* included in *lines of business* 1, 2, 3, 13, 14, 15 and 25;

(2) the *SLT health underwriting risk* sub-module to *health insurance obligations* and *health reinsurance obligations* included in *lines of business* 29, 33 and 35; and

(3) the *health catastrophe risk* sub-module to *health insurance obligations* and *health reinsurance obligations*.

3.11 For the purposes of 3.1(1)(d):

…

(2) the capital requirement for the *market risk* module is a combination of the capital requirements for at least the following sub-modules:

(a) an ~~interest-rate risk~~*interest-rate risk* sub-module covering *interest rate risk* ~~the sensitivity of the values of assets, liabilities and financial instruments to changes in the term structure of interest rates, or in the volatility of interest rates~~;

(b) an ~~equity risk~~*equity risk* sub-module covering *equity risk* ~~the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of equities~~;

(c) a ~~property risk~~*property risk* sub-module covering *property risk*~~the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of market prices of real estate~~;

(d) a ~~spread risk~~*spread risk* sub-module covering *spread risk*~~ the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of credit spreads over the risk-free interest-rate term structure~~;

(e) a ~~currency risk~~*currency risk* sub-module covering *currency risk*~~the sensitivity of the values of assets, liabilities and financial instruments to changes in the level or in the volatility of currency exchange rates~~; and

(f) a ~~*market risk* concentrations~~*market risk concentrations* sub-module covering *market risk concentrations*~~additional risks to a *firm* stemming either from lack of diversification in the asset portfolio or from large exposure to default risk by a single issuer of securities or a *group* of related issuers~~.

3.11A

(1) A *firm* must calculate the capital requirement for *market risk* in accordance with the following formula:

$$SCR_{market} = \sqrt{\Sigma_{i,j} Corr_{(i,j)} \cdot SCR_i \cdot SCR_j}$$

where:

(a) the sum covers all possible combinations *i*, *j* of sub-modules set out in 3.11(2);

(b) $Corr_{(i,j)}$ denotes the correlation coefficient for *market risk* for sub-modules *i* and *j*; and

(c) SCR_i and SCR_j denote the capital requirements for risk sub-modules *i* and *j*, respectively.

(2) The correlation coefficient $Corr_{(i,j)}$ referred to in (1) must be equal to the item set out in row *i* and column *j* of the following correlation matrix:

j i	**Interest rate**	**Equity**	**Property**	**Spread**	**Concentration**	**Currency**
Interest rate	1	A	A	A	0	0.25
Equity	A	1	0.75	0.75	0	0.25
Property	A	0.75	1	0.5	0	0.25
Spread	A	0.75	0.5	1	0	0.25
Concentration	0	0	0	0	1	0
Currency	0.25	0.25	0.25	0.25	0	1

(3) The coefficient A in the table in (2) must be equal to 0 where the capital requirement for *interest-rate risk* set out in 3D4 is the capital requirement referred to in 3D4.1(1). In all other cases, the coefficient A must be equal to 0.5.

3.12 For the purposes of 3.1(1)(c), the ~~counterparty~~*counterparty* default risk module:

(1) must reflect possible losses due to unexpected default, or deterioration in the credit standing, of the ~~counterparties~~*counterparties* and debtors of the *firm* over the following 12 *months*;

(2) must cover risk-mitigating contracts, such as *reinsurance* arrangements, ~~securitisations~~*securitisations* and *derivatives*, and receivables from intermediaries, as well as any other credit exposures which are not covered in the ~~spread risk~~*spread risk* sub-module;

…

(4) for each ~~counterparty~~*counterparty*, must take account of the overall ~~counterparty~~*counterparty* risk exposure of the *firm* to that ~~counterparty~~*counterparty*, irrespective of the legal form of the ~~counterparty's~~*counterparty's* contractual obligations to the *firm*.

3.13 A *firm* must calculate the capital requirement for *counterparty* default risk in accordance with the following formula:

$$SCR_{def} = \sqrt{SCR_{(def,1)}^2 + 1.5 \cdot SCR_{(def,1)} \cdot SCR_{(def,2)} + SCR_{(def,2)}^2}$$

where:

(a) $SCR_{(def,1)}$ denotes the capital requirement for *counterparty* default risk on type 1 exposures as set out in 3.14; and

(b) $SCR_{(def,2)}$ denotes the capital requirement for *counterparty* default risk on type 2 exposures as set out in 3.15.

3.14 A *firm* must treat exposures in relation to the following as type 1 exposures:

(1) risk-mitigation contracts including *reinsurance* arrangements, *special purpose vehicles* and insurance *securitisations*;

(2) cash at bank as referred to in Schedule 3 to the Large and Medium-Sized Companies and Groups (Accounts and Reports) Regulations 2008/410 as amended from time to time;

(3) deposits with ceding undertakings where the number of single name exposures does not exceed 15;

(4) commitments received by the *firm* which have been called up but are unpaid, where the number of single name exposures does not exceed 15, including called up but unpaid ordinary share capital and *preference shares*, called up but unpaid legally binding commitments to subscribe and pay for subordinated liabilities, called up but unpaid initial funds, members' contributions or the equivalent *basic own fund* item for *mutua*l and *mutual*-type *undertakings*, called up but unpaid guarantees, called up but unpaid letters of credit, called up but unpaid claims which *mutual or mutual*-type associations may have against their members by way of a call for supplementary contributions;

(5) legally binding commitments which the *firm* has provided or arranged and which may create payment obligations depending on the credit standing or default of a *counterparty* including guarantees, letters of credit, and letters of comfort; and

(6) *derivatives* other than credit *derivatives* covered in the *spread risk* sub-module.

3.15 A *firm* must treat all credit exposures which are not covered in the *spread risk* sub-module and which are not type 1 exposures as type 2 exposures, including the following:

(1) receivables from intermediaries;

(2) *policyholder* debtors;

(3) mortgage loans which meet the requirements in 3E3.2 to 3E3.13;

(4) deposits with ceding undertakings where the number of single name exposures exceeds 15; and

(5) commitments received by the *firm* which have been called up but are unpaid as referred to in 3.14(4), where the number of single name exposures exceeds 15.

3.16 A *firm* may, at its discretion, consider all exposures referred to in 3.15(4) and (5) as type 1 exposures, regardless of the number of single name exposures.

3.17 Where a letter of credit, a guarantee or an equivalent *risk-mitigation technique* has been provided to fully secure an exposure and this *risk mitigation technique* complies with the requirements of 3G2, 3G3 and 3G5 to 3G9, then the *firm* may treat the provider of that letter of credit, guarantee or equivalent *risk mitigation technique* as the *counterparty* on the secured exposure for the purposes of assessing the number of single name exposures.

3.18 A *firm* must not include the following *credit risks* in the *counterparty* default risk module:

(1) the *credit risk* transferred by a credit *derivative*;

(2) the *credit risk* on debt issuance by *special purpose vehicles*;

(3) the *underwriting risk* of credit and suretyship insurance or *reinsurance* as referred to in *lines of business* 9, 21 and 28;

(4) the *credit risk* on mortgage loans which do not meet the requirements in 3E3.2 to 3E3.9; and

(5) the *credit risk* on assets posted as collateral to a *CCP* or a *clearing member* that are *bankruptcy remote*.

3.19 A *firm* must treat investment guarantees on *contracts of insurance* provided to *policyholders* by a third party and for which the *firm* would be liable should the third party default as *derivatives* in the *counterparty* default risk module.

3A NON-LIFE UNDERWRITING RISK MODULE

3A1 NON-LIFE PREMIUM AND RESERVE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *non-life premium and reserve risk* in accordance with the following formula:

$$SCR_{nl\ prem\ res} = 3 \cdot \sigma_{nl} \cdot V_{nl}$$

where:

(1) σ_{nl} denotes the standard deviation for *non-life premium and reserve risk* determined in accordance with 3A4; and

(2) V_{nl} denotes the volume measure for *non-life premium and reserve risk* determined in accordance with 3A2.

3A2 VOLUME MEASURE FOR NON-LIFE PREMIUM AND RESERVE RISK

1. A *firm* must calculate the volume measure for *non-life premium and reserve risk* as equal to the sum of the volume measures for *premium* and reserve risk of the segments set out in 3A3.

2. For all segments set out in 3A3 a *firm* must calculate the volume measure of a particular segment *s* in accordance with the following formula:

$$V_s = \left(V_{(prem,s)} + V_{(res,s)}\right) \cdot (0.75 + 0.25 \cdot DIV_s)$$

where:

(1) $V_{(prem,s)}$ denotes the volume measure for *premium* risk of segment *s*;

(2) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment *s*; and

(3) DIV_s denotes the factor for geographical diversification of segment *s*.

3. For all segments set out in 3A3, a *firm* must calculate the volume measure for *premium* risk of a particular segment *s* in accordance with the following formula:

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

where:

(1) P_s denotes an estimate of the *premiums* to be earned by the *firm* for segment *s* during the following 12 *months*;

(2) $P_{(last,\ s)}$ denotes the *premiums* earned by the *firm* for segment *s* during the last 12 *months*;

(3) $FP_{(existing,\ s)}$ denotes the expected present value of *premiums* to be earned by the *firm* for segment *s* after the following 12 *months* for existing *contracts of insurance*; and

(4) $FP_{(future,\ s)}$ denotes the following amount with respect to *contracts of insurance* where the initial recognition date falls in the following 12 *months*:

(a) for all such *contracts of insurance* with an initial term of one year or less, the expected present value of *premiums* to be earned by the *firm* for segment *s*, but excluding the *premiums* to be earned during the 12 *months* after the initial recognition date; and

(b) for all such *contracts of insurance* with an initial term of more than one year, the amount equal to 30% of the expected present value of *premiums* to be earned by the *firm* for segment *s* after the following 12 *months*.

4. For all segments set out in 3A3, a *firm* may, as an alternative to the calculation set out in 3A2.3, 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 requirements are met:

(1) the *governing body* of the *firm* has decided that its *earned premiums* for segment *s* during the following 12 *months* will not exceed P_s;

(2) the *firm* has established effective control mechanisms to ensure that the limits on *earned premiums* referred to in (1) will be met; and

(3) the *firm* has informed the *PRA* in writing about the decision referred to in (1) and the reasons for it.

For the purposes of this calculation, the terms P_s, $FP_{(existing,\ s)}$ and $FP_{(future,\ s)}$ must be calculated in accordance with 3A2.3(1), (3) and (4).

5. For the purposes of the calculations set out in 3A2.3 and 3A2.4, *premiums* must be net, after deduction of *premiums* for *reinsurance contracts,* except for *premiums* for the following types of *reinsurance contracts* which must not be deducted:

(1) *premiums* in relation to non-insurance events or settled insurance claims that are not accounted for in the cash-flows referred to in Technical Provisions – Further Requirements 23.3; and

(2) *premiums* for *reinsurance contracts* that do not comply with 3G2, 3G3, 3G5 and 3G7.

6. For all segments set out in 3A3, a *firm* must calculate the volume measure for reserve risk of a particular segment as equal to the *best estimate* of the provisions for claims outstanding for the segment, after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, provided that:

(1) the *reinsurance contracts* or *special purpose vehicles* comply with 3G2, 3G3, 3G5 and 3G7; and

(2) the volume measure must not be a negative amount.

7. For all segments set out in 3A3, the default factor for geographical diversification of a particular segment must be either 1 or calculated in accordance with 3A5.

3A3 SEGMENTATION OF NON-LIFE INSURANCE AND REINSURANCE OBLIGATIONS AND STANDARD DEVIATIONS FOR THE NON-LIFE PREMIUM AND RESERVE RISK SUB-MODULE

	Segment	***Lines of business* that the segment consists of**	**Standard deviation for gross *premium* risk of the segment**	**Standard deviation for reserve risk of the segment**
1	Motor vehicle liability insurance and proportional *reinsurance*	4 and 16	10%	9%
2	Other motor insurance and proportional *reinsurance*	5 and 17	8%	8%
3	Marine, aviation and transport insurance and proportional *reinsurance*	6 and 18	15%	11%
4	Fire and other damage to property insurance and proportional *reinsurance*	7 and 19	8%	10%
5	*General liability* insurance and proportional *reinsurance*	8 and 20	14%	11%
6	Credit and suretyship insurance and proportional	9 and 21	19%	17.2%

	reinsurance			
7	Legal expenses insurance and proportional *reinsurance*	10 and 22	8.3%	5.5%
8	Assistance and its proportional *reinsurance*	11 and 23	6.4%	22%
9	Miscellaneous financial loss insurance and proportional *reinsurance*	12 and 24	13%	20%
10	Non-proportional casualty *reinsurance*	26	17%	20%
11	Non-proportional marine, aviation and transport *reinsurance*	27	17%	20%
12	Non-proportional property *reinsurance*	28	17%	20%

3A4 STANDARD DEVIATION FOR NON-LIFE PREMIUM AND RESERVE RISK

1. A *firm* must calculate the standard deviation for *non-life premium and reserve risk* in accordance with the following formula:

$$\sigma_{nl} = \frac{1}{V_{nl}} \cdot \sqrt{\sum_{s,t} CorrS_{(s,t)} \cdot \sigma_s \cdot V_s \cdot \sigma_t \cdot V_t}$$

where:

(1) V_{nl} denotes the volume measure for *non-life premium and reserve risk*;

(2) the sum covers all possible combinations (*s*, *t*) of the segments set out in 3A3;

(3) $CorrS_{(s,t)}$ denotes the correlation coefficient for *non-life premium and reserve risk* for segment *s* and segment *t* set out in Annex IV;

(4) σ_s and σ_t denote standard deviations for *non-life premium and reserve risk* of segments *s* and *t* respectively; and

(5) V_s and V_t denote volume measures for *premium* and reserve risk of segments *s* and *t*, referred to in 3A2, respectively.

2. For all segments set out in 3A3, a *firm* must calculate the standard deviation for *non-life premium and reserve risk* of a particular segment *s* in accordance with the following formula:

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

where:

(1) $\sigma_{(prem,\,s)}$ denotes the standard deviation for non-life *premium* risk of segment *s* determined in accordance with 3A4.3;

(2) $\sigma_{(res,\,s)}$ denotes the standard deviation for non-life reserve risk of segment *s* as set out in 3A3;

(3) $V_{(prem,\,s)}$ denotes the volume measure for *premium* risk of segment *s* referred to in 3A2; and

(4) $V_{(res,\,s)}$ denotes the volume measure for reserve risk of segment *s* referred to in 3A2.

3. For all segments set out in 3A3, a *firm* must calculate the standard deviation for non-life *premium* risk of a particular segment as equal to the product of the standard deviation for non-life gross *premium* risk of the segment set out in 3A3 and the adjustment factor for non-proportional *reinsurance*.

4. For segments 1, 4 and 5 set out in 3A3 the adjustment factor for non-proportional *reinsurance* must be equal to 80%. For all other segments set out in 3A3 the adjustment factor for non-proportional *reinsurance* must be equal to 100%.

3A5 FACTOR FOR GEOGRAPHICAL DIVERSIFICATION OF PREMIUM AND RESERVE RISK

1. Subject to 3A5.5, 3A5.6 and 3A5.7, for all segments set out in 3A3 and 3C4, a *firm* must calculate the factor for geographical diversification of a particular segment *s* referred to in 3A2 and 3C3 in accordance with the following formula:

$$DIV_s = \frac{\sum_r (V_{(prem,r,s)} + V_{res,r,s})^2}{\left(\sum_r \left(V_{(prem,r,s)} + V_{res,r,s}\right)\right)^2}$$

where:

(1) each of the sums cover all the geographical regions set out in 3A5.8;

(2) $V(prem, r, s)$ denotes the volume measure for *premium* risk of the segment *s* and the region *r*; and

(3) $V(res, r, s)$ denotes volume measure for reserve risk of the segment *s* and the region *r*.

2. For all segments set out in 3A3 and 3C4 and all geographical regions set out in 3A5.8, a *firm* must calculate the volume measure for *premium* risk of a particular segment *s* and a particular region *r* in the same way as the volume measure for non-life or *NSLT health premium* risk of the segment *s* as referred to in 3A2 and 3C3, but taking into account only insurance and *reinsurance* obligations where the underlying risk is situated in the region *r*.

3. For all segments set out in 3A3 and 3C4 and all geographical regions set out in 3A5.8 a *firm* must calculate the volume measure for reserve risk of a particular segment *s* and a particular region *r* in the same way as the volume measure for non-life or *NSLT health* reserve risk of the segment *s* as referred to in 3A2 and 3C3, but taking into account only insurance and *reinsurance* obligations where the underlying risk is situated in the region *r*.

4. For the purpose of the calculations set out in 3A5.2 and 3A5.3, the following criteria apply:

(1) In the case of non-life insurance, the region in which a risk is situated is,

(a) if the insurance relates to a building or to a building and its contents (so far as the contents are covered by the same *policy*), to the region in which the building is situated;

(b) if the insurance relates to a vehicle of any type, to the region of registration;

(c) in the case of *policies* of a duration of four *months* or less covering travel or holiday risks (whatever the class concerned), to the region in which the *policyholder* took out the *policy*; or

(d) in a case not covered by (a) to (c):

(i) if the *policyholder* is an individual, to the region in which the individual has their habitual residence at the date when the *contract of insurance* is entered into; and

(ii) otherwise, to the region in which the establishment of the *policyholder* to which the *policy* relates is situated and that date; and

(2) In the case of life insurance, the region of the commitment, in relation to a commitment entered into at any date, is

(a) if the *policyholder* is an individual, the region in which the individual had their habitual residence at that date; or

(b) if the *policyholder* is not an individual, the region in which the establishment of the *policyholder* to which the commitment relates was situated at that date;

where for these purposes 'commitment' means a commitment represented by *contracts of insurance* of a prescribed class.

5. Notwithstanding 3A5.1, the factor for geographical diversification must be equal to 1 for segments 6, 10, 11 and 12 set out in 3A3 and for segment 4 set out in 3C4.

6. Notwithstanding 3A5.1, the factor for geographical diversification for a segment set out in 3A3 must be equal to 1 if a *firm* uses an *undertaking specific parameter* for the standard deviation for non-life *premium* risk or non-life reserve risk of the segment to calculate the *non-life premium and reserve risk* sub-module.

7. Notwithstanding 3A5.1, the factor for geographical diversification for a segment set out in 3C4 must be equal to 1 if a *firm* uses an *undertaking specific parameter* for the standard deviation for *NSLT health premium* risk or *NSLT health* reserve risk of the segment to calculate the *NSLT health premium and reserve risk* sub-module.

8. Regions for the calculation of the factor for geographical diversification.

	Region	**Territories that the region consists of**
1	Northern Europe	Denmark (except Greenland), Estonia, Finland, Guernsey, Iceland, Ireland, Isle of Man, Jersey, Latvia, Lithuania, Norway, Sweden, United Kingdom (except Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn Islands, Saint Helena, Turks and Caicos Islands)
2	Western Europe	Austria, Belgium, France (except French Guiana, French Polynesia, Guadeloupe, Martinique, Mayotte, New Caledonia, Réunion, Saint Barthélemy, Saint Martin, Saint Pierre and Miquelon, Wallis and Futuna), Germany, Liechtenstein, Luxembourg, Monaco, Netherlands (except Aruba, Bonaire, Curaçao, Saba, Sint Eustatius, Sint Maarten), Switzerland
3	Eastern Europe	Belarus, Bulgaria, Czech Republic, Hungary, Moldova, Poland, Romania, Russia,

		Slovakia, Ukraine
4	Southern Europe	Albania, Andorra, Bosnia and Herzegovina, Croatia, Cyprus, the former Yugoslav Republic of Macedonia, Gibraltar, Greece, Italy, Malta, Montenegro, Portugal, San Marino, Serbia, Slovenia, Spain, Vatican City State
5	Central and Western Asia	Armenia, Azerbaijan, Bahrain, Georgia, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Tajikistan, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Yemen
6	Eastern Asia	China, Japan, Mongolia, North Korea, South Korea, Taiwan
7	South and South-Eastern Asia	Afghanistan, Bangladesh, Bhutan, Brunei, Burma/Myanmar, Cambodia, India, Indonesia, Iran, Laos, Malaysia, Maldives, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, East Timor, Vietnam
8	Oceania	American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis and Futuna
9	Northern Africa	Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Côte d'Ivoire, Egypt, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Saint Helena, Senegal, Sierra Leone, South Sudan, Sudan, Togo, Tunisia
10	Southern Africa	Angola, Botswana, Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mayotte, Mozambique, Namibia, Congo, Réunion, Rwanda, São Tomé and Príncipe, Seychelles, Somalia, South Africa, Swaziland, Uganda, Tanzania, Zambia, Zimbabwe
11	Northern America excluding the United States of America	Bermuda, Canada, Greenland, Saint Pierre and Miquelon
12	Caribbean and Central America	Anguilla, Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, British Virgin Islands, Cayman Islands, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, El Salvador, Grenada, Guadeloupe, Guatemala, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Puerto Rico, Saint Barthélemy, Saba, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Eustatius, Sint Maarten, Trinidad and Tobago, Turks and Caicos Islands, US Virgin Islands
13	Eastern South America	Brazil, Falkland Islands, French Guiana, Guyana, Paraguay, Suriname, Uruguay
14	Northern, southern and western South	Argentina, Bolivia, Chile, Colombia, Ecuador, Peru, Venezuela

	America	
15	North-east United States of America	Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
16	South-east United States of America	Alabama, Arkansas, Florida, Georgia (US), Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia
17	Mid-west United States of America	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Wisconsin
18	Western United States of America	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, Wyoming

3A6 NON-LIFE LAPSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for the non-life *lapse risk* sub-module as equal to the loss in its *basic own funds* resulting from a combination of the following instantaneous events:

   (1) the *discontinuance* of 40% of the insurance *policies* for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin*; and

   (2) where *reinsurance contracts* cover *contracts of insurance* or *reinsurance contracts* that will be written in the future, the decrease of 40% of the number of those future *contracts of insurance* or *reinsurance contracts* used in the calculation of *technical provisions*.

2. A *firm* must apply the events referred to in 3A6.1 uniformly to all relevant *contracts of insurance* and *reinsurance contracts* and, in respect of any such *reinsurance contracts*, the *firm* must apply the event referred to in 3A6.1(1) to the underlying *contracts of insurance*.

3. For the purposes of determining the loss in its *basic own funds* under the event referred to in 3A6.1(1), the *firm* must base the calculation on the type of d*iscontinuance* that most negatively affects its *basic own funds* on a per *policy* basis.

3A7 NON-LIFE CATASTROPHE RISK SUB-MODULE

1. The *non-life catastrophe risk* sub-module must consist of all of the following sub-modules:

   (1) the natural catastrophe risk sub-module;

   (2) the sub-module for catastrophe risk of non-proportional property *reinsurance*;

   (3) the man-made catastrophe risk sub-module; and

   (4) the sub-module for other *non-life catastrophe risk*.

2. A *firm* must calculate the capital requirement for the *non-life catastrophe risk* sub-module in accordance with the following formula:

$$SCR_{nlCAT} = \sqrt{\left(SCR_{natCAT} + SCR_{npproperty}\right)^2 + SCR^2{}_{mmCAT} + SCR^2{}_{CATother}}$$

   where:

(1) SCR_{natCAT} denotes the capital requirement for natural catastrophe risk;

(2) $SCR_{npproperty}$ denotes the capital requirement for the catastrophe risk of non-proportional property *reinsurance*;

(3) SCR_{mmCAT} denotes the capital requirement for man-made catastrophe risk; and

(4) $SCR_{CATother}$ denotes the capital requirement for other *non-life catastrophe risk*.

3A8 NATURAL CATASTROPHE RISK SUB-MODULE

1. The natural catastrophe risk sub-module must consist of all of the following sub-modules:

(1) the windstorm risk sub-module;

(2) the earthquake risk sub-module;

(3) the flood risk sub-module;

(4) the hail risk sub-module; and

(5) the subsidence risk sub-module.

2. A *firm* must calculate the capital requirement for natural catastrophe risk in accordance with the following formula:

$$SCR_{natCAT} = \sqrt{\sum_{i} SCR_i^2}$$

where:

(1) the sum includes all possible combinations of the sub-modules *i* set out in 3A8.1; and

(2) SCR_i denotes the capital requirement for sub-module *i*.

3A9 WINDSTORM RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for windstorm risk in accordance with the following formula:

$$SCR_{windstorm} = \sqrt{\left(\sum_{(r,s)} CorrWS_{(r,s)} \cdot SCR_{windstorm,r} \cdot SCR_{windstorm,s}\right) + SCR_{(windstorm,other)}^2}$$

where:

(1) the sum includes all possible combinations (*r*, *s*) of the regions set out in Annex V;

(2) $CorrWS_{(r,s)}$ denotes the correlation coefficient for windstorm risk for region *r* and region *s* as set out in Annex V;

(3) $SCR_{(windstorm,r)}$ and $SCR_{(windstorm,s)}$ denote the capital requirements for windstorm risk in region *r* and *s* respectively; and

(4) $SCR_{(windstorm,other)}$ denotes the capital requirement for windstorm risk in regions other than those set out in 3A10.

2. For all regions set out in Annex V, a *firm* must calculate the capital requirement for windstorm risk in a particular region *r* as the higher of the following two capital requirements:

(1) the capital requirement for windstorm risk in region *r* according to scenario A as set out in 3A9.3; and

(2) the capital requirement for windstorm risk in region *r* according to scenario B as set out in 3A9.4.

3. For all regions set out in Annex V, a *firm* must calculate the capital requirement for windstorm risk in a particular region *r* according to scenario A as equal to the loss in its *basic own funds* that would result from the following sequence of events:

(1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 80% of the specified windstorm loss in region *r*; and

(2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 40% of the specified windstorm loss in region *r*.

4. For all regions set out in Annex V, a *firm* must calculate the capital requirement for windstorm risk in a particular region *r* according to scenario B as equal to the loss in its *basic own funds* that would result from the following sequence of events:

(1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 100% of the specified windstorm loss in region *r*; and

(2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 20% of the specified windstorm loss in region *r*.

5. For all regions set out in Annex V, a *firm* must calculate the specified windstorm loss in a particular region *r* in accordance with the following formula:

$$L_{(windstorm,r)} = \sqrt{\sum_{(i,j)} Corr_{(windstorm,r,i,j)} \cdot WSI_{(windstorm,r,i)} \cdot WSI_{(windstorm,r,j)}}$$

where:

(1) the sum includes all possible combinations of risk zones (*i*, *j*) of region *r* set out in Annex IX;

(2) $Corr_{(windstorm,\ r,\ i,\ j)}$ denotes the correlation coefficient for windstorm risk in risk zones *i* and *j* of region *r* set out in Annex XXII; and

(3) $WSI_{(windstorm,\ r,\ i)}$ and $WSI_{(windstorm,\ r,\ j)}$ denote the weighted sums insured for windstorm risk in risk zones *i* and *j* of region *r* set out in Annex IX.

6. For all regions set out in Annex V and all risk zones of those regions set out in Annex IX, a *firm* must calculate the weighted sum insured for windstorm risk in a particular windstorm zone *i* of a particular region *r i*n accordance with the following formula:

$$WSI_{(windstorm,r,i)} = Q_{(windstorm,r)} \cdot W_{(windstorm,r,i)} \cdot SI_{(windstorm,r,i)}$$

where:

(1) $W_{(windstorm,\ r,\ i)}$ denotes the risk weight for windstorm risk in risk zone *i* of region *r* set out in Annex X;

(2) $SI_{(windstorm,\ r,\ i)}$ denotes the sum insured for windstorm risk in windstorm zone *i* of region *r*; and

(3) $Q_{(windstorm,\ r)}$ denotes the windstorm risk factor for region *r* as set out in Annex V.

7. Where the amount determined for a particular risk zone in accordance with 3A9.6 exceeds an amount (referred to for these purposes as 'the lower amount') equal to the sum of the potential

losses without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that the *firm* could suffer for windstorm risk in that risk zone, taking into account the terms and conditions of its specific *policies*, including any contractual payment limits, the *firm* may, as an alternative calculation, determine the weighted sum insured for windstorm risk in that risk zone as the lower amount.

8. For all regions set out in Annex V and all risk zones of those regions set out in Annex IX, a *firm* must calculate the sum insured for windstorm risk in a particular windstorm zone *i* of a particular region *r* in accordance with the following formula:

$$SI_{(windstorm,r,i)} = SI_{(property,r,i)} + SI_{(onshore-property,r,i)}$$

where:

(1) $SI_{(property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 7 and 19 in relation to *contracts of insurance* that cover windstorm risk and where the risk is situated in risk zone *i* of region *r*; and

(2) $SI_{(onshore\text{-}property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 6 and 18 in relation to *contracts of insurance* that cover onshore property damage by windstorm and where the risk is situated in risk zone *i* of region *r*.

9. A *firm* must calculate the capital requirement for windstorm risk in regions other than those set out in 3A10 as equal to the loss in its *basic own funds* that would result from an instantaneous loss in relation to each *contract of insurance* that covers any of the following insurance or *reinsurance* obligations:

(1) obligations of *lines of business* 7 or 19 that cover windstorm risk and where the risk is not situated in one of the regions set out in 3A10; and

(2) obligations of *lines of business* 6 or 18 in relation to onshore property damage by windstorm and where the risk is not situated in one of the regions set out in 3A10.

10. A *firm* must calculate the amount of the instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, referred to in 3A9.9 in accordance with the following formula:

$$L_{(windstorm,other)} = 1.75 \cdot (0.5 \cdot DIV_{windstorm} + 0.5) \cdot P_{windstorm}$$

where:

(1) $DIV_{windstorm}$ is calculated in accordance with 3A5, but based on the *premiums* in respect of the obligations referred to in 3A9.9 and restricted to the regions 5 to 18 set out in 3A5.8; and

(2) $P_{windstorm}$ is an estimate of the *premiums* to be earned by the *firm* for each *contract of insurance* that covers the obligations referred to in 3A9.9 during the following 12 *months* provided that, for this purpose *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3A10 LIST OF REGIONS FOR WHICH NATURAL CATASTROPHE RISK IS NOT CALCULATED BASED ON PREMIUMS

1. The regions for which natural catastrophe risk is not calculated based on *premiums* are:

(1) Member States of the European Union;

(2) Principality of Andorra;

(3) Republic of Iceland;

(4) Principality of Lichtenstein;

(5) Principality of Monaco;

(6) Kingdom of Norway;

(7) Republic of San Marino;

(8) Swiss Confederation;

(9) Vatican City State; and

(10) The United Kingdom.

3A11 EARTHQUAKE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for earthquake risk in accordance with the following formula:

$$SCR_{earthquake} = \sqrt{\left(\sum_{r,s} CorrEQ_{(r,s)} \cdot SCR_{(earthquake,r)} \cdot SCR_{(earthquake,s)}\right) + SCR^2_{(earthquake,other)}}$$

where:

(1) the sum includes all possible combinations (*r*, *s*) of the regions set out in Annex VI;

(2) $CorrEQ_{(r,s)}$ denotes the correlation coefficient for earthquake risk for region *r* and region *s* as set out in Annex VI;

(3) $SCR_{(earthquake,r)}$ and $SCR_{(earthquake,s)}$ denote the capital requirements for earthquake risk in region *r* and *s* respectively; and

(4) $SCR_{(earthquake,other)}$ denotes the capital requirement for earthquake risk in regions other than those set out in 3A10.

2. For all regions set out in Annex VI, a *firm* must calculate the capital requirement for earthquake risk in a particular region *r* as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_{(earthquake,r)} = \sqrt{\sum_{(i,j)} Corr_{(earthquake,r,i,j)} \cdot WSI_{(earthquake,r,i)} \cdot WSI_{(earthquake,r,j)}}$$

where:

(1) the sum includes all possible combinations of risk zones (*i*, *j*) of region *r* set out in Annex IX;

(2) $Corr_{(earthquake,r,i,j)}$ denotes the correlation coefficient for earthquake risk in risk zones *i* and *j* of region *r* set out in Annex XXIII; and

(3) $WSI_{(earthquake,r,i)}$ and $WSI_{(earthquake,r,j)}$ denote the weighted sums insured for earthquake risk in risk zones *i* and *j* of region *r* set out in Annex IX.

3. For all regions set out in Annex VI and all risk zones of those regions set out in Annex IX, a *firm* must calculate the weighted sum insured for earthquake risk in a particular earthquake zone *i* of a particular region *r* in accordance with the following formula:

$$WSI_{(earthquake,r,i)} = Q_{(earthquake,r)} \cdot W_{(earthquake,r,i)} \cdot SI_{(earthquake,r,i)}$$

where:

(1) $W_{(earthquake,\ r,\ i)}$ denotes the risk weight for earthquake risk in risk zone *i* of region *r* set out in Annex X;

(2) $SI_{(earthquake,\ r,\ i)}$ denotes the sum insured for earthquake risk in earthquake zone *i* of region *r*; and

(3) $Q_{(earthquake,\ r)}$ denotes the earthquake risk factor for region *r* as set out in Annex VI.

4. Where the amount determined for a particular risk zone in accordance with 3A11.3 exceeds an amount (referred to for these purposes as 'the lower amount') equal to the sum of the potential losses, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that the *firm* could suffer for earthquake risk in that risk zone, taking into account the terms and conditions of its specific *policies*, including any contractual payment limits, the *firm* may, as an alternative calculation, determine the weighted sum insured for earthquake risk in that risk zone as the lower amount.

5. For all regions set out in Annex VI and all risk zones of those regions set out in Annex IX, a *firm* must calculate the sum insured for earthquake risk in a particular earthquake zone *i* of a particular region *r* in accordance with the following formula:

$$SI_{(earthquake,r,i)} = SI_{(property,r,i)} + SI_{(onshore-property,r,i)}$$

where:

(1) $SI_{(property,\ r,\ i)}$ denotes the sum insured of the *firm* for *lines of business* 7 and 19 in relation to *contracts of insurance* that cover earthquake risk and where the risk is situated in risk zone *i* of region *r*; and

(2) $SI_{(onshore\text{-}property,\ r,\ i)}$ denotes the sum insured of the *firm* for *lines of business* 6 and 18 in relation to *contracts of insurance* that cover onshore property damage by earthquake and where the risk is situated in risk zone *i* of region *r*.

6. A *firm* must calculate the capital requirement for earthquake risk in regions other than those set out in 3A10 as equal to the loss in its *basic own funds* that would result from an instantaneous loss in relation to each *contract of insurance* that covers one or both of the following insurance or *reinsurance* obligations:

(1) obligations of *lines of business* 7 or 19 that cover earthquake risk, where the risk is not situated in one of the regions set out in 3A10; and

(2) obligations of *lines of business* 6 or 18 in relation to onshore property damage by earthquake, where the risk is not situated in one of the regions set out in 3A10.

7. A *firm* must calculate the amount of the instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, referred to in 3A11.6, in accordance with the following formula:

$$L_{(earthquake,other)} = 1.2 \cdot \left(0.5 \cdot DIV_{earthquake} + 0.5\right) \cdot P_{earthquake}$$

where:

(1) $DIV_{earthquake}$ is calculated in accordance with 3A5, but based on the *premiums* in respect of the obligations referred to in 3A11.6(1) and 3A11.6(2) and restricted to the regions 5 to 18 set out in 3A5; and

(2) $P_{earthquake}$ is an estimate of the *premiums* to be earned by the *firm* for each *contract of insurance* that covers the obligations referred to in 3A11.6(1) and 3A11.6(2) during the following 12 *months* provided that, for this purpose *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3A12 FLOOD RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for flood risk in accordance with the following formula:

$$SCR_{flood} = \sqrt{\left(\sum_{(r,s)} CorrFL_{(r,s)} \cdot SCR_{(flood,r)} \cdot SCR_{(flood,s)}\right) + SCR^2_{(flood,other)}}$$

where:

(1) the sum includes all possible combinations (*r*, *s*) of the regions set out in Annex VII;

(2) $CorrFL_{(r,s)}$ denotes the correlation coefficient for flood risk for region *r* and region *s* as set out in Annex VII;

(3) $SCR_{(flood,r)}$ and $SCR_{(flood,s)}$ denote the capital requirements for flood risk in region *r* and *s* respectively; and

(4) $SCR_{(flood,other)}$ denotes the capital requirement for flood risk in regions other than those set out in 3A10.

2. For all regions set out in Annex VII, the capital requirement for flood risk in a particular region *r* must be the higher of the following capital requirements:

(1) the capital requirement for flood risk in region *r* according to scenario A as set out in 3A12.3; and

(2) the capital requirement for flood risk in region *r* according to scenario B as set out in 3A12.4.

3. For all regions set out in Annex VII, a *firm* must calculate the capital requirement for flood risk in a particular region *r* according to scenario A as equal to the loss in its *basic own funds* that would result from the following sequence of events:

(1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 65% of the specified flood loss in region *r*; and

(2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 45% of the specified flood loss in region *r*.

4. For all regions set out in Annex VII, a *firm* must calculate the capital requirement for flood risk in a particular region *r* according to scenario B as equal to the loss in its *basic own funds* that would result from the following sequence of events:

(1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 100% of the specified flood loss in region *r*; and

(2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 10% of the specified flood loss in region *r*.

5. For all regions set out in Annex VII, a *firm* must calculate the specified flood loss in a particular region *r* in accordance with the following formula:

$$L_{(flood,r)} = \sqrt{\sum_{(i,j)} Corr_{(flood,r,i,j)} \cdot WSI_{(flood,r,i)} \cdot WSI_{(flood,r,j)}}$$

where:

(1) the sum includes all possible combinations of risk zones (*i*, *j*) of region *r* set out in Annex IX;

(2) $Corr_{(flood,\ r,\ i,\ j)}$ denotes the correlation coefficient for flood risk in flood zones *i* and *j* of region *r* set out in Annex XXIV; and

(3) $WSI_{(flood,\ r,\ i)}$ and $WSI_{(flood,\ r,\ j)}$ denote the weighted sums insured for flood risk in risk zones *i* and *j* of region *r* set out in Annex IX.

6. For all regions set out in Annex VII and all risk zones of those regions set out in Annex IX, a *firm* must calculate the weighted sum insured for flood risk in a particular flood zone *i* of a particular region *r* in accordance with the following formula:

$$WSI_{(flood,r,i)} = Q_{(flood,r)} \cdot W_{(flood,r,i)} \cdot SI_{(flood,r,i)}$$

where:

(1) $W_{(flood,\ r,\ i)}$ denotes the risk weight for flood risk in risk zone *i* of region *r* set out in Annex X;

(2) $SI_{(flood,\ r,\ i)}$ denotes the sum insured for flood risk in flood zone *i* of region *r*; and

(3) $Q_{(flood,\ r)}$ denotes the flood risk factor for region *r* as set out in Annex VII.

7. Where the amount determined for a particular risk zone in accordance with 3A12.6 exceeds an amount (referred to for these purposes as 'the lower amount') equal to the sum of the potential losses, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that the *firm* could suffer for flood risk in that risk zone, taking into account the terms and conditions of its specific *policies*, including any contractual payment limits, the *firm* may, as an alternative calculation, determine the weighted sum insured for flood risk in that risk zone as the lower amount.

8. For all regions set out in Annex VII and all risk zones of those regions set out in Annex IX, a *firm* must calculate the sum insured for flood risk for a particular risk zone *i* of a particular region *r* in accordance with the following formula:

$$SI_{(flood,r,i)} = SI_{(property,r,i)} + SI_{(onshore-property,r,i)} + 1.5 \cdot SI_{(motor,r,i)}$$

where:

(1) $SI_{(property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 7 and 19 in relation to *contracts of insurance* that cover flood risk, where the risk is situated in risk zone *i* of region *r*;

(2) $SI_{(onshore\text{-}property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 6 and 18 in relation to *contracts of insurance* that cover onshore property damage by flood and where the risk is situated in risk zone *i* of region *r*; and

(3) $SI_{(motor,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 5 and 17 in relation to *contracts of insurance* that cover flood risk, where the risk is situated in risk zone *i* of region *r*.

9. A *firm* must calculate the capital requirement for flood risk in regions other than those set out in 3A10, as equal to the loss in its *basic own funds* that would result from an instantaneous loss in relation to each *contract of insurance* that covers any of the following insurance or *reinsurance* obligations:

(1) obligations of *lines of business* 7 or 19 that cover flood risk, where the risk is not situated in one of the regions set out in 3A10;

(2) obligations of *lines of business* 6 or 18 in relation to onshore property damage by flood, where the risk is not situated in one of the regions set out in 3A10; and

(3) obligations of *lines of business* 5 or 17 that cover flood risk, where the risk is not situated in one of the regions set out in 3A10.

10. A *firm* must calculate the amount of the instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, referred to in 3A12.9, in accordance with the following formula:

$$L_{(flood,other)} = 1.1 \cdot \left(0.5 \cdot DIV_{flood} + 0.5\right) \cdot P_{flood}$$

where:

(1) DIV_{flood} is calculated in accordance with 3A5, but based on the *premiums* in respect of the obligations referred to in 3A12.9(1), (2) and (3) and restricted to the regions 5 to 18 set out in 3A5.8; and

(2) P_{flood} is an estimate of the *premiums* to be earned by the *firm* for each *contract of insurance* that covers the obligations referred to in 3A12.9(1), (2) and (3) during the following 12 *months* provided that, for this purpose, *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3A13 HAIL RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for hail risk in accordance with the following formula:

$$SCR_{hail} = \sqrt{\left(\sum_{(r,s)} CorrHL_{(r,s)} \cdot SCR_{(hail,r)} \cdot SCR_{(hail,s)}\right) + SCR^2{}_{(hail,other)}}$$

where:

(1) the sum includes all possible combinations (*r*, *s*) of the regions set out in Annex VIII;

(2) $CorrHL_{(r,s)}$ denotes the correlation coefficient for hail risk for region *r* and region *s* as set out in Annex VIII;

(3) $SCR_{(hail,r)}$ and $SCR_{(hail,s)}$ denote the capital requirements for hail risk in regions *r* and *s* respectively; and

(4) $SCR_{(hail,other)}$ denotes the capital requirement for hail risk in regions other than those set out in 3A10.

2. For all regions set out in Annex VIII, a *firm* must calculate the capital requirement for hail risk in a particular region *r* as the higher of the following capital requirements:

(1) the capital requirement for hail risk in region *r* according to scenario A as set out in 3A13.3; and

(2) the capital requirement for hail risk in region *r* according to scenario B as set out in 3A13.4.

3. For all regions set out in Annex VIII, a *firm* must calculate the capital requirement for hail risk in a particular region *r* according to scenario A as equal to the loss in its *basic own funds* that would result from the following sequence of events:

(1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 70% of the specified hail loss in region *r*; and

(2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 50% of the specified hail loss in region *r*.

4. For all regions set out in Annex VIII, a *firm* must calculate the capital requirement for hail risk in a particular region *r* according to scenario B as equal to the loss in its *basic own funds* that would result from the following sequence of events:

   (1) an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 100% of the specified hail loss in region *r*; and

   (2) a loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 20% of the specified hail loss in region *r*.

5. For all regions set out in Annex VIII, a *firm* must calculate the specified hail loss in a particular region *r* in accordance with the following formula:

$$L_{(hail,r)} = \sqrt{\sum_{(i,j)} Corr_{(hail,r,i,j)} \cdot WSI_{(hail,r,i)} \cdot WSI_{(hail,r,j)}}$$

   where:

   (1) the sum includes all possible combinations of risk zones (*i*, *j*) of region *r* set out in Annex IX;

   (2) $Corr_{(hail,\ r,\ i,\ j)}$ denotes the correlation coefficient for hail risk in risk zones *i* and *j* of region *r* set out in Annex XXV; and

   (3) $WSI_{(hail,\ r,\ i)}$ and $WSI_{(hail,\ r,\ j)}$ denote the weighted sums insured for hail risk in risk zones *i* and *j* of region *r* set out in Annex IX.

6. For all regions set out in Annex VIII and all risk zones of those regions set out in Annex IX, a *firm* must calculate the weighted sum insured for hail risk in a particular hail zone *i* of a particular region *r* in accordance with the following formula:

$$WSI_{(hail,r,i)} = Q_{(hail,r)} \cdot W_{(hail,r,i)} \cdot SI_{(hail,r,i)}$$

   where:

   (1) $W_{(hail,\ r,\ i)}$ denotes the risk weight for hail risk in risk zone *i* of region *r* set out in Annex X;

   (2) $SI_{(hail,\ r,\ i)}$ denotes the sum insured for hail risk in hail zone *i* of region *r*; and

   (3) $Q_{(hail,\ r)}$ denotes the hail risk factor for region *r* as set out in Annex VIII.

7. Where the amount determined for a particular risk zone in accordance with 3A13.6 exceeds an amount (referred to for these purposes as 'the lower amount') equal to the sum of the potential losses, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that the *firm* could suffer for hail risk in that risk zone taking into account the terms and conditions of its specific *policies*, including any contractual payment limits, the *firm* may, as an alternative calculation, determine the weighted sum insured for hail risk in that risk zone as the lower amount.

8. For all regions set out in Annex VIII and all hail zones, a *firm* must calculate the sum insured for hail risk in a particular hail zone *i* of a particular region *r* in accordance with the following formula:

$$SI_{(hail,r,i)} = SI_{(property,r,i)} + SI_{(onshore-property,r,i)} + 5 \cdot SI_{(motor,r,i)}$$

   where:

   (1) $SI_{(property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 7 and 19 in relation to *contracts of insurance* that cover hail risk, where the risk is situated in risk zone *i* of region *r*;

(2) $SI_{(onshore\text{-}property,\ r,\ i)}$ denotes the sum insured by the *firm* for *lines of business* 6 and 18 in relation to *contracts of insurance* that cover onshore property damage by hail, where the risk is situated in risk zone *i* of region *r*; and

(3) $SI_{(motor,\ r,\ i)}$ denotes the sum insured by the *firm* for insurance or *reinsurance* obligations for *lines of business* 5 and 17 in relation to *contracts of insurance* that cover hail risk, where the risk is situated in risk zone *i* of region *r*.

9. A *firm* must calculate the capital requirement for hail risk in regions other than those set out in 3A10, as equal to the loss in its *basic own funds* that would result from an instantaneous loss in relation to each *contract of insurance* that covers one or more of the following insurance or *reinsurance* obligations:

(1) obligations of *lines of business* 7 or 19 that cover hail risk, where the risk is not situated in one of the regions set out in 3A10;

(2) obligations of *lines of business* 6 or 18 in relation to onshore property damage by hail, where the risk is not situated in one of the regions set out in 3A10; and

(3) obligations of *lines of business* 5 or 17 that cover hail risk, where the risk is not situated in one of the regions set out in 3A10.

10. A *firm* must calculate the amount of the instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, referred to in 3A13.9, in accordance with the following formula:

$$L_{(hail,other)} = 0.3 \cdot (0.5 \cdot DIV_{hail} + 0.5) \cdot P_{hail}$$

where:

(1) DIV_{hail} is calculated in accordance with 3A5, but based on the *premiums* in respect of the obligations referred to in 3A13.9(1), (2) and (3) and restricted to the regions 5 to 18 set out in 3A5; and

(2) P_{hail} is an estimate of the *premiums* to be earned by the *firm* for each *contract of insurance* that covers the obligations referred to in 3A13.9(1), (2) and (3) during the following 12 *months* provided that, for this purpose *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3A14 SUBSIDENCE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for subsidence risk as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_{(subsidence)} = \sqrt{\Sigma_{(i,j)} Corr_{(subsidence,i,j)} \cdot WSI_{(subsidence,i)} \cdot WSI_{(subsidence,j)}}$$

where:

(1) the sum includes all possible combinations of risk zones (*i*, *j*) of France set out in Annex IX;

(2) $Corr_{(subsidence,\ i,\ j)}$ denotes the correlation coefficient for subsidence risk in risk zones *i* and *j* set out in Annex XXVI; and

(3) $WSI_{(subsidence,\ i)}$ and $WSI_{(subsidence,\ j)}$ denote the weighted sums insured for subsidence risk in risk zones *i* and *j* of France set out in Annex IX.

