INTEGRATED PRUDENTIAL SOURCEBOOK (INSURERS AND OTHER AMENDMENTS) INSTRUMENT 2004

Powers exercised

A. The Financial Services Authority 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 138 (General rule-making power);
(2) section 141 (Insurance business rules);
(3) section 149 (Evidential provisions);
(4) section 150(2) (Actions for damages);
(5) section 156 (General supplementary powers); and
(6) section 157(1) (Guidance).

B. The rule-making powers listed above are specified for the purpose of section 153(2) (Rule-making instruments) of the Act.

Commencement

C. This instrument comes into force as follows:

(1) PRU 8.3.15R in Annex J comes into force on 31 December 2006;
(2) subject to (3), the remainder of this instrument comes into force on 31 December 2004;
(3) paragraph E below comes into force on 1 December 2004.

Amendments to the Integrated Prudential sourcebook

D. The Integrated Prudential sourcebook is amended:

(1) by inserting new chapters or sections of chapters, as listed in column (1) of the following table, in accordance with the Annexes to this instrument listed in column (2):

(1)	(2)
PRU 1.2	Annex A
PRU 1.3	Annex B
PRU 1.4	Annex C
PRU 2	Annex D
PRU 3	Annex E
PRU 4	Annex F
PRU 5	Annex G
PRU 6	Annex H
PRU 7	Annex I
PRU 8.3	Annex J

(2) in accordance with Annex K to this instrument.

Revocation

E. Annex E to the Financial Conglomerates and Other Financial Groups Instrument 2004 is revoked.

Citation

F. This instrument may be cited as the Integrated Prudential Sourcebook (Insurers and Other Amendments) Instrument 2004.

By order of the Board
18 November 2004

Annex A

PRU 1.2

In this Annex, all the text is new and is not underlined.

1.2 Adequacy of financial resources

Application

1.2.1 R This section applies to an *insurer* unless *PRU* 1.2.7R applies.

1.2.2 R (1) In relation to *liquidity risk* only, this section applies to a *firm* in *PRU* 1.2.3R unless *PRU* 1.2.7R applies.

(2) *Liquidity risk* includes the systems, processes and resources required by this section in respect of *liquidity risk*.

1.2.3 R The *firms* referred to in *PRU* 1.2.2R(1) are:

(1) a *building society*;

(2) a *bank* or an *own account dealer* (other than a *venture capital firm*) that is a *UK firm*;

(3) an *incoming EEA firm* which:

(a) is a *full BCD credit institution*; and

(b) has a *branch* in the *United Kingdom*;

(4) an *overseas firm* which is a *bank* or an *own account dealer* (other than a *venture capital firm*) but which is not:

(a) an *incoming EEA firm*; or

(b) a *lead-regulated firm*;

(5) an *overseas firm* which:

(a) is a *bank*;

(b) is a *lead-regulated firm*;

(c) is not an *incoming EEA firm*; and

(d) has a *branch* in the *United Kingdom*.

1.2.4 R For a *firm* described in *PRU* 1.2.3R(3) or *PRU* 1.2.3R(5), this section applies only with respect to the *branch*.

1.2.5 R This section applies to an *incoming EEA firm* only to the extent that the relevant matter is not reserved by the relevant *Single Market Directive* to the *firm's Home State regulator*.

1.2.6 R If a *firm* carries on:

(1) *long-term insurance business*; and

(2) *general insurance business*;

this section applies separately to each type of business.

1.2.7 R This section does not apply to:

(1) a *non-directive friendly society*; or

(2) a *Swiss general insurer*; or

(3) an *EEA-deposit insurer*; or

(4) a *UCITS qualifier*; or

(5) an *ICVC*; or

(6) an *incoming EEA firm* (unless *PRU* 1.2.3R applies); or

(7) an *incoming Treaty firm*.

1.2.8 G The *guidance* in *PRU* 1.2 is drafted with respect to a *firm* to which *PRU* 1.2 and the other provisions of *PRU* referred to in *PRU* 1.2 apply in full. The *guidance* in *PRU* 1.2 is also applicable to a *firm* that falls into *PRU* 1.2.2R. However the *guidance* in *PRU* 1.2, as it applies to such a *firm*, should be read accordingly. In particular, the *guidance* in *PRU* 1.2 only applies to such a *firm* in respect of *liquidity risk*.

1.2.9 G In the case of an *incoming EEA firm* that is a *full BCD credit institution* and of an *overseas firm* that is a *lead-regulated firm*, *PRU* 1.2 only applies to its *United Kingdom branch*. However, as a *branch* is not itself a legal entity separate from the rest of a *firm*, this restriction does not mean that the rest of the *firm* can necessarily be left out of account when considering compliance with *PRU* 1.2. For example, the availability of the *branch's* liquidity resources may be affected by general liquidity problems in the *firm*. Likewise, there may be liquidity resources elsewhere in the *firm* that are available to meet liquidity problems in the *branch*.