2. For all subsidence zones, a *firm* must calculate the weighted sum insured for subsidence risk in a particular risk zone *i* of France set out in Annex IX in accordance with the following formula:

$$WSI_{(subsidence,i)} = 0.0005 \cdot W_{(subsidence,i)} \cdot SI_{(subsidence,i)}$$

where:

(1) $W_{(subsidence,\ i)}$ denotes the risk weight for subsidence risk in risk zone *i* set out in Annex X; and

(2) $SI_{(subsidence,\ i)}$ denotes the sum insured of the *firm* for *lines of business* 7 and 19 in relation to *contracts of insurance* that cover subsidence risk of residential buildings in subsidence zone *i*.

3. Where the amount determined for a particular risk zone in accordance with 3A14.2 exceeds an amount (referred to for these purposes as 'the lower amount') equal to the sum of the potential losses, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that the *firm* could suffer for subsidence risk in that risk zone, taking into account the terms and conditions of its specific *policies*, including any contractual payment limits, the *firm* may, as an alternative calculation, determine the weighted sum insured for subsidence risk in that risk zone as the lower amount.

3A15 INTERPRETATION OF CATASTROPHE SCENARIOS

1. For the purposes of 3A9.3 and 3A9.4, 3A12.3 and 3A12.4 and 3A13.3 and 3A13.4, a *firm* must base the calculation of the capital requirement on the following assumptions:

(1) the two consecutive events referred to in those rules are independent; and

(2) the *firm* does not enter into new insurance *risk-mitigation techniques* between the occurrence of the two events.

2. Notwithstanding 3.3A(1)(d), where current *reinsurance contracts* allow for reinstatements:

(1) a *firm* must take into account future management actions in relation to the reinstatements between the occurrence of the first and the second event; and

(2) the assumptions about future management actions must be realistic, objective and verifiable.

3A16 SUB-MODULE FOR CATASTROPHE RISK OF NON-PROPORTIONAL PROPERTY REINSURANCE

1. A *firm* must calculate the capital requirement for catastrophe risk of non-proportional property *reinsurance* as equal to the loss in Its *basic own funds* that would result from an instantaneous loss in relation to each *reinsurance contract* that covers *reinsurance* obligations of *line of business* 28 other than non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 9 and 21.

2. A *firm* must calculate the amount of the instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, referred to in 3A16.1 in accordance with the following formula:

$$L_{npproperty} = 2.5 \cdot \left(0.5 \cdot DIV_{npproperty} + 0.5\right) \cdot P_{npproperty}$$

where:

(1) $DIV_{npproperty}$ is calculated in accordance with 3A5, but based on the *premiums* earned by the *firm* in *line of business* 28, other than non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 9 and 21;

(2) $P_{npproperty}$ is an estimate of the *premiums* to be earned by the *firm* during the following 12 *months* for each *reinsurance contract* that covers the *reinsurance* obligations of *line of business* 28 other than non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 9 and 21 provided that for this purpose *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3A17 MAN-MADE CATASTROPHE RISK SUB-MODULE

1. The man-made catastrophe risk sub-module must consist of all of the following sub-modules:

(1) the motor vehicle liability risk sub-module;

(2) the marine risk sub-module;

(3) the aviation risk sub-module;

(4) the fire risk sub-module;

(5) the liability risk sub-module; and

(6) the credit and suretyship risk sub-module.

2. A *firm* must calculate the capital requirement for the man-made catastrophe risk in accordance with the following formula:

$$SCR_{mmCAT} = \sqrt{\sum_i SCR_i^2}$$

where:

(1) the sum includes all sub-modules set out in 3A17.1; and

(2) SCR_i denotes the capital requirements for sub-module *i*.

3A18 MOTOR VEHICLE LIABILITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for motor vehicle liability risk as equal to the loss in its *basic own funds* that would result from an instantaneous loss that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula in GBP:

$$L_{motor} = max\left(5{,}300{,}000; 44{,}0000 \cdot \sqrt{N_a + 0.05 \cdot N_b + 0.95 \cdot min(N_b; 20{,}000)}\right)$$

where:

(1) N_a is the number of vehicles insured by the *firm* in *lines of business* 4 and 16 with a deemed *policy* limit above GBP 21,200,000; and

(2) N_b is the number of vehicles insured by the *firm* in *lines of business* 4 and 16 with a deemed *policy* limit below or equal to GBP 21,200,000.

2. The number of motor vehicles covered by the proportional *reinsurance* obligations of the *firm* must be weighted by the relative share of the *firm's* obligations in respect of the sum insured of the motor vehicles.

3. The deemed *policy* limit referred to in 3A18.1 must be:

(1) the overall limit of the motor vehicle liability insurance *policy* or, where no such overall limit is specified in the terms and conditions of the *policy*, the sum of the limits for damage to property and for personal injury; or

(2) where the *policy* limit is specified as a maximum per victim, based on the assumption of ten victims.

3A19 MARINE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for marine risk in accordance with the following formula:

$$SCR_{marine} = \sqrt{SCR_{vessel}^2 + SCR_{platform}^2}$$

where:

(1) SCR_{vessel} is the capital requirement for the risk of a vessel collision; and

(2) $SCR_{platform}$ is the capital requirement for the risk of a platform explosion.

2. A *firm* must calculate the capital requirement for the risk of a vessel collision as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount calculated in accordance with the following formula:

$$L_{vessel} = max_v\left(SI_{(hull,v)} + SI_{(liab,v)} + SI_{(pollution,v)}\right)$$

where:

(1) the maximum relates to all sea, lake, river, and canal vessels insured by the *firm* in respect of vessel collision in *lines of business* 6, 18 and 27 where the insured value of the vessel is at least GBP 220,000;

(2) $SI_{(hull, v)}$ is the sum insured by the *firm*, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, for marine hull insurance and *reinsurance* in relation to vessel *v*;

(3) $SI_{(liab, v)}$ is the sum insured by the *firm*, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, for marine liability insurance and *reinsurance* in relation to vessel *v*; and

(4) $SI_{(pollution, v)}$ is the sum insured by the *firm*, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, for oil pollution insurance and *reinsurance* in relation to vessel *v*.

3. For the purposes of determining $SI_{(hull, v)}$, $SI_{(liab, v)}$, and $SI_{(pollution, v)}$, a *firm* must only take into account *reinsurance contracts* and *special purpose vehicles* that would pay out in the event of insurance claims related to vessel *v* and must not take into account *reinsurance contracts* and *special purpose vehicles* where payout is dependent on insurance claims not related to vessel *v*.

4. Where the deduction of amounts recoverable would lead to a capital requirement for the risk of a vessel collision that insufficiently captures the risk of a vessel collision that the *firm* is exposed to, the *firm* must calculate $SI_{(hull, v)}$, $SI_{(liab, v)}$, or $SI_{(pollution, v)}$ without deduction of amounts recoverable.

5. A *firm* must calculate the capital requirement for the risk of a platform explosion as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount calculated in accordance with the following formula:

$$L_{platform} = \max_p\left(SI_p\right)$$

where:

(1) the maximum relates to all oil and gas offshore platforms insured by the *firm* in respect of platform explosion in *lines of business* 6, 18, and 27; and

(2) SI_p is the accumulated sum insured by the *firm*, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, for the following insurance and *reinsurance* obligations in relation to platform *p*:

(a) obligations to compensate for property damage;

(b) obligations to compensate for the expenses for the removal of wreckage;

(c) obligations to compensate for loss of production income;

(d) obligations to compensate for the expenses for capping of the well or making the well secure; and

(e) liability insurance and *reinsurance* obligations.

6. For the purposes of determining SI_p, a *firm* must only take into account *reinsurance contracts* and *special purpose vehicles* that would pay out in the event of insurance claims related to platform *p* and must not take into account *reinsurance contracts* and *special purpose vehicles* where payout is dependent on insurance claims that are not related to platform *p*.

7. Where the deduction of amounts recoverable would lead to a capital requirement for the risk of a platform explosion that insufficiently captures the risk of a platform explosion that the *firm* is exposed to, the *firm* must calculate SI_p without the deduction of amounts recoverable.

3A20 AVIATION RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for aviation risk as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount calculated in accordance with the following formula:

$$L_{aviation} = \max_{a}(SI_a)$$

where:

(1) the maximum relates to all aircrafts insured by the *firm* in *lines of business* 6, 18, and 27; and

(2) SI_a is the sum insured by the *firm*, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, for aviation hull insurance and *reinsurance* and aviation liability insurance and *reinsurance* in relation to aircraft *a*.

2. For the purposes of 3A20, a *firm* must only take into account *reinsurance contracts* and *special purpose vehicles* that would pay out in the event of insurance claims related to aircraft *a* and must not take into account *reinsurance contracts* and *special purpose vehicles* where payout is dependent on insurance claims that are not related to aircraft *a*.

3. Where the deduction of amounts recoverable would lead to a capital requirement for aviation risk that insufficiently captures the aviation risk that the *firm* is exposed to, the *firm* must, calculate SI_a without the deduction of amounts recoverable.

3A21 FIRE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for fire risk as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount equal to the sum insured by the *firm* with respect to the largest fire risk concentration.

2. The largest fire risk concentration of a *firm* is the set of buildings with the highest sum insured, after deduction of the amounts that the *firm* can recover from *reinsurance contracts* and *special purpose vehicles*, that meets all of the following requirements:

   (1) the *firm* has insurance or *reinsurance* obligations in *lines of business* 7 and 19, in relation to each building that cover damage due to fire or explosion, including as a result of terrorist attacks; and

   (2) all buildings are partly or fully located within a radius of 200 metres.

3. In determining the sum insured for a set of buildings, a *firm* must only take into account *reinsurance contracts* and *special purpose vehicles* that would pay out in the event of insurance claims related to that set of buildings and must not take into account *reinsurance contracts* and *special purpose vehicles* where payout is dependent on insurance claims that are not related to that set of buildings.

4. Where the deduction of amounts recoverable would lead to a capital requirement for fire risk that insufficiently captures the fire risk that the *firm* is exposed to, the *firm* must calculate the sum insured for a set of buildings without the deduction of amounts recoverable.

5. For the purposes of 3A21.2 to 3A21.4, the set of buildings may be covered by one or several *contracts of insurance* or *reinsurance contracts*.

3A22 LIABILITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for liability risk in accordance with the following formula:

$$SCR_{liability} = \sqrt{\sum_{(i,j)} Corr_{(liability,i,j)} \cdot SCR_{(liability,i)} \cdot SCR_{(liability,j)}}$$

   where:

   (1) the sum includes all possible combinations of liability risk groups (*i*, *j*) as set out in Annex XI;

   (2) $Corr_{(liability,\ i,\ j)}$ denotes the correlation coefficient for liability risk of liability risk groups *i* and *j* as set out in Annex XI; and

   (3) $SCR_{(liability,\ i)}$ denotes the capital requirement for liability risk of liability risk group *i*.

2. For all liability risk groups set out in Annex XI, a *firm* must calculate the capital requirement for liability risk of a particular liability risk group *i* as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_{(liability,i)} = f_{(liability,i)} \cdot P_{(liability,i)}$$

   where:

   (1) $f_{(liability,\ i)}$ denotes the risk factor for liability risk group *i* as set out in Annex XI; and

   (2) $P_{(liability,\ i)}$ denotes the *premiums* earned by the *firm* during the following 12 *months* in relation to insurance and *reinsurance* obligations in liability risk group *i*; for this purpose *premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

3. The calculation of the loss in *basic own funds* referred to in 3A22.2 must be based on the following assumptions:

(1) the loss of liability risk group *i* is caused by *ni* claims and the losses caused by these claims are representative for the business of the *firm* in liability risk group *i* and sum up to the loss of liability risk group *i*; and

(2) the number of claims *ni* is equal to the lowest integer that exceeds the following amount:

$$\frac{f_{(liability,i)} \cdot P_{(liability,i)}}{1.15 \cdot Lim_{(i,1)}}$$

where:

(a) $f_{(liability,\ i)}$ and $P_{(liability,\ i)}$ are defined as in 3A22.2; and

(b) $Lim_{(i,\ 1)}$ denotes the highest liability limit of indemnity provided by the *firm* in liability risk group *i*;

(3) where the *firm* provides unlimited cover in liability risk group *i*, the number of claims *ni* is equal to one.

3A23 CREDIT AND SURETYSHIP RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for credit and suretyship risk in accordance with the following formula:

$$SCR_{credit} = \sqrt{SCR_{default}^2 + SCR_{recession}^2}$$

where:

(1) $SCR_{default}$ is the capital requirement for the risk of a large credit default; and

(2) $SCR_{recession}$ is the capital requirement for recession risk.

2. A *firm* must calculate the capital requirement for the risk of a large credit default as equal to the loss in its *basic own funds* that would result from an instantaneous default of the two largest exposures relating to obligations included in *lines of business* 9 and 21 of the *firm* and must base this calculation on the assumption that the loss-given-default, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, of each exposure is 10% of the sum insured in relation to the exposure.

3. The two largest credit insurance exposures referred to in 3A23.2 must be determined based on a comparison of the net loss-given-default of the credit insurance exposures, being the loss-given-default after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*.

4. A *firm* must calculate the capital requirement for recession risk as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is equal to 100% of the *premiums* earned by the *firm* during the following 12 *months* in *lines of business* 9 and 21.

3A24 SUB-MODULE FOR OTHER NON-LIFE CATASTROPHE RISK

1. A *firm* must calculate the capital requirement for other *non-life catastrophe risk* as equal to the loss in its *basic own funds* that would result from an instantaneous loss, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, that is equal to the following amount:

$$L_{other} = \sqrt{(c_1 \cdot P_1 + c_2 \cdot P_2)^2 + (c_3 \cdot P_3)^2 + (c_4 \cdot P_4)^2 + (c_5 \cdot P_5)^2}$$

where:

(1) P_1, P_2, P_3, P_4, and P_5 denote estimates of the gross *premium*, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, expected to be earned by the *firm* during the following 12 *months* in relation to the groups of insurance and *reinsurance* obligations 1 to 5 set out in Annex XII; and

(2) c_1, c_2, c_3, c_4, and c_5 denote the risk factors for the groups of insurance and *reinsurance* obligations 1 to 5 set out in Annex XII.

3B LIFE UNDERWRITING RISK MODULE

3B1 LIFE MORTALITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *mortality risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 15% in the mortality rates used for the calculation of *technical provisions*.

2. A *firm* must only apply the increase in mortality rates referred to in 3B1.1 to those insurance *policies* for which an increase in mortality rates leads to an increase in *technical provisions* without the *risk margin* and in identifying such *policies,* the firm may make the following assumptions:

   (1) multiple insurance *policies* in respect of the same insured *person* may be treated as if they were one insurance *policy*; and

   (2) where the calculation of *technical provisions* is based on groups of *policies* as referred to in Technical Provisions – Further Requirements 20, the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result that is not materially different.

3. With regard to *reinsurance* obligations, the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates must only apply to the underlying insurance *policies* and must be carried out in accordance with 3B1.2.

3B2 LIFE LONGEVITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *longevity risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent decrease of 20% in the mortality rates used for the calculation of *technical provisions*.

2. A *firm* must only apply the decrease in mortality rates referred to in 3B2.1 to those insurance *policies* for which a decrease in mortality rates leads to an increase in *technical provisions* without the *risk margin* and in identifying such *policies*, the *firm* may make the following assumptions:

   (1) multiple insurance *policies* in respect of the same insured *person* may be treated as if they were one insurance *policy*; and

   (2) where the calculation of *technical provisions* is based on groups of *policies* as referred to in Technical Provisions – Further Requirements 20, the identification of the *policies* for which *technical provisions* increase under a decrease in mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result that is not materially different.

3. With regard to *reinsurance* obligations, the identification of the *policies* for which *technical provisions* increase under a decrease in mortality rates must only apply to the underlying insurance *policies* and must be carried out in accordance with 3B2.2.

3B3 LIFE DISABILITY-MORBIDITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *disability-morbidity risk* as equal to the loss in its *basic own funds* that would result from the combination of the following instantaneous permanent changes:

   (1) an increase of 35% in the disability and morbidity rates that are used in the calculation of *technical provisions* to reflect the disability and morbidity experience in the following 12 *months*;

   (2) an increase of 25% in the disability and morbidity rates that are used in the calculation of *technical provisions* to reflect the disability and morbidity experience for all *months* after the following 12 *months*; and

   (3) a decrease of 20% in the disability and morbidity recovery rates used in the calculation of *technical provisions* in respect of the following 12 *months* and for all years thereafter.

3B4 LIFE-EXPENSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for life *expense risk* as equal to the loss in its *basic own funds* that would result from the combination of the following instantaneous permanent changes:

   (1) an increase of 10% in the amount of expenses taken into account in the calculation of *technical provisions*; and

   (2) an increase of one percentage point to the expense inflation rate (expressed as a percentage) used in the calculation of *technical provisions*.

2. With regard to *reinsurance* obligations, a *firm* must apply those changes to its own expenses and, where relevant, to the expenses of the ceding undertakings.

3B5 LIFE REVISION RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *life revision risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 3% in the amount of annuity benefits only on annuity insurance and *reinsurance* obligations where the benefits payable under the underlying insurance *policies* could increase as a result of changes in the legal environment or in the state of health of the *person* insured.

3B6 LIFE LAPSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *lapse risk* as equal to the highest of the following capital requirements:

   (1) the capital requirement for the risk of a permanent increase in lapse rates;

   (2) the capital requirement for the risk of a permanent decrease in lapse rates; and

   (3) the capital requirement for mass *lapse risk*.

2. A *firm* must calculate the capital requirement for the risk of a permanent increase in lapse rates as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 50% in the option exercise rates of the relevant options (as set out in 3B6.4 and 3B6.5), provided that the increased option exercise rates must not exceed 100% and the

increase in option exercise rates must only apply to relevant options for which the exercise of the option would result in an increase in *technical provisions* without the *risk margin*.

3. A *firm* must calculate the capital requirement for the risk of a permanent decrease in lapse rates as equal to the loss in its *basic own funds* that would result from an instantaneous permanent decrease of 50% in the option exercise rates of the relevant options (as set out in 3B6.4 and 3B6.5), provided that the decrease in option exercise rates must not exceed 20 percentage points and the decrease in option exercise rates must only apply to relevant options for which the exercise of the option would result in a decrease in *technical provisions* without the *risk margin*.

4. The relevant options for the purposes of 3B6.2 and 3B6.3 are the following:

   (1) all legal or contractual *policyholder* rights to fully or partly terminate, *surrender*, decrease, restrict or suspend insurance cover or permit the insurance *policy* to lapse; and

   (2) all legal or contractual *policyholder* rights to fully or partially establish, renew, increase, extend or resume the insurance or *reinsurance* cover.

   For the purposes of 3B6.4(2) the change in the option exercise rate referred to in 3B6.2 and 3B6.3 must be applied to the rate reflecting that the relevant option is not exercised.

5. In relation to *reinsurance contracts* the relevant options for the purposes of 3B6.2 and 3B6.3 are the following:

   (1) the rights referred to in 3B6.4 of the *policyholders* of the *reinsurance contracts*;

   (2) the rights referred to in 3B6.4 of the *policyholders* of the *contracts of insurance* underlying the *reinsurance contracts*; and

   (3) where the *reinsurance contract* covers *contracts of insurance* or *reinsurance contracts* that will be written in the future, the right of the potential *policyholders* not to conclude those *contracts of insurance* or *reinsurance contracts*.

6. A *firm* must calculate the capital requirement for mass *lapse risk* as equal to the loss in its *basic own funds* that would result from a combination of the following instantaneous events:

   (1) the *discontinuance* of 70% of the insurance *policies* falling within the scope of operations referred to with *Regulated Activities Order* Schedule 1, Part II, class VII and *Regulated Activities Order* Schedule 1, Part II, class III for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin* and where one of the following requirements are met:

      (a) the *policyholder* is not a natural *person* and *discontinuance* of the *policy* is not subject to approval by the beneficiaries of the pension fund; or

      (b) the *policyholder* is a natural *person* acting for the benefit of the *beneficiaries* of the *policy*, except where there is a family relationship between that natural *person* and the *beneficiaries*, or where the *policy* is effected for private estate planning or inheritance purposes and the number of *beneficiaries* under the *policy* does not exceed 20;

   (2) the *discontinuance* of 40% of the insurance *policies* other than those falling within 3B6.6(1) for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin*; and

   (3) where *reinsurance contracts* cover *contracts of insurance* or *reinsurance contracts* that will be written in the future, the decrease of 40% of the number of those future *contracts of insurance* or *reinsurance contracts* used in the calculation of *technical provisions*.

7. A *firm* must apply the events referred to in 3B6.6 uniformly to all relevant *contracts of insurance* and *reinsurance contracts* and, in respect of any such *reinsurance contracts*, the *firm* must apply the event referred to in 3B6.6(1) to the underlying *contracts of insurance*.

8. For the purposes of determining the loss in its *basic own funds* under the events referred to in 3B6.6(1) and (2) the *firm* must base the calculation on the type of *discontinuance* that most negatively affects its *basic own funds* on a per *policy* basis.

9. Where the highest of the capital requirements referred to in 3B6.1(1), (2) and (3) and the highest of the corresponding capital requirements calculated in accordance with 6.3(2) are not based on the same scenario, the capital requirement for *lapse risk* must be the capital requirement referred to in 3B6.1(1), (2) and (3) for which the underlying scenario results in the highest corresponding capital requirement calculated in accordance with 6.3(2).

3B7 LIFE-CATASTROPHE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *life-catastrophe risk* as equal to the loss in its *basic own funds* that would result from an instantaneous increase of 0.15 percentage points in the mortality rates (expressed as percentages) that are used in the calculation of *technical provisions* to reflect the mortality experience in the following 12 *months*.

2. A *firm* must only apply the increase in mortality rates referred to in 3B7.1 to those insurance *policies* for which an increase in mortality rates that are used to reflect the mortality experience in the following 12 *months* leads to an increase in *technical provisions* without the *risk margin* and in identifying such *policies*, the *firm* may make the following assumptions:

   (1) multiple insurance *policies* in respect of the same insured *person* may be treated as if they were one insurance *policy*; and

   (2) where the calculation of *technical provisions* is based on groups of *policies* as referred to in Technical Provisions – Further Requirements 20 the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result that is not materially different.

3. With regard to *reinsurance policies*, the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates must only apply to the underlying insurance *policies* and must be carried out in accordance with 3B7.2.

3C HEALTH UNDERWRITING RISK MODULE

3C1 NSLT HEALTH UNDERWRITING RISK SUB-MODULE

1. The *NSLT health underwriting risk* sub-module must consist of the following sub-modules:

   (1) the *NSLT health premium and reserve risk* sub-module; and

   (2) the *NSLT health lapse risk* sub-module.

2. A *firm* must calculate the capital requirement for *NSLT health underwriting risk* in accordance with the following formula:

$$SCR_{NSLTh} = \sqrt{SCR^2_{(NSLTh,pr)} + SCR^2_{(NSLTh,lapse)}}$$

where:

(1) $SCR_{(NSLTh,\ pr)}$ denotes the capital requirement for *NSLT health premium and reserve risk*; and

(2) $SCR_{(NSLTh,\ lapse)}$ denotes the capital requirement for *NSLT health lapse risk*.

3C2 NSLT HEALTH PREMIUM AND RESERVE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *NSLT health premium and reserve risk* in accordance with the following formula:

$$SCR_{(NSLT,pr)} = 3 \cdot \sigma_{NSLTh} \cdot V_{NSLTh}$$

where:

(1) σ_{NSLTh} denotes the standard deviation for *NSLT health premium and reserve risk* determined in accordance with 3C5; and

(2) V_{NSLTh} denotes the volume measure for *NSLT health premium and reserve risk* determined in accordance with 3C3.

3C3 VOLUME MEASURE FOR NSLT HEALTH PREMIUM AND RESERVE RISK

1. A *firm* must calculate the volume measure for *NSLT health premium and reserve risk* as equal to the sum of the volume measures for *premium* and reserve risk of the segments set out in 3C4.

2. For all segments set out in 3C4 a *firm* must calculate the volume measure of a particular segment *s* in accordance with the following formula:

$$V_s = \left(V_{(prem,s)} + V_{(res,s)}\right) \cdot (0.75 + 0.25 \cdot DIV_s)$$

where:

(1) $V_{(prem,\ s)}$ denotes the volume measure for *premium* risk of segment *s*;

(2) $V_{(res,\ s)}$ denotes the volume measure for reserve risk of segment *s*; and

(3) DIV_s denotes the factor for geographical diversification of segment *s*.

3. For all segments set out in 3C4 a *firm* must calculate the volume measure for *premium* risk of a particular segment *s* in accordance with the following formula:

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

where:

(1) P_s denotes an estimate of the *premiums* to be earned by the *firm* for the segment *s* during the following 12 *months*;

(2) $P_{(last,\ s)}$ denotes the *premiums* earned by the *firm* for the segment *s* during the last 12 *months*;

(3) $FP_{(existing,\ s)}$ denotes the expected present value of *premiums* to be earned by the *firm* for the segment *s* after the following 12 *months* for existing *contracts of insurance*; and

(4) $FP_{(future,\ s)}$ denotes the following amount with respect to *contracts of insurance* where the initial recognition date falls in the following 12 *months*:

(a) for all such *contracts of insurance* with an initial term of one year or less, the expected present value of *premiums* to be earned by the *firm* for the segment *s*, but excluding the *premiums* to be earned during the 12 *months* after the initial recognition date; and

(b) for all such *contracts of insurance* with an initial term of more than one year, the amount equal to 30% of the expected present value of *premiums* to be earned by the *firm* for the segment *s* after the following 12 *months*.

4. For all segments set out in 3C4, a *firm* may, as an alternative to the calculation set out in 3C3.3, 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 requirements are met:

(1) the *governing body* of the *firm* has decided that its *earned premiums* for the segment *s* during the following 12 *months* will not exceed P_s;

(2) the *firm* has established effective control mechanisms to ensure that the limits on *earned premiums* referred to in (1) will be met; and

(3) the *firm* has informed the *PRA* in writing about the decision referred to in (1) and the reasons for it.

5. For the purposes of 3C3.4, the terms P_s, $FP_{(existing, s)}$ and $FP_{(future, s)}$ must be determined in accordance with 3C3.3(a), (c) and (d).

6. For the purposes of the calculations set out in 3C3.3 and 3C3.4, *premiums* must be net, after deduction of *premiums* for *reinsurance contracts*, except for *premiums* for the following types of *reinsurance contracts* which must not be deducted:

(1) *premiums* in relation to non-insurance events or settled insurance claims that are not accounted for in the cash-flows referred to in Technical Provisions – Further Requirements 23.3; and

(2) *premiums* for *reinsurance contracts* that do not comply with 3G2, 3G3, 3G5 and 3G7.

7. For all segments set out in 3C4, a *firm* must calculate the volume measure for reserve risk of a particular segment as equal to the *best estimate* for the provision for claims outstanding for the segment, after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, provided that:

(1) the *reinsurance contracts* or *special purpose vehicles* comply with 3G2, 3G3, 3G5 and 3G7; and

(2) the volume measure must not be a negative amount.

8. For all segments set out in 3C4, the default factor for geographical diversification must be either equal to 1 or calculated in accordance with 3A5.

3C4 SEGMENTATION OF NSLT HEALTH INSURANCE OBLIGATIONS AND NSLT HEALTH REINSURANCE OBLIGATIONS AND STANDARD DEVIATIONS FOR THE NSLT HEALTH PREMIUM AND RESERVE RISK SUB-MODULE

	Segment	***Lines of business* that the segment consists of**	**Standard deviation for gross *premium* risk of the segment**	**Standard deviation for reserve risk of the segment**
1	Medical expense insurance and proportional *reinsurance*	1 and 13	5%	5.7%

2	Income protection insurance and proportional *reinsurance*	2 and 14	8.5%	14%
3	Workers' compensation insurance and proportional *reinsurance*	3 and 15	9.6%	11%
4	Non-proportional health *reinsurance*	25	17%	17%

3C5 STANDARD DEVIATION FOR NSLT HEALTH PREMIUM AND RESERVE RISK

1. A *firm* must calculate the standard deviation for *NSLT health premium and reserve risk* in accordance with the following formula:

$$\sigma_{NSLTh} = \frac{1}{V_{NSLTh}} \cdot \sqrt{\sum_{s,t} CorrHS_{(s,t)} \cdot \sigma_s \cdot V_s \cdot \sigma_t \cdot V_t}$$

where:

(1) V_{NSLTh} denotes the volume measure for *NSLT health premium and reserve* risk;

(2) the sum covers all possible combinations (*s*, *t*) of the segments set out in 3C4;

(3) $CorrHS_{(s,t)}$ denotes the correlation coefficient for *NSLT health premium and reserve risk* for segment *s* and segment *t* set out in 3C6;

(4) σ_s and σ_t denote standard deviations for *NSLT health premium and reserve risk* of segments *s* and *t* respectively; and

(5) V_s and V_t denote volume measures for *premium* and reserve risk of segments *s* and *t*, referred to in 3C4, respectively.

2. For all segments set out in 3C4, a *firm* must calculate the standard deviation for *NSLT health premium and reserve risk* of a particular segment *s* in accordance with the following formula:

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

where:

(1) $\sigma_{(prem,s)}$ denotes the standard deviation for *NSLT health premium* risk of segment *s* determined in accordance with 3C5.3;

(2) $\sigma_{(res,s)}$ denotes the standard deviation for *NSLT health* reserve risk of segment *s* as set out in 3C4; and

(3) $V_{(prem,s)}$ denotes the volume measure for *premium* risk of segment *s* referred to in 3C3;

(4) $V_{(res,s)}$ denotes the volume measure for reserve risk of segment *s* referred to in 3C3.

3. For all segments set out in 3C4, a *firm* must calculate the standard deviation for *NSLT health premium* risk of a particular segment as equal to the product of the standard deviation for *NSLT health* gross *premium* risk of the segment set out in 3C4 and the adjustment factor for non-proportional *reinsurance*, which, for all segments set out in 3C4 must be equal to 100%.

3C6 CORRELATION MATRIX FOR NSLT HEALTH PREMIUM AND RESERVE RISK

1. The correlation coefficient $CorrHS_{(s,\,t)}$ referred to in 3C5.1 must be equal to the item set out in row *s* and in column *t* of the following correlation matrix. The headings of the rows and columns denote the numbers of the segments set out 3C4:

t, s	**1**	**2**	**3**	**4**
1	1	0.5	0.5	0.5
2	0.5	1	0.5	0.5
3	0.5	0.5	1	0.5
4	0.5	0.5	0.5	1

3C7 NSLT HEALTH LAPSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *NSLT health lapse risk* as equal to the loss in its *basic own funds* that would result from the combination of the following instantaneous events:

   (1) the *discontinuance* of 40% of the insurance *policies* for which *discontinuance* would result in an increase of *technical provisions* without the *risk margin*; and

   (2) where *reinsurance contracts* cover *contracts of insurance* or *reinsurance contracts* that will be written in the future, the decrease of 40% of the number of those future *contracts of insurance or reinsurance contracts* used in the calculation of *technical provisions*.

2. A *firm* must apply the events referred to in 3C7.1 uniformly to relevant all *contracts of insurance* and *reinsurance contracts* and, in respect of any such *reinsurance contracts,* the *firm* must apply the event referred to in 3C7.1(1) to the underlying *contracts of insurance*.

3. For the purposes of determining the loss in its *basic own funds* under the event referred to in 3C7.1(1), the *firm* must base the calculation on the type of *discontinuance* that most negatively affects its *basic own funds* on a per *policy* basis.

3C8 SLT HEALTH UNDERWRITING RISK SUB-MODULE

1. The *SLT health underwriting risk* sub-module must consist of all of the following sub-modules:

   (1) the health *mortality risk* sub-module;

   (2) the health *longevity risk* sub-module;

   (3) the health *disability-morbidity risk* sub-module;

   (4) the health *expense risk* sub-module;

   (5) the *health revision risk* sub-module; and

   (6) the *SLT health lapse risk* sub-module.

2. A *firm* must calculate the capital requirement for *SLT health underwriting risk* in accordance with the following formula:

$$SCR_{SLTh} = \sqrt{\sum_{i,j} CorrSLTH_{(i,j)} \cdot SCR_i \cdot SCR_j}$$

where:

(1) the sum denotes all possible combinations (*i*, *j*) of the sub-modules set out in 3C8.1;

(2) $CorrSLTH_{(i,j)}$ denotes the correlation coefficient for *SLT health underwriting risk* for sub-modules *i* and *j*; and

(3) SCR_i and SCR_j denote the capital requirements for risk sub-modules *i* and *j* respectively.

3. The correlation coefficient $CorrSLTH_{(i,j)}$ referred to in 3C8.2 must be equal to the value set out in row *i* and in column *j* of the following correlation matrix:

i \ *j*	Health mortality	Health longevity	Health disability-morbidity	Health expense	Health revision	SLT health lapse
Health mortality	1	-0.25	0.25	0.25	0	0
Health longevity	-0.25	1	0	0.25	0.25	0.25
Health disability-morbidity	0.25	0	1	0.5	0	0
Health expense	0.25	0.25	0.5	1	0.5	0.5
Health revision	0	0.25	0	0.5	1	0
SLT health lapse	0	0.25	0	0.5	0	1

3C9 HEALTH MORTALITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for health *mortality risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 15% in the mortality rates used for the calculation of *technical provisions*.

2. A *firm* must only apply the increase in mortality rates referred to in 3C9.1 to those insurance *policies* for which an increase in mortality rates leads to an increase in *technical provisions* without the *risk margin* and in identifying such *policies*, the *firm* may make the following assumptions:

(1) multiple insurance *policies* in respect of the same insured *person* may be treated as if they were one insurance *policy*; and

(2) where the calculation of *technical provisions* is based on groups of *policies* as referred to in Technical Provisions – Further Requirements 20, the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result that is not materially different.

3. With regard to *reinsurance* obligations, the identification of the *policies* for which *technical provisions* increase under an increase in mortality rates must only apply to the underlying insurance *policies* and must be carried out in accordance with 3C9.2.

3C10 HEALTH LONGEVITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for health *longevity risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent decrease of 20% in the mortality rates used for the calculation of *technical provisions*.

2. A *firm* must only apply the decrease in mortality rates referred to in 3C10.1 to those insurance *policies* for which a decrease in mortality rates leads to an increase in *technical provisions* without the *risk margin* and in identifying such *policies,* the *firm* may make the following assumptions:

   (1) multiple insurance *policies* in respect of the same insured *person* may be treated as if they were one insurance *policy*; and

   (2) where the calculation of *technical provisions* is based on groups of *policies* as referred to in Technical Provisions – Further Requirements 20, the identification of the *policies* for which *technical provisions* increase under a decrease in mortality rates may also be based on those groups of *policies* instead of single *policies*, provided that it yields a result that is not materially different.

3. With regard to *reinsurance* obligations, the identification of the *policies* for which *technical provisions* increase under a decrease in mortality rates must only apply to the underlying insurance *policies* and must be carried out in accordance with 3C10.2.

3C11 HEALTH DISABILITY-MORBIDITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for health *disability-morbidity risk* as the sum of the following:

   (1) the capital requirement for medical expense *disability-morbidity risk*; and

   (2) the capital requirement for income protection *disability-morbidity risk*.

2. A *firm* must apply:

   (1) the scenarios underlying the calculation of the capital requirement for medical expense *disability-morbidity risk* only to *medical expense insurance obligations* and *medical expense reinsurance obligations* where the underlying business is pursued on a similar technical basis to that of life insurance; and

   (2) the scenarios underlying the calculation of the capital requirement for income protection *disability-morbidity risk* only to *income protection insurance obligations* and *income protection reinsurance obligations* where the underlying business is pursued on a similar technical basis to that of life insurance.

3C12 CAPITAL REQUIREMENT FOR MEDICAL EXPENSE DISABILITY-MORBIDITY RISK

1. A *firm* must calculate the capital requirement for medical expense *disability-morbidity risk* as equal to the higher of the following capital requirements:

   (1) the capital requirement for the increase of medical payments; and

   (2) the capital requirement for the decrease of medical payments.

2. A *firm* must calculate the capital requirement for the increase of medical payments as equal to the loss in its *basic own funds* that would result from the following combination of instantaneous permanent changes:

   (1) an increase of 5% in the amount of medical payments taken into account in the calculation of *technical provisions*; and

(2) an increase of one percentage point in the inflation rate of medical payments (expressed as a percentage) used for the calculation of *technical provisions*.

3. A *firm* must calculate the capital requirement for the decrease of medical payments as equal to the loss in its *basic own funds* that would result from the following combination of instantaneous permanent changes:

(1) a decrease of 5% in the amount of medical payments taken into account in the calculation of *technical provisions*; and

(2) a decrease of one percentage point in the inflation rate of medical payments (expressed as a percentage) used for the calculation of *technical provisions*.

3C13 CAPITAL REQUIREMENT FOR INCOME PROTECTION DISABILITY-MORBIDITY RISK

1. A *firm* must calculate the capital requirement for income protection *disability-morbidity risk* as equal to the loss in its *basic own funds* that would result from the following combination of instantaneous permanent changes:

(1) an increase of 35% in the disability and morbidity rates that are used in the calculation of *technical provisions* to reflect the disability and morbidity in the following 12 *months*;

(2) an increase of 25% in the disability and morbidity rates that are used in the calculation of *technical provisions* to reflect the disability and morbidity in the years after the following 12 *months*;

(3) where the disability and morbidity recovery rates used in the calculation of *technical provisions* are lower than 50%, a decrease of 20% in those rates; and

(4) where the disability and morbidity persistency rates used in the calculation of *technical provisions* are equal to or lower than 50%, an increase of 20% in those rates.

3C14 HEALTH EXPENSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for health *expense risk* as equal to the loss in is *basic own funds* that would result from the following combination of instantaneous permanent changes:

(1) an increase of 10% in the amount of expenses taken into account in the calculation of *technical provisions*; and

(2) an increase of one percentage point in the expense inflation rate (expressed as a percentage) used for the calculation of *technical provisions*.

With regard to *reinsurance* obligations, a *firm* must apply those changes to its own expenses and, where relevant, to the expenses of the ceding undertakings.

3C15 HEALTH REVISION RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *health revision risk* as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 4% in the amount of annuity benefits, only on annuity insurance and *reinsurance* obligations where the benefits payable under the underlying insurance *policies* could increase as a result of changes in inflation, the legal environment or the state of health of the *person* insured.

3C16 SLT HEALTH LAPSE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *SLT health lapse risk* as equal to the higher of the following capital requirements:

(1) capital requirement for the risk of a permanent increase in *SLT health* lapse rates;

(2) capital requirement for the risk of a permanent decrease in *SLT health* lapse rates; and

(3) capital requirement for *SLT health* mass *lapse risk*.

2. A *firm* must calculate the capital requirement for the risk of a permanent increase in *SLT health* lapse rates as equal to the loss in its *basic own funds* that would result from an instantaneous permanent increase of 50% in the exercise rates of the relevant options (as set out in 3C16.4 and 3C16.5), provided that the increased option exercise rates must not exceed 100% and the increase in option exercise rates must only apply to relevant options for which the exercise would result in an increase in *technical provisions* without the *risk margin*.

3. A *firm* must calculate the capital requirement for the risk of a permanent decrease in *SLT health* lapse rates as equal to the loss in its *basic own funds* that would result from an instantaneous permanent decrease of 50% in the option exercise rates of the relevant options (as set out in 3C16.4 and 3C16.5), provided that, the decrease in option exercise rates must not exceed 20 percentage points and the decrease in option exercise rates must only apply to relevant options for which the exercise would result in a decrease in *technical provisions* without the *risk margin*.

4. The relevant options for the purposes of 3C16.2 and 3C16.3 must be the following:

(1) all legal or contractual *policyholder* rights to fully or partly terminate, *surrender*, decrease, restrict or suspend the insurance or *reinsurance* cover or permit the insurance *policy* to lapse; and

(2) all legal or contractual *policyholder* rights to fully or partially establish, renew, increase, extend or resume the insurance or *reinsurance* cover.

For the purposes of 3C16.4(2), the change in the option exercise rate referred to in 3C16.2 and 3C16.3 should be applied to the rate reflecting that the relevant option is not exercised.

5. In relation to *reinsurance contracts*, the relevant options for the purposes of 3C16.2 and 3C16.3 must be the following:

(1) the rights referred to in 3C16.4 of the *policyholders* of the *reinsurance contracts*;

(2) the rights set out in 3C16.4 of the *policyholders* of the *contracts of insurance* underlying the *reinsurance contracts*; and

(3) where *reinsurance contracts* cover *contracts of insurance* or *reinsurance contracts* that will be written in the future, the right of the potential *policyholders* not to conclude those *contracts of insurance* or *reinsurance contracts*.

6. A *firm* must calculate the capital requirement for *SLT health* mass *lapse risk* as equal to the loss in its *basic own funds* that would result from a combination of the following instantaneous events:

(1) the *discontinuance* of 40% of the insurance *policies* for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin*; and

(2) where *reinsurance contracts* cover *contracts of insurance* or *reinsurance contracts* that will be written in the future, the decrease of 40% of the number of those future *contracts of insurance* or *reinsurance contracts* used in the calculation of *technical provisions*.

7. A *firm* must apply the events referred to in 3C16.6 uniformly to all relevant *contracts of insurance* and *reinsurance* contracts and in respect of any such *reinsurance contracts,* the *firm* must apply the event referred to in 3C16.6(1) to the underlying *contracts of insurance*.

8. For the purposes of determining the loss in its *basic own funds* under the event referred to in 3C16.6(1), the *firm* must base the calculation on the type of *discontinuance* that most negatively affects its *basic own funds* on a per *policy* basis.

9. Where the highest of the capital requirements referred to in 3C16.1(1), (2) and (3) and the highest of the corresponding capital requirements calculated in accordance with 6.3(2) are not based on the same scenario, the capital requirement for *lapse risk* must be the capital requirement referred to in 3C16.1(1), (2) and (3) for which the underlying scenario results in the highest corresponding capital requirement calculated in accordance with 6.3(2).

3C17 HEALTH CATASTROPHE RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for the *health catastrophe risk* sub-module in accordance with the following formula:

$$SCR_{healthCAT} = \sqrt{SCR_{ma}^2 + SCR_{ac}^2 + SCR_p^2}$$

where:

(1) SCR_{ma} denotes the capital requirement for the mass accident risk sub-module;

(2) SCR_{ac} denotes the capital requirement for the accident concentration risk sub-module; and

(3) SCR_p denotes the capital requirement for the pandemic risk sub-module.

2. A *firm* must apply:

(1) the mass accident risk sub-module to *health insurance obligations* and *health reinsurance obligations* other than *workers' compensation insurance obligations* and *workers' compensation reinsurance obligations*;

(2) the accident concentration risk sub-module to *workers' compensation insurance obligations* and *workers' compensation reinsurance obligations* and to group *income protection insurance obligations* and group *income protection reinsurance obligations*; and

(3) the pandemic risk sub-module to *health insurance obligations* and *health reinsurance obligations* other than *workers' compensation insurance obligations* and *workers' compensation reinsurance obligations*.

3C18 MASS ACCIDENT RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for the mass accident risk sub-module in accordance with the following formula:

$$SCR_{ma} = \sqrt{\sum_s SCR_{(ma,s)}^2}$$

where:

(1) the sum includes all countries set out in Annex XVI; and

(2) $SCR_{(ma,\,s)}$ denotes the capital requirement for mass accident risk of country *s*.

2. For all countries set out in Annex XVI, a *firm* must calculate the capital requirement for mass accident risk of a particular country *s* as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_{(ma,s)} = r_s \cdot \sum_e x_e \cdot E_{(e,s)}$$

where:

(1) r_s denotes the ratio of *persons* affected by the mass accident in country *s* as set out in Annex XVI;

(2) the sum includes the event types *e* set out in Annex XVI;

(3) x_e denotes the ratio of *persons* who will receive benefits attributable to event type *e* as a result of the accident as set out in Annex XVI; and

(4) $E_{(e,s)}$ denotes the total value of benefits payable by the *firm* in respect of event type *e* in country *s*.

3. For all event types set out in Annex XVI and all countries set out in Annex XVI, a *firm* must calculate its sum insured for a particular event type *e* in a particular country *s* in accordance with the following formula:

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

where:

(1) the sum includes all insured *persons i* of the *firm* who are insured against event type *e* and are inhabitants of country *s*; and

(2) $SI_{(e,i)}$ denotes the value of the benefits payable by the *firm* for the insured *person i* in case of event type *e*.

4. For the purposes of 3C18.3(2), a *firm* must calculate the value of the benefits as the sum insured or where the *contract of insurance* provides for recurring benefit payments the *best estimate* of the benefit payments in case of event type *e*. Where the benefits of a *contract of insurance* depend on the nature or extent of any injury resulting from event type *e*, the calculation of the value of the benefits must be based on the maximum benefits payable under the *contract of insurance* that are consistent with the event. For *medical expense insurance obligations* and *medical expense reinsurance obligations* the value of the benefits must be based on an estimate of the average amounts paid in case of event type *e*, assuming the insured *person* is disabled for the duration specified and taking into account the specific guarantees included within the obligations.

5. Subject to 7.2, a *firm* may calculate the value of benefits payable for the insured *person* referred to in 3C18.3(2) based on homogenous risk groups, provided that the grouping of *policies* complies with Technical Provisions – Further Requirements 20.

3C19 ACCIDENT CONCENTRATION RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for the accident concentration risk sub-module in accordance with the following formula:

$$SCR_{ac} = \sqrt{\sum_c SCR_{(ac,c)}^2}$$

where:

(1) the sum includes all countries *c*; and

(2) $SCR_{(ac,c)}$ denotes the capital requirement for accident concentration risk of country *c*.

2. For all countries a *firm* must calculate the capital requirement for accident concentration risk of country *c* as equal to the loss in is *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_{(ac,c)} = C_c \cdot \sum_c x_e \cdot CE_{(e,c)}$$

where:

(1) C_c denotes the largest accident risk concentration of the *firm* in country *c*;

(2) the sum includes the event types *e* set out in Annex XVI;

(3) x_e denotes the ratio of *persons* who will receive benefits attributable to event type *e* as a result of the accident as set out in Annex XVI; and

(4) $CE_{(e,c)}$ denotes the average value of benefits payable by the *firm* for event type *e* for the largest accident risk concentration in country *c*.

3. For all countries, a *firm* must calculate the highest accident risk concentration of a *firm* in country *c* as equal to the highest number of *persons* for which all of the following requirements are met:

(1) the *firm* has a *workers' compensation insurance obligation* or a *workers' compensation reinsurance obligation* or a group *income protection insurance obligation* or a group *income protection reinsurance obligation* in relation to each of the *persons*;

(2) the obligations in relation to each of the *persons* cover at least one of the events set out in Annex XVI; and

(3) the *persons* are working in the same building, which is situated in country *c*.

4. For all event types and countries, a *firm* must calculate its average sum insured for event type *e* for the largest accident risk concentration in country *c* in accordance with the following formula:

$$CE_{(e,c)} = \frac{1}{N_e}\sum_{i=1}^{Ne} SI_{(e,i)}$$

where:

(1) N_e denotes the number of insured *persons* who are insured by the *firm* against event type *e* and who belong to the largest accident risk concentration of the *firm* in country *c*;

(2) the sum includes all the insured *persons* referred to in (1); and

(3) $SI_{(e,i)}$ denotes the value of the benefits payable by the *firm* for the insured *person i* in case of event type *e*.

5. For the purposes of 3C19.4(3), a *firm* must calculate the value of the benefits as the sum insured or where the *contract of insurance* provides for recurring benefit payments the *best estimate* of the benefit payments in case of event type *e*. Where the benefits of an insurance *policy* depend on the nature or extent of the injury resulting from event type *e*, the calculation of the value of the benefits must be based on the maximum benefits payable under the *policy*, that are consistent with the event. For *medical expense insurance obligations* and *medical expense reinsurance obligations* the value of the benefits must be based on an estimate of the average amounts paid in case of event type *e*, assuming the insured *person* is disabled for the duration specified and taking into account the specific guarantees included within the obligations.

6. Subject to 7.2, a *firm* may calculate the value of the benefits referred to in 3C19.4(3) based on homogenous risk groups, provided that the grouping of *policies* complies with the requirements set out in Technical Provisions – Further Requirements 20.

3C20 PANDEMIC RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for the pandemic risk sub-module as equal to the loss in its *basic own funds* that would result from an instantaneous loss of an amount that, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*, is calculated in accordance with the following formula:

$$L_p = 0.000075 \cdot E + 0.4 \cdot \sum_c N_c \cdot M_c$$

where:

(1) *E* denotes the income protection pandemic exposure of the *firm*;

(2) the sum includes all countries *c*;

(3) N_c denotes the number of insured *persons* of the *firm* who meet all of the following requirements:

(a) the insured *persons* are inhabitants of country *c*; and

(b) the insured *persons* are covered by a *contract of insurance* that includes *medical expense insurance obligations* or *medical expense reinsurance obligations*, other than *workers' compensation insurance obligations* or *workers' compensation reinsurance obligations*, that cover medical expenses resulting from an infectious disease; and

(4) M_c denotes the expected average amount payable by the *firm* per insured *person* of country *c* in case of a pandemic.

2. A *firm* must calculate its income protection pandemic exposure in accordance with the following formula:

$$E = \sum_i E_i$$

where:

(1) the sum includes all insured *persons i* covered by a *contract of insurance* that includes *income protection insurance obligations* or *income protection reinsurance obligations* other than *workers' compensation insurance obligations* or *workers' compensation reinsurance obligations*;

(2) E_i denotes the value of the benefits payable by the *firm* for the insured *person i* in case of a permanent work disability caused by an infectious disease. The value of the benefits must be the sum insured or, where the *contract of insurance* provides for recurring benefit payments, the *best estimate* of the benefit payments assuming that the insured *person* is permanently disabled and will not recover.

3. For all countries, a *firm* must calculate the expected average amount payable by the *firm* per insured *person* of a particular country *c* in case of a pandemic in accordance with the following formula:

$$M_c = \sum_h H_h \cdot CH_{(h,c)}$$

where:

(1) the sum includes the types of healthcare utilisation *h* set out in Annex XVI;

(2) H_h denotes the ratio of insured *persons* with clinical symptoms utilising healthcare type *h* as set out in Annex XVI; and

(3) $CH_{(h,c)}$ denotes the *best estimate* of the amounts payable by the *firm* for an insured *person* in country *c* in relation to *medical expense insurance obligations* or *medical expense reinsurance obligations*, other than *workers' compensation insurance obligations* or *workers' compensation reinsurance obligations*, for healthcare utilisation type *h* in the event of a pandemic.

3D MARKET RISK MODULE

3D1 LISTS OF REGIONAL GOVERNMENTS AND LOCAL AUTHORITIES

1. A *firm* must treat exposures to the Scottish Government, the Welsh Government and the Northern Ireland Executive as exposures to the central government of the *UK* for the calculation of the *market risk* module of the *standard formula*.

QUALIFYING INFRASTRUCTURE INVESTMENTS

3D2 QUALIFYING INFRASTRUCTURE INVESTMENTS

1. The requirements that must be met for an investment in an *infrastructure entity* to constitute a *qualifying infrastructure investment* are as follows:

   (1) the cash-flows generated by the *infrastructure assets* allow for all financial obligations to be met under sustained stresses that are relevant for the risks of the project;

   (2) the cash-flows that the *infrastructure entity* generates for debt providers and equity investors are predictable;

   (3) the *infrastructure assets* and *infrastructure entity* are governed by a regulatory or contractual framework that provides debt providers and equity investors with a high degree of protection including the following:

      (a) the contractual framework must include provisions that effectively protect debt providers and equity investors against losses resulting from the termination of the project by the party which agrees to purchase the goods or services provided by the infrastructure project, unless one of the following requirements is met:

         (i) the revenues of the *infrastructure entity* are funded by payments from a large number of users; or

         (ii) the revenues are subject to a rate-of-return regulation; and

      (b) the *infrastructure entity* has sufficient reserve funds or other financial arrangements to cover the contingency funding and working capital requirements of the project.

   (4) where investments are in bonds or loans, this contractual framework must also include the following:

      (a) debt providers have security or the benefit of security to the extent permitted by applicable law in all assets and contracts that are critical to the operation of the project;

      (b) the use of net operating cash-flows after mandatory payments from the project for purposes other than servicing debt obligations is restricted; and

      (c) restrictions on activities that may be detrimental to debt providers, including that new debt cannot be issued without the consent of existing debt providers in the form agreed with them, unless such new debt issuance is permitted under the documentation for the existing debt;

   (5) notwithstanding (4)(a), for investments in bonds or loans, where a *firm* can demonstrate that security in all assets and contracts is not essential for debt providers to effectively protect or recover the vast majority of their investment, other security mechanisms may be used, provided they comprise at least one of the following:

      (a) pledge of *shares*;

(b) step-in rights;

(c) lien over bank accounts;

(d) control over cash-flows; or

(e) provisions for assignment of contracts;

(6) where investments are in bonds or loans, the *firm* is able to hold the investment to maturity and, subject to 3D2.3, has notified the *PRA* of this in writing before it treats an investment as a *qualifying infrastructure investment*;

(7) where investments are in bonds or loans for which a credit assessment by a nominated *external credit assessment institution* is not available, the investment instrument and other pari passu instruments are senior to all other claims other than statutory claims and claims from liquidity facility providers, trustees and *derivatives counterparties*; and

(8) where investments are in equities, or bonds or loans for which a credit assessment by a nominated *external credit assessment institution* is not available, the following criteria are met:

(a) the *infrastructure assets* and *infrastructure entity* are located in the *OECD*;

(b) where the infrastructure project is in the construction phase the following criteria must be fulfilled by the equity investor, or where there is more than one equity investor, the following criteria must be fulfilled by a *group* of equity investors as a whole:

(i) the equity investors have a history of successfully overseeing infrastructure projects and the relevant expertise;

(ii) the equity investors have a low risk of default, or there is a low risk of material losses for the *infrastructure entity* as a result of their default; and

(iii) the equity investors are incentivised to protect the interests of investors;

(c) where there are construction risks, safeguards exist to ensure completion of the project according to the agreed specification, budget or completion date;

(d) where operating risks are material, they are properly managed;

(e) the *infrastructure entity* uses tested technology and design;

(f) the capital structure of the *infrastructure entity* allows it to service its debt;

(g) the refinancing risk for the *infrastructure entity* is low; and

(h) the *infrastructure entity* uses *derivatives* only for risk-mitigation purposes.

2. For the purposes of 3D2.1(2), a *firm* must not treat the cash-flows generated for debt providers and equity investors as predictable unless all except an immaterial part of the revenues satisfy the following requirements:

(1) one of the following criteria is met:

(a) the revenues are availability-based;

(b) the revenues are subject to a rate-of-return regulation;

(c) the revenues are subject to a take-or-pay contract; or

(d) the level of output or the usage and the price must independently meet one of the following criteria:

(i) it is regulated;

(ii) it is contractually fixed; or

(iii) it is sufficiently predictable as a result of low demand risk; and

(2) where the revenues of the *infrastructure entity* are not funded by payments from a large number of users, the party which agrees to purchase the goods or services provided by the infrastructure project entity must be one of the following:

(a) an entity listed in 3D24.2;

(b) a body listed in 3D1;

(c) an entity with an *external credit assessment institution* rating with a *credit quality step* of at least 3; or

(d) an entity that is replaceable without a significant change in the level and timing of revenues.

3. Where a *firm* treated an investment as a qualifying infrastructure investment in accordance with Article 164a of Commission Delegated Regulation (EU) 2015/35 immediately before 31 December 2024 and from 31 December 2024 treats that investment as a *qualifying infrastructure investment*, the *firm* must notify in writing the *PRA* by 31 January 2025.

3D3 QUALIFYING INFRASTRUCTURE CORPORATE INVESTMENTS

1. The requirements that must be met for an investment in an *infrastructure entity* to constitute a *qualifying infrastructure corporate investment* are as follows:

(1) the substantial majority of the *infrastructure entity's* revenues is derived from owning, financing, developing or operating *infrastructure assets* located in the *OECD*;

(2) the revenues generated by the *infrastructure assets* satisfy one of the criteria set out in 3D2.2(1);

(3) where the revenues of the *infrastructure entity* are not funded by payments from a large number of users, the party which agrees to purchase the goods or services provided by the *infrastructure entity* must be one of the entities listed in 3D2.2(2);

(4) the revenues must be diversified in terms of activities, location, or payers, unless the revenues are subject to a rate-of-return regulation in accordance with 3D2.1(3)(a)(ii) or a take-or-pay contract or the revenues are availability based;

(5) where investments are in bonds or loans, the *firm* is able to hold the investment to maturity and, subject to 3D3.2, has notified the *PRA* of this in writing before it treats an investment as a *qualifying infrastructure corporate investment*;

(6) where no credit assessment from a nominated *external credit assessment institution* is available for the *infrastructure entity*:

(a) the capital structure of the *infrastructure entity* must allow it to service all its debt under conservative assumptions based on an analysis of the relevant financial ratios; and

(b) the *infrastructure entity* must have been active for at least three years or, in the case of an acquired business, it must have been in operation for at least three years; and

(7) where a credit assessment from a nominated *external credit assessment institution* is available for the *infrastructure entity*, such credit assessment has a *credit quality step* between 0 and 3.

2. Where a *firm* treated an investment as a qualifying infrastructure corporate investment in accordance with Article 164b of Commission Delegated Regulation (EU) 2015/35 immediately

before 31 December 2024 and from 31 December 2024 treats that investment as a *qualifying infrastructure corporate investment*, the *firm* must notify the *PRA* in writing by 31 January 2025.

INTEREST RATE RISK SUB-MODULE

3D4 GENERAL PROVISIONS

1. A *firm* must calculate the capital requirement for *interest-rate risk* as equal to the higher of the following:

   (1) the sum, over all currencies, of the capital requirements for the risk of an increase in the term structure of interest rates as set out in 3D5; and

   (2) the sum, over all currencies, of the capital requirements for the risk of a decrease in the term structure of interest rates as set out in 3D6.

2. Where the higher of the capital requirements referred to in 3D4.1(1) and (2) and the higher of the corresponding capital requirements calculated in accordance with 6.3(2) are not based on the same scenario, the capital requirement for *interest-rate risk* must be the capital requirement referred to in 3D4.1(1) and (2) for which the underlying scenario results in the highest corresponding capital requirement calculated in accordance with 6.3(2).

3D5 INCREASE IN THE TERM STRUCTURE OF INTEREST RATES

1. A *firm* must calculate the capital requirement for the risk of an increase in the term structure of interest rates for a given currency as equal to the loss in its *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 (in years)	**Increase**
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. For maturities not specified in the table above, the value of the increase must be linearly interpolated, provided that:

   (1) for maturities shorter than 1 year, the increase must be 70%; and

   (2) for maturities longer than 90 years, the increase must be 20%.

3. In any case, the increase of basic risk-free interest rates at any maturity must be at least one percentage point.

4. The impact of the increase in the *basic relevant risk-free rate term structure* on the value of *participations* in *financial institutions* and *credit institutions* as referred to in Own Funds 3K.6 must only be taken into account on the value of the *participations* that are not deducted from *own funds* pursuant to Own Funds 3K and the part deducted from *own funds* must only be taken into account to the extent that such impact increases the *basic own funds*.

3D6 DECREASE IN THE TERM STRUCTURE OF INTEREST RATES

1. A *firm* must calculate the capital requirement for the risk of a decrease in the term structure of interest rates for a given currency as equal to the loss in its *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 (in years)	**Decrease**
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%

2. For maturities not specified in the table above, the value of the decrease must be linearly interpolated, provided that:

   (1) for maturities shorter than 1 year, the decrease must be 75%; and

   (2) for maturities longer than 90 years, the decrease must be 20%.

3. Notwithstanding 3D6.1 and 3D6.2, for negative basic risk-free interest rates the decrease must be nil.

4. The impact on the value of *participations* as referred to in Own Funds 3K.6 in *financial institutions* and *credit institutions* of the decrease in the *basic relevant risk-free interest rate term structure* must only be taken into account on the value of the *participations* that are not deducted from *own funds* pursuant to Own Funds 3K and the part deducted from *own funds* must only be taken into account to the extent that such impact increases the *basic own funds*.

EQUITY RISK SUB-MODULE

3D7 GENERAL PROVISIONS

1. The *equity risk* sub-module must include a risk sub-module for type 1 equities, a risk sub-module for type 2 equities, a risk sub-module for qualifying infrastructure equities and a risk sub-module for qualifying infrastructure corporate equities.

2. A firm must treat as type 1 equities:

   (1) those listed in 3D7.8; and

(2) equities listed in *regulated markets* in countries which are members of the *OECD*, or traded on multilateral trading facilities, as defined in Article 3 of the *RAO*, whose registered office or head office is in an EU Member State.

3. A *firm* must treat as type 2 equities:

(1) equities other than those referred to in 3D7.2, commodities and other alternative investments; and

(2) all assets other than those covered in the *interest-rate risk* sub-module, the *property risk* sub-module or the *spread risk* sub-module, including the assets and indirect exposures referred to in 2.3(1) and (2) where a *look-through approach* is not possible and the *firm* does not make use of the provisions in 2.3(3) and (4).

4. A *firm* must treat as qualifying infrastructure equities equity investments in *infrastructure entities* that meet the requirements set out in 3D2.

5. A *firm* must treat as qualifying infrastructure corporate equities equity investments in *infrastructure entities* that meet the requirements set out in 3D3.

6. A *firm* must calculate the capital requirement for *equity risk* in accordance with the following formula:

$$SCR_{equity} = \sqrt{SCR_{equ1}^2 + 2 \cdot 0.75 \cdot SCR_{equ1} \cdot \left(SCR_{equ2} + SCR_{quinf} + SCR_{quinfc}\right) + \left(SCR_{equ2} + SCR_{quinf} + SCR_{quinfc}\right)^2}$$

where:

(a) SCR_{equ1} denotes the capital requirement for type 1 equities;

(b) SCR_{equ2} denotes the capital requirement for type 2 equities;

(c) SCR_{quinf} denotes the capital requirement for qualifying infrastructure equities; and

(d) SCR_{quinfc} denotes the capital requirement for qualifying infrastructure corporate equities.

7. The impact of the instantaneous decreases set out in 3D9 and 3D10 on the value of *participations* as referred to in Own Funds 3K.6 in *financial institutions* and *credit institutions* must only be taken into account on the value of the *participations* that are not deducted from *own funds* pursuant to Own Funds 3K.

8. A *firm* must treat the following equities as type 1:

(1) equities, other than qualifying infrastructure equities or qualifying infrastructure corporate equities, held within *collective investment undertakings* which are qualifying social entrepreneurship funds as referred to in Article 3(b) of Regulation (EU) No 346/2013 of the European Parliament and of the Council where the *look-through approach* is possible for all exposures within the *collective investment undertaking*, or *units* or *shares* of those funds where the *look-through approach* is not possible for all exposures within the *collective investment undertaking*;

(2) equities, other than qualifying infrastructure equities or qualifying infrastructure corporate equities, held within *collective investment undertakings* which are qualifying venture capital funds as referred to in Article 3(b) of Regulation (EU) No 345/2013 of the European Parliament and of the Council where the *look-through approach* is possible for all exposures within the *collective investment undertaking*, or *units* or *shares* of those funds where the *look-through approach* is not possible for all exposures within the *collective investment undertaking*;

(3) as regards closed-ended *alternative investment funds* which are established in the *UK* or, if they are not established in the *UK*, which are marketed in the *UK* in accordance with regulations 49, 50 and 54 of the Alternative Investment Fund Managers Regulations

2013/1773 in the form such regulations will take when regulation 3 and Schedule 1 of the Alternative Investment Fund Managers (Amendment) Regulations 2013/1797 come into force and which, in either case, have no leverage in accordance with the commitment method set out in Article 8 of Commission Delegated Regulation (EU) No 231/2013:

(a) equities, other than qualifying infrastructure equities or qualifying infrastructure corporate equities, held within such funds where the *look-through approach* is possible for all exposures within the *alternative investment fund*; and

(b) *units* or *shares* of such funds where the *look-through approach* is not possible for all exposures within the *alternative investment fund*; and

(4) qualifying unlisted equity portfolios as defined in 3D8.

3D8 QUALIFYING UNLISTED EQUITY PORTFOLIOS

1. For the purposes of 3D7.8(4), a qualifying unlisted equity portfolio is a set of equity investments that meets all of the following requirements:

(1) the set of investments consists solely of investments in the ordinary *shares* of companies;

(2) the ordinary *shares* of each of the companies concerned are not listed in any *regulated market*;

(3) each company has its head office in the *UK*;

(4) more than 50% of the annual revenue of each company is denominated in currencies of countries which are members of the *OECD*;

(5) more than 50% of the staff employed by each company have their principal place of work in the *UK*;

(6) each company fulfils at least one of the following requirements for each of the last three financial years ending prior to the date on which the *SCR* is being calculated:

(a) the annual turnover of the company exceeds GBP 8,800,000;

(b) the balance sheet total of the company exceeds GBP 8,800,000; or

(c) the number of staff employed by the company exceeds 50;

(7) the value of the investment in each company represents no more than 10% of the total value of the set of investments;

(8) none of the companies is a *UK Solvency II undertaking*, a *credit institution*, an *investment firm*, a *financial institution*, an *alternative investment fund manager*, a *UCITS management company*, an *institution for occupational retirement provision* or a *non-regulated undertaking carrying out financial activities*; and

(9) the beta of the set of investments does not exceed 0.796.

2. For the purposes of 3D8.1(9), the beta of a set of investments is the average of the betas for each of the investments in that set of investments, weighted by the book values of those investments and a *firm* must determine the beta of an investment in a company in accordance with the following formula:

$$\beta = 0.9478 - 0.0034 \cdot GM + 0.0139 \cdot \frac{Debt}{CFO} - 0.0015 \cdot ROCE$$

where:

(a) β is the beta of the equity investment in the company;

(b) *GM* is the average gross margin for the company over the last five financial years ending prior to the date on which the *SCR* is being calculated;

(c) *Debt* is the total debt of the company at the end of the most recent financial year for which figures are available;

(d) *CFO* is the average net cash-flow for the company from operations over the last five financial years ending prior to the date on which the *SCR* is being calculated; and

(e) *ROCE* is the average return on common equity for the company over the last five financial years ending prior to the date on which the *SCR* is being calculated. Common equity for these purposes shall mean capital and reserves as referred to in Schedule 1 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008/410 as amended from time to time excluding *preference shares* and the related share premium account.

3D9 STANDARD EQUITY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for type 1 equities referred to in 3D7 as equal to the loss in its *basic own fund*s that would result from the following instantaneous decreases:

   (1) an instantaneous decrease equal to 22% in the value of type 1 equity investments in *related undertakings* where these investments are of a strategic nature, in accordance with 3D10;

   (2) an instantaneous decrease equal to 22% in the value of type 1 equity investments that are treated as long-term equity investments in accordance with 3D11; and

   (3) an instantaneous decrease equal to the sum of 39% and the *symmetric adjustment*, in the value of type 1 equities other than those referred to in (1) and (2).

2. A *firm* must calculate the capital requirement for type 2 equities referred to in 3D7 as equal to the loss in its *basic own fund*s that would result from the following instantaneous decreases:

   (1) an instantaneous decrease equal to 22% in the value of type 2 equity investments in *related undertakings* where these investments are of a strategic nature, in accordance with 3D10;

   (2) an instantaneous decrease equal to 22% in the value of type 2 equity investments that are treated as long-term equity *investments* in accordance with 3D11; and

   (3) an instantaneous decrease equal to the sum of 49% and the *symmetric adjustment*, in the value of type 2 equities other than those referred to in (1) and (2).

3. A *firm* must calculate the capital requirement for qualifying infrastructure equities referred to in 3D7 as equal to the loss in its *basic own fund*s that would result from the following instantaneous decreases:

   (1) an instantaneous decrease equal to 22% in the value of qualifying infrastructure equity investments in *related undertakings*, where those investments are of a strategic nature, in accordance with 3D10;

   (2) an instantaneous decrease equal to 22% in the value of qualifying infrastructure equity investments that are treated as long-term equity investments in accordance with 3D11; and

   (3) an instantaneous decrease equal to the sum of 30% and 77% of the *symmetric adjustment* in the value of qualifying infrastructure equity investments, other than those referred to in (1) and (2).

4. A *firm* must calculate the capital requirement for qualifying infrastructure corporate equities referred to in 3D7 as equal to the loss in its *basic own fund*s that would result from the following instantaneous decreases:

   (1) an instantaneous decrease equal to 22% in the value of qualifying infrastructure corporate equity investments in *related undertakings* where those investments are of a strategic nature, in accordance with 3D10;

   (2) an instantaneous decrease equal to 22% in the value of qualifying infrastructure corporate equity investments that are treated as long-term equity investments in accordance with 3D11; and

   (3) an instantaneous decrease equal to the sum of 36% and 92% of the *symmetric adjustment* in the value of qualifying infrastructure corporate equities, other than those referred to in (1) and (2).

3D10 STRATEGIC EQUITY INVESTMENTS

1. For the purposes of 3D9.1(1), 3D9.2(1), 3D9.3(1) and 3D9.4(1), equity investments of a strategic nature means equity investments for which the *firm* holding a *participation* demonstrates the following:

   (1) that the value of the equity investment is likely to be materially less volatile for the following 12 *months* than the value of other equities over the same period as a result of both the nature of the investment and the influence exercised by the *firm* holding a *participation* in the *related undertaking*; and

   (2) that the nature of the investment is strategic, taking into account all relevant factors, including:

      (a) the existence of a clear decisive strategy to continue holding the *participation* for a long period;

      (b) the consistency of the strategy referred to in (a) with the main policies guiding or limiting the actions of the *undertaking*;

      (c) the *firm's* ability to continue holding the *participation* in the *related undertaking*;

      (d) the existence of a durable link; and

      (e) where the *firm* holding a *participation* is part of a *group*, the consistency of such strategy with the main policies guiding or limiting the actions of the *group*.

3D11 LONG-TERM EQUITY INVESTMENTS

1. A *firm* may treat a sub-set of equity investments as long-term equity investments if all of the following requirements are met and, subject to 3D11.4, the *firm* has notified the *PRA* in writing that it meets these requirements:

   (1) the sub-set of equity investments as well as the holding period of each equity investment within the sub-set are clearly identified;

   (2) the sub-set of equity investments is included within a portfolio of assets which is assigned to cover the *best estimate* of a portfolio of insurance or *reinsurance* obligations corresponding to one or several clearly identified businesses, and the *firm* maintains that assignment over the lifetime of the obligations;

   (3) the portfolio of insurance or *reinsurance* obligations, and the assigned portfolio of assets referred to in (2) are identified, managed and organised separately from the other activities

of the *firm*, and the assigned portfolio of assets cannot be used to cover losses arising from other activities of the *firm*;

(4) the *technical provisions* within the portfolio of insurance or *reinsurance* obligations referred to in (2) only represent a part of the total *technical provisions* of the *firm*;

(5) the average holding period of equity investments in the sub-set exceeds five years, or where the average holding period of the sub-set is lower than five years, the *firm* does not sell any equity investments within the sub-set until the average holding period exceeds five years;

(6) the sub-set of equity investments consists only of equities that are listed in the *UK* or of unlisted equities of companies that have their head offices in *UK*;

(7) the solvency and liquidity position of the *firm*, as well as its strategies, processes and reporting procedures with respect to asset-liability management, are such as to ensure, on an ongoing basis and under stressed conditions, that it is able to avoid forced sales of each equity investments within the sub-set for at least 10 years; and

(8) the risk management, asset-liability management and investment policies of the *firm* reflects the *firm's* intention to hold the sub-set of equity investments for a period that is compatible with the requirement of (5) and its ability to meet the requirement of (7).

2. Where equities are held within *collective investment undertakings* or within *alternative investment funds* that meet the requirements of 3D7.8(1) to (3), the requirements set out in 3D11.1 may be assessed at the level of the funds and not of the underlying assets held within those funds.

3. A *firm* that treats a sub-set of equity investments as long-term equity investments in accordance with 3D11.1 must not revert back to an approach that does not include long-term equity investments, and if the *firm* is no longer able to comply with the requirements set out in 3D11.1, it must immediately inform the *PRA* in writing and cease to apply 3D9.1(2), 3D9.2(2), 3D9.3(2) and 3D9.4(2) to any of its equity investments for a period of 36 *months*.

4. Where a *firm* treated a sub-set of equity investments as long-term equity investments in accordance with Article 171a of Commission Delegated Regulation (EU) 2015/35 immediately before 31 December 2024 and from 31 December 2024 treats that sub-set of equity investments as long-term equity investments, the *firm* must notify the *PRA* in writing by 31 January 2025.

3D12 SYMMETRIC ADJUSTMENT OF THE EQUITY CAPITAL CHARGE

1. The equity index upon which the *symmetric adjustment* to the *standard equity capital charge* is to be based must comply with all of the following requirements:

(1) the equity index measures the market price of a diversified portfolio of equities which is representative of the nature of equities typically held by *UK Solvency II undertakings*;

(2) the level of the equity index is publicly available; and

(3) the frequency of published levels of the equity index is sufficient to enable the current level of the index and its average value over the last 36 *months* to be determined.

2. Subject to 3D12.4, a *firm* must calculate the *symmetric adjustment* in accordance with the following formula:

$$SA = \frac{1}{2} \cdot \left(\frac{CI - AI}{AI} - 8\% \right)$$

where:

(a) *CI* denotes the current level of the equity index; and

(b) *AI* denotes the weighted average of the daily levels of the equity index over the last 36 *months*.

3. For the purposes of calculating the weighted average of the daily levels of the equity index, the weights for all daily levels must be equal and the days during the last 36 *months* in respect of which the index was not determined must not be included in the average.

4. The *symmetric adjustment* must not be lower than -10% or higher than 10%.

3D13 CALCULATION OF THE EQUITY INDEX

1. For the purpose of this Chapter, the following definitions apply:

(1) 'last level' means the last value of the equity index for the day of reference published by the provider of the equity index; and

(2) 'working day' means every day other than Saturdays and Sundays.

2. The level of the equity index referred to in 3D12 must be determined for each working day.

3. The level of the equity index for a particular working day must be the sum of the contributions of all equity indices included in 3D14 on that working day.

4. For each of the equity indices set out in 3D14, its contribution for a particular working day must be the product of its normalised level for the working day and the respective weight for the equity index as set out in 3D14.

5. For each of the equity indices set out in 3D14, its normalised level for a particular working day must be its last level on that working day divided by its last level on the first day of the 36 *month* period ending on the working day for which the level of the equity index as defined in 3D12.1 is being calculated, provided that where the last level of an equity index is not available for a specific day, the most recent last level before that day must be used.

3D14 CALCULATION OF THE EQUITY INDEX

1. The equity indices referred to in 3D13 are as follows:

Equity indices (Price indices)	**Weights**
FTSE All-Share Index	0.48
Nikkei 225	0.07
S&P 500	0.30
FTSE Developed Europe ex UK (local currency)	0.15

PROPERTY RISK SUB-MODULE

3D15 PROPERTY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *property risk* as equal to the loss in its *basic own funds* that would result from an instantaneous decrease of 25% in the value of immovable property.

SPREAD RISK SUB-MODULE

3D16 SCOPE OF THE SPREAD RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *spread risk* in accordance with the following formula:

$$SCR_{spread} = SCR_{bonds} + SCR_{securitisation} + SCR_{cd}$$

where:

(a) SCR_{bonds} denotes the capital requirement for *spread risk* on bonds and loans;

(b) $SCR_{securitisation}$ denotes the capital requirement for *spread risk* on *securitisation positions*; and

(c) SCR_{cd} denotes the capital requirement for *spread risk* on credit *derivatives*.

3D17 SPREAD RISK ON BONDS AND LOANS

1. A *firm* must calculate the capital requirement for *spread risk* on bonds and loans SCR_{bonds} as equal to the loss in its *basic own funds* that would result from an instantaneous relative decrease of $stress_i$ in the value of each bond or loan *i* other than mortgage loans that meet the requirements in 3E3, including bank deposits other than cash at bank referred to in 3.14(2).

2. A *firm* must calculate the risk factor $stress_i$ by reference to the modified duration of the bond or loan *i* denominated in years (dur_i) provided that dur_i must never be lower than 1. 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.

3. A *firm* must assign bonds or loans for which a credit assessment by a nominated *external credit assessment institution* is available a risk factor $stress_i$ depending on the *credit quality step* and the modified duration dur_i of the bond or loan *i* according to the following table:

Credit quality step		**0**		**1**		**2**		**3**		**4**		**5 and 6**	
Duration (dur_i)	**$stress_i$**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	0.9%	—	1.1%	—	1.4%	—	2.5%	—	4.5%	—	7.5%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	4.5%	0.5%	5.5%	0.6%	7.0%	0.7%	12.5%	1.5%	22.5%	2.5%	37.5%	4.2%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	7.0%	0.5%	8.5%	0.5%	10.5%	0.5%	20.0%	1.0%	35.0%	1.8%	58.5%	0.5%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	9.5%	0.5%	11.0%	0.5%	13.0%	0.5%	25.0%	1.0%	44.0%	0.5%	61.0%	0.5%
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	12.0%	0.5%	13.5%	0.5%	15.5%	0.5%	30.0%	0.5%	46.6%	0.5%	63.5%	0.5%

4. A *firm* must assign bonds and loans for which a credit assessment by a nominated *external credit assessment institution* is not available and for which debtors have not posted collateral by way of a *collateral arrangement* that meets the criteria set out in 3G8 a risk factor $stress_I$ depending on the duration dur_i of the bond or loan *i* according to the following table:

Duration (dur_i)	***stress**$_i$*
Up to 5	$3\% \cdot dur_i$
More than 5 and up to 10	$15\% + 1.7\% \cdot (dur_i - 5)$
More than 10 and up to 20	$23.5\% + 1.2\% \cdot (dur_i - 10)$
More than 20	$\min(35.5\% + 0.5\% \cdot (dur_i - 20); 1)$

5. Notwithstanding 3D17.4, bonds and loans that are assigned to a *credit quality step* in accordance with 3D18.1 or 3D18.2 or 3D20.1 must be assigned a risk factor *stress$_i$* depending on the *credit quality step* and the modified duration *dur$_i$* of the bond or loan *i* assigned in accordance with the table set out in 3D17.3.

6. A *firm* must assign bonds and loans for which a credit assessment by a nominated *external credit assessment institution* is not available and for which debtors have posted collateral by way of a *collateral arrangement*, where the collateral of those bonds and loans meet the criteria set out in 3G8, a risk factor *stress$_i$* according to the following:

   (1) where the risk-adjusted value of collateral is higher than or equal to the value of the bond or loan *i*, *stress$_i$* must be equal to half of the risk factor that would be determined in accordance with 3D17.4;

   (2) where 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 3D17.4 would result in a value of the bond or loan *i* that is lower than the risk-adjusted value of the collateral, *stress$_i$* must be equal to the average of the following:

      (a) the risk factor determined in accordance with 3D17.4; and

      (b) 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

   (3) where 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 3D17.4 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$_i$* must be determined in accordance with 3D17.4.

   A *firm* must calculate the risk-adjusted value of the collateral in accordance with 7.34, 3E10 and 3E11.

7. A *firm* must take into account the impact of the instantaneous decrease in the value of *participations* in *financial institutions* and *credit institutions*, as referred to in Own Funds 3K.6, only on the value of the *participations* that are not deducted from *own funds* pursuant to Own Funds 3K.

3D18 INTERNAL ASSESSMENT OF CREDIT QUALITY STEPS OF BONDS AND LOANS

1. A *firm* may assign a bond or loan for which a credit assessment by a nominated *external credit assessment institution* is not available and for which debtors have not posted collateral by way of a *collateral arrangement* that meets the criteria set out in 3G8 to *credit quality step* 2 if all of the criteria set out in 3D18.3 and 3D18.4 are met with respect to the bond or loan.

2. A *firm* may assign a bond or loan for which a credit assessment by a nominated *external credit assessment institution* is not available and for which debtors have not posted collateral by way of a *collateral arrangement* that meets the criteria set out in 3G8, other than a bond or loan

assigned to *credit quality step* 2 under 3D18.1, to *credit quality step* 3 if all of the criteria set out in 3D18.3 and 3D18.5 are met with respect to the bond or loan.

3. The criteria in this rule are as follows:

(1) the *firm's* own internal credit assessment of the bond or loan meets the requirements listed in 3D19;

(2) the bond or loan is issued by a company which does not belong to the same corporate *group* as the *firm*;

(3) the bond or loan is not issued by a company which is a *UK Solvency II undertaking*, an *infrastructure entity*, a *credit institution*, an *investment firm*, a *financial institution*, an *alternative investment fund manager*, a *UCITS management company*, an *institution for occupational retirement provision* or a *non-regulated undertaking carrying out financial activities*;

(4) no claims on the issuing company of the bond or loan rank senior to the bond or loan, except for the following claims:

(a) statutory claims and claims from liquidity facility providers provided that those statutory claims and claims from liquidity facility providers are in aggregate not material relative to the overall senior debt of the issuing company;

(b) claims from trustees; and

(c) claims from *derivatives counterparties*;

(5) the bond or loan provides a fixed redemption payment on or before the date of maturity, in addition to regular fixed or floating rate interest payments;

(6) the contractual terms and conditions of the bond or loan provide for the following:

(a) the borrower is obliged to provide audited financial data to the lender at least annually;

(b) the borrower is obliged to notify the lender of any events that could materially affect the *credit risk* of the bond or loan;

(c) the borrower is not entitled to change the terms and conditions of the bond or loan unilaterally, nor to make other changes to its business that would materially affect the *credit risk* of the bond or loan;

(d) the issuer is prohibited from issuing new debt without the prior agreement of the *firm*;

(e) what constitutes a default event is defined in a way that is specific to the issue and the issuer; and

(f) what is to happen on a change of control; and

(7) the bond or loan is issued by a company that meets all of the following criteria:

(a) the company is a limited liability company;

(b) the company has its head office in the *UK*;

(c) more than 50% of the annual revenue of the company is denominated in currencies of countries which are members of the *OECD*;

(d) the company has operated without any credit event over at least the last 10 years;

(e) at least one of the following requirements is fulfilled with respect to each of the last three financial years ending prior to the date on which the *SCR* is being calculated:

(i) the annual turnover of the company exceeds GBP 8,800,000;

(ii) the balance sheet total of the company exceeds GBP 8,800,000; or

(iii) the number of staff employed by the company exceeds 50;

(f) the sum of the company's annual earnings before interest, tax, depreciation and amortisation ('EBITDA') over the last five financial years is greater than 0;

(g) the total debt of the company at the end of the most recent financial year for which figures are available is no higher than 6.5 times the average of the company's annual free cash-flows over the last five financial years;

(h) the average of the company's EBITDA over the last five financial years is no lower than 6.5 times the company's interest expense for the most recent financial year for which figures are available; and

(i) the net debt of the company at the end of the most recent financial year for which figures are available is no higher than 1.5 times the company's total equity at the end of that financial year.

4. The yield on the bond or loan, and the yield on any bonds and loans with similar contractual terms and conditions issued by the same company in the previous three financial years, is no higher than the higher of the following values:

(1) the average of the yields on the two indices determined in accordance with 3D18.6; and

(2) the sum of 0.5% and the yield on the index that meets the requirement in 3D18.6(4).

5. The yield on the bond or loan, and the yield on bonds and loans with similar contractual terms and conditions issued by the same company in the previous three financial years, is no higher than the higher of the following values:

(1) the average of the yields on the two indices determined in accordance with 3D18.7; and

(2) the sum of 0.5% and the yield on the index that meets the requirement in 3D18.7(2).

6. For the purposes of 3D18.4, a *firm* must use, for the bond or loan referred to in 3D18.1, the yield, as at the time of issuance of that bond or loan, on two indices that meet all of the following requirements:

(1) both indices are broad indexes of traded bonds for which an external credit assessment is available;

(2) the constituent traded bonds in the two indices are denominated in the same currency as the bond or loan;

(3) the constituent traded bonds in the two indices have a similar maturity date as the bond or loan;

(4) one of the two indices consists of traded bonds of *credit quality step* 2; and

(5) one of the two indices consists of traded bonds of *credit quality step* 4.

7. For the purposes of 3D18.5, a *firm* must use, for the bond or loan referred to in 3D18.2, the yield, as at the time of issuance of that bond or loan, on two indices that meet all of the following requirements:

(1) both indices meet the requirements set out in 3D18.6(1), (2) and (3);

(2) one of the two indices consists of traded bonds of *credit quality step* 3; and

(3) one of the two indices consists of traded bonds of *credit quality step* 4.

8. For the purposes of 3D18.4, where the bond or loan referred to in 3D18.1 has features, other than those related to *credit risk* or illiquidity, which materially differ from the features of the

constituent traded bonds in the two indices determined in accordance with 3D18.6, a *firm* must adjust the yield on the bond or loan to reflect those differences.

9. For the purposes of 3D18.5, where the bond or loan referred to in 3D18.2 has features, other than those related to *credit risk* or illiquidity, which materially differ from the features of the constituent traded bonds in the two indices determined in accordance with 3D18.7, a *firm* must adjust the yield on the bond or loan to reflect those differences.

3D19 REQUIREMENTS FOR A FIRM'S OWN INTERNAL CREDIT ASSESSMENT OF BONDS AND LOANS

1. For the purposes of 3D18.3(1), a *firm* must comply with the following requirements in respect of its own internal credit assessment of a bond or loan:

   (1) the bond or loan is allocated a *credit quality step* on the basis of the *firm's* own internal credit assessment;

   (2) the *firm's* own internal credit assessment, and the allocation of a *credit quality step* to the bond or loan on the basis of that assessment, are reliable and properly reflect the *spread risk* of the bond or loan *spread risk* sub-module, and, subject to 3D19.2, the *firm* has notified the *PRA* of this in writing before it assigns a bond or loan to a *credit quality step* in accordance with 3D18.1 or 3D18.2;

   (3) the *firm's* own internal credit assessment takes into account all factors which could have a material effect on the *credit risk* associated with the bond or loan, including the following factors:

      (a) the competitive position of the issuer;

      (b) the quality of the issuer's management;

      (c) the financial policies of the issuer;

      (d) country risk;

      (e) the effect of any covenants that are in place;

      (f) the issuer's financial performance history, including the number of years that it has been operating;

      (g) the issuer's size and the level of diversity in its activities;

      (h) the quantitative impact on the issuer's risk profile and financial ratios of its having issued the bond or loan;

      (i) the issuer's ownership structure; and

      (j) the complexity of the issuer's business model;

   (4) the *firm's* own internal credit assessment uses all relevant quantitative and qualitative information;

   (5) the *firm's* own internal credit assessment, the allocation of a *credit quality step* on the basis of that assessment and the information used to support the own internal credit assessment are documented;

   (6) the *firm's* own internal credit assessment takes into account the characteristics of comparable assets for which a credit assessment by a nominated *external credit assessment institution* is available;

   (7) the *firm's* own internal credit assessment takes into account trends in the issuer's financial performance;

(8) the *firm's* own internal credit assessment is procedurally independent from the decision to underwrite; and

(9) the *firm* regularly reviews its own internal credit assessment.

2. Where a *firm* assigned a bond or loan to a *credit quality step* in accordance with Article 176a(1) or (2) of Commission Delegated Regulation (EU) 2015/35 immediately before 31 December 2024 and from 31 December 2024 assigns the bond or loan to a *credit quality step* in accordance with 3D18.1 or 3D18.2, the *firm* must notify the *PRA* in writing by 31 January 2025.

3D20 ASSESSMENT OF CREDIT QUALITY STEPS OF BONDS AND LOANS BASED ON AN APPROVED INTERNAL MODEL

1. This Chapter applies in the following circumstances:

(1) a *firm* has concluded an agreement ('co-investment agreement') to invest in bonds and loans jointly with another entity;

(2) that other entity ('the co-investor') is one or other of the following:

(a) an *institution* which uses the Internal Ratings Based Approach referred to in Article 143(1) of the *CRR*; or

(b) a *UK Solvency II undertaking* which uses an *internal model* to calculate its *SCR*;

(3) pursuant to the co-investment agreement, the *firm* and the co-investor invest jointly in bonds and loans for which a credit assessment by a nominated *external credit assessment institution* is not available and for which debtors have not posted collateral by way of a *collateral arrangement* that meets the criteria set out in 3G8; and

(4) the co-investment agreement provides that the co-investor shares with the *firm* the probabilities of default produced by its Internal Ratings Based Approach or, as applicable, the *credit quality steps* produced by its *internal model* for the bonds or loans referred to in (3) for the purpose of using that information for the calculation of the *SCR* of the *firm*.

2. If all of the criteria set out in 3D20.3 to 3D20.6 are met, a *firm* must assign the bonds and loans referred to in 3D20.1(3) to *credit quality steps* determined as follows:

(1) in a case where the co-investor falls within 3D20.1(2)(a), *credit quality steps* must be determined on the basis of the most recent probabilities of default that the Internal Ratings Based Approach has produced; and

(2) in a case where the co-investor falls within 3D20.1(2)(b), *credit quality steps* must be the *credit quality steps* produced by the *internal model*.

3. The criteria in this rule are as follows:

(1) the issuer of each bond or loan does not belong to the same corporate *group* as the *firm*;

(2) the issuer is not a *UK Solvency II undertaking*, an *infrastructure entity*, a *credit institution*, an *investment firm*, a *financial institution*, an *alternative investment fund manager*, a *UCITS management company*, an *institution for occupational retirement provision* or a *non-regulated undertaking carrying out financial activities*;

(3) the issuer has its head office in the *UK*;

(4) more than 50% of the issuer's annual revenue is denominated in currencies of countries which are members of the *OECD*; and

(5) at least one of the following requirements is met for each of the last three financial years ending prior to the date on which the *SCR* is being calculated:

(a) the annual turnover of the issuer exceeds GBP 8,800,000;

(b) the balance sheet total of the issuer exceeds GBP 8,800,000; or

(c) the number of staff employed by the issuer exceeds 50.

4. The criteria in this rule are as follows:

(1) the co-investment agreement defines the types of bonds and loans to be underwritten, and the applicable assessment criteria;

(2) the co-investor provides the *firm* with sufficient details of the underwriting process, including the criteria used, the organisational structure of the co-investor and the controls conducted by the co-investor;

(3) the co-investor provides the *firm* with data on all applications for bonds and loans to be underwritten;

(4) the co-investor provides the *firm* with details of all decisions to approve or reject applications for bonds and loans to be underwritten;

(5) the co-investor retains an exposure of at least 20% of the nominal value of each bond and loan;

(6) the underwriting process is the same as the underwriting process followed by the co-investor for its other investments in comparable bonds and loans;

(7) the *firm* invests in all bonds and loans of the types referred to in (1) for which the co-investor decides to approve the bond or loan application; and

(8) the co-investor provides the *firm* with information that allows the *firm* to understand the Internal Ratings Based Approach or, as applicable, *internal model* and its limitations, as well as its adequacy and appropriateness, in particular:

(a) a description of the Internal Ratings Based Approach or, as applicable, *internal model*, including the inputs and risk factors, the quantification of risk parameters and the underlying methods, and the general methodology applied;

(b) a description of the scope of the use of the Internal Ratings Based Approach or, as applicable, *internal model*; and

(c) a description of the model validation process and of other processes which allow the model's performance to be monitored, the appropriateness of its specification to be reviewed over time, and the results of the Internal Ratings Based Approach or, as applicable, *internal model* to be tested against experience.

5. In a case where the co-investor falls within 3D20.1(2)(a):

(1) the *firm* clearly documents to which *credit quality step* the probability of default produced by the *institution's* Internal Ratings Based Approach corresponds;

(2) the mapping of probabilities of default to *credit quality steps* carried out by the *firm* ensures that, for the bond or loan in question, the resulting level of capital requirement for the *spread risk* sub-module is appropriate;

(3) the mapping is based on Table 1 in Annex I to Commission Implementing Regulation (EU) 2016/1799;

(4) adjustments are made in a prudent manner to the probabilities of default before the mapping is carried out, taking into account the qualitative factors set out in Article 7 of Commission Implementing Regulation (EU) 2016/1799; and

(5) an adjustment to the probabilities of default is made in either of the following situations:

(a) the time horizon covered by the Internal Ratings Based Approach deviates significantly from the 3-year time horizon set out in Article 4(2) of Commission Implementing Regulation (EU) 2016/1799; and

(b) the definition of default used in the Internal Ratings Based Approach deviates significantly from the one set out in Article 4(4) of that Commission Implementing Regulation.

6. In a case where the co-investor falls within 3D20.1(2)(b), its *internal model* ensures that, for the bond or loan in question, the resulting level of capital requirement for the *spread risk* sub-module is appropriate.

3D21 SPREAD RISK ON SECURITISATION POSITIONS: CALCULATION OF THE CAPITAL REQUIREMENT

1. A *firm* must calculate the capital requirement $SCR_{securitisation}$ for *spread risk* on *securitisation positions* as equal to the loss in its *basic own funds* that would result from an instantaneous relative decrease of $stress_I$ in the value of each *securitisation position i*.

2. The risk factor $stress_I$ must be calculated by reference to the modified duration denominated in years (dur_I), and dur_I must not be lower than 1 year.

3. In respect of *senior securitisation positions* in *STS securitisations* which fulfil the requirements set out in Article 243 of the *CRR* and for which a credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor $stress_I$ depending on the *credit quality step* and the modified duration of the *securitisation position I*, as set out in the following table:

Credit quality step		**0**		**1**		**2**		**3**		**4**		**5 and 6**	
Duration ***(dur_I)***	***$stress_i$***	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	1.0%	—	1.2%	—	1.6%	—	2.8%	—	5.6%	—	9.4%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	5.0%	0.6%	6.0%	0.7%	8.0%	0.8%	14.0%	1.7%	28.0%	3.1%	47.0%	5.3%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	8.0%	0.6%	9.5%	0.5%	12.0%	0.6%	22.5%	1.1%	43.5%	2.2%	73.5%	0.6%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	11.0%	0.6%	12.0%	0.5%	15.0%	0.6%	28.0%	1.1%	54.5%	0.6%	76.5%	0.6%
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	14.0%	0.6%	14.5%	0.5%	18.0%	0.6%	33.5%	0.6%	57.5%	0.6%	79.5%	0.6%

4. In respect of *securitisation positions* in *STS securitisations* that are not *senior securitisation positions*, which fulfil the requirements set out in Article 243 of the *CRR* and for which a credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor $stress_i$ depending on the *credit quality step* and the modified duration of the *securitisation position i*, as set out in the following table:

Credit quality step		**0**		**1**		**2**		**3**		**4**		**5 and 6**	
Duration (dur_i)	***stress*$_i$**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$\min[b_i \cdot dur_i; 1]$	—	2.8 %	—	3.4 %	—	4.6 %	—	7.9 %	—	15.8%	—	26.7 %
More than 5 and up to 10	$\min[a_i + b_i \cdot (dur_i - 5); 1]$	14.0 %	1.6 %	17.0 %	1.9 %	23.0 %	2.3 %	39.5 %	4.7 %	79.0%	8.8%	100.0 %	0.0 %
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	22.0 %	1.6 %	26.5 %	1.5 %	34.5 %	1.6 %	63.0 %	3.2 %	100.0%	0.0%	100.0 %	0.0 %
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	30.0 %	1.6 %	34.0 %	1.5 %	42.5 %	1.6 %	79.0 %	3.2 %	100.0%	0.0%	100.0 %	0.0 %
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	38.0 %	1.6 %	41.5 %	1.5 %	50.5 %	1.6 %	95.0 %	1.6 %	100.0%	0.0%	100.0 %	0.0 %

5. In respect of s*enior securitisation positions* in *STS securitisations* which fulfil the criteria set out in Article 243 of the *CRR* and for which no credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor *stress*$_i$ depending on the modified duration of the *securitisation position i*, as set out in the following table:

Duration (dur_i)	***stress*$_i$**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	4.6%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	23%	2.5%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	35.5%	1.8%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	44.5%	0.5%
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	47%	0.5%

6. In respect of s*ecuritisation positions* in *STS securitisations* that are not *senior securitisation positions*, which fulfil the criteria set out in Article 243 of the *CRR* and for which no credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor *stress*$_i$ equivalent to *credit quality step* 5 and depending on the modified duration of the exposure, as set out in the table in 3D21.3.

7. In respect of *resecuritisation* positions for which a credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor *stress*$_i$ in accordance with the following formula:

stress$_i$ = min ($b_i \cdot dur_i$;1)

where the value of b_i depends on the *credit quality step* of *resecuritisation* position *i*, as set out in the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
b_i	33%	40%	51%	91%	100%	100%	100%

8. In respect of *securitisation positions* not covered by 3D21.3 to 3D21.7, for which a credit assessment by a nominated *external credit assessment institution* is available, a *firm* must assign a risk factor $stress_i$ in accordance with the following formula:

$stress_i = \min(b_i \cdot dur_i; 1)$

where the value of b_i depends on the *credit quality step* of *securitisation position i*, as set out in the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
b_i	12.5%	13.4%	16.6%	19.7%	82%	100%	100%

9. In respect of *securitisation positions* not covered by 3D21.3 to 3D21.8, a *firm* must assign a risk factor $stress_i$ of 100%.

3D22 SPREAD RISK ON SECURITISATION POSITIONS: TRANSITIONAL PROVISIONS

1. Notwithstanding 3D21.3, in respect of *securitisations* issued before 1 January 2019 that qualify as type 1 *securitisations* in accordance with Article 177(2) of Commission Delegated Regulation (EU) 2015/35 in the version that was in force on 31 December 2018, a *firm* must (subject to 3D22.2) assign a risk factor $stress_i$ in accordance with 3D21.3 even where those *securitisations* are not *STS securitisations* which fulfil the requirements set out in Article 243 of the *CRR*.

2. 3D22.1 applies only in circumstances where no new underlying exposures were added or substituted after 31 December 2018.

3. Notwithstanding 3D21.3, in respect of *securitisations* issued before 18 January 2015 that qualify as type 1 *securitisations* in accordance with Article 177(4) in the version of Commission Delegated Regulation (EU) 2015/35 that was in force on 31 December 2018, a *firm* must assign a risk factor $stress_i$ in accordance with Articles 177 and 178 in the version in force on 31 December 2018.

4. Notwithstanding 3D21.3, in respect of *securitisations* issued before 1 January 2019 that qualify as type 1 *securitisations* in accordance with Article 177(5) in the version of Commission Delegated Regulation (EU) 2015/35 that was in force on 31 December 2018, a *firm* must, until 31 December 2025, assign a risk factor $stress_i$ in accordance with Articles 177 and 178 in the version in force on 31 December 2018.

5. For the purposes of 3D22.3 and 3D22.4, Article 177 (in the version of Commission Delegated Regulation (EU) 2015/35 which was in force on 31 December 2018) continues to have effect notwithstanding its deletion by Article 1(3) of Commission Delegated Regulation (EU) 2018/1221, and has effect for those purposes with the following modifications:

   (1) paragraph 2 is to be read as if:

      (a) a reference to Regulation (EU) No 575/2013 were a reference to the version of that Regulation which was in force on 31 December 2018;

      (b) in point (b) 'the EEA or' were omitted;

      (c) in point (h)(i):

         (i) for 'national law of the Member State where the loans were originated' there were substituted 'loans were originated in the *UK* and the law of the *UK*';

         (ii) ', and that Member State has notified this law to the Commission and EIOPA' were omitted;

      (d) point (h)(ii) were omitted;

(e) in point (h)(iv) for the words from 'agricultural' to 'tracked' there were substituted 'tractors as defined in point (8) of Article 3 of Regulation (EU) No 167/2013 of the European Parliament and of the Council (as it had effect immediately before *IP completion day*), powered two-wheelers or powered tricycles as defined in points (68) and (69) of Article 3 of Regulation (EU) No 168/2013 of the European Parliament and of the Council (as it had effect immediately before *IP completion day*) or tracked';

(f) in points (r) and (s) for the words 'countries that are not members of the Union', both times it occurs, substitute 'a country other than the *UK*'; and

(g) in point (t):

(i) the words from 'and discloses information' to 'stress tests' were omitted;

(ii) for 'Union', in both places it occurs, there were substituted '*UK*';

(2) paragraph 4 is to be read as if for 'the entry into force of this Regulation' there were substituted '18 January 2015'; and

(3) paragraph 5 is to be read as if, in points (a) and (c), for 'the date of entry into force of this Regulation' there were substituted '18 January 2015'.

3D23 SPREAD RISK ON CREDIT DERIVATIVES

1. A *firm* must calculate the capital requirement SCR_{cd} for *spread risk* on credit *derivatives* other than those referred to in 3D23.4 as equal to the higher of the following capital requirements:

(1) the loss in its *basic own fund*s that would result from an instantaneous increase in absolute terms of the credit spread of the instruments underlying the credit *derivatives*; and

(2) the loss in its *basic own fund*s 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 3D23.1(1), a *firm* must calculate the instantaneous increase of the credit spread of the instruments underlying the credit *derivatives* for which a credit assessment by a nominated *external credit assessment institution* is available according to the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Instantaneous increase in spread (in percentage points)	1.3	1.5	2.6	4.5	8.4	16.2	16.2

3. For the purposes of 3D23.1(1), a *firm* must calculate the instantaneous increase of the credit spread of the instruments underlying the credit *derivatives* for which a credit assessment by a nominated *external credit assessment institution* is not available as 5 percentage points.

4. A *firm* must not subject credit *derivatives* which are part of the *firm's* risk mitigation policy to a capital requirement for *spread risk*, provided that the *firm* 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. Where the higher of the capital requirements referred to in 3D23.1(1) and (2) and the higher of the corresponding capital requirements calculated in accordance with 6.3(2) are not based on the same scenario, the capital requirement for *spread risk* on credit *derivatives* must be the capital requirement referred to in 3D23.1 for which the underlying scenario results in the highest corresponding capital requirement calculated in accordance with 6.3(2).

3D24 SPECIFIC EXPOSURES

1. In respect of exposures in the form of *covered bonds* which have been assigned to *credit quality step* 0 or 1, a *firm* must assign a risk factor $stress_i$ according to the following table:

***Credit quality step* Duration (dur_i)**	**0**	**1**
Up to 5	$0.7\% \cdot dur_i$	$0.9\% \cdot dur_i$
More than 5 years	$min\ (3.5\% + 0.5\% \cdot (dur_i - 5); 1)$	$\min\ (4.5\% + 0.5\% \cdot (dur_i - 5); 1)$

2. A *firm* must assign to exposures in the form of bonds and loans to the following a risk factor $stress_i$ of 0%:

   (1) *UK* central government and *Bank of England* denominated and funded in pounds sterling;

   (2) multilateral development banks referred to in paragraph 2 of Article 117 of the *CRR*; and

   (3) international organisations referred to in Article 118 of the *CRR*;

3. A *firm* must assign a risk factor $stress_i$ of 0% to exposures in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by one of the *counterparties* mentioned in 3D24.2(1) to (3), where the guarantee meets the requirements set out in 3G9.

4. For the purposes of 3D24.2(1), a *firm* must treat exposures in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by bodies listed in 3D1, where the guarantee meets the requirements set out in 3G9, as exposures to the central government.

5. In respect of exposures in the form of bonds and loans to central governments and *central banks* other than those referred to in 3D24.2(1), denominated and funded in the domestic currency of that central government and *central bank*, and for which a credit assessment by a nominated *external credit assessment institution* is available, a *firm* must be assign 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**	
Duration(dur_i)	**$stress_i$**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	0.0%	—	1.1%	—	1.4%	—	2.5%	—	4.5%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	0.0%	0.0%	5.5%	0.6%	7.0%	0.7%	12.5%	1.5%	22.5%	2.5%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	0.0%	0.0%	8.4%	0.5%	10.5%	0.5%	20.0%	1.0%	35.0%	1.8%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	0.0%	0.0%	10.9%	0.5%	13.0%	0.5%	25.0%	1.0%	44.0%	0.5%

More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	0.0%	0.0%	13.4%	0.5%	15.5%	0.5%	30.0%	0.5%	46.5%	0.5%

6. In respect of exposures in the form of bonds and loans to the *UK's* regional governments and local authorities not listed in 3D1, a *firm* must assign a risk factor $stress_i$ from the table in 3D24.5 corresponding to *credit quality step* 2.

7. In respect of exposures in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by the *UK's* regional government or local authority that are not listed in 3D1, where the guarantee meets the requirements set out in 3G9, must be assigned a risk factor $stress_i$ from the table in 3D24.5 corresponding to *credit quality step* 2.

8. In respect of exposures in the form of bonds and loans to a *UK Solvency II undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available and where this *UK Solvency II undertaking* meets its *MCR*, a *firm* must assign a risk factor $stress_i$ from the table in 3D17.3 depending on the *UK Solvency II undertaking's* solvency ratio, using the following mapping between solvency ratios and *credit quality steps*:

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

9. Where the solvency ratio falls in between the solvency ratios set out in the table above, the value of $stress_i$ must be linearly interpolated from the closest values of $stress_i$ corresponding to the closest solvency ratios set out in the table above, provided that:

   (1) where the solvency ratio is lower than 75%, $stress_i$ must be equal to the factor corresponding to the *credit quality steps* 5 and 6; and

   (2) where the solvency ratio is higher than 196%, $stress_i$ must be the same as the factor corresponding to the *credit quality step* 1.

10. For the purposes of 3D24.8 and 3D24.9, 'solvency ratio' denotes the ratio of the *eligible own funds* to cover the *SCR* and the *SCR*, using the latest available values.

11. A *firm* must assign to exposures in the form of bonds and loans to a *UK Solvency II undertaking* which does not meet its *MCR* a risk factor $stress_i$ according to the following table:

Duration (dur_i)	**risk factor $stress_i$**
Up to 5	$7.5\% \cdot dur_i$
More than 5 and up to 10	$37.50\% + 4.20\% \cdot (dur_i - 5)$
More than 10 and up to 15	$58.50\% + 0.50\% \cdot (dur_i - 10)$
More than 15 and up to 20	$61\% + 0.50\% \cdot (dur_i - 15)$
More than 20	$\min(63.5\% + 0.5\% \cdot (dur_i - 20); 1)$

12. 3D24.8 to 3D24.11 only applies as of the first date of public disclosure, by the *UK Solvency II undertaking* corresponding to the exposure, of the *SFCR*, and before that date:

   (1) if a credit assessment by a nominated *external credit assessment institution* is available for the exposures, 3D17 applies;

(2) in all other cases, a firm must assign to the exposures the same risk factor as the ones that would result from the application of 3D24.8 to 3D24.10 to exposures to a *UK Solvency II undertaking* whose solvency ratio is 100%.

13. In respect of exposures in the form of bonds and loans to a *third country insurance undertaking* or a *third country reinsurance undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available, situated in a *third country* which is an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation, and which complies with the solvency requirements of that *third country*, a *firm* must assign the same risk factor as the ones that would result from the application of 3D24.8 to 3D24.10 to exposures to a *UK Solvency II undertaking* whose solvency ratio is 100%.

14. In respect of exposures in the form of bonds and loans to *credit institutions* and *financial institutions* which comply with the solvency requirements set out in the *PRA* Rulebook, the *CRR* or technical standards as amended from time to time, for which a credit assessment by a nominated *external credit assessment institution* is not available, *a firm* must assign the same risk factor as the ones that would result from the application of 3D24.8 to 3D24.10 to exposures to a *UK Solvency II undertaking* whose solvency ratio is 100%.

15. A *firm* must calculate the capital requirement for *spread risk* on credit *derivatives* where the underlying financial instrument is a bond or a loan to any exposure listed in 3D24.2 as nil.

16. In respect of exposures in the form of bonds and loans that fulfil the criteria set out in 3D24.17, a *firm* must assign 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**		**1**		**2**		**3**	
Duration (dur_i)	**$stress_i$**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	0.64%	—	0.78%	—	1.0%	—	1.67%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	3.2%	0.36%	3.9%	0.43%	5.0%	0.5%	8.35%	1.0%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	5.0%	0.36%	6.05%	0.36%	7.5%	0.36%	13.35%	0.67%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	6.8%	0.36%	7.85%	0.36%	9.3%	0.36%	16.7%	0.67%
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	8.6%	0.36%	9.65%	0.36%	11.1%	0.36%	20.05%	0.36%

17. The criteria for exposures that are assigned a risk factor in accordance with 3D24.16 are:

(1) the exposure relates to a *qualifying infrastructure investment* that meets the criteria set out in 3D2;

(2) the exposure is not an asset that fulfils the following conditions:

(a) it is assigned to a *matching adjustment portfolio*; and

(b) it has been assigned a *credit quality step* between 0 and 2;

(3) a credit assessment by a nominated *external credit assessment institution* is available for the exposure; and

(4) the exposure has been assigned a *credit quality step* between 0 and 3.

18. In respect of exposures in the form of bonds and loans that meet the criteria set out in 3D24.17(1) and (2), but do not meet the criteria set out in 3D24.17(3), a *firm* must assign a risk factor $stress_i$ equivalent to *credit quality step* 3 and the duration of the exposure in accordance with the table set out in 3D24.16.

19. In respect of exposures in the form of bonds and loans that fulfil the criteria set out in 3D24.20, a *firm* must assign 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**		**1**		**2**		**3**	
Duration (dur_i)	**$stress_i$**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**	**a_i**	**b_i**
Up to 5	$b_i \cdot dur_i$	—	0.68%	—	0.83%	—	1.05%	—	1.88%
More than 5 and up to 10	$a_i + b_i \cdot (dur_i - 5)$	3.38%	0.38%	4.13%	0.45%	5.25%	0.53%	9.38%	1.13%
More than 10 and up to 15	$a_i + b_i \cdot (dur_i - 10)$	5.25%	0.38%	6.38%	0.38%	7.88%	0.38%	15.0%	0.75%
More than 15 and up to 20	$a_i + b_i \cdot (dur_i - 15)$	7.13%	0.38%	8.25%	0.38%	9.75%	0.38%	18.75%	0.75%
More than 20	$min[a_i + b_i \cdot (dur_i - 20); 1]$	9.0%	0.38%	10.13%	0.38%	11.63%	0.38%	22.50%	0.38%

20. The criteria for exposures that are assigned a risk factor in accordance with 3D24.19 are:

(1) the exposure relates to a *qualifying infrastructure corporate investment* that meets the criteria set out in 3D3;

(2) the exposure is not an asset that fulfils the following conditions:

(a) it is assigned to a *matching adjustment portfolio*; and

(b) it has been assigned a *credit quality step* between 0 and 2;

(3) a credit assessment by a nominated *external credit assessment institution* is available for the *infrastructure entity*; and

(4) the exposure has been assigned a *credit quality step* between 0 and 3.

21. In respect of exposures in the form of bonds and loans that meet the criteria set out in 3D24.20(1) and (2), but do not meet the criteria set out in 3D24.20(3), a *firm* must assign a risk factor $stress_i$ equivalent to *credit quality step* 3 and the duration of the exposure in accordance with the table set out in 3D24.19.

3D25 APPLICATION OF THE SPREAD RISK SCENARIOS TO MATCHING ADJUSTMENT PORTFOLIOS

1. Where a *firm* applies the *matching adjustment*, it must carry out the scenario-based calculation for *spread risk* as follows:

(1) the *relevant portfolio of assets* must be subject to the instantaneous decrease in value for *spread risk* set out in 3D17, 3D21 and 3D24; and

(2) the *firm* must recalculate the *technical provisions* to take into account the impact on the

amount of the *matching adjustment* of the instantaneous decrease in value of the *relevant portfolio of assets* and, in particular, the *firm* must increase the fundamental spread calculated in respect of *assigned assets* by an absolute amount that is calculated as the product of the following:

(a) the absolute increase in spread that, multiplied by the modified duration of the relevant asset, would result in the relevant risk factor $stress_i$, referred to in 3D17, 3D21 and 3D24; and

(b) a reduction factor, depending on the credit quality as set out in the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Reduction factor	45%	50%	60%	75%	100%	100%	100%

2. In respect of the *assigned assets* for which no credit assessment by a nominated *external credit assessment institution* is available, and for qualifying *infrastructure assets* and for qualifying infrastructure corporate assets that have been assigned *credit quality step* 3, a *firm* must apply a reduction factor of 100%.

MARKET RISK CONCENTRATIONS SUB-MODULE

3D26 SINGLE NAME EXPOSURE

1. A *firm* must calculate the capital requirement for *market risk concentrations* on the basis of single name exposures. For this purpose:

   (1) exposures to *undertakings* which belong to the same corporate *group* must be treated as a single name exposure; and

   (2) immovable properties which are located in the same building must be treated as a single immovable property.

2. A *firm* must calculate the exposure at default to a *counterparty* as the sum of its exposures to this *counterparty*.

3. A *firm* must calculate the exposure at default to a single name exposure as the sum of the exposures at default to all *counterparties* that belong to the single name exposure.

4. A *firm* must calculate the weighted average *credit quality step* on a single name exposure as equal to the rounded-up average of the *credit quality steps* of all exposures to all *counterparties* that belong to the single name exposure, weighted by the value of each exposure.

5. For the purposes of 3D26.4, a *firm* must assign to exposures for which a credit assessment by a nominated *external credit assessment institution* is available a *credit quality step* in accordance with 1A to 1C.

6. For the purposes of 3D26.4, in respect of exposures to a *UK Solvency II undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available and where the *UK Solvency II undertaking* meets its *MCR*, a *firm* must assign a *credit quality step* depending on the *UK Solvency II undertaking's* solvency ratio using the following mapping between solvency ratios and *credit quality steps*:

Solvency Ratio	**196%**	**175%**	**122%**	**100%**	**95%**
Credit quality step	1	2	3	3.82	5

7. Where the solvency ratio falls in between the solvency ratios set out in the table above, the *credit quality step* must be linearly interpolated from the closest *credit quality steps* corresponding to the closest solvency ratios set out in the table above, provided that:

    (1) where the solvency ratio is lower than 95%, the *credit quality step* must be 5; and

    (2) where the solvency ratio is higher than 196%, the *credit quality step* must be 1.

8. For the purposes of 3D26.6 to 3D26.7, 'solvency ratio' denotes the ratio of the *eligible own funds* to cover the *SCR* and the *SCR*, using the latest available values.

9. For the purposes of 3D26.4, a *firm* must assign *credit quality step* 6 to exposures to a *UK Solvency II undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available and where the *UK Solvency II undertaking* does not meet its *MCR*.

10. 3D26.6 to 3D26.9 only applies as of the first date of public disclosure, by the *UK Solvency II undertaking* corresponding to the exposure, of the *SFCR* and before that date, a *firm* must assign the exposures to *credit quality step* 3.82.

11. For the purposes of 3D26.4, a *firm* must assign exposures to a *third country insurance undertaking* or a *third country reinsurance undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available, situated in a *third country* which is an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation, and which complies with the solvency requirements of that *third country*, to *credit quality step* 3.82.

12. For the purposes of 3D26.4, a *firm* must assign exposures to *credit institutions* and *financial institutions*, which comply with the solvency requirements set out in the *PRA* Rulebook, the *CRR* or technical standards as amended from time to time, for which a credit assessment by a nominated *external credit assessment institution* is not available, to *credit quality step* 3.82.

13. For the purpose of 3D26.4, *firm* must assign exposures other than those to which a *credit quality step* is assigned under 3D26.5 to 3D26.12 to *credit quality step* 5.

3D27 CALCULATION OF THE CAPITAL REQUIREMENT FOR MARKET RISK CONCENTRATIONS

1. A *firm* must calculate the capital requirement for *market risk concentrations* in accordance with the following formula:

$$SCR_{conc} = \sqrt{\sum_i Conc_i^2}$$

where:

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

(b) $Conc_i$ denotes the capital requirement for *market risk concentrations* on a single name exposure *i*.

2 For each single name exposure *i*, a *firm* must calculate the capital requirement for *market risk concentrations* $Conc_i$ as equal to the loss in its *basic own funds* that would result from an instantaneous decrease in the value of the assets corresponding to the single name exposure *i* calculated in accordance with the following formula:

$$XS_i \cdot g_i$$

where:

(a) XS_i is the excess exposure referred to in 3D28; and

(b) g_i is the risk factor for *market risk concentrations* referred to in 3D30 and 3D31;

3D28 EXCESS EXPOSURE

1. A *firm* must calculate the excess exposure on a single name exposure *i* in accordance with the following formula:

$$XS_i = Max(0; E_i - CT_i \cdot Assets)$$

where:

(a) E_i denotes the exposure at default to single name exposure *i* that is included in the calculation base of the *market risk concentrations* sub-module;

(b) *Assets* denotes the calculation base of the *market risk concentrations* sub-module; and

(c) CT_i denotes the relative excess exposure threshold referred to in 3D29.

2. The calculation base of the *market risk concentrations* sub-module *Assets* must be equal to the value of all assets held by the *firm*, excluding the following:

(1) assets held in respect of *long-term insurance contracts* where the investment risk is fully borne by the *policyholders*;

(2) exposures to a *counterparty* which belongs to the same *group* as the *firm*, provided that all of the following requirements are met:

(a) the *counterparty* is a *UK Solvency II undertaking*, an *insurance holding company*, a *mixed financial holding company* or an *ancillary services undertaking*;

(b) the *counterparty* is fully consolidated in accordance with Group Supervision 11.1A(1);

(c) the *counterparty* is subject to the same risk evaluation, measurement and control procedures as the *firm*;

(d) the *counterparty* is established in the *UK*; and

(e) there is no current or foreseen material practical or legal impediment to the prompt transfer of *own funds* or repayment of liabilities from the *counterparty* to the *firm*;

(3) the value of the *participations* as referred to in Own Funds 3K.6 in *financial institutions* and *credit institutions* that is deducted from *own funds* pursuant to Own Funds 3K;

(4) exposures included in the scope of the *counterparty* default risk module;

(5) deferred tax assets; and

(6) intangible assets.

3. A *firm* must reduce the exposure at default on a single name exposure *i* by the amount of the exposure at default to *counterparties* belonging to that single name exposure and for which the risk factor for *market risk concentrations* referred to in 3D30 and 3D31 is 0%.

3D29 RELATIVE EXCESS EXPOSURE THRESHOLDS

1. In respect of each single name exposure *i*, a *firm* must assign, 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 3D26.4.

Weighted average *credit quality step* of single name exposure *i*	**0**	**1**	**2**	**3**	**4**	**5**	**6**

Relative excess exposure threshold CT_i	3%	3%	3%	1.5%	1.5%	1.5%	1.5%

3D30 RISK FACTOR FOR MARKET RISK CONCENTRATIONS

1. In respect of each single name exposure *i*, a *firm* must assign, in accordance with the following table, a risk factor g_i for *market risk concentrations* depending on the weighted average *credit quality step* of the single name exposure *i*, calculated in accordance with 3D26.4.

Weighted average *credit quality step* of single name exposure *i*	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Risk factor g_i	12%	12%	21%	27%	73%	73%	73%

3D31 SPECIFIC EXPOSURES

1. A *firm* must assign to exposures in the form of *covered bonds* a relative excess exposure threshold CT_i of 15%, provided that the corresponding exposures in the form of *covered bonds* have been assigned to *credit quality step* 0 or 1 and must treat exposures in the form of *covered bonds* as single name exposures, regardless of other exposures to the same *counterparty* as the issuer of the *covered bonds*, which constitute a distinct single name exposure.

2. A *firm* must assign to exposures to a single immovable property a relative excess exposure threshold CT_i of 10% and a risk factor g_i for *market risk concentrations* of 12%.

3. A *firm* must assign to the following exposures a risk factor g_i for *market risk concentrations* of 0%:

   (1) the *UK* central government and *Bank of England* denominated and funded in pounds sterling;

   (2) multilateral development banks referred to in Article 117(2) of the *CRR*; and

   (3) international organisations referred to in Article 118 of the *CRR*.

4. In respect of exposures that are fully, unconditionally and irrevocably guaranteed by one of the *counterparties* mentioned in 3D31.3(1) to (3), where the guarantee meets the requirements set out in 3G9, a *firm* must also assign a risk factor g_i for *market risk concentrations* of 0%.

5. For the purposes of 3D31.3(1), a *firm* must treat exposures that are fully, unconditionally and irrevocably guaranteed by bodies listed in 3D1, where the guarantee meets the requirements set out in 3G9, as exposures to the central government.

6. In respect of exposures to central governments and *central banks* other than those referred to in 3D31.3(1), denominated and funded in the domestic currency of that central government and *central bank*, a *firm* must assign a risk factor g_i for *market risk concentrations* depending on their weighted average *credit quality steps*, in accordance with the following table:

Weighted average *credit quality step* of single name exposure *i*	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Risk factor g_i	0%	0%	12%	21%	27%	73%	73%

7. In respect of exposures to the *UK's* regional governments and local authorities not listed in 3D1, a *firm* must assign a risk factor g_i for *market risk concentrations* corresponding to weighted average *credit quality step* 2 in accordance with 3D31.6.

8. In respect of exposures that are fully, unconditionally and irrevocably guaranteed by the *UK's* regional government or local authority that is not listed in 3D1, where the guarantee meets the requirements set out in 3G9, a *firm* must assign a risk factor g_i for *market risk concentration* corresponding to weighted average *credit quality step* 2 in accordance with 3D31.6.

9. A *firm* must assign to exposures in the form of bank deposits a risk factor g_i for *market risk concentration* of 0%, provided they meet all of the following requirements:

   (1) the full value of the exposure is covered by a government guarantee scheme in the *UK*;

   (2) the guarantee covers the *firm* without any restriction; and

   (3) there is no double counting of such guarantee in the calculation of the *SCR*.

CURRENCY RISK SUB-MODULE

3D32 CURRENCY RISK SUB-MODULE

1. A *firm* must calculate the capital requirement for *currency risk* as equal to the sum of the capital requirements for *currency risk* for each foreign currency. For these purposes, a *firm* must treat investments as follows:

   (1) type 1 equities referred to in 3D7.2 and type 2 equities referred to in 3D7.3 which are listed in stock exchanges operating with different currencies as sensitive to the currency of its main listing;

   (2) type 2 equities referred to in 3D7.3 which are not listed as sensitive to the currency of the country in which the issuer has its main operations; and

   (3) immovable property as sensitive to the currency of the country in which it is located.

2. For the purposes of this Chapter, foreign currencies are currencies other than the currency used for the preparation of the *firm's* financial statements ('the local currency').

3. For each foreign currency, a *firm* must calculate the capital requirement for *currency risk* as equal to the higher of the following capital requirements:

   (1) the capital requirement for the risk of an increase in value of the foreign currency against the local currency; and

   (2) the capital requirement for the risk of a decrease in value of the foreign currency against the local currency.

4. A *firm* must calculate the capital requirement for the risk of an increase in value of a foreign currency against the local currency as equal to the loss in its *basic own funds* that would result from an instantaneous increase of 25% in the value of the foreign currency against the local currency.

5. A *firm* must calculate the capital requirement for the risk of a decrease in value of a foreign currency against the local currency as equal to the loss in its *basic own funds* that would result from an instantaneous decrease of 25% in the value of the foreign currency against the local currency.

6. For currencies which are pegged to the euro, a *firm* may adjust the 25% factor referred to in 3D32.4 and 3D32.5 in accordance with 3D33 and 3D34, provided that all of the following requirements are met:

(1) the pegging arrangement must ensure that the relative changes in the exchange rate over a one-year period do not exceed the relative adjustments to the 25% factor, in the event of extreme market events, that correspond to the confidence level set out in Solvency Capital Requirement – General Provisions 3.3 and 3.4; and

(2) one of the following criteria is complied with:

(a) participation of the currency in the European Exchange Rate Mechanism (ERM II);

(b) existence of a decision from the European Council which recognises pegging arrangements between this currency and the euro; or

(c) establishment of the pegging arrangement by the law of country establishing the country's currency.

7. For the purposes of 3D32.6(1), the financial resources of the parties that guarantee the pegging must be taken into account.

8. The impact of an increase or a decrease in the value of a foreign currency against the local currency on the value of *participations* in *financial institutions* and *credit institutions* as defined in Own Funds 3K.6 must only be taken into account in respect of the value of the *participations* that are not deducted from *own funds* pursuant to Own Funds 3K, and the part deducted from *own funds* must be taken into account only to the extent such impact increases the *firm's basic own funds*.

9. Where the higher of the capital requirements referred to in 3D32.3(1) and (2) and the highest of the corresponding capital requirements calculated in accordance with 6.3(2) are not based on the same scenario, a *firm* must apply as the capital requirement for *currency risk* on a given currency the capital requirement referred to in 3D32.3(1) or (2) for which the underlying scenario results in the highest corresponding capital requirement calculated in accordance with 6.3(2).

3D33 ADJUSTED FACTORS FOR CURRENCY RISK WHERE THE LOCAL OR FOREIGN CURRENCY IS THE EURO

1. Where the local or foreign currency is the euro, for the purposes of 3D32.4 and 3D32.5, a *firm* must replace the 25% factor with:

(1) 0.39% where the other currency is the Danish krone (DKK);

(2) 1.81% where the other currency is the lev (BGN);

(3) 2.18% where the other currency is the West African CFA franc (BCEAO) (XOF);

(4) 1.96% where the other currency is the Central African CFA franc (BEAC) (XAF); and

(5) 2.00% where the other currency is the Comorian franc (KMF).

3D34 ADJUSTED FACTORS FOR CURRENCY RISK WHERE THE LOCAL AND THE FOREIGN CURRENCY ARE PEGGED TO THE EURO

1. For the purposes of 3D32.4 and 3D32.5, a *firm* must replace the 25% factor with:

(1) 2.24% where the two currencies are the DKK and the BGN;

(2) 2.62% where the two currencies are the DKK and the XOF;

(3) 2.40% where the two currencies are the DKK and the XAF;

(4) 2.44% where the two currencies are the DKK and the KMF;

(5) 4.06% where the two currencies are the BGN and the XOF;

(6) 3.85% where the two currencies are the BGN and the XAF;

(7) 3.89% where the two currencies are the BGN and the KMF;

(8) 4.23% where the two currencies are the XOF and the XAF;

(9) 4.27% where the two currencies are the XOF and the KMF; and

(10) 4.04% where the two currencies are the XAF and the KMF.

3E COUNTERPARTY DEFAULT RISK MODULE

3E1 LISTS OF REGIONAL GOVERNMENTS AND LOCAL AUTHORITIES

1. A *firm* must treat exposures to the Scottish Government, the Welsh Government and the Northern Ireland Executive as exposures to the central government of the *UK* for the calculation of the *counterparty* default risk module of the *standard formula*.

3E2 SINGLE NAME EXPOSURES

1. A *firm* must calculate the capital requirement for *counterparty* default risk on the basis of single name exposures. For that purpose exposures to *undertakings* which belong to the same corporate *group* must be treated as a single name exposure.

2. A *firm* may treat exposures which belong to different members of the same legal or contractual *pooling arrangement* as different single name exposures where the probability of default of the single name exposure is calculated in accordance with 3E12 and the loss-given-default is calculated as follows:

   (1) in accordance with 3E6, if it is a *pool exposure of type A*,

   (2) in accordance with 3E7, if it is a *pool exposure of type B*; *or*

   (3) in accordance with 3E8, if it is a *pool exposure of type C*.

   Alternatively exposures to the undertakings which belong to the same *pooling arrangement* must be treated as a single name exposure.

3E3 MORTGAGE LOANS

1. A *firm* must treat retail loans secured by mortgages on residential property (mortgage loans) as type 2 exposures under the *counterparty* default risk provided the requirements in 3E3.2 to 3E3.13 are met.

2. The exposure must be either to a natural *person* or *persons* or to a small or medium-sized enterprise.

3. The exposure must be one of a significant number of exposures with similar characteristics such that the risks associated with such lending are substantially reduced.

4. The total amount owed to the *firm* and, where relevant, to all *related undertakings*, including any exposure in default, by the *counterparty* or other connected third party, must not, to the knowledge of the *firm*, exceed GBP 880,000 and the *firm* must take reasonable steps to acquire this knowledge.

5. The residential property is or will be occupied or let by the owner.

6. The value of the property does not materially depend upon the credit quality of the borrower.

7. 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 facility does not materially depend on any cash-flow generated by the underlying property serving as collateral provided by way of a *collateral arrangement*. For those other sources, the *firm* 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.

8. All of the following requirements on legal certainty must be met:

   (1) a mortgage or charge is enforceable in all jurisdictions which are relevant at the time of the conclusion of the credit agreement and must be properly filed on a timely basis;

   (2) all legal requirements for establishing the pledge have been fulfilled; and

   (3) the protection agreement and the legal process underpinning it enable the *firm* to realise the value of the protection within a reasonable timeframe.

9. All of the following requirements on the monitoring of property values and on property valuation must be met:

   (1) the *firm* must monitor the value of the property on a frequent basis and at a minimum once every three years, provided that the *firm* must carry out more frequent monitoring where the market is subject to significant changes in conditions; and

   (2) the *firm* must review the property valuation when information available to the *firm* indicates that the value of the property may have declined materially relative to general market prices and that review must be 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.

10. For the purposes of 3E3.9, a *firm* may use statistical methods to monitor the value of the property and to identify property that needs revaluation.

11. A *firm* must clearly document the types of residential property it accepts as collateral and its lending policies in this regard and must require the independent valuer of the *market value* of the property, as referred to in 3E11.2, to document that *market value* in a transparent and clear manner.

12. A *firm* must have in place procedures to monitor that the property taken as credit protection is adequately insured against the risk of damage.

13. A *firm* must report all of the following data on losses stemming from mortgage loans to the *PRA*:

   (1) losses stemming from loans that have been classified as type 2 exposures in accordance with 3.15 in any given year; and

   (2) overall losses in any given year.

3E4 LOSS-GIVEN-DEFAULT

1. A *firm* must calculate the loss-given-default on a single name exposure as equal to the sum of the loss-given-default on each of the exposures to *counterparties* belonging to the single name exposure on the following basis:

   (1) the loss-given-default must be net of the liabilities towards *counterparties* belonging to the single name exposure provided that:

      (a) those liabilities and exposures are set off in the case of default of the *counterparties;* and

      (b) 3G2 and 3G3 are complied with in relation to that right of set-off; and

(2) no offsetting shall be allowed for if the liabilities are expected to be met before the credit exposure is cleared.

2. Where a *firm* has concluded contractual netting agreements covering several *derivatives* that represent credit exposure to the same *counterparty*, it may calculate the loss-given-default on those *derivatives*, as set out in 3E4.5 to 3E4.8, on the basis of the combined economic effect of all of those *derivatives* that are covered by the same contractual netting agreement, provided that 3G2 and 3G3 are complied with in relation to the netting.

3. A *firm* must calculate the loss-given-default on a *reinsurance* arrangement or insurance *securitisation* in accordance with the following formula:

$$LGD = max[50\% \cdot (Recoverables + 50\% \cdot RM_{re}) - F \cdot Collateral; 0]$$

where:

(a) *Recoverables* denotes the best estimate of amounts recoverable from the *reinsurance* arrangement or insurance *securitisation* and the corresponding debtors;

(b) RM_{re} denotes the risk mitigating effect on *underwriting risk* of the *reinsurance* arrangement or *securitisation*;

(c) *Collateral* denotes the risk-adjusted value of collateral provided by way of a *collateral arrangement* in relation to the *reinsurance* arrangement or *securitisation*; and

(d) *F* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *reinsurance* arrangement or *securitisation* in case of any credit event related to the *counterparty*, determined in accordance with 3E10.7.

4. Where the *reinsurance* arrangement is with a *UK Solvency II undertaking*, a *third country insurance undertaking* or a *third country reinsurance undertaking* and 60% or more of that *counterparty's* assets are subject to *collateral arrangements*, a *firm* must calculate the loss-given-default in accordance with the following formula:

$$LGD = max(90\% \cdot (Recoverables + 50\% \cdot RM_{re}) - F' \cdot Collateral; 0)$$

where:

F' denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *reinsurance* arrangement or *securitisation* in the case of a credit event related to the *counterparty*, determined in accordance with 3E10.7.

5. A *firm* must calculate the loss-given-default on a *derivative* falling within 3E5.1 in accordance with the following formula:

$$LGD = max\left(18\% \cdot \left(Derivative + 50\% \cdot RM_{fin}\right) - 50\% \cdot F' \cdot Value; 0\right)$$

where:

(a) *Derivative* denotes the value of the *derivative* determined in accordance with Valuation 2.1 to 2.2;

(b) RM_{fin} denotes the risk-mitigating effect on *market risk* of the *derivative*;

(c) *Value* denotes the value of the assets held as collateral, provided by way of a *collateral arrangement*, determined in accordance with Valuation 2.1 to 2.2; and

(d) *F'* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *derivative* in case of a credit event related to the *counterparty*, determined in accordance with 3E10.7.

6. Notwithstanding 3E4.5, a *firm* must calculate the loss-given-default on a *derivative* falling within 3E5.2 in accordance with the following formula:

$$LGD = \max(16\% \cdot (Derivative + 50\% \cdot RM_{fin}) - 50\% \cdot F'' \cdot Value; 0)$$

where:

(a) *Derivative* denotes the value of the *derivative* in accordance with Valuation 2.1 to 2.2;

(b) *RM fin* denotes the risk-mitigating effect on *market risk* of the *derivative*;

(c) *Value* denotes the value of the assets held as collateral, provided by way of a *collateral arrangement*, in accordance with Valuation 2.1 to 2.2; and

(d) *F''* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *derivative* in case of a credit event related to the *counterparty*, determined in accordance with 3E10.7.

7. A *firm* must calculate the loss-given-default on *derivatives* other than those referred to in 3E4.5 and 3E4.6 in accordance with the following formula, provided that the *derivative* contract meets the requirements of Article 11 of Regulation (EU) 648/2012:

$$LGD = max(90\% \cdot (Derivative + 50\% \cdot RM_{fin}) - 50\% \cdot F''' \cdot Value; 0)$$

where:

(a) *Derivative* denotes the value of the *derivative* determined in accordance with Valuation 2.1 to 2.2;

(b) *RM fin* denotes the risk-mitigating effect on *market risk* of the *derivative*;

(c) *Value* denotes the value of the assets held as collateral, provided by way of a *collateral arrangement,* determined in accordance with Valuation 2.1 to 2.2; and

(d) *F'''* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *derivative* in case of a credit event related to the *counterparty*, determined in accordance with 3E10.7.

8. A *firm* must calculate the loss-given-default on *derivatives* not covered by 3E4.5, 3E4.6 and 3E4.7 in accordance with the following formula:

$$LGD = max(90\% \cdot (Derivative + RM_{fin}) - F''' \cdot Collateral; 0)$$

where:

(a) *Derivative* denotes the value of the *derivative* determined in accordance with Valuation 2.1 to 2.2;

(b) *RM fin* denotes risk-mitigating effect on *market risk* of the *derivative*;

(c) *Collateral* denotes the risk-adjusted value of collateral provided by way of a *collateral arrangement* in relation to the *derivative*; and

(d) *F'''* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *derivative* in case of a credit event related to the *counterparty*, determined in accordance with 3E10.7.

9. Where the loss-given-default on *derivatives* is to be calculated on the basis referred to in 3E4.2, the following rules apply for the purposes of 3E4.5 to 3E4.8:

(1) the value of the *derivative* must be the sum of the values of the *derivatives* covered by the contractual netting arrangement;

(2) the risk-mitigating effect must be determined at the level of the combination of *derivatives* covered by the contractual netting arrangement; and

(3) the risk-adjusted value of collateral provided by way of a *collateral arrangement* must be determined at the level of the combination of *derivatives* covered by the contractual netting arrangement.

10. A *firm* must calculate the loss-given-default on a mortgage loan in accordance with the following formula:

$$LGD = max(Loan - (80\% \cdot Mortgage + Guarantee); 0)$$

where:

(a) *Loan* denotes the value of the mortgage loan determined in accordance with Valuation 2.1 to 2.2;

(b) *Mortgage* denotes the risk-adjusted value of the mortgage; and

(c) *Guarantee* denotes the amount that the guarantor would be required to pay to the *firm* if the obligor of the mortgage loan were to default at a time when the value of the property held as mortgage were equal to 80% of the risk-adjusted value of the mortgage.

11. For the purposes of 3E4.10(c), a guarantee must only be recognised if it is provided by a *counterparty* mentioned in 3D24.2(1) to (3) and it complies with the requirements set out in 3G2, 3G3 and 3G9.1(1) to (5).

12. A *firm* must calculate the loss-given-default on a legally binding commitment as referred to in 3.14(5) as the difference between its nominal value and its value in accordance with Valuation 2.1 to 2.2.

13. The loss-given-default on cash at bank as referred to in Schedule 3 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008/410 as amended from time to time, of a deposit with a ceding undertaking, of an item listed in 3.14(4) or 3.15(5), or of a receivable from an intermediary or *policyholder* debtor, as well as any other exposure not listed elsewhere in this Chapter must be equal to its value in accordance with Valuation 2.1 to 2.2.

3E5 EXPOSURE TO CLEARING MEMBERS

1. For the purposes of 3E4.5, a *derivative* falls within this rule if the following requirements are met:

(1) the *derivative* is a *CCP-related transaction* in which the *firm* is the *client*;

(2) the positions and assets of the *firm* related to that transaction are distinguished and segregated, at the level of both the *clearing member* and the *CCP*, from the positions and assets of both the *clearing member* and the other *clients* of that *clearing member* and as a result of that distinction and segregation those positions and assets are *bankruptcy remote* in the event of the default or insolvency of the *clearing member* or one or more of its other *clients*;

(3) the laws, regulations, rules and contractual arrangements applicable to or binding the *firm* or the *CCP* facilitate the transfer of the *client's* positions relating to that transaction and of the corresponding collateral provided by way of a *collateral arrangement* to another *clearing member* within the applicable margin period of risk in the event of default or insolvency of the original *clearing member* and in such circumstances, the *client's* positions and the collateral must be transferred at *market value*, unless the *client* requests to close out the position at *market value*;

(4) the *firm* has available an independent, written and reasoned legal opinion that concludes that, in the event of legal challenge, the relevant courts and administrative authorities

would find that the *client* would bear no losses on account of the insolvency of the *clearing member* or of any the *clients* of that *clearing member* under any of the following laws:

(a) the laws of the jurisdiction of the *firm*, its *clearing member* or the *CCP*;

(b) the law governing the transaction;

(c) the law governing the collateral; and

(d) the law governing any contract or agreement necessary to meet the requirement set out in (2); and

(5) the *CCP* is a qualifying central counterparty as defined in Article 4(1)(88) of the *CRR*.

2. For the purposes of 3E4.6, a *derivative* falls within this rule if the requirements set out in 3E5.1 are met, with the exception that the *firm* is not required to be protected from losses in the event that the *clearing member* and another *client* of the *clearing member* jointly default.

3E6 LOSS-GIVEN-DEFAULT FOR POOL EXPOSURES OF TYPE A

1. For *pool exposures of type A* which a *firm* is permitted to treat as separate single name exposures in accordance with 3E2.2, where members are each only liable up to their respective portion of the obligation covered by the *pooling arrangement*, the *firm* must calculate the loss-given-default in accordance with 3E4.

2. For *pool exposures of type A* which a *firm* is permitted to treat as separate single name exposures in accordance with 3E2.2, where members are each liable up to the full amount of the obligation covered by the *pooling arrangement*, a *firm* must multiply the loss-given-default calculated in accordance with 3E4 by the risk-share factor, calculated in accordance with the following formula:

$$risk\text{-}share\_factor = e^{-0.15(\min(SR,196\%)-1)}$$

where:

(a) $SR = (1-P)\cdot\frac{\sum_i EOF_i}{\sum_i \left({EOF_i}/{SR_i}\right)} + \sum_j P_j \cdot SR_j$;

(b) *i* denotes all pool members which are *UK Solvency II undertakings* and *j* denotes all pool members which are *third country insurance undertakings* or *third country reinsurance undertakings*;

(c) $P = \sum_j P_j$;

(d) P_j denotes the share of the total risk of the *pooling arrangement* undertaken by pool member *j*; and

(e) for pool members for which a credit assessment by a nominated *external credit assessment institution* is available, SR_i and SR_j must be assigned in accordance with the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
SR_i	196%	196%	175%	122%	95%	75%	75%

(f) for pool members which are *UK Solvency II undertakings* and for which a credit assessment by a nominated *external credit assessment institution* is not available, SR_i and SR_j must be the latest available solvency ratio; and

(g) for pool members situated in a *third country* and for which a credit assessment by a nominated *external credit assessment institution* is not available:

(i) SR_i and SR_j must be equal to 100% where the pool member is situated in a *third country* which is an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation; and

(ii) SR_i and SR_j must be equal to 75% where the pool member is situated in a *third country* which is not an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation.

3. Where a *firm* is ceding risk to a *pooling arrangement* by the intermediary of a central *undertaking*, the *firm* must treat the central *undertaking* as part of the *pooling arrangement* and calculate its share of the risk accordingly.

3E7 LOSS-GIVEN-DEFAULT FOR POOL EXPOSURES OF TYPE B

1. For *pool exposures of type B* which a *firm* is permitted to treat as separate single name exposures in accordance with 3E2.2, where members are each liable up to the full amount of the obligation covered by the *pooling arrangement*, the *firm* must calculate the loss-given-default in accordance with the following formula:

$$LGD = max\left(\left((1 - RR_c) \cdot \left(\frac{P_u}{(1 - P_c)} BE_c + \Delta RM_c\right) - F \cdot Collateral\right); 0\right)$$

where:

(a) P_U denotes the *firm's* share of the risk according to the terms of the *pooling arrangement*;

(b) P_C denotes the *counterparty* member's share of the risk according to the terms of the *pooling arrangement*;

(c) RR_C is equal to:

(i) 10% if 60% or more of the assets of the *counterparty* member are subject to *collateral arrangements*; or

(ii) 50% otherwise;

(d) BE_C denotes the *best estimate* of the liability ceded to the *counterparty* member by the *firm*, net of any amounts reinsured with *counterparties* external to the *pooling arrangement*;

(e) ΔRM_C denotes the *counterparty* member's contribution to the risk-mitigating effect of the *pooling arrangement* on the *underwriting risk* of the *firm*;

(f) *Collateral* denotes the risk-adjusted value of collateral provided by way of *collateral arrangement* held by the *counterparty* member of the *pooling arrangement*; and

(g) *F* denotes the factor to take into account the economic effect of the collateral provided by way of a *collateral arrangement* held by the *counterparty* member, calculated in accordance with 3E10.

2. For *pool exposures of type B* which a *firm* is permitted to treat as separate single name exposures in accordance with 3E2.2, where members are each only liable up to their respective portion of the obligation covered by the *pooling arrangement*, the *firm* must calculate the loss-given-default in accordance with the following formula:

$$LGD = max\left(\left((1 - RR_{CE}) \cdot (P_c \cdot BE_{CE} + \Delta RM_{CE}) - F \cdot Collateral\right); 0\right)$$

where:

(a) P_C denotes the *counterparty* member's share of the risk according to the terms of the *pooling arrangement*;

(b) RR_C is equal to:

(i) 10% if 60% or more of the assets of the *counterparty* member are subject to *collateral arrangements*; or

(ii) 50% otherwise;

(c) BE_U denotes the *best estimate* of the liability ceded to the *pooling arrangement* by the undertaking, net of any amounts reinsured with *counterparties* external to the *pooling arrangement*;

(d) ΔRM_C denotes the *counterparty* member's contribution to the risk-mitigating effect of the *pooling arrangement* on the *underwriting risk* of the *firm*;

(e) *Collateral* denotes the risk-adjusted value of collateral provided by way of a *collateral arrangement* held by the *counterparty* member of the *pooling arrangement*; and

(f) *F* denotes the factor to take into account the economic effect of the collateral provided by way of a *collateral arrangement* held by the *counterparty* member, calculated in accordance with 3E10.

3E8 LOSS-GIVEN-DEFAULT FOR POOL EXPOSURES OF TYPE C

1. For *pool exposures of type C* which a *firm* is permitted to treat as separate single name exposures in accordance with 3E2.2, the *firm* must calculate the loss-given-default in accordance with the following formula:

$$LGD = max\left(\left((1 - RR_{CE}) \cdot (P_U \cdot BE_{CE} + \Delta RM_{CE}) - F \cdot Collateral\right); 0\right)$$

where:

(a) P_U denotes the *firm's* share of the risk according to the terms of the *pooling arrangement*;

(b) RR_{CE} is equal to:

(i) 10% if 60% or more of the assets of the external *counterparty* are subject to *collateral arrangements*; or

(ii) 50% otherwise;

(c) BE_{CE} denotes the *best estimate* of the liability ceded to the external *counterparty* by the *pooling arrangement* as a whole;

(d) ΔRM_{CE} denotes the external *counterparty's* contribution to the risk-mitigating effect of the *pooling arrangement* on the *underwriting risk* of the *firm*;

(e) *Collateral* denotes the risk-adjusted value of collateral provided by way of a *collateral arrangement* held by the *counterparty* member of the *pooling arrangement*; and

(f) *F* denotes the factor to take into account the economic effect of the collateral provided by way of a *collateral arrangement* held by the *counterparty* member, calculated in accordance with 3E10.

3E9 RISK-MITIGATING EFFECT

1. A *firm* must calculate the risk-mitigating effect on *underwriting risk* or *market risk* of a *reinsurance* arrangement, *securitisation* or *derivative* as the greater of zero and the difference between the following capital requirements:

(1) the hypothetical capital requirement for *underwriting risk* or *market risk* of the *firm*, calculated in accordance with Chapter 3 and Sections 3A to 3D, that would apply if the *reinsurance* arrangement, *securitisation* or *derivative* did not exist; and

(2) the capital requirement for *underwriting risk* or *market risk* of the *firm*.

3E10 RISK-ADJUSTED VALUE OF COLLATERAL

1. Where the criteria set out in 3G8 are met, a *firm* must calculate the risk-adjusted value of collateral provided by way of security, as referred to in paragraph (2) of the definition *collateral arrangement*, as the difference between the value of the assets held as collateral, valued in accordance with Valuation 2.1 to 2.2, and the adjustment for *market risk*, as referred to in 3E10.5, provided that both of the following requirements are fulfilled:

   (1) the *firm* 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* ('the *counterparty* requirement'); and

   (2) the *firm* 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* ('the third party requirement').

2. Where the *counterparty* requirement is met and the criteria set out in 3G8 are met and the third party requirement is not met, a *firm* must calculate the risk-adjusted value of a collateral provided by way of security, as referred to in paragraph (2) of the definition *collateral arrangement*, as equal to 90% of the difference between the value of the assets held as collateral in accordance with Valuation 2.1 to 2.2 and the adjustment for *market risk*, as referred to in 3E10.5.

3. Where either the *counterparty* requirement is not met or the requirements in 3G8 are not met, a *firm* must assign a value to the risk-adjusted value of collateral provided by way of security, as referred to in paragraph (2) of the definition *collateral arrangements*, of zero.

4. A *firm* must calculate the risk-adjusted value of a collateral of which full ownership is transferred, as referred to in paragraph (1) of the definition *collateral arrangement*, as the difference between the value of the assets held as collateral, valued in accordance with Valuation 2.1 to 2.2, and the adjustment for *market risk*, as referred to in 3E10.5, provided the requirements in 3G8 are fulfilled.

5. A *firm* must calculate the adjustment for *market risk* as the difference between the following capital requirements:

   (1) the hypothetical capital requirement for *market risk* of the *firm* that would apply if the assets held as collateral provided by way of a *collateral arrangement* were not included in the calculation; and

   (2) the hypothetical capital requirement for *market risk* of the *firm* that would apply if the assets held as collateral provided by way of a *collateral arrangement* were included in the calculation.

6. For the purposes of 3E10.5, a *firm* must calculate the *currency risk* of the assets held as collateral by comparing the currency of the assets held as collateral against the currency of the corresponding exposure.

7. Where, in case of insolvency of the *counterparty*, the determination of the *firm's* proportional share of the *counterparty's* insolvency estate in excess of the collateral does not take into account that the *firm* receives the collateral, the factors *F*, *F'*, *F''* and *F'''* referred to in 3E4.3 to

3E4.8 and 7.35 must all be 100% and in all other cases these factors must be 50%, 18%, 16% and 90% respectively.

3E11 RISK-ADJUSTED VALUE OF MORTGAGE

1. A *firm* must calculate the risk-adjusted value of mortgage as the difference between the value of the residential property held as mortgage, valued in accordance with 3E11.2, and the adjustment for *market risk*, as referred to in 3E11.3.

2. A *firm* must calculate the value of the residential property held as mortgage as the *market value,* reduced as appropriate to reflect the results of the monitoring required under 3E3.9 and 3E3.10 and to take account of any prior claims on the property and the external, independent valuation of the property must be the same or less than the *market value* calculated in accordance with Valuation 2.1 to 2.2.

3. A *firm* must calculate the adjustment for *market risk* referred to in 3E11.1 as the difference between the following capital requirements:

   (1) the hypothetical capital requirement for *market risk* of the *firm* that would apply if the residential property held as mortgage were not included in the calculation; and

   (2) the hypothetical capital requirement for *market risk* of the *firm* that would apply if the residential property held as mortgage were included in the calculation.

4. For the purposes of 3E11.2, a *firm* must calculate the *currency risk* of the residential property held as mortgage by comparing the currency of the residential property against the currency of the corresponding loan.

TYPE 1 EXPOSURES

3E12 PROBABILITY OF DEFAULT

1. A *firm* must calculate the probability of default on a single name exposure as equal to the average of the probabilities of default on each of the exposures to *counterparties* that belong to the single name exposure, weighted by the loss-given-default in respect of those exposures.

2. A *firm* must assign to a single name exposure *i* for which a credit assessment by a nominated *external credit assessment institution* is available, a probability of default PD_i in accordance with the following table:

Credit quality step	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Probability of default PD_i	0.002%	0.01%	0.05%	0.24%	1.2%	4.2%	4.2%

3. In respect of single name exposures *i* to a *UK Solvency II undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available and where this *UK Solvency II undertaking* meets its *MCR*, a *firm* must assign a probability of default PD_i depending on the *UK Solvency II undertaking's* solvency ratio, in accordance with the following table:

Solvency ratio	196%	175%	150%	125%	122%	100%	95%	75%
Probability of	0.01%	0.05%	0.1%	0.2%	0.24%	0.5%	1.2%	4.2%

default								

Where the solvency ratio falls in between the solvency ratios specified in the table above, the value of the probability of default must be linearly interpolated from the closest values of probabilities of default corresponding to the closest solvency ratios specified in the table above, provided that:

(1) where the solvency ratio is lower than 75%, the probability of default must be 4.2%; and

(2) where the solvency ratio is higher than 196%, the probability of default must be 0.01%.

For the purposes of this rule, 'solvency ratio' denotes the ratio of the *eligible own funds* to cover the *SCR* and the *SCR*, using the latest available values.

4. A *firm* must assign a probability of default equal to 4.2% to exposures to a *UK Solvency II undertaking* that does not meet its *MCR*.

5. 3E12.3 and 3E12.4 only apply as of the first date of public disclosure, by the *UK Solvency II undertaking* corresponding to the exposure, of the *SFCR* and before that date, the following applies:

(1) if a credit assessment by a nominated *external credit assessment institution* is available for the exposures, 3E12.2 applies;

(2) in all other cases, a *firm* must assign to the exposures the same risk factor as the ones that would result from the application of 3E3.3 to exposures to a *UK Solvency II undertaking* whose solvency ratio is 100%.

6. In respect of exposures to a *third country insurance undertaking* or a *third country reinsurance undertaking* for which a credit assessment by a nominated *external credit assessment institution* is not available, situated in a *third country* which is an overseas jurisdiction designated under regulation 11 in relation to regulation 13 of the *IRPR regulations* in respect of the insurance group capital requirements calculation, and which complies with the solvency requirements of that *third country*, a *firm* must assign a probability of default equal to 0.5%.

7. In respect of exposures to *credit institutions* and *financial institutions* which comply with the solvency requirements set out in the *PRA* Rulebook, the *CRR* or technical standards as amended from time to time, for which a credit assessment by a nominated *external credit assessment institution* is not available, a *firm* must assign a probability of default equal to 0.5%.

8. A *firm* must assign a probability of default equal to 0% to exposures to *counterparties* referred to in 3D24.2(1) to (3)

9. A *firm* must calculate the probability of default on single name exposures other than those identified in 3E12.2 to 3E12.8 as equal to 4.2%.

10. Where a letter of credit, a guarantee or an equivalent arrangement is provided to fully secure an exposure and this arrangement complies with 3G2 to 3G9, a *firm* may treat the provider of that letter of credit, guarantee or equivalent arrangement as the *counterparty* on the secured exposure for the purposes of assessing the probability of default of a single name exposure.

11. For the purposes of 3E12.10, a *firm* must treat exposures fully, unconditionally and irrevocably guaranteed by *counterparties* listed in 3E1 as exposures to the central government.

12. Notwithstanding 3E12.2 to 3E12.11, a *firm* must assign to exposures referred to 3E4.5 a probability of default equal to 0.002%.

13. Notwithstanding 3E12.2 to 3E12.12, a *firm* must assign to exposures referred to 3E4.6 a probability of default equal to 0.01%.

3E13 TYPE 1 EXPOSURES

1. Where the standard deviation of the loss distribution of type 1 exposures as referred to in 3.13 to 3.19 is lower than or equal to 7% of the total loss-given-default on all type 1 exposures, a *firm* must calculate the capital requirement for *counterparty* default risk on type 1 exposures in accordance with the following formula:

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

where σ denotes the standard deviation of the loss distribution of type 1 exposures, as defined in 3E13.4.

2. Where the standard deviation of the loss distribution of type 1 exposures is higher than 7% of the total loss-given-default on all type 1 exposures and lower or equal to 20% of the total loss-given-default on all type 1 exposures, a *firm* must calculate the capital requirement for *counterparty* default risk on type 1 exposures in accordance with the following formula:

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

where σ denotes the standard deviation of the loss distribution of type 1 exposures.

3. Where the standard deviation of the loss distribution of type 1 exposures is higher than 20% of the total loss-given-default on all type 1 exposures, a *firm* must calculate the capital requirement for *counterparty* default risk on type 1 exposures as equal to the total loss-given-default on all type 1 exposures.

4. A *firm* must calculate the standard deviation of the loss distribution of type 1 exposures in accordance with the following formula:

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

where *V* denotes the variance of the loss distribution of type 1 exposures.

3E14 VARIANCE OF THE LOSS DISTRIBUTION OF TYPE 1 EXPOSURES

1. The variance of the loss distribution of type 1 exposures as referred to in 3E13.4 must be equal to the sum of V_{inter} and V_{intra}.

2. A *firm* must calculate V_{inter} in accordance with the following formula:

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

where:

(a) the sum covers all possible combinations (*j,k*) of probabilities of default on single name exposures in accordance with 3E12; and

(b) $TLGD_j$ and $TLGD_k$ denote the sum of loss-given-default on type 1 exposures from *counterparties* bearing a probability of default *PDj* and *PDk* respectively.

3. A *firm* must calculate V_{intra} in accordance with the following formula:

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

where:

(a) the first sum covers all different probabilities of default on single name exposures in accordance with 3E12;

(b) the second sum covers all single name exposures that have a probability of default equal to PD_i; and

(c) LGD_i denotes the loss-given-default on the single name exposure *i*.

TYPE 2 EXPOSURES

3E15 TYPE 2 EXPOSURES

1. A *firm* must calculate the capital requirement for *counterparty* default risk on type 2 exposures as equal to the loss in its *basic own funds* that would result from an instantaneous decrease in value of type 2 exposures calculated in accordance with the following formula:

$$90\% \cdot LGD_{receivables>3\ months} + \sum_i 15\% \cdot LGD_i$$

where:

(a) $LGD_{receivables>3months}$ denote the total loss-given-default on all receivables from intermediaries which have been due for more than three *months*;

(b) the sum is taken on all type 2 exposures other than receivables from intermediaries which have been due for more than three *months*; and

(c) LGD_i denotes the loss-given-default on the type 2 exposure *i*.

3F INTANGIBLE ASSET MODULE

3F1 INTANGIBLE ASSET MODULE

1. A *firm* must calculate the capital requirement for intangible asset risk in accordance with the following formula:

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

where $V_{intangibles}$ denotes the amount of intangible assets as recognised and valued in accordance with Valuation 8.1(2).

3G RISK MITIGATION TECHNIQUES

3G1 METHODS AND ASSUMPTIONS

1. Where a *firm* transfers *underwriting risk* using a *reinsurance contract* or *special purpose vehicle* that meets the requirements set out in 3G2, 3G5 and 3G7, and where the arrangement provides for protection in several of the scenario-based calculations set out in Sections 3A to 3C, the *firm* must allocate the risk-mitigating effects of the contractual arrangement to the scenario-based calculations in a manner that, without double-counting, captures the economic effect of the protections provided and, in particular, captures the economic effect of the protections provided in determining the loss in *basic own funds* in the scenario-based calculations.

2. Where a *firm* transfers *underwriting risk* using a *finite reinsurance* contract that meets the requirements set out in 3G2, 3G5 and 3G7:

(1) subject to (2), the *firm* may recognise that contract in the scenario-based calculations set out in Sections 3A to 3C only to the extent *underwriting risk* is transferred to the *counterparty* of the contract; and

(2) the *firm* must not take into account *finite reinsurance*, or similar arrangements where the effective risk transfer is comparable to that of *finite reinsurance*, for the purposes of determining the volume measures for *premium* and reserve risk in accordance with 3A2 and 3C3, or for the purposes of calculating *undertaking specific parameters* in accordance with the Solvency Capital Requirement – Undertaking Specific Parameters Part.

3G2 QUALITATIVE CRITERIA

1. When calculating the *basic SCR*, a *firm* must only take into account a *risk-mitigation technique* as referred to in Solvency Capital Requirement – General Provisions 3.5 where all of the following qualitative criteria are met:

   (1) the contractual arrangements and transfer of risk are legally effective and enforceable in all relevant jurisdictions;

   (2) the *firm* has taken all appropriate steps to ensure the effectiveness of the arrangement and to address the risks related to that arrangement;

   (3) the *firm* is able to monitor the effectiveness of the arrangement and the related risks on an ongoing basis;

   (4) the *firm* has, in the event of a default, insolvency or bankruptcy of a *counterparty* or other credit event set out in the transaction documentation for the arrangement, a direct claim on that *counterparty*; and

   (5) there is no double counting of risk-mitigation effects in *own funds* and in the calculation of the *SCR* or within the calculation of the *SCR*.

2. Subject to 3G2.3, a *firm* must take a *risk-mitigation technique* into account in the calculation of the *basic SCR* on the following basis:

   (1) full recognition of the risk mitigation effect of the *risk-mitigation technique* where it is in force for at least the next 12 *months* and meets the qualitative criteria set out in Section 3G; or

   (2) partial recognition of the risk-mitigation effect of a *risk-mitigation technique* where it is in force for a period shorter than 12 *months* and meets the qualitative criteria set out in Section 3G, in proportion to the length of time involved for the shorter of the full term of the risk exposure or the period that the *risk-mitigation technique* is in force.

3. A *firm* must take a *risk-mitigation technique* into account in the calculation of the *basic SCR* on the basis of full recognition of its risk mitigation effect, where contractual arrangements governing the *risk-mitigation technique* will be in force for a period shorter than the next 12 *months* and the *firm* intends to replace that *risk-mitigation technique* at the time of its expiry with a similar arrangement or where that *risk-mitigation technique* is subject to an adjustment to reflect changes in the exposure that it covers, provided all of the following qualitative criteria are met:

   (1) the *firm* has a written policy on the replacement or adjustment of that *risk-mitigation technique*, covering situations including the situation where the *firm* uses several contractual arrangements in combination to transfer risk as referred to in 3G3.5;

   (2) the replacement or adjustment of the *risk-mitigation technique* takes place more often than once per week only in cases where, without the replacement or adjustment, an event would have a material adverse impact on the solvency position of the *firm*;

   (3) the replacement or adjustment of the *risk-mitigation technique* is not conditional on any future event which is outside of the control of the *firm* and where the replacement or adjustment of the *risk-mitigation technique* is conditional on any future event that is within

the control of the *firm*, the conditions for such replacement or adjustment are clearly documented in the written policy referred to in (1);

(4) the replacement or adjustment of the *risk-mitigation technique* is realistically based on replacements and adjustments undertaken previously by the *firm* and consistent with the *firm's* current business practice and business strategy;

(5) there is no material risk that the *risk-mitigation technique* cannot be replaced or adjusted due to an absence of liquidity in the market;

(6) the risk that the cost of replacing or adjusting the *risk-mitigation technique* increases during the following 12 *months* is reflected in the *SCR*;

(7) the replacement or adjustment of the *risk-mitigation technique* would not be contrary to requirements that apply to future management actions set out in Technical Provisions – Further Requirements 8.5;

(8) the initial contractual maturity is not shorter than one *month* in cases where the *firm* transfers risks through the purchase or issuance of financial instruments; and

(9) the initial contractual maturity is not shorter than three *months* where the *firm* transfers *underwriting risks* using *reinsurance contracts* or *special purpose vehicles*.

3G3 EFFECTIVE TRANSFER OF RISK

1. A *firm* must only take a *risk-mitigation technique* into account in the calculation of the *basic SCR* where the contractual arrangements governing the *risk-mitigation technique* ensure that the extent of the cover provided by the *risk-mitigation technique* and the transfer of risk is clearly defined and incontrovertible.

2. The contractual arrangement must not result in material *basis risk* or in the creation of other risks, unless this is reflected in the calculation of the *SCR*.

3. A *firm* must treat *basis risk* as material if it leads to a misstatement of the risk-mitigating effect on the *firm's basic SCR* that could influence the decision-making or judgement of the intended user of that information, including the *supervisory authorities*.

4. In determining whether the contractual arrangements and transfer of risk are legally effective and enforceable in all relevant jurisdictions in accordance with 3G2.1(1), a *firm* must take into account the following:

   (1) whether the contractual arrangement is subject to any condition which could undermine the effective transfer of risk, the fulfilment of which is outside the direct control of the *firm*; and

   (2) whether there are any connected transactions which could undermine the effective transfer of risk.

5. Where a *firm* combines several contractual arrangements to transfer risk, each of the contractual arrangements must meet the requirements set out in 3G3.1 and 3G3.4 and the contractual arrangements in combination must meet the requirements set out in 3G3.2 and 3G3.3.

3G4 MATERIAL BASIS RISK

1. Notwithstanding 3G3.2, where a *firm* transfers *underwriting risk* using a *reinsurance contract* or a *special purpose vehicle* that is subject to material *basis risk* stemming from a currency mismatch between *underwriting risk* and the *risk-mitigation technique*, a *firm* may take into account the *risk-mitigation technique* in the calculation of the *SCR* according to the *standard*

formula, provided that the *risk-mitigation technique* complies with 3G2, 3G3.1, 3G3.3, 3G3.4 and 3G5, and the calculation is carried out as follows:

(1) the *firm* must take the *basis risk* stemming from a currency mismatch between *underwriting risk* and the *risk-mitigation technique* into account in the relevant *underwriting risk* module, sub-module or scenario of the *standard formula* at the most granular level by adding 25% of the difference between the following to the capital requirement calculated in accordance with the relevant module, sub-module or scenario:

(a) the hypothetical capital requirement for the relevant *underwriting risk* module, sub-module or scenario that would result from a simultaneous occurrence of the scenario set out in 3D32; and

(b) the capital requirement for the relevant *underwriting risk* module, sub-module or scenario; and

(2) where the *risk-mitigation technique* covers more than one module, sub-module or scenario, the *firm* must apply the calculation referred to in (1) for each of those modules, sub-modules and scenarios and the capital requirement resulting from those calculations must not exceed 25% of the capacity of the non-proportional *reinsurance contract* or *special purpose vehicle*.

3G5 RISK-MITIGATION TECHNIQUES USING REINSURANCE CONTRACTS OR SPECIAL PURPOSE VEHICLES

1. Where a *firm* transfers *underwriting risk* using a *reinsurance contract* or *special purpose vehicle*, the *firm* must only take the *risk-mitigation technique* into account in the calculation of the *basic SCR* if the qualitative criteria set out in 3G2 and 3G3 and those set out in 3G5.2 to 3G5.6 are met.

2. In the case of a *reinsurance contract* the *counterparty* must be any of the following:

(1) a *UK Solvency II undertaking* which complies with the *SCR*;

(2) a *third country insurance undertaking* or a *third country reinsurance undertaking*, situated in a *third country* which is an overseas jurisdiction designated under regulation 11 in relation to regulation 12 of the *IRPR regulations* in respect of reinsurance contracts, and which complies with the solvency requirements of that *third country*; or

(3) a *third country insurance undertaking* or a *third country reinsurance undertaking*, situated in a *third country* which is not an overseas jurisdiction designated under regulation 11 in relation to regulation 12 of the *IRPR regulations* in respect of reinsurance contracts, and which has been assigned to *credit quality step* 3 or better in accordance with 1A to 1C.

3. Where a *counterparty* to a *reinsurance contract* is a *UK Solvency II undertaking* which ceases to comply with its *SCR* after the *reinsurance contract* has been entered into, a *firm* may partially recognise the protection offered by the insurance *risk-mitigation technique* for a period of no longer than six *months* after the *counterparty* ceases to comply with its *SCR* and, in that case, the effect of the *risk-mitigation technique* must be reduced by the percentage by which the *SCR* is breached, provided that:

(1) as soon as the *counterparty* has restored compliance with its *SCR*, the *firm* must no longer reduce the effect of the *risk-mitigation technique*; and

(2) where:

(a) the *counterparty* fails to restore compliance with its *SCR* within that period of six *months*; or

(b) where, before the end of the period of six *months*, the *firm* becomes aware that it is unlikely that the *counterparty* will be able to restore compliance with its *SCR* within that period,

the *firm* must no longer recognise the effect of the *risk-mitigation technique* in the calculation of the *basic SCR*.

4. Notwithstanding 3G5.3, where a *counterparty* to a *reinsurance contract* is a *UK Solvency II undertaking* which ceases to comply with its *MCR* after the *reinsurance contract* has been entered into, a *firm* must cease to recognise the effect of the *risk-mitigation technique* in the calculation of the *basic SCR*.

5. Where risk is transferred to a *UK ISPV*, a *firm* must only take the *risk-mitigation technique* into account in the calculation of the *basic SCR* where the requirements in Insurance Special Purpose Vehicles Part 2, 2A to 2C and 5A.1 to 5A.5 are met, provided that:

(1) where the requirements for a *UK ISPV* to be fully funded cease to be fully met after the arrangement has been entered into, the *firm* may only partially recognise the protection offered by the insurance *risk-mitigation technique* if the *firm* can demonstrate that compliance with the fully funded requirement will be restored within three *months*; and

(2) for this purpose, the effect of the *risk-mitigation technique* must be reduced by the percentage of the *aggregate maximum risk exposure* of the *UK ISPV*, referred to in Insurance Special Purpose Vehicles 2.2 to 2.5 not covered by the assets of the *UK ISPV*.

6. Where risk is transferred to a *special purpose vehicle* that is regulated by a *third country* supervisory authority, a *firm* must not take the *risk-mitigation technique* into account in the calculation of the *basic SCR* unless requirements equivalent to those set out in Insurance Special Purpose Vehicles Part 2, 2A to 2C and 5A.1 to 5A.5 are met by the *special purpose vehicle*.

3G6 FINANCIAL RISK-MITIGATION TECHNIQUES

1. Where a *firm* transfers risk other than in the cases referred to in 3G5.1, including transfers through the purchase or issuance of financial instruments, the *firm* may only take that *risk-mitigation technique* into account in the calculation of the *basic SCR* if the qualitative criteria provided in 3G6.2 to 3G6.5 are met, in addition to the qualitative criteria set out in 3G2 and 3G3.

2. The *risk-mitigation technique* must be consistent with the *firm's* written policy on risk management, as referred to in Conditions Governing Business 2.5.

3. The *firm* must be able to value the assets and liabilities that are subject to the *risk-mitigation technique* and, where the *risk-mitigation technique* includes the use of financial instruments, the *firm* must be able to value the financial instruments reliably in accordance with Valuation 2.1 to 2.2.

4. Where the *risk-mitigation technique* includes the use of financial instruments, the financial instruments must have a credit quality which has been assigned to *credit quality step* 3 or better in accordance with 1A to 1C.

5. Where the *risk-mitigation technique* is not a financial instrument, the *counterparties* to the *risk-mitigation technique* must have a credit quality which has been assigned to *credit quality step* 3 or better in accordance with 1A to 1C.

3G7 STATUS OF THE COUNTERPARTIES

1. In the event that the qualitative criteria in 3G5.1, 3G6.4 or 3G6.5 are not met, a *firm* must only take into account the *risk-mitigation technique* when calculating the *basic SCR* where one of the following criteria is met:

   (1) the *risk-mitigation technique* meets the qualitative criteria set out in 3G2, 3G3, 3G6.2 and 3G6.3 and *collateral arrangements* exist that meet the criteria provided in 3G8; and

   (2) the *risk-mitigation technique* is accompanied by another *risk-mitigation technique* that, when viewed in combination with the first technique, meets the qualitative criteria set out in 3G2, 3G3, 3G6.2 and 3G6.3, with the *counterparties* to that other technique meeting the criteria provided in 3G5.1, 3G6.4 and 3G6.5.

2. For the purposes of 3G7.1(1), where the value, of the collateral provided by way of a *collateral arrangement*, valued in accordance with Valuation 2.1 to 2.2, is less than the total risk exposure, the *firm* must only take the *collateral arrangement* into account to the extent that the collateral covers the risk exposure.

3G8 COLLATERAL ARRANGEMENTS

1. In the calculation of the *basic SCR*, a *firm* must only recognise *collateral arrangements* where, in addition to the qualitative criteria in 3G2 and 3G3, the following criteria are met:

   (1) the *firm* 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*;

   (2) there is sufficient certainty as to the protection achieved by the collateral because of either of the following:

      (a) it is of sufficient credit quality, is of sufficient liquidity and is sufficiently stable in value; or

      (b) it is guaranteed by a *counterparty*, other than a *counterparty* referred to in 3D31.9 and 3D28.2 who has been assigned a risk factor for concentration risk of 0%;

   (3) there is no material positive correlation between the credit quality of the *counterparty* and the value of the collateral; and

   (4) the collateral is not securities issued by the *counterparty* or a *related undertaking* of that *counterparty*.

2. Where a *collateral arrangement* involves collateral being held by a custodian or other third party, the *firm* must ensure that all of the following criteria are met:

   (1) the relevant custodian or other third party segregates the assets held as collateral from its own assets;

   (2) the segregated assets are held by a deposit-taking institution that has a credit quality which has been assigned to *credit quality step* 3 or better in accordance with 1A to 1C;

   (3) the segregated assets are individually identifiable and can only be changed or substituted with the consent of the *firm* or a *person* acting as a trustee in relation to the *firm's* interest in such assets;

   (4) the *firm* 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 *counterparty*; and

(5) the segregated assets must not be used to pay, or to provide collateral in favour of, any *person* other than the *firm* or as directed by the *firm*.

3G9 GUARANTEES

1. In the calculation of the *basic SCR*, a *firm* must only recognise guarantees where explicitly referred to in this Chapter, and where in addition to the qualitative criteria in 3G2 and 3G3, all of the following criteria are met:

(1) the credit protection provided by the guarantee is direct;

(2) the extent of the credit protection is clearly defined and incontrovertible;

(3) the guarantee does not contain any clause, the fulfilment of which is outside the direct control of the lender, that:

(a) would allow the protection provider to cancel the protection unilaterally;

(b) would increase the effective cost of protection as a result of a deterioration in the credit quality of the protected exposure;

(c) could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make any payments due; or

(d) could allow the maturity of the credit protection to be reduced by the protection provider;

(4) on the default, insolvency or bankruptcy or other credit event of the *counterparty*, the *firm* has the right to pursue, in a timely manner, the guarantor for any monies due under the claim in respect of which the protection is provided and the payment by the guarantor must not be subject to the *firm* first having to pursue the obligor;

(5) the guarantee is an explicitly documented obligation assumed by the guarantor; and

(6) the guarantee fully covers all types of regular payments the obligor is expected to make in respect of the claim.

...

5 CAPITAL REQUIREMENT FOR OPERATIONAL RISK

…

5.3 With respect to *insurance business* operations other than those referred to in 5.2, the capital requirement for *operational risk* must:

(1) take into account the volume of those operations, in terms of *earned premiums*~~earned premiums~~ and *technical provisions* which are held in respect of that *insurance business*; ~~and~~

(2) not exceed 30% of the *basic SCR* relating to those operations; ~~.~~ and

(3) comply with 5.4.

5.4 (1) A *firm* must calculate the capital requirement for the *operational risk* module in accordance with the following formula:

$$SCR_{Operational} = min(0.3 \cdot BSCR; Op) + 0.25 \cdot Exp_{ul}$$

where:

(a) *BSCR* denotes the *basic SCR*;

(b) *Op* denotes the basic capital requirement for *operational risk* as referred to in (2); and

(c) Exp_{ul} denotes the amount of expenses incurred during the previous 12 *months* in respect of *long-term insurance contracts* where the investment risk is borne by *policyholders*.

(2) A *firm* must calculate the basic capital requirement for *operational risk* in accordance with the following formula:

$$Op = max\left(Op_{premiums}; Op_{provisions}\right)$$

where:

(a) $Op_{premiums}$ denotes the capital requirement for *operational risk* based on *earned premiums*; and

(b) $Op_{provisions}$ denotes the capital requirement for *operational risk* based on *technical provisions*.

(3) A *firm* must calculate the capital requirement for *operational risk* based on *earned premiums* as follows:

$$Op_{premiums} = 0.04 \cdot \left(Earn_{life} - Earn_{life-ul}\right) + 0.03 \cdot Earn_{non-life} + max\left(0; 0.04 \cdot \left(Earn_{life} - 1.2 \cdot pEarn_{life} - \left(Earn_{life-ul} - 1.2 \cdot pEarn_{life-ul}\right)\right)\right) + max\left(0; 0.03\left(Earn_{non-life} - 1.2 \cdot pEarn_{non-life}\right)\right)$$

where:

(a) $Earn_{life}$ denotes the *premiums* earned during the last 12 *months* for *long-term insurance and reinsurance obligations*, without deducting *premiums* for *reinsurance contracts*;

(b) $Earn_{life\text{-}ul}$ denotes the *premiums* earned during the last 12 *months* for *long-term insurance and reinsurance obligations* where the investment risk is borne by the *policyholders* without deducting *premiums* for *reinsurance contracts*;

(c) $Earn_{non\text{-}life}$ denotes the *premiums* earned during the last 12 *months* for *general insurance and reinsurance obligations*, without deducting *premiums* for *reinsurance contracts*;

(d) $pEarn_{life}$ denotes the *premiums* earned during the 12 *months* prior to the last 12 *months* for *long-term insurance and reinsurance obligations*, without deducting *premiums* for *reinsurance contracts*;

(e) $pEarn_{life\text{-}ul}$ denotes the *premiums* earned during the 12 *months* prior to the last 12 *months* for *long-term insurance and reinsurance obligations* where the investment risk is borne by the *policyholders* without deducting *premiums* for *reinsurance contracts*; and

(f) $pEarn_{non\text{-}life}$ denotes the *premiums* earned during the 12 *months* prior to the last 12 *months* for *general insurance and reinsurance obligations*, without deducting *premiums* for *reinsurance contracts*.

For the purposes of (3), *earned premiums* must be gross, without deduction of *premiums* for *reinsurance contracts*.

(4) A *firm* must calculate the capital requirement for *operational risk* based on *technical provisions* in accordance with the following formula:

$$Op_{provisions} = 0.0045 \cdot max\left(0; TP_{life} - TP_{life-ul}\right) + 0.03 \cdot max\left(0; TP_{non-life}\right)$$

where:

(a) TP_{life} denotes the *technical provisions* for *long-term insurance and reinsurance obligations*;

(b) $TP_{life\text{-}ul}$ denotes the *technical provisions* for *long-term insurance obligations* where the investment risk is borne by the *policyholders*; and

(c) $TP_{non\text{-}life}$ denotes the *technical provisions* for *general insurance and reinsurance obligations*.

For the purposes of (4), *technical provisions* must not include the *risk margin*, and must be calculated without deduction of recoverables from *reinsurance contracts* and *special purpose vehicles*.

6 ADJUSTMENT FOR LOSS-ABSORBING CAPACITY OF TECHNICAL PROVISIONS AND DEFERRED TAXES

6.1 The adjustment for the loss-absorbing capacity of *technical provisions* and deferred taxes as referred to in 2.1(3) must:

(1) ~~must~~ reflect potential compensation of unexpected losses through a simultaneous decrease in *technical provisions* or deferred taxes, or a combination of the two;~~ and~~

(2) ~~must~~ take account of the risk-mitigating effect provided by *future discretionary benefits*~~future discretionary benefits~~ of *contracts of insurance*; and~~.~~

(3) represent the sum of:

(a) the adjustment for the loss-absorbing capacity of *technical provisions* calculated in accordance with 6.3; and

(b) the adjustment for the loss-absorbing capacity of deferred taxes calculated in accordance with 6.4 and, if applicable, 6.5.

…

6.3 (1) A *firm* must calculate the adjustment for the loss-absorbing capacity of *technical provisions* in accordance with the following formula:

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

where:

(a) *BSCR* denotes the *basic SCR*;

(b) *nBSCR* denotes the net *basic SCR* calculated in accordance with (2); and

(c) *FDB* denotes the *technical provisions* without *risk margin* in relation to *future discretionary benefits*.

(2) The net *basic SCR* is the *basic SCR* calculated with all the following modifications:

(a) where the calculation of a module or sub-module of the *basic SCR* is based on the impact of a scenario on a *firm's basic own funds*, the *firm* must assume that the scenario can change the value of the *future discretionary benefits* included in *technical provisions*;

(b) the scenario based calculations of the life *underwriting risk* module, the *SLT health underwriting risk* sub-module, the *health catastrophe risk* sub-module, the *market risk* module and the *counterparty* default risk module as well as the scenario-based calculation set out in (c) and (d) must take into account the impact of the scenario on *future discretionary benefits* included in *technical provisions* and this must be done on

the basis of assumptions on future management actions that comply with Technical Provisions – Further Requirements 8;

(c) instead of the capital requirement for *counterparty* default risk on type 1 exposures referred to in 3.13, the calculation must be based on the capital requirement that is equal to the loss in the *firm's basic own funds* that would result from an instantaneous loss, due to default events relating to type 1 exposures referred to in 3.14, of the amount of the capital requirement for *counterparty* default risk on type 1 exposures referred to in 3.13; and

(d) where a *firm* uses a simplified calculation for a specific capital requirement as set out in 7.8, 7.9, 7.10, 7.11, 7.12(1), 7.12(2), 7.14, 7.20, 7.23(1)(a), 7.23(1)(b) or 7.24, the *firm* must base the calculation on the capital requirement that is equal to the loss in its *basic own funds* that would result from an instantaneous loss of the amount of the capital requirement referred to in the relevant rule and must assume that the instantaneous loss is due to the risk that the capital requirement referred to in that rule captures.

(3) For the purposes of (2)(b), a *firm* must take into account any legal, regulatory or contractual restrictions in the distribution of *future discretionary benefits*.

6.4 (1) A *firm* must calculate the adjustment for the loss-absorbing capacity of deferred taxes as equal to the change in the value of its deferred taxes that would result from an instantaneous loss of an amount that is equal to the sum of the following:

(a) the *basic SCR*;

(b) the adjustment for the loss-absorbing capacity of *technical provisions* referred to in 6.3; and

(c) the capital requirement for *operational risk* as set out in 5.

(2) For the purposes of (1), deferred taxes must be valued in accordance with Valuation 11.1 and 11.2, without prejudice to (3) and 6.5.

(3) Where the loss referred to in (1) would result in an increase in the amount of deferred tax assets, a *firm* must not utilise that increase for the purposes of calculating the adjustment referred to in (1), unless 6.5 applies.

(4) A *firm* may assume the implementation of future management actions following the loss referred to in (1), provided that the provisions set out in Technical Provisions – Further Requirements 8 are complied with.

(5) For the purposes of (1), a decrease in deferred tax liabilities or an increase in deferred tax assets must result in a negative adjustment for the loss-absorbing capacity of deferred taxes.

(6) Where the calculation of the adjustment in accordance with (1) results in a positive change of deferred taxes, the adjustment must be nil.

(7) Where it is necessary to allocate the loss referred to in (1) to its causes in order to calculate the adjustment for the loss-absorbing capacity of deferred taxes, a *firm* must:

(a) allocate the loss to the risks that are captured by the *basic SCR* and the capital requirement for *operational risk*;

(b) make that allocation consistent with the contribution of the modules and sub-modules of the *standard formula* to the *basic SCR*; and

(c) where a *firm* has an *internal model permission* to use a *partial internal model* and where the adjustment for the loss-absorbing capacity of *technical provisions* and

deferred taxes is not within the *scope* of the *partial internal model*, make that allocation consistent with the contribution of the modules and sub-modules of the *standard formula* which are outside of the *scope* of the *partial internal model* to the *basic SCR*.

6.5 (1) For a transitional period ending on 30 December 2025, where the loss referred to in 6.4(1) would result in an increase in the amount of deferred tax assets, a *firm* may utilise that increase for the purposes of calculating the adjustment referred to in 6.4(1), if all of the following requirements are met:

(a) it is probable that future taxable profit will be available against which that increase can be utilised;

(b) the *firm* has determined that the requirement in (a) is met based on an assessment that:

(i) takes account of all of the matters referred to in (2); and

(ii) uses assumptions that comply with the requirements in (3);

(c) the *firm* has documentary evidence explaining how the requirements in (a) and (b) are met and can provide that evidence to the *PRA*, if the *PRA* requests it; and

(d) the *firm* has given the *PRA* advance notice in writing that it proposes to utilise an increase in deferred tax assets in accordance with this rule.

(2) The relevant matters for the purpose of (1)(b)(i) are:

(a) 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;

(b) the magnitude of the loss referred to in 6.4(1) and its impact on the *firm's* current and future financial situation and on insurance product pricing, market profitability, insurance demand, *reinsurance* coverage and all other relevant macro-economic variables; and

(c) the increased uncertainty in future profit following the loss referred to in 6.4(1), as well as the increasing degree of uncertainty relating to future taxable profit following that loss, as the projection horizon becomes longer.

(3) The relevant requirements for the purpose of (1)(b)(ii) are:

(a) a *firm* must not assume new business sales in excess of those projected for the purposes of the *firm's* business planning;

(b) a *firm* must not assume new business sales after the end of the *firm's* business planning horizon and, for this purpose, a *firm's* business planning horizon must not exceed five years;

(c) the rates of return on the *firm's* investments following the loss referred to in 6.4(1) must be assumed to be equal to the implicit returns of the forward rates derived from the *relevant risk-free interest rate term structure* obtained after that loss, unless the *firm* is able to demonstrate that returns in excess of those implicit returns are likely;

(d) where a *firm* sets a projection horizon for profits from new business that is longer than its business planning horizon, it must:

(i) set a finite projection horizon:

(ii) apply appropriate haircuts to the profits from new business projected beyond the business planning horizon;

(iii) assume that such haircuts increase the further into the future the profits are projected; and

(e) a *firm* must not apply assumptions that are more favourable than those used for valuation and utilisation of deferred tax assets in accordance with Valuation 11.

7 SIMPLIFICATION IN THE STANDARD FORMULA

…

7.2 (1) For the purposes of 7.1(1), a *firm* 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 of the *firm* covered in the relevant module or sub-module;

(b) an evaluation in qualitative or quantitative terms, as appropriate, of the error introduced in the results of the simplified calculation due to any deviation between the following:

(i) the assumptions underlying the simplified calculation in relation to the risk;

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

(2) Where the error referred to in 1(b) would lead to a misstatement of the *SCR* that could influence the decision-making or judgement of the user of the information relating to the *SCR*, the use of a simplified calculation by a *firm* will not be proportionate to the nature, scale and complexity of the risks that the *firm* faces and the *firm* must not use that simplified calculation, unless it produces an *SCR* which exceeds the *SCR* that results from the standard calculation.

7.3 A *firm* that is a *captive insurer* or *captive reinsurer* may use the simplified calculations set out in 7.4, 7.23, 7.25 and 7.27, where 7.2 is complied with and all of the following requirements are met:

(1) in relation to the insurance obligations of the *firm*, all insured *persons* and *beneficiaries* are legal entities of the *group* of which the *firm* is part;

(2) in relation to the *reinsurance* obligations of the *firm*, all insured *persons* and *beneficiaries* of the *contracts of insurance* underlying the *reinsurance* obligations are legal entities of the *group* of which the *firm* is part; and

(3) the insurance obligations and the *contracts of insurance* underlying the *reinsurance* obligations of the *firm* do not relate to any compulsory third-party liability insurance.

7.4 (1) Subject to 7.2 and 7.3, a *firm* that is a *captive insurer* or *captive reinsurer* may calculate the capital requirement for *non-life premium and reserve risk* in accordance with the following formula:

$$SCR_{nl\ prem\ res} = \sqrt{0.65 \cdot \sum_s NL^2_{(pr,s)} + 0.35 \cdot \left(\sum_s NL_{(pr,s)}\right)^2}$$

where *s* covers all segments set out in 3A3.

(2) For the purposes of (1), a *firm* must calculate the capital requirement for *non-life premium and reserve risk* of a particular segment *s* set out in 3A3 in accordance with the following formula:

$$NL_{pr,s} = 0.6 \cdot \sqrt{V^2{}_{(prem,s)} + V_{(prem,s)} \cdot V_{(res,s)} + V^2{}_{(res,s)}}$$

where:

(a) $V_{(prem,s)}$ denotes the volume measure for *premium* risk of segment *s* calculated in accordance with 3A2.3; and

(b) $V_{(res,s)}$ denotes the volume measure for reserve risk of a segment calculated in accordance with 3A2.6.

7.5 For the purposes of 3A6.1(1), subject to 7.2, a *firm* may determine the insurance *policies* for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin* on the basis of groups of *policies*, provided that the grouping complies with the requirements set out in Technical Provisions – Further Requirements 20.1(2).

7.6 Subject to 7.2, a *firm* may calculate:

(1) the sum insured for windstorm risk referred to in 3A9.6(2) and 3A9.8 on the basis of groups of risk zones provided that:

(a) each of the risk zones within a group must be situated within the same particular region set out in Annex V; and

(b) where the sum insured for windstorm risk referred to in 3A9.6(2) is calculated on the basis of a group of risk zones, the risk weight for windstorm risk referred to in 3A9.6(1) must be the risk weight for windstorm risk in the risk zone within that group with the highest risk weight for windstorm risk set out in Annex X;

(2) the sum insured for earthquake risk referred to 3A11.3(2) and 3A11.5 on the basis of groups of risk zones, provided that:

(a) each of the risk zones within a group must be situated within the same particular region set out in Annex VI; and

(b) where the sum insured for earthquake risk referred to in 3A11.3(2) is calculated on the basis of a group of risk zones, the risk weight for earthquake risk referred to in 3A11.3(1) must be the risk weight for earthquake risk in the risk zone within that group with the highest risk weight for earthquake risk as set out in Annex X;

(3) the sum insured for flood risk referred to in 3A12.6(2) and 3A12.8 on the basis of groups of risk zones, provided that:

(a) each of the risk zones within a group must be situated within the same particular region set out in Annex VII; and

(b) where the sum insured for flood risk referred to in 3A12.6(2) is calculated on the basis of a group of risk zones, the risk weight for flood risk referred to in 3A12.6(1) must be the risk weight for flood risk in the risk zone within that group with the highest risk weight for flood risk as set out in Annex X;

(4) the sum insured for hail risk referred to in 3A13.6(2) and 3A13.8 on the basis of groups of risk zones, provided that:

(a) each of the risk zones within a group must be situated within the same particular region set out in Annex VIII; and

(b) where the sum insured for hail risk referred to in 3A13.6(2) is calculated on the basis of a group of risk zones, the risk weight for hail risk referred to in 3A13.6(1) must be the risk weight for hail risk in the risk zone within that group with the highest risk weight for hail risk as set out in Annex X; and

(5) the weighted sum insured for subsidence risk referred to in 3A14.2 on the basis of groups of risk zones, provided that where the weighted sum insured referred to in 3A14.2 is calculated on the basis of a group of risk zones, the risk weight for subsidence risk

referred to in 3A14.2(1) must be the risk weight for subsidence risk in the risk zone within that group with the highest risk weight for subsidence risk as set out in Annex X.

7.7 (1) Subject to 7.2, a *firm* may calculate the capital requirement for fire risk referred to in 3A21.1 in accordance with the following formula:

$$SCR_{fire} = \max\left(\mathrm{SCR}_{firei}; \mathrm{SCR}_{firec}; \mathrm{SCR}_{firer}\right)$$

where:

(a) *SCR firei* denotes the largest industrial fire risk concentration;

(b) *SCR firec* denotes the largest commercial fire risk concentration; and

(c) *SCR firer* denotes the largest residential fire risk concentration.

(2) A *firm* must calculate its largest industrial fire risk concentration in accordance with the following formula:

$$\mathrm{SCR}_{firei} = \max\left(E_{1,i}; E_{2,i}; E_{3,i}; E_{4,i}; E_{5,i}\right)$$

where $E_{k,I}$ denotes the total exposure within the perimeter of the *k-th* largest industrial fire risk exposure.

(3) A *firm* must calculate its largest commercial fire risk concentration in accordance with the following formula:

$$\mathrm{SCR}_{firec} = \max\left(E_{1,c}; E_{2,c}; E_{3,c}; E_{4,c}; E_{5,c}\right)$$

where $E_{k,c}$ denotes the total exposure within the perimeter of the *k-th* largest commercial fire risk exposure.

(4) A *firm* must calculate its largest residential fire risk concentration in accordance with the following formula:

$$\mathrm{SCR}_{firer} = \max\left(E_{1,r}; E_{2,r}; E_{3,r}; E_{4,r}; E_{5,r}; \theta\right)$$

where:

(a) $E_{k,r}$ denotes the total exposure within the perimeter of the *k-th* largest residential fire risk exposure; and

(b) θ denotes the market share based residential fire risk exposure.

(5) For the purposes of (2), (3) and (4), the total exposure within the perimeter of the *k-th* largest industrial, commercial or residential fire risk exposure of a *firm* is the sum insured by the *firm* with respect to a set of buildings that meets all of the following requirements:

(a) in relation to each building, the *firm* has obligations in *lines of business* 7 and 19 which cover damage due to fire or explosion, including as a result of terrorist attacks; and

(b) each building is partly or fully located within a radius of 200 metres around the industrial, commercial or residential building with the *k-th* highest sum insured after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*.

For the purposes of determining the sum insured with respect to a building, a *firm* must take into account all *reinsurance contracts* and *special purpose vehicles* that would pay out in case of insurance claims related to that building, other than *reinsurance contracts* and *special purpose vehicles* that are subject to conditions not related to that building, which must not be taken into account.

(6) A *firm* must calculate the market share based residential fire risk exposure in accordance with the following formula:

$$\theta = SI_{av} \cdot 500 \cdot max(0.05; max_c\,(MarketShare_c))$$

where:

(a) SI_{av} is the average sum insured by the *firm* with respect to residential property;

(b) *c* denotes all countries where the *firm* has obligations in *lines of business* 7 and 19 covering residential property; and

(c) $MarketShare_c$ is the market share of the *firm* in country *c* related to obligations in those *lines of business* covering residential property.

7.8 Subject to 7.2, a *firm* may calculate the capital requirement for life *mortality risk* in accordance with the following formula:

$$SCR_{mortality} = 0.15 \cdot q \cdot \sum_{k=1}^{n} CAR_k \cdot \frac{(1-q)^{k-1}}{(1+i_k)^{k-0.5}}$$

where, with respect to insurance and *reinsurance policies* with a positive capital at risk:

(a) CAR_k denotes the total capital at risk in year *k*, meaning the sum over all *contracts of insurance* of the higher of zero and the difference, in relation to each *contract of insurance* between the following amounts:

(i) the sum of:

A. the amount that the *firm* would pay in year *k* in the event of the death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

B. the expected present value of amounts not covered in A. that the *firm* would pay after year *k* in the event of the immediate death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

(ii) the *best estimate* of the corresponding insurance and *reinsurance* obligations in year *k* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(b) *q* denotes the expected average mortality rate over all the insured *persons* and over all future years weighted by the sum insured;

(c) *n* denotes the modified duration in years of payments payable on death included in the *best estimate*; and

(d) i_k denotes the annualised spot rate for maturity *k* of the *relevant risk-free interest rate term structure*.

7.9 Subject to 7.2, a *firm* may calculate the capital requirement for life *longevity risk* in accordance with the following formula:

$$SCR_{longevity} = 0.2 \cdot q \cdot n \cdot 1.1^{(n-1)/2} \cdot BE_{long}$$

where, with respect to the *policies* referred to in 3B2.2:

(a) *q* denotes the expected average mortality rate of the insured *persons* during the following 12 *months* weighted by the sum insured;

(b) *n* denotes the modified duration in years of the payments to *beneficiaries* included in the *best estimate*; and

(c) BE_{long} denotes the *best estimate* of the insurance and *reinsurance* obligations subject to *longevity risk*.

7.10 Subject to 7.2, a *firm* may calculate the capital requirement for life *disability-morbidity risk* in accordance with the following formula:

$$SCR_{disability-morbidity} = 0.35 \cdot CAR_1 \cdot d_1 + 0.25 \cdot 1.1^{(n-3)/2} \cdot (n-1) \cdot CAR_2 \cdot d_2 + 0.2 \cdot 1.1^{(n-1)/2} \cdot t \cdot n \cdot BE_{dis}$$

where, with respect to insurance and *reinsurance policies* with a positive capital at risk:

(a) CAR_1 denotes the total capital at risk, meaning the sum over all *contracts of insurance* of the higher of zero and the difference between the following amounts:

(i) the sum of:

A. the amount that the *firm* would currently pay in the event of the death or disability of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

B. the expected present value of amounts not covered in A. that the *firm* would pay in the future in the event of the immediate death or disability of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

(ii) the *best estimate* of the corresponding insurance and *reinsurance* obligations after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(b) CAR_2 denotes the total capital at risk as defined in (a) after 12 *months*;

(c) d_1 denotes the expected average disability-morbidity rate during the following 12 *months* weighted by the sum insured;

(d) d_2 denotes the expected average disability-morbidity rate in the 12 *months* after the following 12 *months* weighted by the sum insured;

(e) *n* denotes the modified duration of the payments on disability-morbidity included in the *best estimate*;

(f) *t* denotes the expected termination rates during the following 12 *months*; and

(g) BE_{dis} denotes the *best estimate* of insurance and *reinsurance* obligations subject to *disability-morbidity risk*.

7.11 Subject to 7.2, a *firm* may calculate the capital requirement for life *expense risk* in accordance with the following formula:

$$\mathrm{SCR}_{\mathrm{expenses}} = 0.1 \cdot \mathrm{EI} \cdot \mathrm{n} + \mathrm{EI} \cdot \left(\left(\frac{1}{\mathrm{i} + 0.01} \right) \cdot \left((1 + \mathrm{i} + 0.01)^n - 1 \right) - \frac{1}{\mathrm{i}} \left((1 + \mathrm{i})^n - 1 \right) \right)$$

where:

(a) *EI* denotes the amount of expenses incurred in servicing *long-term insurance or reinsurance obligations* other than *health insurance obligations* and *health reinsurance obligations* during the last year;

(b) *n* denotes the modified duration in years of the cash-flows included in the *best estimate* of those obligations; and

(c) *i* denotes the weighted average inflation rate included in the calculation of the *best estimate* of those obligations, where the weights are based on the present value of expenses included in the calculation of the *best estimate* for servicing existing *long-term*

insurance and reinsurance obligations.

7.12 (1) Subject to 7.2, a *firm* may calculate the capital requirement for the risk of a permanent increase in lapse rates in accordance with the following formula:

$$Lapse_{up} = 0.5 \cdot l_{up} \cdot n_{up} \cdot S_{up}$$

where:

(a) l_{up} denotes the higher of the average lapse rate of the *policies* with positive *surrender* strains and 67%;

(b) n_{up} denotes the average period in years over which the *policies* with positive *surrender* strains run off; and

(c) S_{up} denotes the sum of positive *surrender* strains referred to in (3).

(2) Subject to 7.2, a *firm* may calculate the capital requirement for the risk of a permanent decrease in lapse rates in accordance with the following formula:

$$Lapse_{down} = 0.5 \cdot l_{down} \cdot n_{down} \cdot S_{down}$$

where:

(a) l_{down} denotes the higher of the average lapse rate of the *policies* with negative *surrender* strains and 40%;

(b) n_{down} denotes the average period in years over which the *policies* with negative *surrender* strains run off; and

(c) S_{down} denotes the sum of negative *surrender* strains referred to in (3).

(3) The *surrender* strain of an insurance *policy* is the difference between the following:

(a) the amount currently payable by the *firm* on *discontinuance* by the *policyholder*, net of any amounts recoverable from *policyholders* or intermediaries; and

(b) the amount of *technical provisions* without the *risk margin*.

7.13 Subject to 7.2, a *firm* may calculate each of the following capital requirements on the basis of groups of *policies*, provided that the grouping complies with the requirements set out in Technical Provisions – Further Requirements 20.1(2):

(1) the capital requirement for the risk of a permanent increase in lapse rates referred to in 3B6.2;

(2) the capital requirement for the risk of a permanent decrease in lapse rates referred to in 3B6.3; and

(3) the capital requirement for mass *lapse risk* referred to in 3B6.6.

7.14 Subject to 7.2, a *firm* may calculate the capital requirement for *life-catastrophe risk* in accordance with the following formula:

$$SCR_{life-catastrophe} = \sum_i 0.0015 \cdot CAR_i$$

where:

(a) the sum includes all *policies* with a positive capital at risk; and

(b) CAR_i denotes the capital at risk of the *policy i*, meaning the higher of zero and the difference between the following amounts:

(i) the sum of:

A. the amount that the *firm* would currently pay in the event of the death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

B. the expected present value of amounts not covered in A. that the *firm* would pay in the future in the event of the immediate death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

(ii) the *best estimate* of the corresponding insurance and *reinsurance* obligations after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*.

7.15 For the purposes of 3C7.1(1), subject to 7.2, a *firm* may determine the insurance *policies* for which *discontinuance* would result in an increase in *technical provisions* without the *risk margin* on the basis of groups of *policies*, provided that the grouping complies with the requirements set out in Technical Provisions – Further Requirements 20.1(2).

7.16 Subject to 7.2, a *firm* may calculate the capital requirement for health *mortality risk* in accordance with the following formula:

$$SCR_{health-mortality} = 0.15 \cdot q \cdot \sum_{k=1}^{n} CAR_k \cdot \frac{(1-q)^{k-1}}{(1+i_k)^{k-0.5}}$$

where, with respect to insurance and *reinsurance policies* with a positive capital at risk:

(a) CAR_k denotes the total capital at risk in year *k*, meaning the sum over all *contracts of insurance* of the higher of zero and the difference, in relation to each *contract of insurance*, between the following amounts:

(i) the sum of:

A. the amount that the *firm* would pay in year *k* in the event of the death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

B. the expected present value of amounts not covered in A. that the *firm* would pay after year *k* in the event of the immediate death of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

(ii) the *best estimate* of the corresponding insurance and *reinsurance* obligations in year *k* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(b) *q* denotes the expected average mortality rate over all insured *persons* and over all future years weighted by the sum insured;

(c) *n* denotes the modified duration in years of payments payable on death included in the *best estimate*; and

(d) i_k denotes the annualised spot rate for maturity *k* of the *relevant risk-free interest rate term structure*.

7.17 Subject to 7.2, a *firm* may calculate the capital requirement for health *longevity risk* in accordance with the following formula:

$$SCR_{health-longevity} = 0.2 \cdot q \cdot n \cdot 1.1^{(n-1)/2} \cdot BE_{long}$$

where, with respect to the *policies* referred to in 3C10.2:

(a) *q* denotes the expected average mortality rate of the insured *persons* during the following

12 *months* weighted by the sum insured;

(b) *n* denotes the modified duration in years of the payments to *beneficiaries* included in the *best estimate*; and

(c) BE_{long} denotes the *best estimate* of the obligations subject to health *longevity risk* .

7.18 Subject to 7.2, a *firm* may calculate the capital requirement for medical expense *disability-morbidity risk* in accordance with the following formula:

$$SCR_{medical\ expense} = 0.05 \cdot MP \cdot n + MP \cdot \left(\left(\frac{1}{i + 0.01}\right)((1 + i + 0.01)^n - 1) - \frac{1}{i}((1 + i)^n - 1)\right)$$

where:

(a) *MP* denotes the amount of medical payments on *medical expense insurance obligations* or *medical expense reinsurance obligations* during the last year;

(b) *n* denotes the modified duration in years of the cash-flows included in the *best estimate* of those obligations; and

(c) *i* denotes the average rate of inflation on medical payments included in the calculation of the *best estimate* of those obligations, where the weights are based on the present value of medical payments included in the calculation of the *best estimate* of those obligations.

7.19 Subject to 7.2, a *firm* may calculate the capital requirement for income protection *disability-morbidity risk* in accordance with the following formula:

$$SCR_{income-protection-disability-morbidity} = 0.35 \cdot CAR_1 \cdot d_1 + 0.25 \cdot 1.1^{(n-3)/2} \cdot (n-1) \cdot CAR_2 \cdot d_2 + 0.2 \cdot 1.1^{(n-1)/2} \cdot t \cdot n \cdot BE_{dis}$$

where, with respect to insurance and *reinsurance policies* with a positive capital at risk:

(a) CAR_1 denotes the total capital at risk, meaning the sum over all *contracts of insurance* of the higher of zero and the difference between the following amounts:

(i) the sum of:

A. the amount that the *firm* would currently pay in the event of the death or disability of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*; and

B. the expected present value of amounts not covered in A. that the *firm* would pay in the future in the event of the immediate death or disability of the *persons* insured under the *contract of insurance* after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(ii) the *best estimate* of the corresponding insurance and *reinsurance* obligations after deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(b) CAR_2 denotes the total capital at risk as defined in (a) after 12 *months*;

(c) d_1 denotes the expected average disability-morbidity rate during the following 12 *months* weighted by the sum insured;

(d) d_2 denotes the expected average disability-morbidity rate in the 12 *months* after the following 12 *months* weighted by the sum insured;

(e) *n* denotes the modified duration of the payments on disability-morbidity included in the *best estimate*;

(f) *t* denotes the expected termination rates during the following 12 *months*; and

(g) BE_{dis} denotes the *best estimate* of obligations subject to *disability-morbidity risk*.

7.20 Subject to 7.2, a *firm* may calculate the capital requirement for health *expense risk* in accordance with the following formula:

$$SCR_{health-expense} = 0.1 \cdot EI \cdot n + EI \cdot \left(\left(\frac{1}{i + 0.01}\right) \cdot ((1 + i + 0.01)^n - 1) - \frac{1}{i}((1 + i)^n - 1)\right)$$

where:

(a) EI denotes the amount of expenses incurred in servicing *health insurance obligations* and *health reinsurance obligations* during the last year;

(b) n denotes the modified duration in years of the cash-flows included in the *best estimate* of those obligations; and

(c) i denotes the weighted average inflation rate included in the calculation of the *best estimate* of those obligations, weighted by the present value of expenses included in the calculation of the *best estimate* for servicing existing *health insurance obligations* and *health reinsurance obligations*.

7.21 (1) Subject to 7.2, a *firm* may calculate the capital requirement for the risk of a permanent increase in lapse rates referred to in 3C16.1(1) in accordance with the following formula:

$$Lapse_{up} = 0.5 \cdot l_{up} \cdot n_{up} \cdot S_{up}$$

where:

(a) l_{up} denotes the higher of the average lapse rate of the *policies* with positive *surrender* strains and 83%;

(b) n_{up} denotes the average period in years over which the *policies* with positive *surrender* strains run off; and

(c) S_{up} denotes the sum of positive *surrender* strains referred to in (3).

(2) Subject to 7.2, a *firm* may calculate the capital requirement for the risk of a permanent decrease in lapse rates referred to in 3C16.1(2) in accordance with the following formula:

$$Lapse_{down} = 0.5 \cdot l_{down} \cdot n_{down} \cdot S_{down}$$

where:

(a) l_{down} denotes the average lapse rate of the *policies* with negative *surrender* strains;

(b) n_{down} denotes the average period in years over which the *policies* with negative *surrender* strains run off; and

(c) S_{down} denotes the sum of negative *surrender* strains referred to in (3).

(3) The *surrender* strain of an insurance *policy* is the difference between the following:

(a) the amount currently payable by the *firm* on *discontinuance* by the *policyholder*, net of any amounts recoverable from *policyholders* or intermediaries; and

(b) the amount of *technical provisions* without the *risk margin*.

7.22 Subject to 7.2, a *firm* may calculate each of the following capital requirements on the basis of groups of *policies*, provided that the grouping complies with the requirements set out in Technical Provisions – Further Requirements 20.1(2):

(1) the capital requirement for the risk of a permanent increase in *SLT health* lapse rates referred to in 3C16.2;

(2) the capital requirement for the risk of a permanent decrease in *SLT health* lapse rates

referred to in 3C16.3; and

(3) the capital requirement for *SLT health* mass *lapse risk* referred to in 3C16.6.

7.23 (1) Subject to 7.2 and 7.3, a *firm* that is a *captive insurer* or *captive reinsurer* may calculate the capital requirement for *interest-rate risk* referred to in 3D4 as follows:

(a) the sum, for each currency, of the capital requirements for the risk of an increase in the term structure of interest rates as set out in (2); and

(b) the sum, for each currency, of the capital requirements for the risk of a decrease in the term structure of interest rates as set out in (3).

(2) For the purposes of (1)(a), a *firm* must calculate the capital requirement for the risk of an increase in the term structure of interest rates for a given currency in accordance with the following formula:

$$IR_{up} = \sum_{i} MVAL_i \cdot dur_i \cdot rate_i \cdot stress_{(i,up)} - \sum_{lob} BE_{lob} \cdot dur_{lob} \cdot rate_{lob} \cdot stress_{(lob,up)}$$

where:

(a) the first sum covers all maturity intervals *i* set out in (4);

(b) $MVAL_i$ denotes the value in accordance with Valuation 2.1 to 2.2 of assets less liabilities other than *technical provisions* for maturity interval *i*;

(c) dur_i denotes the simplified duration of maturity interval *i*;

(d) $rate_i$ denotes the relevant risk-free rate for the simplified duration of maturity interval *i*;

(e) $stress_{(i,up)}$ denotes the relative upward stress of the interest rate for simplified duration of maturity interval *i*;

(f) the second sum covers all *lines of business*;

(g) BE_{lob} denotes the *best estimate* for *line of business lob*;

(h) dur_{lob} denotes the modified duration of the *best estimate* in *line of business lob*;

(i) $rate_{lob}$ denotes the relevant risk-free rate for modified duration in *line of business lob*; and

(j) $stress_{(lob,up)}$ denotes the relative upward stress of the interest rate for the modified duration dur_{lob}.

(3) For the purposes of (1)(b), a *firm* must calculate the capital requirement for the risk of a decrease in the term structure of interest rates for a given currency in accordance with the following formula:

$$IR_{down} = \sum_{i} MVAL_i \cdot dur_i \cdot rate_i \cdot stress_{(i,down)} - \sum_{lob} BE_{lob} \cdot dur_{lob} \cdot rate_{lob} \cdot stress_{(lob,down)}$$

where:

(a) the first sum covers all maturity intervals *i* set out in (4);

(b) $MVAL_i$ denotes the value in accordance with Valuation 2.1 to 2.2 of assets less liabilities other than *technical provisions* for maturity interval *i*;

(c) dur_i denotes the simplified duration of maturity interval *i*;

(d) $rate_i$ denotes the relevant risk-free rate for the simplified duration of maturity interval *i*;

(e) $stress_{(i,down)}$ denotes the relative downward stress of the interest rate for simplified duration of maturity interval *i*;

(f) the second sum covers all *lines of business*;

(g) BE_{lob} denotes the *best estimate* for *line of business lob*;

(h) dur_{lob} denotes the modified duration of the *best estimate* in *line of business lob*;

(i) $rate_{lob}$ denotes the relevant risk-free rate for modified duration in *line of business lob*; and

(j) $stress_{(lob,\ down)}$ denotes the relative downward stress of the interest rate for modified duration dur_{lob}.

(4) The maturity intervals *i* and the simplified duration dur_i referred to in (2)(a), 2(c), (3)(a) and 3(c) must be as follows:

(a) up to the maturity of one year, the simplified duration must be 0.5 years;

(b) between maturities of one and three years, the simplified duration must be two years;

(c) between maturities of three and five years, the simplified duration must be four years;

(d) between maturities of five and 10 years, the simplified duration must be seven years; and

(e) from the maturity of 10 years onwards, the simplified duration must be 12 years.

7.24 (1) Subject to 7.2, a *firm* may calculate the capital requirement for *spread risk* referred to in 3D17 in accordance with the following formula:

$$SCR_{bonds} = MV^{bonds} \cdot \left(\sum_i \%MV_i^{bonds} \cdot stress_i + \%MV_{norating}^{bonds} \cdot min\left[dur_{norating} \cdot 0.03; 1\right] \right) + \Delta Liab_{ul}$$

where:

(a) SCR_{bonds} denotes the capital requirement for *spread risk* on bonds and loans;

(b) MV^{bonds} denotes the value in accordance with Valuation 2.1 to 2.2 of the assets subject to capital requirements for *spread risk* on bonds and loans;

(c) $\%MV_i^{\ bonds}$ denotes 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 *external credit assessment institution* is available for those assets;

(d) $\%MV^{bonds}_{\ norating}$ denotes the proportion of the portfolio of the assets subject to a capital requirement for *spread risk* on bonds and loans for which no credit assessment by a nominated *external credit assessment institution* is available;

(e) dur_i and $dur_{norating}$ denote 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 *external credit assessment institution* is available;

(f) $stress_i$ denotes 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 (2); and

(g) $\Delta Liab_{ul}$ denotes the increase in the *technical provisions* without *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:

$$MV^{bonds} \cdot \left(\sum_i \%MV_i^{bonds} \cdot stress_i + \%MV_{norating}^{bonds} \cdot min\left[dur_{norating} \cdot 0.03; 1\right] \right)$$

(2) *stress*$_i$ referred to in (1)(f), for each *credit quality step i*, must be equal to: *dur*$_i$ · *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 *i*	**0**	**1**	**2**	**3**	**4**	**5**	**6**
b$_i$	0.9 %	1.1 %	1.4 %	2.5 %	4.5 %	7.5 %	7.5 %

(3) *dur*$_{norating}$ referred to in (1)(e) and *dur*$_i$ referred to in (2) must not be lower than one year.

7.25 Subject to 7.2 and 7.3, a *firm* that is a *captive insurer* or *captive reinsurer* may base the calculation of the capital requirement for *spread risk* referred to in 3D17 on the assumption that all assets are assigned to *credit quality step* 3.

7.26 Subject to 7.2, a *firm* may assign a bond other than those to be included in the calculations under paragraphs 3D24.2 to 3D24.21 a risk factor *stress*$_i$ equivalent to that for *credit quality step* 3 for the purposes of 3D17.3 and assign the bond to *credit quality step* 3 for the purpose of calculating the weighted average *credit quality step* in accordance with 3D26.4, provided that all of the following requirements are met:

(1) credit assessments from a nominated *external credit assessment institution* are available for at least 80% of the total value of the bonds other than those to be included in the calculations under 3D24.2 to 3D24.21;

(2) a credit assessment by a nominated *external credit assessment institution* is not available for the bond in question;

(3) the bond in question provides a fixed redemption payment on or before the date of maturity, in addition to regular fixed or floating rate interest payments;

(4) the bond in question is not a structured note or collateralised security as referred to in the CIC table set out in the Section IR.06.02 instructions referred to in Reporting 10; and

(5) the bond in question does not cover liabilities that provide *long-term insurance obligations* with profit participation, nor does it cover unit-linked liabilities or *index-linked liabilities*, nor liabilities where a *matching adjustment* is applied.

7.27 Subject to 7.2 and 7.3, a *firm* that is a *captive insurer* or *captive reinsurer* may use all of the following assumptions for the calculation of the capital requirement for concentration risk:

(1) Intra-*group* asset *pooling arrangements* of the *firm* may be exempted from the calculation base referred to in 3D28.2 to the extent that there exist legally enforceable contractual terms which ensure that the liabilities of the *firm* will be offset by the intra-*group* exposures it holds against other entities of the *group*.

(2) The relative excess exposure threshold referred to in 3D28.1(c) must be equal to 15% for the following single name exposures:

(a) exposures to *credit institutions* that do not belong to the same *group* and that have been assigned to the *credit quality step* 2; and

(b) exposures to entities of the *group* that manage the cash of the *firm* that have been assigned to the *credit quality step* 2.

7.28 (1) Subject to 7.2 and where the best estimate of amounts recoverable from a *reinsurance* arrangement or *securitisation* and the corresponding debtors is not negative, a *firm* may calculate the risk-mitigating effect on *underwriting risk* of that *reinsurance* arrangement or *securitisation* referred to in 3E9 in accordance with the following formula:

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

where:

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

(b) $Recoverables_i$ denotes the best estimate of amounts recoverable from the *reinsurance* arrangement or *securitisation* and the corresponding debtors for *counterparty i* and $Recoverables_{all}$ denotes the best estimate of amounts recoverable from the *reinsurance* arrangements and *securitisations* and the corresponding debtors for all *counterparties*.

(2) A *firm* may calculate the risk-mitigating effect on *underwriting risk* of the *reinsurance* arrangements and *securitisations* for all *counterparties* referred to in (1) as the difference between the following capital requirements:

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

(b) the capital requirement for *underwriting risk* of the *firm*.

7.29 Subject to 7.2 and where the best estimate of amounts recoverable from a proportional *reinsurance* arrangement and the corresponding debtors for a *counterparty i* is not negative, a *firm* may calculate the risk-mitigating effect on *underwriting risk j* of the proportional *reinsurance* arrangement for *counterparty i* referred to 3E9 in accordance with the following formula:

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

where:

(1) *BE* denotes the *best estimate* of obligations gross of the amounts recoverable;

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

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

(4) SCR_j denotes the capital requirement for *underwriting risk j* of the *firm*.

7.30 Subject to 7.2, a *firm* may use the following simplified calculations for the purposes of 3E6, 3E7 and 3E8:

(1) The *best estimate* referred to in 3E7.1(d) may be calculated in accordance with the following formula:

$$BE_C = \frac{P_C}{P_U} \cdot BE_U$$

where:

(a) BE_U denotes the *best estimate* of the liability ceded to the *pooling arrangement* by the *firm*, net of any amounts reinsured with *counterparties* external to the *pooling*

arrangement;

(b) P_C denotes the *counterparty* member's share of the risk according to the terms of the *pooling arrangement*; and

(c) P_U denotes the *firm's* share of the risk according to the terms of the *pooling arrangement*.

(2) The *best estimate* referred to in 3E8.1(c) may be calculated in accordance with the following formula:

$$BE_{CE} = \frac{1}{P_U} \cdot BE_{CEP}$$

where:

(a) BE_{CEP} denotes the *best estimate* of the liability ceded to the external *counterparty* by the *pooling arrangement*, in relation to risk ceded to the *pooling arrangement* by the *firm*; and

(b) P_U denotes the *firm's* share of the risk according to the terms of the *pooling arrangement*.

(3) A *firm* may calculate the risk-mitigating effect referred to in 3E8.1(d) in accordance with the following formula:

$$\Delta RM_{CE} = \frac{BE_{CE}}{\sum_{CE} BE_{CE}} \cdot \Delta RM_{CEP}$$

where:

(a) BE_{CE} denotes the *best estimate* of the liability ceded to the external *counterparty* by the *pooling arrangement* as a whole; and

(b) ΔRM_{CEP} denotes the contribution of all external *counterparties* to the risk-mitigating effect of the *pooling arrangement* on the *underwriting risk* of the *firm*.

(4) The *counterparty* pool members and the *counterparties* external to the *pooling arrangement* may be grouped according to the credit assessment by a nominated *external credit assessment institution*, provided there are separate groupings for *pool exposure of type A*, *pool exposure of type B* and *pool exposure of type C*.

7.31 Subject to 7.2, a *firm* may calculate the loss-given-default set out in 3E4, including the risk-mitigating effect on *underwriting risk* and *market risk* and the risk-adjusted value of collateral provided by way of a *collateral arrangement*, for a group of single name exposures provided that the group of single name exposures are assigned the highest probability of default assigned to single name exposures included in the group in accordance with 3E12.

7.32 Subject to 7.2, a *firm* may calculate the risk-mitigating effect on *underwriting risk* and *market risk* of a *reinsurance* arrangement, *securitisation* or *derivative* referred to in 3E9 as the difference between the following capital requirements:

(1) the sum of the hypothetical capital requirement for the sub-modules of the *underwriting risk* and *market risk* modules of the *firm*, calculated in accordance with this Part but as if the *reinsurance* arrangement, *securitisation* or *derivative* did not exist; and

(2) the sum of the capital requirements for the sub-modules of the *underwriting risk* and *market risk* modules of the *firm*.

7.33 For the purposes of 3E9, subject to 7.2 and where the *reinsurance* arrangement, *securitisation* or *derivative* covers obligations from only one of the segments (segment *s*) set out in 3A3 or, as applicable, 3C4, a *firm* may calculate the risk-mitigating effect of that *reinsurance* arrangement,

securitisation or *derivative* on its *underwriting risk* in accordance with the following formula:

$$\sqrt{\left(SCR_{CAT}^{hyp} - SCR_{CAT}^{without}\right)^2 + \left(3 \cdot \sigma_s \cdot \left(P_s^{hyp} - P_s^{without} + Recoverables\right)\right)^2 + 1.5 \cdot \sigma_s \cdot \left(P_s^{hyp} - P_s^{without} + Recoverables\right) \cdot \left(SCR_{CAT}^{hyp} - SCR_{CAT}^{without}\right)}$$

where:

(1) SCR_{CAT}^{hyp} denotes the hypothetical capital requirement for the *non-life catastrophe risk* sub-module referred to in 3A7.2 or, as applicable, the hypothetical capital requirement for the *health catastrophe risk* sub-module referred to in 3C17, that would apply if the *reinsurance* arrangement, *securitisation* or *derivative* did not exist;

(2) $SCR_{CAT}^{without}$ denotes the capital requirement for the *non-life catastrophe risk* sub-module referred to in 3A7.2 or, as applicable, the capital requirement for the *health catastrophe risk* sub-module referred to in 3C17;

(3) σ_s denotes the standard deviation for non-life *premium* risk of segment *s* determined in accordance with 3A4.3 and 3A4.4 or, as applicable, the standard deviation for the *NSLT health premium* risk of segment *s* determined in accordance with 3C5.3;

(4) P_s^{hyp} denotes the hypothetical volume measure for *premium* risk of segment *s* determined in accordance with 3A2.3 or 3A2.4 or, as applicable, 3C3.3 or 3C3.4 that would apply if the *reinsurance* arrangement, *securitisation* or *derivative* did not exist;

(5) $P_s^{without}$ denotes the volume measure for *premium* risk of segment *s* determined in accordance with 3A2.3 or 3A2.4 or, as applicable, 3C3.3 or 3C3.4; and

(6) *Recoverables* denotes the best estimate of amounts recoverable from the *reinsurance* arrangement, *securitisation* or *derivative* and the corresponding debtors.

7.34 (1) Subject to 7.2, and where the *counterparty* requirement and the third party requirement referred to in 3E10.1 are both met, a *firm* may, for the purposes of 3E10, calculate the risk-adjusted value of a collateral provided by way of a *collateral arrangement* under which collateral is provided by way of security, as 85% of the value of the assets held as collateral, valued in accordance with Valuation 2.1 to 2.2.

(2) Subject to 7.2 and 3G8, and where the *counterparty* requirement referred to in 3E10.1 is met and the third party requirement referred to in 3E10.1 is not met, a *firm* may, for the purposes of 3E10, calculate the risk-adjusted value of a collateral provided by way of a *collateral arrangement* under which collateral is provided by way of security, as 75% of the value of the assets held as collateral, valued in accordance with Valuation 2.1 to 2.2.

7.35 Subject to 7.2, a *firm* may calculate the loss-given-default on a *reinsurance* arrangement or insurance *securitisation* referred to in 3E4.3 in accordance with the following formula:

$$LGD = max[90\% \cdot (Recoverables + 50\% \cdot RM_{re}) - F \cdot Collateral; 0]$$

where:

(1) *Recoverables* denotes the best estimate of amounts recoverable from the *reinsurance* arrangement or insurance *securitisation* and the corresponding debtors;

(2) RM_{re} denotes the risk-mitigating effect on *underwriting risk* of the *reinsurance* arrangement or *securitisation*;

(3) *Collateral* denotes the risk-adjusted value of collateral provided by way of a *collateral arrangement* in relation to the *reinsurance* arrangement or *securitisation*; and

(4) *F* denotes a factor to take into account the economic effect of the *collateral arrangement* in relation to the *reinsurance* arrangement or *securitisation* in case of any credit event related to the *counterparty*, determined in accordance with 3E10.7.

7.36 Subject to 7.2 and where the standard deviation of the loss distribution of type 1 exposures, as determined in accordance with 3E13.4 is lower than or equal to 20% of the total loss-given default on all type 1 exposures referred to in 3.13 to 3.19, a *firm* may calculate the capital requirement for *counterparty* default risk referred to in 3E13.1 in accordance with the following formula:

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

where σ denotes the standard deviation of the loss distribution of type 1 exposures as determined in accordance with 3E13.4.

…

9 RING-FENCED FUNDS AND MATCHING ADJUSTMENT PORTFOLIOS

9.1 A *firm* must calculate the adjustment in respect of any *ring-fenced fund* or *matching adjustment portfolio* referred to in 2.2 as follows:

(1) the *firm* must calculate a notional *SCR* for each *ring-fenced fund* and each *matching adjustment portfolio*, as well as for the remaining part of the *firm*, in the same manner as if each of those *ring-fenced funds*, each of those *matching adjustment portfolios* and the remaining part of the *firm* were separate *firms*;

(2) the *firm* must calculate its *SCR* as the sum of the notional *SCRs* for each of its *ring-fenced funds*, each of its *matching adjustment portfolios* and for the remaining part of the *firm*;

(3) subject to (4), where the calculation of the capital requirement for a risk module or sub-module of the *basic SCR* is based on the impact of a scenario on the *firm's basic own funds*, the *firm* must calculate the impact of the scenario on its *basic own funds* at the level of each *ring-fenced fund*, each *matching adjustment portfolio* and the remaining part of the *firm*;

(4) the *basic own funds* at the level of each *ring-fenced fund* or each *matching adjustment portfolio* must, for the purposes of (3), only include *restricted own funds*;

(5) where profit participation arrangements exist in respect of any insurance and *reinsurance obligations* within a *ring-fenced fund*, the *firm* must apply the following approach:

(a) where the calculation referred to in (3) would result in an increase in the *basic own funds* at the level of the *ring-fenced fund*, the estimated increase in those *basic own funds* must, in order to reflect the existence of those profit participation arrangements in the *ring-fenced fund*, be adjusted by an amount equal to the increase in *technical provisions* resulting from the increase in *future discretionary benefits* that the *firm* would expect to pay to *policyholders* in that scenario;

(b) where the calculation referred to in (3) would result in a decrease in the *basic own funds* at the level of the *ring-fenced fund*, the estimated decrease in those *basic own funds* for the calculation of the net *basic SCR* as referred to in 6.3(2), must, subject to (c), be adjusted by an amount equal to the reduction in *future discretionary benefits* that the *firm* would expect to pay to *policyholders* in that scenario;

(c) the amount of the adjustment referred to in (b) must not exceed the amount of *future discretionary benefits* that are included in the *firm's technical provisions* in respect of that *ring-fenced fund*.

(6) notwithstanding (1), the *firm* must calculate the notional *SCR* for each *ring-fenced fund* and each *matching adjustment portfolio* using the scenario-based calculations under which the *basic own funds* of the *firm* as a whole are most negatively affected.

(7) for the purposes of determining the scenario under which *basic own funds* are most negatively affected for the *firm* as a whole, the *firm* must:

(a) calculate the sum of the results of the impacts of the scenarios on the *basic own funds* at the level of each *ring-fenced fund* and each *matching adjustment portfolio*, in accordance with (3) and (5); and

(b) add sums at the level of each *ring-fenced fund* and each *matching adjustment portfolio* to one another and to the results of the impact of the scenarios on the *basic own funds* in the remaining part of the *firm*.

(8) the *firm* must determine the notional *SCR* for each *ring-fenced fund* and each *matching adjustment portfolio* by aggregating the capital requirements for each sub-module and risk module of the *basic SCR*.

(9) notwithstanding 3.4, the *firm* must not allow for *diversification effects* between any, or a combination of, the following:

(a) its *ring-fenced funds*;

(b) its *matching adjustment portfolios*; or

(c) the remaining part of the *firm*.

Annex P

Solvency Capital Requirement – Undertaking Specific Parameters Part

In this Annex, the text is all new and is not underlined.

Part

SOLVENCY CAPITAL REQUIREMENT – UNDERTAKING SPECIFIC PARAMETERS

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1 APPLICATION AND DEFINITIONS

1.1 Unless otherwise stated, this Part applies to:

(1) a *UK Solvency II firm*; and

(2) in accordance with Insurance General Application 3, the *Society*.

1.2 In this Part, the following definitions shall apply:

accident year

means, with respect to a payment for an insurance or *reinsurance* claim, the year in which the insured event that gave rise to that claim took place.

adjustment factor for non-proportional reinsurance (non-life)

means the adjustment factor for non-proportional *reinsurance* referred to in Solvency Capital Requirement – Standard Formula 3A4.3 and 3A4.4.

adjustment factor for non-proportional reinsurance (NSLT health)

means the adjustment factor for non-proportional *reinsurance* referred to in Solvency Capital Requirement – Standard Formula 3C5.3.

aggregated losses

for the purposes of 4, means the payments made and the *best estimates* of the provision for insurance and *reinsurance* claims outstanding in *segment s* after the first *development year* of the *accident year* of those claims.

credibility factor

means the applicable credibility factor determined in accordance with 10.

cumulative claims amounts

means the cumulative payment amounts for insurance and *reinsurance* claims in *segment s*.

development year

means, with respect to a payment for an insurance or *reinsurance* claim, the difference between the year of that payment and the *accident year* of that payment.

financial year

means, with respect to a payment for an insurance or *reinsurance* claim, the year in which this payment took place.

increase in the amount of annuity benefits (health)

means the increase in the amount of annuity benefits referred to in Solvency Capital Requirement - Standard Formula 3C15.

increase in the amount of annuity benefits (life)

means the increase in the amount of annuity benefits referred to in Solvency Capital Requirement - Standard Formula 3B5.

non-proportional reinsurance method 1

means the method set out in 8.

non-proportional reinsurance method 2

means the method set out in 9.

premium risk method

means the method set out in 4.

recognisable excess of loss reinsurance contract

(1) means an excess of loss *reinsurance contract* which:

(a) provides for complete compensation up to a specified limit or without limit for losses of the cedant that relate either to single insurance claims, or to all insurance claims under the same *contract of insurance* during a specified time period, and that are larger than a specified retention;

(b) covers all insurance claims that the *firm* may incur in the segment or homogenous risk groups within the segment during the following 12 *months*;

(c) allows for a sufficient number of reinstatements so as to ensure that all claims of multiple events incurred during the following *months* are covered; and

(d) complies with Solvency Capital Requirement - Standard Formula 3G2, 3G3, 3G5 and 3G7;

and

(2) includes:

(a) arrangements with *special purpose vehicles* that provide risk transfer which is equivalent to that referred to in (1) to (4); and

(b) a combination of *reinsurance contracts* (which may be considered as one recognisable excess of loss *reinsurance contract*) where a *firm* has concluded several excess of loss *reinsurance contracts* that:

(i) individually meet the requirement set out in (4); and

(ii) in combination meet the requirements set out in (1) to (3).

recognisable stop loss reinsurance contract

(1) means a stop loss *reinsurance contract* which:

(a) provides for complete compensation up to a specified limit or without limit for aggregated losses of the cedant that relate to all insurance claims in the segment or homogeneous risk groups within the segment during a specified time period and that are larger than a specified retention; and

(b) covers all insurance claims that the *firm* may incur in the segment or homogenous risk groups within the segment during the following 12 *months*;

(c) allows for a sufficient number of reinstatements so as to ensure that all claims of multiple events incurred during the following *months* are covered; and

(d) complies with Solvency Capital Requirement - Standard Formula 3G2, 3G3, 3G5 and 3G7;

and

(2) includes:

(a) arrangements with *special purpose vehicles* that provide risk transfer which is equivalent to that referred to in (1) to (4); and

(b) a combination of *reinsurance contracts* (which may be considered as one recognisable

stop loss *reinsurance contract*) where a *firm* has concluded several stop loss *reinsurance contracts* that:

(i) individually meet the requirement set out in (4); and

(ii) in combination meet the requirements set out in (1) to (3).

reporting year

means, with respect to a payment for an insurance or *reinsurance* claim, the year in which the insured event that gave rise to that claim was notified to the *firm*.

reserve risk method 1

means the method set out in 5.

reserve risk method 2

means the method set out in 6.

revision risk method

means the method set out in 7.

segment s

denotes the segment for which the *undertaking specific parameter* is determined, being a segment set out in Solvency Capital Requirement - Standard Formula 3A3 or a segment set out in Solvency Capital Requirement - Standard Formula 3C4, as specified in the *firm's USP permission*.

standard deviation for non-life gross premium risk

means the standard deviation for non-life gross *premium* risk referred to in Solvency Capital Requirement – Standard Formula 3A4.3.

standard deviation for non-life premium risk

means the standard deviation for non-life *premium* risk referred to in Solvency Capital Requirement – Standard Formula 3A4.2(1).

standard deviation for non-life reserve risk

means the standard deviation for non-life reserve risk referred to in Solvency Capital Requirement – Standard Formula 3A4.2(2).

standard deviation for NSLT health gross premium risk

means the standard deviation for *NSLT health* gross *premium* risk referred to in Solvency Capital Requirement – Standard Formula 3C5.3.

standard deviation for NSLT health premium risk

means the standard deviation for *NSLT health premium* risk referred to in Solvency Capital Requirement – Standard Formula 3C5.2(1).

standard deviation for NSLT health reserve risk

means the standard deviation for *NSLT health reserve risk* referred to in Solvency Capital Requirement – Standard Formula 3C5.2(2).

2 UNDERTAKING SPECIFIC PARAMETERS

2.1 A *firm* must not apply an *undertaking specific parameter* unless it is a *USP firm*.

2.2 A *USP firm* must not revert to using the standard parameter in respect of which it has been granted a *USP Permission*.

2.3 A *USP firm* must only use a *USP method* that corresponds to the standard parameter in respect of which it has been granted a *USP Permission*, as determined in accordance with the following table:

Standard parameter in respect of which the *firm* has been granted a *USP Permission*	**Corresponding applicable *USP method***
in the *non-life premium and reserve risk* sub-module referred to in Solvency Capital Requirement – Standard Formula 3A1, for each segment set out in Solvency Capital Requirement – Standard Formula 3A3	
the *standard deviation for non-life premium risk*	*premium risk method*
the *standard deviation for non-life gross premium risk*	*premium risk method*
the *adjustment factor for non-proportional reinsurance (non-life)*	(1) where there is a *recognisable excess of loss reinsurance contract*, *non-proportional reinsurance method 1*; and (2) where there is a *recognisable stop loss reinsurance contract*, *non-proportional reinsurance method 2*
the *standard deviation for non-life reserve risk*	*reserve risk method 1* or *reserve risk method 2*
in the *life revision risk* sub-module referred to in Solvency Capital Requirement – Standard Formula 3B5	
the *increase in the amount of annuity benefits (life)*	*revision risk method*
in the *NSLT health premium and reserve risk* sub-module referred to in Solvency Capital Requirement – Standard Formula 3C2, for each segment set out in Solvency Capital Requirement – Standard Formula 3C4	
the *standard deviation for NSLT health premium risk*	*premium risk method*
the *standard deviation for NSLT health gross premium risk*	*premium risk method*
the *adjustment factor for non-proportional reinsurance (NSLT health)*	(1) where there is a *recognisable excess of loss reinsurance contract*, *non-proportional reinsurance method 1*; and (2) where there is a *recognisable stop loss reinsurance contract*, *non-proportional reinsurance method 2*
the *standard deviation for NSLT health reserve risk*	*reserve risk method 1* or *reserve risk method 2*
in the *health revision risk* sub-module referred to in Solvency Capital Requirement – Standard Formula	

3C15	
the *increase in the amount of annuity benefits (health)*	*revision risk method*

2.4 Where, in accordance with 2.3, a *USP firm* is permitted to select from alternative *USP methods*:

(1) the *firm* must use the *USP method* that produces the most accurate result for the purposes of fulfilling the calibration requirements in Solvency Capital Requirement – General Provisions 3.3 and 3.4; and

(2) the *firm* must use the *USP method* that produces the most conservative result where it is not able to demonstrate the greater accuracy of the results of one *USP method* over another *USP method*.

2.5

(1) For each segment set out in Solvency Capital Requirement – Standard Formula 3A3, a *firm* must not replace both of the following standard parameters:

(a) the *standard deviation for non-life gross premium risk*; and

(b) the *adjustment factor for non-proportional reinsurance (non-life)*.

(2) For each segment set out in Solvency Capital Requirement – Standard Formula 3C4, a *firm* must not replace both of the following standard parameters:

(a) the *standard deviation for NSLT health gross premium risk*; and

(b) the *adjustment factor for non-proportional reinsurance (health)*.

3 DATA CRITERIA

3.1 A *USP firm* must ensure that data used to calculate an *undertaking specific parameter* is complete, accurate, and appropriate.

3.2 For the purposes of 3.1, a *firm* must not treat data as complete, accurate, and appropriate unless they satisfy all the following criteria:

(1) the data meet the conditions set out in Technical Provisions - Further Requirements 4(1), 4(2) and 4(3), and the *firm* complies in relation to that data with the requirements set out in Technical Provisions - Further Requirements 4(4), where any reference to the calculation of '*technical provisions*' is to be interpreted for these purposes as a reference to the calculation of an '*undertaking specific parameter*';

(2) the data are capable of being incorporated into the *USP method*;

(3) the data do not prevent the *firm* from complying with the requirements of Solvency Capital Requirement – General Provisions 3.3 and 3.4;

(4) the data meet any additional *USP method*-specific data requirements, as set out for each *USP method*; and

(5) the data and its production process are thoroughly documented, including:

(a) the collection of data and analysis of its quality, where the documentation required includes a directory of the data, specifying its source, characteristics, and usage and the specification for the collection, processing and application of the data;

(b) the choice of assumptions used in the production and adjustment of the data, including adjustments with regard to *reinsurance* and catastrophe claims and about the allocation of expenses, where the documentation required includes a directory of all relevant assumptions that

the calculation of *technical provisions* is based upon and a justification for the choice of the assumptions;

(c) the selection and application of actuarial and statistical methods for the production and the adjustment of the data; and

(d) the validation of the data.

3.3 Where external data are used, a *USP firm* must also ensure those data satisfy all of the following additional criteria:

(1) the process for collecting the data is transparent, auditable and known by the *firm* that uses the data to calculate the *undertaking specific parameter*;

(2) where the data stem from different sources, the assumptions made in the collection, processing and application of data ensure that the data are comparable;

(3) the data stem from *firms* for which the business nature and risk profiles are similar to that of the *firm* that uses that data to calculate the *undertaking specific parameter*;

(4) the *firm* that uses that data to calculate the *undertaking specific parameter* is able to verify that there is sufficient statistical evidence that the probability distributions underlying its own data and the external data have a high degree of similarity, in particular with respect to the level of volatility they reflect;

(5) external data only comprise data from *firms* with a similar risk profile;

(6) the risk profile referred to in (5) is similar to the risk profile of the *firm* that uses the data to calculate the *undertaking specific parameter*; and

(7) for the purposes of (5) and (6), when considering whether the risk profiles are similar, a *firm* must consider in particular whether the external data comprise data from *firms* for which the business nature and risk profiles with respect to the external data are similar and for which there is sufficient statistical evidence that the probability distributions underlying the external data exhibit a high degree of homogeneity.

4 PREMIUM RISK METHOD

Input data and USP method-specific data requirements

4.1 A *USP firm* using the *premium risk method* to calculate an *undertaking specific parameter* must ensure that the data for estimating the standard deviation of *segment s* only consist of the following:

(1) *aggregated losses*; and

(2) the *earned premiums* in *segment s*.

4.2 The *aggregated losses* and *earned premiums* referred to in 4.1 must be available separately for each *accident year* of the insurance and *reinsurance* claims in *segment s*.

4.3 A *USP firm* using the *premium risk method* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the *premium* risk that the *firm* is exposed to during the following 12 *months*;

(2) data are available for at least five consecutive *accident years*;

(3) where the *premium risk method* is applied to replace the standard parameters for either the *standard deviation for non-life gross premium risk* or the *standard deviation for NSLT health gross premium*

risk, the *aggregated losses* and *earned premiums* are not adjusted for recoverables from *reinsurance contracts* and *special purpose vehicles* or *premiums* from *reinsurance contracts*;

(4) where the *premium risk method* is applied to replace the standard parameters for either the *standard deviation for non-life premium risk* or the *standard deviation for NSLT health premium risk*:

(a) the *aggregated losses* are adjusted for amounts recoverable from *reinsurance contracts* and *special purpose vehicles* which are consistent with the *reinsurance contracts* and *special purpose vehicles* that are in place to provide cover for the following 12 *months*; and

(b) the *earned premiums* are adjusted for *premiums* from *reinsurance contracts* which are consistent with the *reinsurance contracts* and *special purpose vehicles* that are in place to provide cover for the following 12 *months*;

(5) the *aggregated losses* are adjusted for catastrophe claims to the extent that the risk of those claims is reflected in the *non-life catastrophe risk* sub-module referred to in Solvency Capital Requirement – Standard Formula 3A7 or the *health catastrophe risk* sub-module referred to in Solvency Capital Requirement – Standard Formula 3C17;

(6) the *aggregated losses* include the expenses incurred in servicing the insurance and *reinsurance* obligations; and

(7) the data are consistent with the following assumptions:

(a) expected *aggregated losses* in a particular segment and *accident year* are linearly proportional in *earned premiums* in a particular *accident year*;

(b) the variance of *aggregated losses* in a particular segment and *accident year* is quadratic in *earned premiums* in a particular *accident year*;

(c) *aggregated losses* follow a lognormal distribution; and

(d) maximum likelihood estimation is appropriate.

USP method specification

4.4 For the purposes of 4.5 to 4.8, the following notations apply:

(1) *accident years* are denoted by consecutive numbers starting with 1 for the first *accident year* for which data are available;

(2) *T* denotes the latest *accident year* for which data are available;

(3) for all *accident years*, the *aggregated losses* in *segment s* in a particular *accident year t* are denoted by y_t; and

(4) for all *accident years*, the *earned premiums* in *segment s* in a particular *accident year t* are denoted by x_t.

4.5 A *USP firm* using the *premium risk method* must calculate the standard deviation of *segment s* in accordance with the following formula:

$$\sigma_{(prem,s,USP)} = c \cdot \hat{\sigma}\left(\hat{\delta}, \hat{\gamma}\right) \cdot \sqrt{\frac{T+1}{T-1}} + (1-c) \cdot \sigma_{(prem,s)}$$

where:

(1) *c* denotes the *credibility factor*;

(2) $\hat{\sigma}$ denotes the standard deviation function set out in 4.6;

(3) $\hat{\delta}$ denotes the mixing parameter set out in 4.7;

(4) $\hat{\gamma}$ denotes the logarithmic variation coefficient set out in 4.7; and

(5) $\sigma_{(prem,s)}$ denotes the standard parameter that is replaced by the *firm's undertaking specific parameter* in respect of *segment s*.

4.6 The standard deviation function must be equal to the following function of two variables:

$$\hat{\sigma}\left(\hat{\delta},\hat{\gamma}\right) = \exp\left(\hat{\gamma} + \frac{\frac{1}{2}\mathrm{T} + \sum_{t=1}^{T} \pi_t\left(\hat{\delta},\hat{\gamma}\right) \cdot \ln\left(\frac{y_t}{x_t}\right)}{\sum_{t=1}^{T} \pi_t\left(\hat{\delta},\hat{\gamma}\right)}\right)$$ where:

(1) $\hat{\delta}$ and $\hat{\gamma}$ are defined in 4.5(3) and (4), respectively;

(2) *exp* denotes the exponential function;

(3) *ln* denotes the natural logarithm function; and

(4) π_t denotes the following function of two variables:

$$\pi_t\left(\hat{\delta},\hat{\gamma}\right) = \frac{1}{\ln\left(1 + \left((1-\hat{\delta}) \cdot \frac{\bar{x}}{x_t} + \hat{\delta}\right) \cdot e^{2\cdot\hat{\gamma}}\right)}$$

where:

(a) $\hat{\delta}$ and $\hat{\gamma}$ are defined in 4.5(3) and (4), respectively; and

(b) $\bar{x}$ denotes the following amount:

$$\bar{x} = \frac{1}{T} \cdot \sum_{t=1}^{T} x_t$$

4.7 The mixing parameter and the logarithmic variation coefficient must be the values $\hat{\delta}$ and $\hat{\gamma}$ respectively for which the following amount becomes minimal:

$$\sum_{t=1}^{T} \pi_t\left(\hat{\delta},\hat{\gamma}\right)\left(\ln\left(\frac{y_t}{x_t}\right) + \frac{1}{2 \cdot \pi_t\left(\hat{\delta},\hat{\gamma}\right)} + \hat{\gamma} - \ln\left(\hat{\sigma}\left(\hat{\delta},\hat{\gamma}\right)\right)\right)^2 - \sum_{t=1}^{T} \ln\left(\pi_t\left(\hat{\delta},\hat{\gamma}\right)\right)$$

where:

(1) *ln* denotes the natural logarithm function;

(2) π_t denotes the function set out in 4.6(4);

(3) $\hat{\sigma}$ denotes the standard deviation function set out in 4.6; and

(4) $\bar{x}$ denotes the following amount:

$$\bar{x} = \frac{1}{T} \cdot \sum_{t=1}^{T} x_t$$

4.8 For the purposes of 4.7, a *USP firm* must ensure that no values for the mixing parameter less than zero or exceeding 1 are considered for the determination of the minimal amount.

5 RESERVE RISK METHOD 1

Input data and USP method-specific data requirements

5.1 A *USP firm* using *reserve risk method 1* to calculate an *undertaking specific parameter* must ensure that the data for estimating the standard deviation of *segment s* consist of the following:

(1) the sum of the *best estimate* provision at the end of the *financial year* for claims that were outstanding in *segment s* at the beginning of the *financial year* and the payments made during the *financial year* for claims that were outstanding in *segment s* at the beginning of the *financial year*; and

(2) the *best estimate* of the provision for claims outstanding in *segment s* at the beginning of the *financial year*.

5.2 The amounts referred to in 5.1(1) and 5.1(2) must be available separately for different *financial years*.

5.3 A *USP firm* using *reserve risk method 1* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the reserve risk that the *firm* is exposed to during the following 12 *months*;

(2) data are available for at least five consecutive *financial years*;

(3) the data are adjusted for amounts recoverable from *reinsurance contracts* and *special purpose vehicles* which are consistent with the *reinsurance contracts* and *special purpose vehicles* that are in place to provide cover for the following 12 *months*;

(4) the data includes the expenses incurred in servicing the insurance and *reinsurance* obligations; and

(5) the data are consistent with the following assumptions:

(a) the amount referred to in 5.1(1) in that particular segment and *financial year* is linearly proportional in the *best estimate* of the provision for claims outstanding in that particular segment and *financial year*;

(b) the variance of the amount referred to 5.1(1) in a particular segment and *financial year* is quadratic in the provision for claims outstanding in a particular segment and *financial year*;

(c) the amount referred to in 5.1(1) follows a lognormal distribution; and

(d) maximum likelihood estimation is appropriate.

USP method specification

5.4 For the purposes of 5.5 to 5.8, the following notations apply:

(1) the *financial years* are denoted by consecutive numbers starting with 1 for the first *financial year* for which data are available;

(2) T denotes the latest *financial year* for which data are available;

(3) for all *financial years*, the amount referred to 5.1(1) in *segment s* in a particular *financial year t* is denoted by y_t; and

(4) for all *financial years*, the *best estimate* of the provision for claims outstanding in *segment s* in a particular *financial year t* is denoted by x_t.

5.5 A *USP firm* using *reserve risk method 1* must calculate the standard deviation of *segment s* in accordance with the following formula:

$$\sigma_{(res,s,USP)} = c \cdot \hat{\sigma}\left(\hat{\delta}, \hat{\gamma}\right) \cdot \sqrt{\frac{T+1}{T-1}} + (1-c) \cdot \sigma_{(res,s)}$$

where:

(1) *c* denotes the *credibility factor*;

(2) $\hat{\sigma}$ denotes the standard deviation function set out in 5.6;

(3) $\hat{\delta}$ denotes the mixing parameter set out in 5.7;

(4) $\hat{\gamma}$ denotes the logarithmic variation coefficient set out in 5.7; and

(5) $\sigma_{(res,s)}$ denotes the standard parameter that is replaced by the *firm's undertaking specific parameter* in respect of *segment s*.

5.6 The standard deviation function must be equal to the following function of two variables:

$$\hat{\sigma}\left(\hat{\delta},\hat{\gamma}\right) = \exp\left(\hat{\gamma} + \frac{\frac{1}{2}\mathrm{T} + \sum_{t=1}^{T}\pi_t\left(\hat{\delta},\hat{\gamma}\right)\cdot\ln\left(\frac{y_t}{x_t}\right)}{\sum_{t=1}^{T}\pi_t\left(\hat{\delta},\hat{\gamma}\right)}\right)$$

where:

(1) $\hat{\delta}$ and $\hat{\gamma}$ are defined in 5.5(3) and 5.5(4), respectively;

(2) *exp* denotes the exponential function;

(3) *ln* denotes the natural logarithm function; and

(4) π_t denotes the following function of two variables:

$$\pi_t\left(\hat{\delta},\hat{\gamma}\right) = \frac{1}{\ln\left(1+\left((1-\hat{\delta})\cdot\frac{\bar{x}}{x_t}+\hat{\delta}\right)\cdot e^{2\cdot\hat{\gamma}}\right)}$$

where:

(a) $\hat{\delta}$ and $\hat{\gamma}$ are defined in 5.5(3) and 5.5(4), respectively;

(b) $\bar{x}$ denotes the following amount:

$$\bar{x} = \frac{1}{T}\cdot\sum_{t=1}^{T}x_t$$

5.7 The mixing parameter and the logarithmic variation coefficient must be the values $\hat{\delta}$ and $\hat{\gamma}$ respectively for which the following amount becomes minimal:

$$\sum_{t=1}^{T}\pi_t\left(\hat{\delta},\hat{\gamma}\right)\left(\ln\left(\frac{y_t}{x_t}\right)+\frac{1}{2\cdot\pi_t\left(\hat{\delta},\hat{\gamma}\right)}+\hat{\gamma}-\ln\left(\hat{\sigma}\left(\hat{\delta},\hat{\gamma}\right)\right)\right)^2-\sum_{t=1}^{T}\ln\left(\pi_t\left(\hat{\delta},\hat{\gamma}\right)\right)$$

where:

(1) *ln* denotes the natural logarithm function;

(2) π_t denotes the function set out in 5.6(4);

(3) $\hat{\sigma}$ denotes the standard deviation function set out in 5.6; and

(4) $\bar{x}$ denotes the following amount:

$$\bar{x} = \frac{1}{T} \cdot \sum_{t=1}^{T} x_t$$

5.8 For the purposes of 5.7, a *USP firm* must ensure that no values for the mixing parameter less than zero or exceeding 1 are considered for the determination of the minimal amount.

6 RESERVE RISK METHOD 2

Input data and USP method-specific data requirements

6.1 A *USP firm* using *reserve risk method 2* to calculate an *undertaking specific parameter* must ensure that the data for estimating the standard deviation of *segment s* consist of *cumulative claims amounts*, separately for each *accident year* and *development year* of the payments.

6.2 A *USP firm* using *reserve risk method 2* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the reserve risk that the *firm* is exposed to during the following 12 *months*;

(2) data are available for at least five consecutive *accident years*;

(3) in the first *accident year*, data are available for at least five consecutive *development years*;

(4) in the first *accident year* the *cumulative claims amounts* of the latest *development year* for which data are available includes all the payments of the *accident year* except an immaterial amount;

(5) the number of consecutive *accident years* for which data are available is not less than the number of consecutive *development years* in the first *accident year* for which data are available;

(6) the *cumulative claims amounts* are adjusted for amounts recoverable from *reinsurance contracts* and *special purpose vehicles* which are consistent with the *reinsurance contracts* and *special purpose vehicles* that are in place to provide cover for the following 12 *months*;

(7) the *cumulative claims amounts* must include the expenses incurred in servicing the insurance or *reinsurance* obligations; and

(8) the data are consistent with the following assumptions about the stochastic nature of *cumulative claims amounts*:

(a) *cumulative claims amounts* for different *accident years* are mutually stochastically independent;

(b) for all *accident years* the implied incremental claim amounts are stochastically independent;

(c) for all *accident years* the expected value of the *cumulative claims amount* for a *development year* is proportional to the *cumulative claims amount* for the preceding *development year*; and

(d) for all *accident years* the variance of the *cumulative claims amount* for a *development year* is proportional to the *cumulative claims amount* for the preceding *development year*.

6.3 For the purposes of 6.2(4), a payment must be considered material where ignoring it in the calculation of the *undertaking specific parameter* could influence the decision-making or the judgement of the users of that information, including the *supervisory authorities*.

USP method specification

6.4 For the purposes of 6.5 and 6.6 the following notations apply:

(1) the *accident years* are denoted by consecutive numbers starting with 0 for the first *accident year* for which data are available;

(2) *I* denotes the latest *accident year* for which data are available;

(3) *J* denotes the latest *development year* in the first *accident year* for which data are available; and

(4) $C_{(i,j)}$ denotes the cumulative claims for *accident year i* and *development year j*.

6.5 A *USP firm* using *reserve risk method 2* must calculate the standard deviation for *segment s* in accordance with the following formula:

$$\sigma_{(res,s,USP)} = c \cdot \frac{\sqrt{MSEP}}{\sum_{i=0}^{I}\left(\hat{C}_{(i,J)} - C_{(i,I-i)}\right)} + (1-c) \cdot \sigma_{(res,s)}$$

where:

(1) *c* denotes the *credibility factor*;

(2) *MSEP* denotes the mean squared error of prediction as specified in 6.6;

(3) for all *accident years* and *development years*, $\hat{C}_{(i,J)}$ denotes the cumulative claims estimate for the specific *accident year i* and *development year j*, being defined as follows:

$$\hat{C}_{(i,J)} = C_{(i,I-i)}\hat{f}_{I-i} \cdots \hat{f}_{j-2}\hat{f}_{j-1}$$

where for all *development years* $\hat{f}_j$ denotes for development factor estimate of the specific *development year j*, being defined as follows:

$$\hat{f}_j = \frac{\sum_{i=0}^{I-j-1} C_{(i,j+1)}}{\sum_{i=0}^{I-j-1} C_{(i,j)}}$$

(4) $\sigma_{(res,s)}$ denotes the standard parameter that is replaced by the *firm's undertaking specific parameter* in respect of *segment s*.

6.6 The mean squared error of prediction must be equal to the following:

$$MSEP = \sum_{i=1}^{I} \hat{C}_{(i,J)}^2 \cdot \left(\frac{\hat{Q}_{I-i}}{C_{(i,I-i)}} + \frac{\hat{Q}_{I-i}}{S_{I-i}} + \sum_{j=I-i+1}^{J-1} \frac{C_{(I-j,j)}}{S'_j} \cdot \frac{\hat{Q}_j}{S_j} \right) + 2 \cdot \sum_{i=1}^{I} \sum_{k=i+1}^{I} \hat{C}_{(i,J)} \cdot \hat{C}_{(k,J)} \cdot \left(\frac{\hat{Q}_{I-i}}{S_{I-i}} + \sum_{j=I-i+1}^{J-1} \frac{C_{(I-j,j)}}{S'_j} \cdot \frac{\hat{Q}_j}{S_j} \right)$$

where:

(1) for all *accident years* and *development years*, $\hat{C}_{(i,J)}$ denotes the cumulative claim estimate in the specific *accident year i* and *development year j*, as set out in 6.5(3);

(2) for all *development years*, S_j denotes for a specific *development year j* the following amount:

$$S_j = \sum_{i=0}^{I-j-1} C_{(i,j)}$$

(3) for all *development years*, S'_j denotes for a specific *development year j* the following amount:

$$S'_j = \sum_{i=0}^{I-j} C_{(i,j)}$$

(4) for all *development years*, $\hat{Q}_j$ denotes for a specific *development year j* the following amount:

$$\hat{Q}_j = \frac{\hat{\sigma}_j^2}{\hat{f}_j^2}$$

where:

(a) $\hat{f}_j$ denotes the development factor estimate of *development year j* as set out in 6.5(3); and

(b) $\hat{\sigma}_j^2$ denotes the following amount:

$\hat{\sigma}_j^2 = \frac{1}{I-j-1}\sum_{i=0}^{I-j-1} C_{(i,j)}\left(\frac{C_{(i,j+1)}}{C_{(i,j)}} - \hat{f}_j\right)^2$	where $j = 0,\ldots, (J-2)$
$\hat{\sigma}_j^2 = \min\left(\hat{\sigma}_{J-2}^2, \hat{\sigma}_{J-3,}^2 \frac{\hat{\sigma}_{J-2}^4}{\hat{\sigma}_{J-3}^2}\right)$	where $j = (J-1)$

7 REVISION RISK METHOD

7.1 (1) A *USP firm* must only use the *revision risk method* for:

(a) the *life revision risk* sub-module referred to in Solvency Capital Requirement - Standard Formula 3B5; or

(b) the *health revision risk* sub-module referred to in Solvency Capital Requirement - Standard Formula 3C15,

if the annuities within scope of the relevant sub-module are not subject to material inflation risk.

(2) For the purposes of (1), a *firm* must treat inflation risk as material where ignoring it in the calculation of the sub-modules referred to in (1)(a) and (1)(b) could influence the decision-making or the judgment of the users of the information, including the *supervisory authorities*.

Input data and USP method-specific data requirements

7.2 A *USP firm* using the *revision risk method* to calculate an *undertaking specific parameter* must ensure that the data for estimating the increase in the amount of annuity benefits consist of annual amounts of annuity benefits of annuity insurance obligations where the benefits payable could increase as a result of changes in the legal environment or in the state of health of the *person* insured, separately for consecutive *financial years* and each *beneficiary*.

7.3 A *USP firm* using the *revision risk method* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the *revision risk* that the *firm* is exposed to during the following 12 *months*;

(2) data are available for at least five consecutive *financial years*;

(3) the annuity benefits are gross, without deduction of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(4) the annuity benefits must include the expenses incurred in servicing the annuity obligations; and

(5) the data are consistent with the following assumptions about the stochastic nature of increases in the amount of annuity benefits:

(a) the annual number of increases in annuity benefits follows a negative binomial distribution, including in the tail of the distribution;

(b) the amount of an increase in annuity benefits follows a lognormal distribution, including in the tail of the distribution; and

(c) the annual number of increases in annuity benefits and the amounts of the increases in annuity benefits are mutually stochastically independent.

USP method specification

7.4 For the purposes of 7.5 to 7.9, the following notations apply:

(1) the *financial years* are denoted by consecutive numbers starting with 1 for the first *financial year* for which data are available;

(2) *T* denotes the latest *financial year* for which data are available;

(3) $A_{(i,t)}$ denotes the annuity benefits of *beneficiary i* in *financial year t*; and

(4) $D_{(i,t)}$ denotes the change of annuity benefits after *financial year t*, being equal to the following difference:

$$D_{(i,t)} = A_{(i,t)} - A_{(i,t-1)}$$

7.5 A *USP firm* using the *revision risk method* must calculate the increase in the amount of annuity benefits in accordance with the following formula:

$$S_{USP} = c \cdot \frac{VaR_{0.995}(R) - \bar{R}}{\bar{R}} + (1 - c) \cdot S$$

where:

(1) *c* denotes the *credibility factor*;

(2) $\bar{R}$ denotes the expected value of increases in annuity benefits set out in 7.6;

(3) $VaR_{0.995}(R)$ denotes the 99.5% quantile of the distribution of increases in annuity benefits set out in 7.7;

(4) *S* is:

(a) equal to 3% where the calculation relates to the *life revision risk* sub-module referred to in Solvency Capital Requirement - Standard Formula 3B5; and

(b) equal to 4% where the calculation relates to the *health revision risk* sub-module referred to in Solvency Capital Requirement - Standard Formula 3C15.

7.6 The expected value of increases in annuity benefits must be equal to the following:

$$\bar{R} = \bar{X} \cdot \bar{N}$$

where:

(1) $\bar{X}$ denotes the estimated average change in annuity benefits, restricted to those changes in annuity benefits that are larger than zero; and

(2) $\bar{N}$ denotes the estimated average number, per *financial year*, of changes in annuity benefits that are larger than zero.

7.7 The increases in annuity benefits must be equal to the following:

$$R = \sum_{k=1}^{N} X_k$$

where:

(1) *N* denotes the annual number of increases in annuity benefits and follows a negative binominal distribution with an expected value that is equal to the estimated number of changes in annuity benefits set out 7.6(2) and with a standard deviation that is equal to the estimated standard deviation of the number of changes in annuity benefits set out in 7.8;

(2) X_k denotes the amount of an increase in annuity benefits and follows a lognormal distribution with an expected value that is equal to the estimated average change in annuity benefits set out in 7.6(1) and with a standard deviation that is equal to the estimated standard deviation of changes in annuity benefits set out in 7.9; and

(3) the annual number of increases in annuity benefits and the amounts of the increase in annuity benefits are mutually stochastically independent.

7.8 The estimated standard deviation of the number of changes in annuity benefits must be equal to the following:

$$\hat{\sigma}_N = \sqrt{\frac{1}{T-1} \cdot \sum_{t=1}^{T} (N_t - \bar{N})^2}$$

where:

(1) N_t denotes the number of changes in annuity benefits in *financial years t* that are larger than zero; and

(2) $\bar{N}$ denotes the estimated average change in annuity benefits set out in 7.6(2).

7.9 The estimated standard deviation of changes in annuity benefits must be equal to the following:

$$\hat{\sigma}_X = \sqrt{\frac{1}{n-1} \cdot \sum_{i,t} \left(D_{(i,t)} - \bar{X}\right)^2}$$

where:

(1) the sum includes only those *beneficiaries i* and *financial years t* for which $D_{(i,t)}$ is larger than zero;

(2) *n* denotes the number of summands of the sum referred to in (1); and

(3) $\bar{X}$ denotes the estimated average change in annuity benefits set out in 7.6(1).

8 NON-PROPORTIONAL REINSURANCE METHOD 1

8.1 A *USP firm* must only use *non-proportional reinsurance method 1* if there is a *recognisable excess of loss reinsurance contract* in place.

Input data and USP method-specific data requirements

8.2 A *USP firm* using *non-proportional reinsurance method 1* to calculate an *undertaking specific parameter* must ensure that the data for estimating an adjustment factor for non-proportional *reinsurance* consist of the ultimate claim amounts of insurance and *reinsurance* claims that were reported to the *firm* in *segment s* during the preceding *financial years*, separately for each insurance and *reinsurance* claim.

8.3 A *USP firm* using *non-proportional reinsurance method 1* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the *premium* risk that the *firm* is exposed to during the following 12 *months*;

(2) the data do not indicate a higher *premium* risk than reflected in the corresponding standard deviation for *premium* risk used to calculate the *SCR* using the *standard formula*;

(3) the ultimate claim amounts are estimated in the year the insurance and *reinsurance* claims were reported;

(4) data are available for at least five *reporting years*;

(5) where the *recognisable excess of loss reinsurance contract* applies to gross claims, the ultimate claim amounts are gross;

(6) where the *recognisable excess of loss reinsurance contract* applies to claims after deduction of the recoverables from certain other *reinsurance contracts* and *special purpose vehicles*, the amounts receivable from those *reinsurance contracts* and *special purpose vehicles* are deducted from the ultimate claim amounts;

(7) the ultimate claim amounts must not include expenses incurred in servicing the insurance and *reinsurance* obligations; and

(8) the data are consistent with the assumption that ultimate claim amounts follow a lognormal distribution, including in the tail of the distribution.

USP method specification

8.4 For the purposes of 8.5 to 8.8, the following notations apply:

(1) insurance and *reinsurance* claims for which data are available are denoted by consecutive numbers starting with 1;

(2) n denotes the number of insurance and *reinsurance* claims for which data are available;

(3) Y_i denotes the ultimate claim amount of the insurance and *reinsurance* claims i;

(4) μ and ω denote the first and second moment, respectively, of the claim amount distribution, being equal to the following amounts:

$$\mu = \frac{1}{n}\sum_{i=1}^{n} Y_i$$

and

$$\omega = \frac{1}{n}\sum_{i=1}^{n} Y_i^2$$

(5) b_1 denotes the amount of the retention of the *recognisable excess of loss reinsurance contract*;

(6) where the *recognisable excess of loss reinsurance contract* provides compensation only up to a specified limit, b_2 denotes the amount of that limit.

8.5 A *USP firm* using *non-proportional reinsurance method 1* must calculate the adjustment factor for non-proportional *reinsurance* in accordance with the following formula:

$$NP_{USP} = c \cdot NP' + (1 - c) \cdot NP$$

where:

(1) c denotes the *credibility factor*;

(2) *NP′* denotes the estimated adjustment factor for non-proportional *reinsurance* set out in 8.6; and

(3) *NP* denotes the standard parameter that is replaced by the *firm's undertaking specific parameter*.

8.6 The estimated adjustment factor for non-proportional *reinsurance* must be equal to the following:

NP′ =	$\sqrt{\frac{\omega_1 - \omega_2 + \omega + 2 \cdot (b_2 - b_1) \cdot (\mu_2 - \mu)}{\omega}}$	where 8.4(6) applies,
	$\sqrt{\frac{\omega_1}{\omega}}$	otherwise.

where the parameters μ_2, ω_1 and ω_2 are set out in 8.7.

8.7 The parameters μ_2, ω_1 and ω_2 must be equal to the following, respectively:

$$\mu_2 = \mu \cdot N\left(\frac{\ln(b_2 - \theta)}{\eta} - \eta\right) + b_2 \cdot N\left(-\frac{\ln(b_2) - \theta}{\eta}\right)$$

$$\omega_1 = \omega \cdot N\left(\frac{\ln(b_1 - \theta)}{\eta} - 2 \cdot \eta\right) + b_1^2 \cdot N\left(-\frac{\ln(b_1) - \theta}{\eta}\right)$$

$$\omega_2 = \omega \cdot N\left(\frac{\ln(b_2 - \theta)}{\eta} - 2 \cdot \eta\right) + b_2^2 \cdot N\left(-\frac{\ln(b_2) - \theta}{\eta}\right)$$

where:

(1) *N* denotes the cumulative distribution function of the normal distribution;

(2) *ln* denotes the natural logarithm function; and

(3) the parameters θ and η are equal to the following, respectively:

$$\theta = 2 \ln \mu - \frac{1}{2} \ln \omega$$

and

$$\eta = \sqrt{\ln \omega - 2 \ln \mu}$$

8.8 Notwithstanding 8.6, where non-proportional *reinsurance* covers homogeneous risk groups within a segment, the estimated adjustment factor for non-proportional *reinsurance* must be equal to the following:

$$NP' = \frac{\sum_h V_{(prem,h)} \cdot NP'_{(h)}}{\sum_h V_{(prem,h)}}$$

where:

(1) $V_{(prem,h)}$ denotes the volume measure for *premium* risk of the homogeneous risk group *h* determined in accordance with Solvency Capital Requirement - Standard Formula 3A2.3; and

(2) $NP'_{(h)}$ denotes the estimated adjustment factor for non-proportional *reinsurance* of homogeneous risk group *h* determined in accordance with 8.6.

9 NON-PROPORTIONAL REINSURANCE METHOD 2

9.1 A *USP firm* must only use *non-proportional reinsurance method 2* if there is a *recognisable stop loss reinsurance contract* in place.

Input data and USP method-specific data requirements

9.2 A *USP firm* using the *non-proportional reinsurance method 2* to calculate an *undertaking specific parameter* must ensure that data for estimating an adjustment factor for non-proportional *reinsurance* consist of the aggregated annual losses of insurance and *reinsurance* claims that were reported to the *firm* in *segment s* during the preceding *financial years*.

9.3 A *USP firm* using the *non-proportional reinsurance method 2* must ensure that the data used to calculate an *undertaking specific parameter* satisfy all the following *USP method*-specific data requirements:

(1) the data are representative of the *premium* risk that the *firm* is exposed to during the following 12 *months*;

(2) the data do not indicate a higher *premium* risk than reflected in the corresponding standard deviation for *premium* risk used to calculate the *SCR* using the *standard formula*;

(3) the aggregated annual losses are estimated in the year insurance and *reinsurance* claims were reported;

(4) data are available for at least five *reporting years*;

(5) where the *recognisable stop loss reinsurance contract* applies to gross claims, the aggregated annual losses are gross;

(6) where the *recognisable stop loss reinsurance contract* applies to claims after deduction of the recoverables from certain other *reinsurance contracts* and *special purpose vehicles*, the amounts receivable from those *reinsurance contracts* and *special purpose vehicles* are deducted from the aggregated annual losses;

(7) the aggregated annual losses must not include expenses incurred in servicing the insurance and *reinsurance* obligations; and

(8) the data are consistent with the assumption that aggregated annual losses follow a lognormal distribution, including in the tail of the distribution.

USP method specification

9.4 For the purposes of 9.5 to 9.8, the following notations apply:

(1) *n* denotes the number of *financial years* for which aggregated annual losses data are available;

(2) Y_i denotes the aggregated losses in *financial year i*;

(3) μ and ω denote the first and second moment, respectively, of the aggregated annual losses distribution, being equal to the following amounts:

$$\mu = \frac{1}{n}\sum_{i=1}^{n} Y_i$$

and

$$\omega = \frac{1}{n}\sum_{i=1}^{n} Y_i^2$$

(4) b_1 denotes the amount of the retention of the *recognisable stop loss reinsurance contract*; and

(5) where the *recognisable stop loss reinsurance contract* provides compensation only up to a specified limit, b_2 denotes the amount of that limit.

9.5 A *USP firm* using the *non-proportional reinsurance method 2* must calculate the adjustment factor for non-proportional *reinsurance* in accordance with the following formula:

$$NP_{USP} = c \cdot NP' + (1 - c) \cdot NP$$

where:

(1) *c* denotes the *credibility factor*;

(2) *NP'* denotes the estimated adjustment factor for non-proportional *reinsurance* set out in 9.6; and

(3) *NP* denotes the standard parameter that is replaced by the *firm's undertaking specific parameter*.

9.6 The estimated adjustment factor for non-proportional *reinsurance* must be equal to the following:

NP' =	$\sqrt{\frac{(\omega_1 + \omega - \omega_2 + 2(b_2 - b_1)(\mu_2 - \mu)) - (\mu_1 + \mu - \mu_2)^2}{\omega - \mu^2}}$	where 9.4(5) applies,
	$\sqrt{\frac{\omega - \mu_1^2}{\omega - \mu^2}}$	otherwise.

where the parameters μ_1, μ_2, ω_1 and ω_2 are set out in 9.7.

9.7 The parameters μ_1, μ_2, ω_1 and ω_2 must be equal to the following, respectively:

$$\mu_1 = \mu \cdot N\left(\frac{\ln(b_1 - \theta)}{\eta} - \eta\right) + b_1 \cdot N\left(-\frac{\ln(b_1) - \theta}{\eta}\right)$$

$$\mu_2 = \mu \cdot N\left(\frac{\ln(b_2 - \theta)}{\eta} - \eta\right) + b_2 \cdot N\left(-\frac{\ln(b_2) - \theta}{\eta}\right)$$

$$\omega_1 = \omega \cdot N\left(\frac{\ln(b_1 - \theta)}{\eta} - 2 \cdot \eta\right) + b_2^1 \cdot N\left(-\frac{\ln(b_1) - \theta}{\eta}\right)$$

$$\omega_2 = \omega \cdot N\left(\frac{\ln(b_2 - \theta)}{\eta} - 2 \cdot \eta\right) + b_2^2 \cdot N\left(-\frac{\ln(b_1) - \theta}{\eta}\right)$$

where:

(1) *N* denotes the cumulative distribution function of the normal distribution;

(2) *ln* denotes the natural logarithm function; and

(3) the parameters θ and η are equal to the following, respectively:

$$\theta = 2 \ln \mu - \frac{1}{2} \ln \omega$$

and

$$\eta = \sqrt{\ln \omega - 2 \ln \mu}$$

9.8 Notwithstanding 9.6, where non-proportional *reinsurance* covers homogeneous risk groups within a segment, the estimated adjustment factor for non-proportional *reinsurance* must be equal to the following:

$$NP' = \frac{\sum_h V_{(prem,h)} \cdot NP'_{(h)}}{\sum_h V_{(prem,h)}}$$

where:

(1) $V_{(prem,h)}$ denotes the volume measure for *premium* risk of the homogeneous risk group *h* determined in accordance with Solvency Capital Requirement - Standard Formula 3A2.3; and

(2) $NP'_{(h)}$ denotes the estimated adjustment factor for non-proportional *reinsurance* of homogeneous risk group *h* determined in accordance with 9.6.

10 CREDIBILITY FACTOR

10.1 (1) The credibility factor for segments 1, 5 and 6 set out in Solvency Capital Requirement - Standard Formula 3A3 must be equal to the following:

Time lengths in years	**Credibility factor *c***
5	34%
6	43%
7	51%
8	59%
9	67%
10	74%
11	81%
12	87%
13	92%
14	96%
15 and larger	100%

(2) The credibility factor for:

(a) segments 2 to 4 and 7 to 12 set out in Solvency Capital Requirement - Standard Formula 3A3;

(b) the segments set out in Solvency Capital Requirement - Standard Formula 3C4; and

(c) the *revision risk method*,

must be equal to the following:

Time lengths in years	**Credibility factor *c***
5	34%
6	51%
7	67%
8	81%

9	92%
10 and larger	100%

10.2 For the purposes of 10.1, the time length must be equal to the following:

(1) for the *premium risk method*, the number of *accident years* for which data are available;

(2) for *reserve risk method 1*, the number of *financial years* for which data are available;

(3) for *reserve risk method 2*, the number of *accident years* for which data are available;

(4) for *the revision risk method*, the number of *financial years* for which data are available; and

(5) for *non-proportional reinsurance method 1* and *non-proportional reinsurance method 2*, the number of *reporting years* for which data are available.

Annex Q

Amendments to the Surplus Funds Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

~~*surplus funds*~~

~~means, in relation to a *with-profits fund*, accumulated profits which have not been made available for distribution to policyholders or other *beneficiaries* and which:~~

~~(1) satisfy the criteria for classification as *Tier 1 own funds* set out in Own Funds 3.1; and~~

~~(2) are represented by the output of the calculations set out in 3.~~

…

Annex R

Amendments to the Technical Provisions Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

cost-of-capital rate

means the rate (above the relevant risk-free interest rate) that must be used in the determination of the cost that a *UK Solvency II firm* would incur in order to hold an amount of *eligible own funds* equal to the *SCR* necessary to support the insurance and *reinsurance* obligations over their lifetime, which, as specified in ~~the *Solvency II Regulations*~~regulation 7B(b) of the *IRPR Regulations*, equals 4%.

[Note: regulation 7B of the *IRPR Regulations* provides that where the *PRA's* rules require the *best estimate* and the *risk margin* to be calculated separately, the *risk margin* must be calculated in accordance with that regulation. This definition therefore requires a *firm* that values the *best estimate* and the *risk margin* separately to calculate the *risk margin* using the cost-of-capital rate specified in regulation 7B(b) of the *IRPR Regulations*]

reference undertaking

means the hypothetical *firm* which is assumed, for the purpose of calculating the *risk margin*, to take over the whole portfolio of insurance and *reinsurance* obligations of the *firm* (or in the case of a *composite firm* either the *general insurance business* or *long-term insurance business* of the *firm*) on the basis of the assumptions in 4B.

reference undertaking notional SCR

means the hypothetical *SCR* of the *reference undertaking*, calculated in accordance with 4B.1.

…

~~*volatility adjustment approval*~~

~~means the approval granted to a *firm* by the *PRA* to permit it to apply a *volatility adjustment* for the purposes of calculating the *best estimate*.~~

volatility adjustment permission

means the permission granted to a *firm* by the *PRA* pursuant to section 138BA of *FSMA* to permit it to apply a *volatility adjustment* for the purposes of calculating the *best estimate*.

…

4A CALCULATION OF THE RISK MARGIN

4A.1 In accordance with regulation 7B of the *IRPR Regulations*, where a *firm* values the *best estimate* and the *risk margin* separately, the *firm* must calculate the *risk margin* for the whole portfolio of insurance and *reinsurance* obligations in accordance with the following formula:

$$\mathrm{RM} = \mathrm{CoC} \cdot \sum_{t \geq 0} \frac{\mathrm{SCR(t)} \cdot \max\left(\lambda^{t}, \lambda_{\mathrm{floor}}\right)}{\left(1 + r(t+1)\right)^{t+1}}$$

where:

(1) RM denotes *risk margin*;
(2) CoC denotes the *cost-of-capital rate*;
(3) the sum covers all integers including zero;
(4) SCR(t) denotes the *reference undertaking notional SCR* after t years;
(5) λ denotes the risk tapering factor, and equals:
  (a) 0.9 for *long-term insurance and reinsurance obligations*; and
  (b) 1.0 for *general insurance and reinsurance obligations*;
(6) λ^{t} denotes the relevant risk tapering factor to the power of t years;
(7) λ_{floor} denotes the floor of the risk tapering factor, and equals 0.25;
(8) r(t+1) denotes the basic relevant risk-free interest rate for the maturity of t+1 years, derived from the *basic relevant risk-free interest rate term structure* and selected in accordance with the currency used for the *firm's* financial statements.

[Note: regulation 7B of the *IRPR Regulations* provides that where the *PRA's* rules require the *best estimate* and the *risk margin* to be calculated separately, the *risk margin* must be calculated in accordance with that regulation. Rules 2.2 and 2.4 require the value of *technical provisions* to correspond to a current transfer value and to consist of a *best estimate* and a *risk margin*. Rule 2.5 (1) requires the *best estimate* and the *risk margin* to be valued separately, unless 2.5(2) applies. Rule 4A.1 therefore requires a *firm* that values the *best estimate* and the *risk margin* separately to calculate the *risk margin* as required by regulation 7B of the *IRPR Regulations*]

4A.2 Where a *firm* calculates its *SCR* using an *internal model* for which it has received *internal model permission*, it must, unless it is inappropriate to do so, use that *internal model* to calculate the *reference undertaking notional SCR*.

4A.3 A *firm* must allocate the *risk margin* for the whole portfolio of insurance and *reinsurance* obligations to each relevant *line of business* and such allocation must adequately reflect the contributions of the *lines of business* to the *reference undertaking notional SCR* over the lifetime of the whole portfolio of insurance and *reinsurance* obligations.

4B REFERENCE UNDERTAKING

4B.1 The *risk margin* must be based on all the following assumptions:

(1) the whole portfolio of insurance and *reinsurance* obligations of the *firm* is taken over by a *reference undertaking*;

(2) notwithstanding (1), a *composite firm* must assume that its *general insurance business* and *long-term insurance business* are each taken over separately by two different *reference undertakings*;

(3) the transfer of insurance and *reinsurance* obligations includes any *reinsurance contracts* and arrangements with *special purpose vehicles* relating to those obligations;

(4) the *reference undertaking* does not have any insurance or *reinsurance* obligations or *own funds* before the transfer takes place;

(5) after the transfer, the *reference undertaking* does not assume any new insurance or *reinsurance* obligations;

(6) after the transfer, the *reference undertaking* raises *eligible own funds* equal to the *reference undertaking notional SCR* necessary to support the insurance and *reinsurance* obligations over the lifetime of those obligations;

(7) after the transfer, the *reference undertaking* holds assets which amount to the sum of the *reference undertaking notional SCR* and of the *reference undertaking's technical provisions* net of the amounts recoverable from *reinsurance contracts* and *special purpose vehicles*;

(8) the assets referred to in (7) are selected in such a way that they minimise the *reference undertaking notional SCR* for *market risk* that the *reference undertaking* is exposed to;

(9) the *reference undertaking notional SCR* captures all the following risks:

(a) *underwriting risk* with respect to the transferred business;

(b) where it is material, the *market risk* referred to in (8), other than interest rate risk;

(c) *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 and *reinsurance* obligations; and

(d) *operational risk*;

(10) the loss-absorbing capacity of *technical provisions* for the *reference undertaking* corresponds, in respect of each risk, to the loss-absorbing capacity of *technical provisions* for the *firm*;

(11) there is no loss-absorbing capacity of deferred taxes for the *reference undertaking*;

(12) the *reference undertaking* will, subject to (5) and (6), adopt future management actions that are consistent with assumed future management actions, as referred to in Technical Provisions – Further Requirements 8, of the *firm*; and

(13) the *reference undertaking* does not apply to its *technical provisions* any of the following:

(a) *matching adjustment*;

(b) *volatility adjustment*;

(c) *risk-free interest rate transitional measure*; or

(d) *TMTP*.

4B.2 Over the lifetime of the insurance and *reinsurance* obligations, the *SCR* necessary to support the insurance and *reinsurance* obligations referred to in 4.1 must be assumed to be equal to the *reference undertaking notional SCR*.

4B.3 For the purposes of 4B.1(9), a risk must be considered material where its impact on the calculation of the *risk margin* could influence the decision-making or the judgment of the users of that information, including the *PRA* and *FCA*.

…

8 VOLATILITY ADJUSTMENT

8.1 A *firm* ~~must not~~may only apply a *volatility adjustment* to the *relevant risk-free interest rate term structure* to calculate the *best estimate* of its insurance or *reinsurance* obligations ~~unless~~:

(1) if it has been granted a ~~*volatility adjustment approval*~~ *volatility adjustment permission*; ~~and~~

(2) the *volatility adjustment* has been ~~set out in *Solvency II Regulations* or~~ published by the *PRA* under regulation 3 of the *IRPR regulations*~~.~~; and

(3) to the extent of its *volatility adjustment permission*.

…

8.4 ~~A *firm* must only apply a *volatility adjustment* that includes a relevant country increase to calculate the *best estimate* of its insurance or *reinsurance* obligations of products sold in the insurance market of that country, respectively.~~[Deleted]

8.5 A *firm* with a ~~The *volatility adjustment*~~*volatility adjustment permission* ~~shall not be applied~~ must not apply the *volatility adjustment* with respect to insurance or *reinsurance* obligations where the *relevant risk-free interest rate term structure* used to calculate the *best estimate* for those obligations includes a *matching adjustment*.

[Note: Art. 77d ~~and Art. 77c(3)~~ of the *Solvency II Directive*]

…

10 SEGMENTATION

10.1 When calculating *technical provisions*, *firms* must segment their insurance and *reinsurance* obligations into homogenous risk groups and, as a minimum, by *lines of business*~~lines of business as contemplated by the *Solvency II Regulations*~~.

…

Annex S

Technical Provisions – Further Requirements Part

In this Annex, the text is all new and is not underlined.

Part

TECHNICAL PROVISIONS – FURTHER REQUIREMENTS

Chapter content

1. APPLICATION
2. RECOGNITION AND DERECOGNITION OF INSURANCE AND REINSURANCE OBLIGATIONS
3. BOUNDARY OF AN INSURANCE OR REINSURANCE CONTRACT
4. DATA USED IN THE CALCULATION OF TECHNICAL PROVISIONS
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8. FUTURE MANAGEMENT ACTIONS
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10. SEPARATE CALCULATION OF THE FUTURE DISCRETIONARY BENEFITS
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22. CIRCUMSTANCES IN WHICH TECHNICAL PROVISIONS ARE TO BE CALCULATED AS A WHOLE AND THE METHOD TO BE USED
23. RECOVERABLES FROM REINSURANCE CONTRACTS AND SPVS – GENERAL PROVISIONS
24. COUNTERPARTY DEFAULT ADJUSTMENT
25. RISK FREE RATE INTEREST TERM STRUCTURE OF CURRENCIES PEGGED TO THE EURO
26. LINES OF BUSINESS

27. PROPORTIONALITY

ANNEX 1: LINES OF BUSINESS

1 APPLICATION

1.1 Unless otherwise stated, this Part applies to:

(1) a *UK Solvency II firm*;

(2) in accordance with Insurance General Application 3, the *Society*, and

(3) in accordance with Insurance General Application 3, *managing agents*.

GENERAL REQUIREMENTS

2 RECOGNITION AND DERECOGNITION OF INSURANCE AND REINSURANCE OBLIGATIONS

2.1 For the calculation of the *best estimate* and the *risk margin* of *technical provisions*, a *firm* must recognise an insurance or *reinsurance* obligation at the date that it becomes a party to the contract that gives rise to the obligation or the date the insurance or *reinsurance* cover begins, whichever date occurs earlier. A *firm* must only recognise the obligations within the boundary of the contract.

A *firm* must derecognise an insurance or *reinsurance* obligation only when it is extinguished, discharged, cancelled or expires.

3 BOUNDARY OF AN INSURANCE OR REINSURANCE CONTRACT

3.1 The boundaries of a *contract of insurance* are defined in accordance with 3.2 to 3.7.

3.2 All obligations relating to the contract, including obligations relating to unilateral rights of the *firm* 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 3.3 to 3.6.

3.3 Obligations which relate to insurance or *reinsurance* cover provided by the *firm* after any of the following dates do not belong to the contract, unless the *firm* can compel the *policyholder* to pay the *premium* for those obligations:

(1) the future date where the *firm* has a unilateral right to terminate the contract;

(2) the future date where the *firm* has a unilateral right to reject *premiums* payable under the contract;

(3) the future date where the *firm* has a unilateral right to amend the *premiums* or the benefits payable under the contract in such a way that the *premiums* fully reflect the risks.

3.3(3) applies where a *firm* has a unilateral right to amend at a future date the *premiums* or benefits of a portfolio of insurance or *reinsurance* obligations in such a way that the *premiums* of the portfolio fully reflect the risks covered by the portfolio.

However, in the case of *long-term insurance business* 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, a *firm* must assess at the level of the contract whether the *premiums* fully reflect the risk for the purposes of (3).

A *firm* must not take into account restrictions on the unilateral right as referred to in (1), (2) and (3) of this paragraph and limitations on the extent to which *premiums* or benefits can be amended that have no discernible effect on the economics of the contract.

3.4 Where the *firm* has a unilateral right as referred to in 3.3 that only relates to a part of the contract, the same principles as defined in 3.3 must apply to that part of the contract.

3.5 Obligations that do not relate to *premiums* which have already been paid do not belong to a *contract of insurance* if all of the following requirements are met:

(1) the contract does not provide compensation for a specified uncertain event that adversely affects the insured person;

(2) the contract does not include a financial guarantee of benefits; and

(3) the *firm* cannot compel the *policyholder* to pay the future *premium* for those obligations.

For the purpose of (1) and (2), a *firm* must not take into account coverage of events and guarantees that have no discernible effect on the economics of the contract.

3.6 Where a *contract of insurance* can be unbundled into two parts and where one of those parts meets the requirements set out in 3.5(1), (2) and (3), any obligations that do not relate to the *premiums* of that part and which have already been paid do not belong to the contract.

3.7 A *firm* must, for the purposes of 3.3, only consider that *premiums* fully reflect the risks covered by a portfolio of insurance or *reinsurance* obligations, where there is no circumstance under which the amount of the benefits and expenses payable under the portfolio exceeds the amount of the *premiums* payable under the portfolio.

DATA QUALITY

4 DATA USED IN THE CALCULATION OF TECHNICAL PROVISIONS

4.1 Data used in the calculation of the *technical provisions* is only complete for the purpose of 12.1 in the Technical Provisions Part where both of the following conditions are met:

(1) the data include sufficient historical information to assess the characteristics of the underlying risks and to identify trends in the risks; and

(2) the data are available for each of the relevant homogeneous risk groups used in the calculation of the *technical provisions* and no relevant data is excluded from being used in the calculation of the *technical provisions* without justification.

4.2 Data used in the calculation of the *technical provisions* is only accurate for the purpose of 12.1 in the Technical Provisions Part where all of the following conditions are met:

(1) the data are free from material errors;

(2) data from different time periods used for the same estimation are consistent;

(3) the data are recorded in a timely manner and consistently over time.

4.3 Data used in the calculation of the *technical provisions* is only to be considered appropriate for the purpose of 12.1 in the Technical Provisions Part where all of the following conditions are met:

(1) the data are consistent with the purposes for which they will be used;

(2) the amount and nature of the data ensure that the estimations made in the calculation of the *technical provisions* on the basis of the data do not include a material estimation error;

(3) the data are consistent with the assumptions underlying the actuarial and statistical techniques that are applied to them in the calculation of the *technical provisions*;

(4) the data appropriately reflect the risks to which the *firm* is exposed with regard to its insurance and *reinsurance* obligations;

(5) the data were collected, processed and applied in a transparent and structured manner, based on a documented process that comprises all of the following:

(a) 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;

(b) the use of and setting of assumptions made in the collection, processing and application of data;

(c) the process for carrying out data updates, including the frequency of updates and the circumstances that trigger additional updates; and

(6) a *firm* ensures that its data are used consistently over time in the calculation of the *technical provisions*.

For the purposes of (2), an estimation error in the calculation of the *technical provisions* must be considered material where it could influence the decision-making or the judgement of the users of the calculation result, including a *supervisory authority*.

4.4 A *firm* may use data from an external source provided that, in addition to fulfilling the requirements set out in 4.1 to 4.3, all of the following requirements are met:

(1) the *firm* is able to demonstrate that the use of that data is more suitable than the use of data which are exclusively available from an internal source;

(2) the *firm* knows the origin of that data and the assumptions or methodologies used to process that data;

(3) the *firm* identifies 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

(4) the *firm* is able to demonstrate that the assumptions and methodologies referred to in (2) and (3) reflect the characteristics of the *firm's* portfolio of insurance and *reinsurance* obligations.

5 LIMITATIONS OF DATA

5.1 Where data does not comply with 4, a *firm* must document appropriately the limitations of the data, including a description of whether and how such limitations will be remedied and of the functions within the system of governance of the *firm* responsible for that process. The data, before adjustments to remedy limitations are made to it, must be recorded and stored appropriately by the *firm*.

6 APPROPRIATE USE OF APPROXIMATIONS TO CALCULATE THE BEST ESTIMATE

6.1 Where a *firm* has insufficient data of appropriate quality to apply a reliable actuarial method, the *firm* may use appropriate approximations to calculate the *best estimate* provided that all of the following requirements are met:

(1) the insufficiency of data is not due to inadequate internal processes and procedures of collecting, storing or validating data used for the valuation of *technical provisions*;

(2) the insufficiency of data cannot be remedied by the use of external data; and

(3) it would not be practicable for the *firm* to adjust the data to remedy the insufficiency.

METHODOLOGIES TO CALCULATE TECHNICAL PROVISIONS

7 METHODOLOGIES TO CALCULATE TECHNICAL PROVISIONS ASSUMPTIONS

7.1 Assumptions shall only be considered realistic for the purposes of 3.1(2)(a) in the Technical Provisions Part where they meet all of the following conditions:

(1) the *firm* 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;

(2) the circumstances under which the assumptions would be considered false can be clearly identified;

(3) unless otherwise provided in this Part, the assumptions are based on the characteristics of the portfolio of insurance and *reinsurance* obligations, where possible regardless of the *firm* holding the portfolio;

(4) the *firm* uses the assumptions consistently over time and within homogeneous risk groups and *lines of business*, without arbitrary changes; and

(5) the assumptions adequately reflect any uncertainty underlying the cash-flows.

For the purpose of (3), a *firm* must only use information specific to that *firm*, including information on claims management and expenses, where that information better reflects the characteristics of the portfolio of insurance or *reinsurance* obligations than information that is not limited to the specific *firm* or where the calculation of *technical provisions* in a prudent, reliable and objective manner without using that information is not possible.

7.2 Assumptions must only be used for the purpose of 4.2 in the Technical Provisions Part where they comply with 7.1.

7.3 A *firm* must set assumptions on future financial market parameters or scenarios that are appropriate and consistent with 2 to 12 of the Valuation Part. Where a *firm* uses a model to produce projections of future financial market parameters, the *firm* must ensure it complies with all of the following requirements:

(1) it generates asset prices that are consistent with asset prices observed in financial markets;

(2) it assumes no arbitrage opportunity; and

(3) the calibration of the parameters and scenarios is consistent with the *relevant risk-free interest rate term structure* used to calculate the *best estimate* as referred to in 3 of the Technical Provisions Part.

8 FUTURE MANAGEMENT ACTIONS

8.1 Assumptions on future management actions shall only be considered realistic for the purposes of 3.1(2)(a) in the Technical Provisions Part where they meet all of the following conditions:

(1) the assumptions on future management actions are determined in an objective manner;

(2) assumed future management actions are consistent with the *firm's* current business practice and business strategy, including the use of *risk-mitigation techniques*; where there is sufficient evidence that the *firm* will change its practices or strategy, the assumed future management actions are consistent with the changed practices or strategy;

(3) assumed future management actions are consistent with each other;

(4) assumed future management actions are not contrary to any obligations towards *policyholders* or to legal requirements applicable to the *firm*; and

(5) assumed future management actions take account of any public indications by the *firm* as to the actions that it would expect to take or not take.

8.2 Assumptions about future management actions shall be realistic and include all of the following:

(1) a comparison of assumed future management actions with management actions taken previously by the *firm*;

(2) a comparison of future management actions taken into account in the current and in the past calculations of the *best estimate*; and

(3) an assessment of the impact of changes in the assumptions on future management actions on the value of the *technical provisions*.

A *firm* must be able to explain any relevant deviations in relation to (1) and (2) to the *PRA* and, where changes in an assumption on future management actions have 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 *firm*.

8.3 For the purpose of 8.1, a *firm* must establish a comprehensive future management actions plan, approved by the *governing body* of the *firm*, which provides for all of the following:

(1) the identification of future management actions that are relevant to the valuation of the *technical provisions*;

(2) the identification of the specific circumstances in which the *firm* would reasonably expect to carry out each respective future management action referred to in 8.3(1);

(3) the identification of the specific circumstances in which the *firm* may not be able to carry out each respective future management action referred to in 8.3(1), and a description of how those circumstances are considered in the calculation of *technical provisions*;

(4) the order in which future management actions referred to in 8.3(1) would be carried out and the governance requirements applicable to those future management actions;

(5) a description of any on-going work required to ensure that the *firm* is in a position to carry out each respective future management action referred to in 8.3(1);

(6) a description of how the future management actions referred to in 8.3(1) have been reflected in the calculation of the *best estimate*; and

(7) a description of the applicable internal reporting procedures that cover the future management actions referred to in 8.3(1) included in the calculation of the *best estimate*.

8.4 Assumptions about future management actions must take account of the time needed to implement the management actions and any expenses caused by them.

8.5 The system for ensuring the transmission of information shall only be considered to be effective for the purpose of 2.2 of the Conditions Governing Business Part where the reporting procedures referred to in 8.3(7) include at least an annual communication to the *governing body*.

9 FUTURE DISCRETIONARY BENEFITS

9.1 Where *future discretionary benefits* depend on the assets held by the *firm*, the *firm* must base the calculation of the *best estimate* on the assets it currently holds and must assume future changes of their asset allocation in accordance with 8. The assumptions on the future returns of the assets must be consistent with the *relevant risk-free interest rate term structure*, including where applicable a *matching adjustment*, a *volatility adjustment*, or a *risk-free interest rate transitional measure*, and the valuation of the assets in accordance with 2 to 12 of the Valuation Part.

10 SEPARATE CALCULATION OF THE FUTURE DISCRETIONARY BENEFITS

10.1 When calculating *technical provisions*, a *firm* must determine separately the value of *future discretionary benefits*.

11 POLICYHOLDER BEHAVIOUR

11.1 When determining the likelihood that *policyholders* will exercise contractual options, including lapses and *surrenders*, a *firm* must conduct an analysis of past *policyholder* behaviour and a prospective assessment of expected *policyholder* behaviour. That analysis must take into account all of the following:

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

(2) the influence of past and future economic conditions;

(3) the impact of past and future management actions; and

(4) any other circumstances that are likely to influence decisions by *policyholders* on whether to exercise the option.

The likelihood shall only be considered to be independent of the elements referred to in (1) to (4) where there is empirical evidence to support such an assumption.

METHODOLOGIES - INFORMATION UNDERLYING THE CALCULATION OF BEST ESTIMATES

12 CREDIBILITY OF INFORMATION

12.1 Information shall only be considered credible for the purposes of 3.1 of the Technical Provisions Part where a *firm* can provide evidence of the credibility of the information taking into account the consistency and objectivity of that information, the reliability of the source of the information and the transparency of the way in which the information is generated and processed.

METHODOLOGIES - CASH-FLOW PROJECTIONS FOR THE CALCULATION OF THE BEST ESTIMATE

13 CASH-FLOWS

13.1 The cash-flow projection used in the calculation of the *best estimate* must include all of the following cash-flows, to the extent that these cash-flows relate to existing *contracts of insurance*:

(1) benefit payments to *policyholders*;

(2) payments that the *firm* will incur in providing contractual benefits that are paid in kind;

(3) payments of expenses as referred to in 9.1(1) of the Technical Provisions Part;

(4) *premium* payments and any additional cash-flows that result from those *premiums*;

(5) payments between the *firm* and *intermediaries* related to insurance or *reinsurance* obligations;

(6) payments between the *firm* and *investment firms* in relation to contracts with *index-linked benefits* and unit linked benefits;

(7) payments for salvage and subrogation to the extent that they do not qualify as separate assets or liabilities in accordance with *UK-adopted international accounting standards*; and

(8) taxation payments which are, or are expected to be, charged to *policyholders* or are required to settle the insurance or *reinsurance* obligations.

14 EXPECTED FUTURE DEVELOPMENTS IN THE EXTERNAL ENVIRONMENT

14.1 The calculation of the *best estimate* must take into account expected future developments that will have a material impact on the cash in- and out-flows required to settle the insurance and *reinsurance* obligations over their lifetime. For that purpose future developments must include demographic, legal, medical, technological, social, environmental and economic developments including inflation as referred to in 9.1(2) of the Technical Provisions Part.

15 UNCERTAINTY OF CASH-FLOWS

15.1 The cash-flow projection used in the calculation of the *best estimate* must, explicitly or implicitly, take account of all uncertainties in the cash-flows, including all of the following characteristics:

(1) uncertainty in the timing, frequency and severity of insured events;

(2) uncertainty in claim amounts, including uncertainty in claims inflation, and in the period needed to settle and pay claims;

(3) uncertainty in the amount of expenses referred to 9.1(1) of the Technical Provisions Part;

(4) uncertainty in expected future developments referred to in 14 to the extent that it is practicable;

(5) uncertainty in *policyholder* behaviour;

(6) dependency between two or more causes of uncertainty; and

(7) dependency of cash-flows on circumstances prior to the date of the cash-flow.

16 EXPENSES

16.1 A cash-flow projection used to calculate *best estimates* must take into account all of the following expenses, which relate to recognised insurance and *reinsurance* obligations of the *firm* and which are referred to in 9.1(1) of the Technical Provisions Part:

(1) administrative expenses;

(2) investment management expenses;

(3) claims management expenses; and

(4) acquisition expenses.

The expenses referred to in (1) to (4) must take into account overhead expenses incurred in servicing insurance and *reinsurance* obligations.

16.2 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.

16.3 Expenses in respect of *reinsurance contracts* and *special purpose vehicles* must be taken into account in the gross calculation of the *best estimate*.

16.4 Expenses must be projected on the assumption that the *firm* will write new business in the future.

17 CONTRACTUAL OPTIONS AND FINANCIAL GUARANTEES

17.1 When calculating the *best estimate*, a *firm* must take into account both of the following:

(1) all financial guarantees and contractual options included in their *contracts of insurance*; and

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

18 CURRENCY OF THE OBLIGATION

18.1 The *best estimate* must be calculated separately for cash-flows in different currencies.

19 CALCULATION METHODS

19.1 The *best estimate* is to be calculated in a transparent manner and in such a way as to ensure that the calculation method and the results that derive from it are capable of review by a qualified expert.

19.2 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 and the nature of the insurance and *reinsurance* obligations. The actuarial and statistical methods are to be consistent with and make use of all relevant data available for the calculation of the *best estimate*.

19.3 Where a calculation method is based on grouped *policy* data, a *firm* must ensure that the grouping of *policies* creates homogeneous risk groups that appropriately reflect the risks of the individual *policies* included in those groups.

19.4 A *firm* must analyse the extent to which the present value of 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.

19.5 Where the present value of cash-flows depends on future events and developments as referred to in 19.4, a *firm* must use a method to calculate the *best estimate* for cash-flows which reflects such dependencies.

20 HOMOGENEOUS RISK GROUPS OF LONG-TERM INSURANCE BUSINESS OBLIGATIONS

20.1 Subject to 27, a *firm* must make cash-flow projections used in the calculation of *best estimates* for *long-term insurance business* obligations:

(1) separately for each *policy*, or

(2) a *firm* may carry out the projection for groups of *policies*, provided that the grouping complies with all of the following requirements:

(a) there are no significant differences in the nature and complexity of the risks underlying the *policies* that belong to the same group;

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

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

21 GENERAL INSURANCE BUSINESS OBLIGATIONS

21.1 The *best estimate* for *general insurance business* obligations must be calculated separately for the *premium* provision and for the provision for claims outstanding.

21.2 The *premium* provision must relate to future claim events covered by insurance and *reinsurance* obligations falling within the contract boundary referred to in 3. Cash-flow projections for the calculation of the *premium* provision must include benefits, expenses and *premiums* relating to these events.

21.3 The provision for claims outstanding must relate to claim events that have already occurred, regardless of whether the claims arising from those events have been reported or not.

21.4 Cash-flow projections for the calculation of the provision for claims outstanding must include benefits, expenses and *premiums* relating to the events referred to in 21.3.

TECHNICAL PROVISIONS CALCULATED AS A WHOLE

22 CIRCUMSTANCES IN WHICH TECHNICAL PROVISIONS ARE TO BE CALCULATED AS A WHOLE AND THE METHOD TO BE USED

22.1 For the purposes of Technical Provisions 2.5(2)(a), reliability must be assessed pursuant to 22.2 and 22.3 and *technical provisions* must be valued pursuant to 22.4.

22.2 A *firm* shall consider the replication of cash-flows to be reliable where those cash-flows are replicated in amount and timing in relation to the underlying risks of those cash-flows and in all possible scenarios. The following cash-flows associated with insurance or *reinsurance* obligations cannot be reliably replicated:

(1) cash-flows associated with insurance or *reinsurance* obligations that depend on the likelihood that *policyholders* will exercise contractual options, including lapses and *surrenders*;

(2) cash-flows associated with insurance or *reinsurance* obligations that depend on the level, trend, or volatility of mortality, disability, sickness and morbidity rates;

(3) all expenses that will be incurred in servicing insurance and *reinsurance* obligations.

22.3 Financial instruments shall be considered to be financial instruments for which a reliable *market value* is observable where those financial instruments are traded on an active, deep, liquid and transparent market. Active markets must also comply with 6.4 of the Valuation Part.

22.4 A *firm* must determine the value of *technical provisions* on the basis of the market price of the financial instruments used in the replication.

RECOVERABLES FROM REINSURANCE CONTRACTS AND SPVS

23 RECOVERABLES FROM REINSURANCE CONTRACTS AND SPVS – GENERAL PROVISIONS

23.1 The amounts recoverable from *reinsurance contracts* and *special purpose vehicles* must be calculated consistently with the boundaries of the *contracts of insurance* to which those amounts relate.

23.2 The amounts recoverable from *special purpose vehicles*, the amounts recoverable from finite *reinsurance contracts* as referred to in 8.1 of the Conditions Governing Business Part and the amounts recoverable from other *reinsurance contracts* must each be calculated separately. The

amounts recoverable from a *special purpose vehicle* must not exceed the *aggregate maximum risk exposure* of that *special purpose vehicle* to the *firm*.

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

23.4 The amounts recoverable from *reinsurance contracts* and *special purpose vehicles* for *general insurance business* obligations must be calculated separately for *premium* provisions and provisions for claims outstanding in the following manner:

(1) the cash-flows relating to provisions for claims outstanding must include the compensation payments relating to the claims accounted for in the gross provisions for claims outstanding of the *firm* ceding risks;

(2) the cash-flows relating to *premium* provisions must include all other payments.

23.5 Where cash-flows from the *special purpose vehicles* to the *firm* do not directly depend on the claims against the *firm* ceding risks, the amounts recoverable from those *special purpose vehicles* for future claims shall only be taken into account to the extent that it can be verified in a prudent, reliable and objective manner that the structural mismatch between claims and amounts recoverable is not material.

24 COUNTERPARTY DEFAULT ADJUSTMENT

24.1 Adjustments to take account of expected losses due to default of a *counterparty* referred to in 11.1(3) of the Technical Provisions Part must be calculated separately from the rest of the amounts recoverable.

24.2 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. For that purpose, the change in cash-flows must not take into account the effect of any *risk-mitigation techniques* that mitigates the *credit risk* of the *counterparty*, other than *risk-mitigation techniques* based on *collateral* holdings. The *risk-mitigation techniques* that are not taken into account are to be separately recognised without increasing the amount recoverable from *reinsurance contracts* and *special purpose vehicles*.

24.3 The calculation referred to in 24.2 must take into account 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. It must be carried out separately by each *counterparty* and for each *line of business*. In *general insurance business*, it is also to be carried out separately for *premium* provisions and provisions for claims outstanding.

24.4 The average loss resulting from a default of a *counterparty*, referred to in 11.1(3) of the Technical Provisions Part, must not be assessed at lower than 50% of the amounts recoverable excluding the adjustment referred to in 24.1, unless there is a reliable basis for another assessment.

24.5 The probability of default of a *special purpose vehicle* is to be calculated on the basis of the *credit risk* inherent in the assets held by the *special purpose vehicle*.

25 RISK FREE RATE INTEREST TERM STRUCTURE OF CURRENCIES PEGGED TO THE EURO

25.1 A *firm* may use the *basic relevant risk-free interest rate term structure* for the EUR, adjusted for currency risk, to calculate the *best estimate* with respect to insurance or *reinsurance* obligations denoted in a currency pegged to the EUR, provided that all of the following conditions are met:

(1) the pegging ensures that the exchange rate between that currency and the EUR stays within a range not wider than 20% of the upper limit of the range;

(2) the economic situation of the EUR area and the area of that currency are sufficiently similar to ensure that interest rates for the EUR and that currency develop in a similar way;

(3) the pegging arrangement ensures that the relative changes in the exchange rate over a one-year-period do not exceed the range referred to in (1) in the event of extreme market events, that correspond to the confidence level set out in Solvency Capital Requirement – General Provisions 3.3 and 3.4; and

(4) one of the following criteria is complied with:

(a) participation of that currency in the European Exchange Rate Mechanism (ERM II);

(b) existence of a decision from the Council of the European Union which recognises pegging arrangements between that currency and the EUR;

(c) establishment of the pegging arrangement by the law of the country establishing that country's currency.

For the purpose of (3), the financial resources of the parties that guarantee the pegging must be taken into account.

25.2 The adjustment for currency risk referred to in 25.1 must be negative and must correspond to the cost of hedging against the risk that the value in the pegged currency of an investment denominated in EUR decreases as a result of changes in the level of the exchange rate between the EUR and the pegged currency.

LINES OF BUSINESS

26 LINES OF BUSINESS

26.1 The *lines of business* referred to in 10.1 of the Technical Provisions Part are those set out in Annex 1.

26.2 The assignment of an insurance or *reinsurance* obligation to a *line of business* must reflect the nature of the risks relating to the obligation. The legal form of the obligation is not necessarily determinative of the nature of the risk.

26.3 Provided that the technical basis is consistent with the nature of the risks relating to the obligation, *health insurance obligations* pursued on a similar technical basis to that of *long-term insurance business* must be assigned to the *lines of business* for *long-term insurance business* and *health insurance obligations* pursued on a similar technical basis to that of *general insurance business* must be assigned to the *lines of business* for *general insurance business*.

26.4 Where the insurance obligations arising from the operations referred to in paragraph V, VI, VII or VIII of Part II to Schedule 1 of the *Regulated Activities Order* cannot clearly be assigned to the *lines of business* set out in Annex 1 on the basis of their nature, they must be included in *line of business* 32 as set out in Annex 1.

26.5 Where a *contract of insurance* covers risks across *long-term insurance business* and *general insurance business*, the insurance or *reinsurance* obligations must be unbundled into their *long-term insurance business* and *general insurance business* parts.

26.6 Where a *contract of insurance* covers risks across the *lines of business* as set out in Annex 1, the insurance or *reinsurance* obligations must, where possible, be unbundled into the appropriate *lines of business*.

26.7 Where a *contract of insurance* includes:

(1) *health insurance obligations* or *health reinsurance obligations*; and

(2) other insurance or *reinsurance* obligations;

those obligations must, where possible, be unbundled.

SIMPLIFICATIONS

27 PROPORTIONALITY

27.1 A *firm* must use methods to calculate *technical provisions* which are proportionate to the nature, scale and complexity of the risks underlying their insurance and *reinsurance* obligations.

27.2 In determining whether a method of calculating *technical provisions* is proportionate, a *firm* must carry out an assessment which includes:

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

(2) an evaluation in qualitative or quantitative terms of the error introduced in the results of the method due to any deviation between the following:

(a) the assumptions underlying the method in relation to the risks;

(b) the results of the assessment referred to in (1).

27.3 The assessment referred to in 27.2(2)(a) must include all risks which affect the amount, timing or value of the cash in- and out-flows required to settle the insurance and *reinsurance* obligations over their lifetime. For the purpose of the calculation of the *risk margin*, the assessment must include all risks referred to in 27.2(2)(a) over the lifetime of the underlying insurance and *reinsurance* obligations. The assessment shall be restricted to the risks that are relevant to that part of the calculation of *technical provisions* to which the method is applied.

27.4 A method shall be considered disproportionate to the nature, scale and complexity of the risks if the error referred to in 27.2(2)(b) leads to a misstatement of *technical provisions* or their components that could influence the decision-making or judgment of the intended user of the information relating to the value of *technical provisions*, unless one of the following conditions are met:

(1) 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*;

(2) the method leads to an amount of *technical provisions* of the *firm* 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 and *reinsurance* obligations that it is applied to.

ANNEX 1: LINES OF BUSINESS

PART A: GENERAL INSURANCE BUSINESS OBLIGATIONS

1. Medical expense insurance

   Medical expense insurance obligations where the underlying business is not pursued on a similar technical basis to that of *long-term insurance business*, other than obligations included in the *line of business* 3.

2. Income protection insurance

   Income protection insurance obligations where the underlying business is not pursued on a similar technical basis to that of *long-term insurance business*, other than obligations included in the *line of business* 3.

3. Workers' compensation insurance

   Health insurance obligations which relate to accidents at work, industrial injury and occupational diseases and where the underlying business is not pursued on a similar technical basis to that of *long-term insurance business*.

4. Motor vehicle liability insurance

   Insurance obligations which cover all liabilities arising out of the use of motor vehicles operating on land (including carrier's liability).

5. Other motor insurance

   Insurance obligations which cover all damage to or loss of land vehicles (including *railway rolling stock*).

6. Marine, aviation and transport insurance

   Insurance obligations which cover all damage or loss to sea, lake, river and canal vessels, *aircraft*, and damage to or loss of *goods in transit* or baggage irrespective of the form of transport. Insurance obligations which cover liabilities arising out of the use of *aircraft*, *ships*, vessels or boats on the sea, lakes, rivers or canals (including carrier's liability).

7. Fire and other damage to property insurance

   Insurance obligations which cover all damage to or loss of property other than those included in the *lines of business* 5 and 6 due to fire, explosion, natural forces including storm, hail or frost, nuclear energy, land subsidence and any event such as theft.

8. General liability insurance

   Insurance obligations which cover all liabilities other than those in the *lines of business* 4 and 6.

9. Credit and suretyship insurance

   Insurance obligations which cover insolvency, export credit, instalment credit, mortgages, agricultural credit and direct and indirect *suretyship*.

10. Legal expenses insurance

    Insurance obligations which cover legal expenses and cost of litigation.

11. Assistance

    Insurance obligations which cover assistance for *persons* who get into difficulties while travelling, while away from home or while away from their habitual residence.

12. Miscellaneous financial loss

Insurance obligations which cover employment risk, insufficiency of income, bad weather, loss of benefit, continuing general expenses, unforeseen trading expenses, loss of *market value*, loss of rent or revenue, indirect trading losses other than those mentioned above, other financial loss (non-trading) as well as any other risk of *general insurance business* not covered by the *lines of business* 1 to 11.

PART B: PROPORTIONAL GENERAL REINSURANCE OBLIGATIONS

13-24. The *lines of business* 13 to 24 must include proportional *reinsurance* obligations which relate to the obligations included in *lines of business* 1 to 12 respectively.

PART C: NON-PROPORTIONAL GENERAL REINSURANCE OBLIGATIONS

25. Non-proportional health *reinsurance*

Non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 1 to 3.

26. Non-proportional casualty *reinsurance*

Non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 4 and 8.

27. Non-proportional marine, aviation and transport *reinsurance*

Non-proportional *reinsurance* obligations relating to insurance obligations included in *line of business* 6.

28. Non-proportional property *reinsurance*

Non-proportional *reinsurance* obligations relating to insurance obligations included in *lines of business* 5, 7 and 9 to 12.

PART D: LONG-TERM INSURANCE BUSINESS OBLIGATIONS

29. Health insurance

Health insurance obligations where the underlying business is pursued on a similar technical basis to that of *long-term insurance business*, other than those included in *line of business* 33.

30. Insurance with profit participation

Insurance obligations with profit participation other than obligations included in *lines of business* 33 and 34.

31. Index-linked and unit-linked insurance

Insurance obligations with *index-linked benefits* and unit linked benefits other than those included in *lines of business* 33 and 34.

32. Other *long-term insurance business*

Long-term insurance business obligations other than those included in *lines of business* 29 to 31, 33 and 34.

33. Annuities stemming from *general insurance business* contracts and relating to *health insurance obligations*.

34. Annuities stemming from *general insurance business* contracts and relating to insurance obligations other than *health insurance obligations*.

PART E: LONG-TERM REINSURANCE OBLIGATIONS

35. Health *reinsurance*

    Reinsurance obligations which relate to the obligations included in *lines of business* 29 and 33.

36. Long-term *reinsurance*

    Reinsurance obligations which relate to the obligations included in *lines of business* 30 to 32 and 34.

Annex T

Amendments to the Third Country Branches Part

In this Annex new text is underlined and deleted text is struck through.

…

15 SOLVENCY II REGULATIONS[DELETED]

15.1 ~~A *third country branch undertaking* that has a *third country pure reinsurance branch* must comply with the *Solvency II Regulations* as at 1 January 2016 in the same way as they apply to a *third country branch undertaking* that has a *third country insurance branch*.~~[Deleted]

15.2 ~~In complying with requirements imposed on it in the Solvency II Firms Sector of the *PRA* Rulebook, a *third country branch undertaking* must ensure that any provisions of the *Solvency II Regulations* relevant to the *third country branch* is applied in order to achieve the same effect as that provision of the *Solvency II Regulations* would have (that is, complying with the requirements of the relevant provision) when applied to a *UK Solvency II firm*.~~[Deleted]

Annex U

Amendments to the Transitional Measures Part

In this Annex new text is underlined and deleted text is struck through.

1 APPLICATION AND DEFINITIONS

…

1.2 In this Part, the following definitions shall apply:

admissible insurance and reinsurance obligations

~~has the meaning set out in regulation 53(2) of the *Solvency 2 Regulations 2015*, where reference to rules implementing Article 20 of Directive 2002/83/EC until 1st January 2016 means INSPRU 1.1.16 R of the *PRA Handbook* as at 31 December 2015.~~

means insurance or *reinsurance* obligations that meet all of the following requirements:

(1) the contracts that give rise to the insurance or *reinsurance* obligations are concluded before 1 January 2016;
(2) the technical provisions for the insurance and *reinsurance* obligations are determined in accordance with INSPRU 1.1.16 R of the *PRA Handbook* as at 31 December 2015; and
(3) the insurance or *reinsurance* obligations are not subject to a *matching adjustment permission*.

For the purposes of paragraph (1), the renewal of a contract does not give rise to a new contract.

[Note: Art. 308c(3) of the *Solvency II Directive*]

…

3 REPORTING TO THE PRA AND PUBLIC DISCLOSURE

3.1 ~~A *firm* must submit under Reporting 2.1 and 2.2 the regular supervisory report and annual quantitative templates required to be submitted in accordance with the *Solvency II Regulations* and the annual *national specific templates* under Reporting 2.6 and 2.8(1) by no later than:~~

~~(1) 20 weeks after the *firm's* financial year end in relation to its financial year ending on or after 30 June 2016 before 1 January 2017;~~

~~(2) 18 weeks after the *firm's* financial year end in relation to its financial year ending on or after 1 January 2017 but before 1 January 2018;~~

~~(3) 16 weeks after the *firm's* financial year end in relation to its financial year ending on or after 1 January 2018 but before 1 January 2019;~~

~~(4) 14 weeks after the *firm's* financial year end in relation to its financial year ending on or after 1 January 2019 but before 1 January 2020.~~[Deleted]

~~[Note: Art. 308b (5) of the *Solvency II Directive*]~~

…

3.3 ~~A *firm* must submit under Reporting 2.1 and 2.2 the quarterly quantitative templates required to be submitted in accordance with the *Solvency II Regulations* and the quarterly *national specific templates* under Reporting 2.8(2) by no later than:~~

~~(1) 8 weeks related to any quarter ending on or after 1 January 2016 but before 1 January 2017;~~

(2) 7 weeks related to any quarter ending on or after 1 January 2017 but before 1 January 2018;

(3) 6 weeks related to any quarter ending on or after 1 January 2018 but before 1 January 2019;

(4) 5 weeks related to any quarter ending on or after 1 January 2019 but before 1 January 2020.[Deleted]

[Note: Art. 308b (7) of the *Solvency II Directive*]

3.4 Where Group Supervision 2.1(1) or (2) applies, the submission under Group Supervision 17.3 of the group regular supervisory report and annual quantitative templates required to be submitted in accordance with the *Solvency II Regulations* must be made by no later than:

(1) 26 weeks after the financial year end of the *participating UK Solvency II firm*, ultimate *insurance holding company* or ultimate *mixed financial holding company* in relation to its financial year ending on or after 30 June 2016 but before 1 January 2017;

(2) 24 weeks after the financial year end of the *participating UK Solvency II firm*, ultimate *insurance holding company* or ultimate *mixed financial holding company* in relation to its financial year ending on or after 1 January 2017 but before 1 January 2018;

(3) 22 weeks after the financial year end of the *participating UK Solvency II firm*, ultimate *insurance holding company* or ultimate *mixed financial holding* company in relation to its financial year ending on or after 1 January 2018 but before 1 January 2019; and

(4) 20 weeks after the financial year end of the *participating UK Solvency II firm*, ultimate *insurance holding company* or ultimate *mixed financial holding company* in relation to its financial year ending on or after 1 January 2019 but before 1 January 2020.[Deleted]

[Note: Art. 308b (8) of the *Solvency II Directive*]

…

3.6 Where Group Supervision 2.1(1) or (2) applies, the submission under Group Supervision 17.3 of the quarterly quantitative templates required to be submitted in accordance with the *Solvency II Regulations* must be made by no later than:

(1) 14 weeks related to any quarter ending on or after 1 January 2016 but before 1 January 2017;

(2) 13 weeks related to any quarter ending on or after 1 January 2017 but before 1 January 2018;

(3) 12 weeks related to any quarter ending on or after 1 January 2018 but before 1 January 2019;

(4) 11 weeks related to any quarter ending on or after 1 January 2019 but before 1 January 2020.[Deleted]

[Note: Art. 308b (8) of the *Solvency II Directive*]

…

5 STANDARD FORMULA: THE BASIC SCR

...

5.2 Notwithstanding Solvency Capital Requirement – General Provisions 2, 3.1, 3.3, 3.4 and Solvency Capital Requirement – Standard Formula 3.1 to 3.3, the standard parameters to be used for equities that a *firm* purchased on or before 1 January 2016, when calculating the

~~equity risk sub-module in accordance with the *standard formula*, must be calculated as the weighted averages of:~~

~~(1) the standard parameter to be used when calculating the equity risk sub-module in accordance with 5.4; and~~

~~(2) the standard parameter to be used when calculating the equity risk sub-module in accordance with the *standard formula*.~~[Deleted]

~~[Note: Art. 308b (13) of the *Solvency II Directive*]~~

5.3 ~~The weight for the parameter expressed in 5.2(2) must increase at least linearly at the end of each year from 0% during 2016 to 100% from 1 January 2023.~~[Deleted]

~~[Note: Art. 308b (13) of the *Solvency II Directive*]~~

5.4 ~~The equity risk sub-module for the purpose of 5.2(1) must be calibrated using a Value-at-Risk measure, over a time period, which is consistent with the typical holding period of equity investments for the *firm* concerned, with a confidence level providing the *policyholders* with a level of protection equivalent to that set out in Solvency Capital Requirement – General Provisions 3.2 to 3.5.~~[Deleted]

~~[Note: Art. 308b (13) of the *Solvency II Directive*]~~

...

10 RISK-FREE INTEREST RATES

10.1 A *firm* may only apply the *risk-free interest rate transitional measure*:

(1) in respect of *admissible insurance and reinsurance obligations*; and

(2) if it has received ~~approval~~permission to do so from the *PRA* pursuant to section 138BA of *FSMA*.

…

Annex V

Amendments to the Undertakings in Difficulty Part

In this Annex new text is underlined and deleted text is struck through.

…

3 NON-COMPLIANCE WITH THE SCR

3.1 …

(3) take the measures necessary to achieve, within six *months* (or such longer period as the *firm* is permitted by the *PRA* pursuant to section 138A or 138BA of *FSMA* as the case may be~~may determine~~) from the observation of non-compliance with the *SCR*, the re-establishment of the level of *eligible own funds* covering the *SCR* or the reduction of its risk profile to ensure compliance with the *SCR*.

[Note: Art. 138(1)–(3) of the *Solvency II Directive*]

3.2 ~~If the *PRA* has extended the period referred to in 3.1(3), by reason of the declaration;~~

(1) ~~before *IP completion day* by *EIOPA*; or~~[deleted]

(2) ~~on or after *IP completion day* by the *PRA* pursuant to regulation 4A of the *Solvency 2 Regulations*~~,[deleted]

If the *PRA* has extended the period referred to in 3.1(3), by reason of the declaration by the *PRA* of an ~~*exceptional adverse situations*~~ affecting the *firm*, the *firm* must submit a progress report to the *PRA* every three *months* setting out the measures taken and the progress made to re-establish the level of *eligible own funds* covering the *SCR* or to reduce its risk profile to ensure compliance with the *SCR*.

...

Annex W

Amendments to the Valuation Part

In this Annex new text is underlined and deleted text is struck through.

…

3 VALUATION ASSUMPTIONS

3.1 A *firm* must value assets and liabilities based on the assumption that the *firm* will pursue its business as a going concern.

4 SCOPE

4.1 5 to 12 apply to the recognition and valuation of assets and liabilities, other than *technical provisions*.

5 VALUATION METHODOLOGY - GENERAL PRINCIPLES

5.1 A *firm* must recognise assets and liabilities in conformity with *UK-adopted international accounting standards*.

5.2 A *firm* must value assets and liabilities in accordance with *UK-adopted international accounting standards* provided that those standards include valuation methods that are consistent with the valuation approach set out in 2. Where those standards allow for the use of more than one valuation method, a *firm* must only use valuation methods that are consistent with 2.

5.3 Where the valuation methods included in *UK-adopted international accounting standards* are not consistent either temporarily or permanently with the valuation approach set out in 2, a *firm* must use other valuation methods that are consistent with 2.

5.4 By way of derogation from 5.1 and 5.2, a *firm* may recognise and value an asset or a liability based on the valuation method it uses for preparing its annual or consolidated financial statements provided that:

(1) the valuation method is consistent with 2;

(2) the valuation method is proportionate with respect to the nature, scale and complexity of the risks inherent in the business of the *firm*;

(3) the *firm* does not value that asset or liability using *UK-adopted international accounting standards* in its financial statements; and

(4) valuing assets and liabilities using international accounting standards would impose costs on the *firm* that would be disproportionate with respect to the total administrative expenses.

5.5 A *firm* must value individual assets separately.

5.6 A *firm* must value individual liabilities separately.

6 VALUATION METHODOLOGY – VALUATION HIERARCHY

6.1 A *firm* must, when valuing assets and liabilities in accordance with 5.1, 5.2 and 5.3, follow the valuation hierarchy set out in 6.2 to 6.7, taking into account the characteristics of the asset or liability where market participants would take those characteristics into account when pricing

the asset or liability at the valuation date, including the condition and location of the asset or liability and restrictions, if any, on the sale or use of the asset.

6.2 As the default valuation method a *firm* must value assets and liabilities using quoted market prices in active markets for the same assets or liabilities.

6.3 Where the use of quoted market prices in active markets for the same assets or liabilities is not possible, a *firm* must value assets and liabilities using quoted market prices in active markets for similar assets and liabilities with adjustments to reflect differences. Those adjustments must reflect factors specific to the asset or liability including all of the following:

(1) the condition or location of the asset or liability;

(2) the extent to which inputs relate to items that are comparable to the asset or liability; and

(3) the volume or level of activity in the markets within which the inputs are observed.

6.4 A *firm's* use of quoted market prices must be based on the criteria for an active market, as defined in *UK-adopted international accounting standards*.

6.5 Where the criteria referred to in 6.4 are not satisfied, a *firm* must use *alternative valuation methods*.

6.6 When using *alternative valuation methods*, a *firm* must rely as little as possible on *undertaking*-specific inputs and make maximum use of relevant market inputs including the following:

(1) quoted prices for identical or similar assets or liabilities in markets that are not active;

(2) inputs other than quoted prices that are observable for the asset or liability, including interest rates and yield curves observable at commonly quoted intervals, implied volatilities and credit spreads; and

(3) market-corroborated inputs, which may not be directly observable, but are based on or supported by observable market data.

All market inputs must be adjusted for the factors referred to in 6.3.

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, a *firm* must use unobservable inputs reflecting the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. Where unobservable inputs are used, a *firm* must adjust *undertaking*-specific data if reasonable available information indicates that other market participants would use different data or there is something particular to the *firm* that is not available to other market participants.

When assessing the assumptions about risk referred to in this paragraph a *firm* 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.

6.7 A *firm* must use valuation techniques that are consistent with one or more of the following approaches when using *alternative valuation methods*:

(1) market approach, which uses prices and other relevant information generated by market transactions involving identical or similar assets, liabilities or group of assets and liabilities. Valuation techniques consistent with the market approach include matrix pricing;

(2) income approach, which converts future amounts, such as cash-flows or income or expenses, to a single current amount. The fair value must reflect current market expectations about those future amounts. Valuation techniques consistent with the income approach include present value techniques, option pricing models and the multi-period excess earnings method; and

(3) cost approach or current replacement cost approach reflects the amount that would be required currently to replace the service capacity of an asset. From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable quality adjusted for obsolescence.

7 RECOGNITION OF CONTINGENT LIABILITIES

7.1 A *firm* must recognise contingent liabilities, as defined in accordance with *UK-adopted international accounting standards*, that are material, as liabilities.

7.2 Contingent liabilities are material where information about the current or potential size or nature of those liabilities could influence the decision-making or judgement of the intended user of that information, including a *supervisory authority*.

7.3 The obligation to recognise material contingent liabilities in 7.1 applies irrespective of whether a liability is required to be recognised in accordance with *UK-adopted international accounting standards*.

8 VALUATION METHODS FOR GOODWILL AND INTANGIBLE ASSETS

8.1 A *firm* must value the following assets at zero:

(1) goodwill; and

(2) intangible assets other than goodwill, unless the intangible asset can be sold separately and the *firm* can demonstrate that there is a value for the same or similar assets that has been derived in accordance with 6.2, in which case the asset must be valued in accordance with 6.

9 VALUATION METHODS FOR RELATED UNDERTAKINGS

9.1 For the purposes of valuing the assets of individual *insurance undertakings* and *reinsurance undertakings*, a *firm* must value holdings in *related undertakings*, in accordance with the following hierarchy of methods:

(1) the default valuation method set out in 6.2;

(2) the adjusted equity method referred to in 9.3 where valuation in accordance with point (1) is not possible;

(3) either the valuation method set out in 6.3 or *alternative valuation methods* in accordance with 6.5 provided that both of the following conditions are fulfilled:

(a) neither valuation in accordance with (1) nor (2) is possible; and

(b) the *undertaking* is not a *subsidiary undertaking*.

9.2 By way of derogation from 9.1, for the purposes of valuing the assets of individual *insurance undertakings* and *reinsurance undertakings*, a *firm* must value holdings in the following *undertakings* at zero:

(1) *undertakings* that are excluded from the scope of the group supervision under Group Supervision 2.3; and

(2) *undertakings* that are deducted from the *own funds* eligible for the *group* solvency in accordance with Group Supervision 10.6.

9.3 The adjusted equity method referred to in 9.1(2) requires the *participating undertaking* to value its holdings in *related undertakings* based on the share of the excess of assets over liabilities of the *related undertaking* held by the *participating undertaking*.

9.4 When calculating the excess of assets over liabilities for a *related undertaking*, the *participating undertaking* must value the *undertaking's* individual assets and liabilities in accordance with:

(1) 2; and

(2) if the *related undertaking* is:

(a) required to calculate *technical provisions* in accordance with the Technical Provisions Part, Matching Adjustment Part, Conditions Governing Business Part and Solvency Capital Requirement – General Provisions Part; or

(b) a *special purpose vehicle*;

also in accordance with the *technical provisions* in the Technical Provisions Part, Matching Adjustment Part, Conditions Governing Business Part and Solvency Capital Requirement – General Provisions Part.

9.5 When calculating the excess of assets over liabilities for *related undertakings* other than *insurance undertakings* or *reinsurance undertakings*, the *participating undertaking* may consider the equity method as prescribed in *UK-adopted international accounting standards* to be consistent with 2, where valuation of individual assets and liabilities in accordance with 9.4 is not practicable. In such cases, the *participating undertaking* must deduct from the value of the *related undertaking* the value of goodwill and other intangible assets that would be valued at zero in accordance with 8.1(2).

9.6 Where the criteria referred to in 5.4 are satisfied, and where the use of the valuation methods referred to in 9.1(1) and (2) is not possible, holdings in *related undertakings* may be valued based on the valuation method the *firm* uses for preparing its annual or consolidated financial statements. In such cases, the *participating undertaking* must deduct from the value of the *related undertaking* the value of goodwill and other intangible assets that would be valued at zero in accordance with 8.1(2).

10 VALUATION METHODS FOR SPECIFIC LIABILITIES

10.1 A *firm* must value financial liabilities, as referred to in *UK-adopted international accounting standards*, in accordance with 5 upon initial recognition. A *firm* must not make any subsequent adjustment to take account of the change in own credit standing of the *firm* after initial recognition.

10.2 A *firm* must value contingent liabilities that have been recognised in accordance with 7. The value of contingent liabilities must be 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 relevant risk-free interest rate term structure*.

11 DEFERRED TAXES

11.1 A *firm* must recognise and value deferred taxes in relation to all assets and liabilities, including *technical provisions*, that are recognised for solvency or tax purposes in accordance with 5.

11.2 Notwithstanding 11.1, a *firm* 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 recognised and valued in accordance with 2 and in the case of *technical provisions* in accordance with Technical Provisions Part, Matching Adjustment Part, Conditions Governing Business Part,

Solvency Capital Requirement – General Provisions Part and the values ascribed to assets and liabilities as recognised and valued for tax purposes.

11.3 A *firm* may only ascribe a positive value to deferred tax assets where 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.

12 EXCLUSION OF VALUATION METHODS

12.1 A *firm* must not value financial assets or financial liabilities at cost or amortised cost.

12.2 A *firm* must not apply valuation models that value at the lower of the carrying amount and fair value less costs to sell.

12.3 A *firm* must not value property, investment property, plant and equipment with cost models where the asset value is determined as cost less depreciation and impairment.

12.4 A *firm* which is a lessee in a financial lease or a lessor must comply with all of the following when valuing assets and liabilities in a lease arrangement:

(1) lease assets must be valued at fair value;

(2) for the purposes of determining the present value of the minimum lease payments, market consistent inputs must be used and a *firm* must not make subsequent adjustments to take account of the own credit standing of the *undertaking*; and

(3) valuation at depreciated cost must not be applied.

12.5 A *firm* must adjust the net realisable value for inventories by the estimated cost of completion and the estimated costs necessary to make the sale where those costs are material. Those costs are to be considered material where their non-inclusion could influence the decision-making or the judgement of the users of the balance sheet, including a *supervisory authority*. Valuation at cost must not be applied.

12.6 A *firm* must not value non-monetary grants at a nominal amount.

12.7 When valuing biological assets, a *firm* must adjust the value by adding the estimated costs to sell if the estimated costs to sell are material.

EXTERNALLY DEFINED TERMS

Term	Definition source
month	Schedule 1, Interpretation Act 1978
person	Schedule 1, Interpretation Act 1978
Treasury	Schedule 1, Interpretation Act 1978