1.2.10 G One factor that may affect the degree to which it is necessary to take into account the *firm* as a whole is the extent to which the *firm* manages the liquidity of the *branch* on an autonomous basis, or includes the *branch* within integrated liquidity management of the *firm* as a whole. In the latter case, for instance, the requirement in *PRU* 1.2.35R to carry out scenario analyses may be satisfied by the *firm* meeting similar requirements set by the regulator in its home country in respect of the *firm* as whole, provided that the *firm* separately identifies the impacts on the *United Kingdom branch* of the scenarios analysed. However, in the case of a *full BCD* *credit institution*, the application of *PRU* 1.2 is further restricted by *PRU* 1.2.5R.

1.2.11 G The scope of application of *PRU* 1.2 is not restricted to *firms* that are subject to the relevant EC Directives. It applies, for example, to *pure reinsurers*.

1.2.12 G The adequacy of a *firm's* financial resources needs to be assessed in relation to all the activities of the *firm* and the risks to which they give rise.

1.2.13 G The requirements in *PRU* 1.2 apply to a *firm* on a solo basis.

Purpose

1.2.14 G This section amplifies *Principle* 4, under which a *firm* must maintain adequate financial resources. It is concerned with the adequacy of the financial resources which a *firm* needs to hold in order to be able to meet its liabilities as they fall due. These resources include both capital and liquidity resources. *PRU* 2 sets out provisions relating to the adequacy of *capital resources*. *PRU* 5 contains provisions relating to liquidity.

1.2.15 G This section therefore introduces *rules* requiring a *firm* to identify and assess risks to its being able to meet its liabilities as they fall due, how it intends to deal with those risks, and the amount and nature of financial resources the *firm* considers necessary. These assessments should be documented so that they can be easily reviewed by the *FSA* as part of the *FSA's* assessment of the adequacy of *capital resources*.

1.2.16 G This section also introduces *rules* requiring a *firm* to carry out appropriate stress tests and scenario analyses for the risks it has previously identified and to establish the amount of financial resources needed in each of the circumstances and events considered in carrying out the stress tests and scenario analyses.

1.2.17 G The adequacy of a *firm's capital resources* needs to be assessed both by the *firm* and the *FSA*. This is done, by the *FSA*, through comparing the *firm's capital resource requirements* with its *capital resources* and by review of a *firm's* processes and systems for assessing capital needs, the results of the *firm's* assessments, and other information available to the *FSA* on the risks faced by the *firm*.

Outline of other related provisions

1.2.18 G *PRU* 2.1 sets out the minimum *capital resources requirements* for a *firm*. *PRU* 2.2 sets out how *capital resources* are defined and measured for the purpose of meeting the requirements of *PRU* 2.1.

1.2.19 G *PRU* 2.3 sets out detailed *guidance* on how *firms* could assess the adequacy of their *capital resources* both to comply with the *rules* set out in this section and to enable the *FSA* to assess better whether the minimum *capital resources requirements* of *PRU* 2.1 are appropriate. The more thorough, objective, and prudent a *firm's* capital assessment is and can be demonstrated as being, the more reliance the *FSA* will be able to place on the results of that assessment. The *FSA* will consider the appropriateness of the *firm's* capital assessment to establish the level of *capital resources* the *firm* needs. This may result in the *FSA's* assessment of a *firm's* *capital resources* needs being lower or higher than would otherwise be the case.

1.2.20 G *PRU* 5.1 sets out general systems and controls provisions for *liquidity risk*.

1.2.21 G *PRU* 1.4 sets out *rules* and *guidance* on the establishment and maintenance of systems and controls.

Main Requirements

1.2.22 R A *firm* must at all times maintain overall financial resources, including *capital resources* and liquidity resources, which are adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due.

1.2.23 G The liabilities referred to in *PRU* 1.2.22R include contingent and prospective liabilities that a *firm* has potentially incurred. It therefore excludes liabilities that might arise from transactions that a *firm* has not entered into and which it could avoid, for example, by ceasing to trade. It includes liabilities or costs that arise as a consequence of strategies other than continuing as a going concern. It also includes claims that could be made against a *firm*, which ought to be paid in accordance with fair treatment of *customers*, even if such claims could not be legally enforced.

1.2.24 G A *firm* should therefore make its assessment of adequate financial resources on realistic valuation bases for assets and liabilities taking into account the actual amounts and timing of cash flows under realistic adverse projections. This does not require a *firm* to hold financial resources sufficient to ensure that any particular margin of financial resources is maintained under such adverse projections.

1.2.25 G Risks may be addressed through holding capital to absorb losses that unexpectedly materialise. The ability to pay liabilities as they fall due also requires liquidity. Therefore, in assessing the adequacy of a *firm's* financial resources, both capital and liquidity needs should be considered. *PRU* 5.1.86E is an *evidential provision* relating to *PRU* 1.2.22R concerning *contingency funding plans*. A *firm* should also consider the quality of its financial resources such as the loss-absorbency of different types of capital and the time required to liquidate different types of asset.

1.2.26 R A *firm* must carry out regular assessments of the adequacy of its financial resources using processes and systems which comply with *PRU* 1.2.27R.

1.2.27 R The processes and systems required by *PRU* 1.2.26R must be proportionate to the nature, scale and complexity of the *firm's* activities.

1.2.28 G *PRU* 1.2.27R amplifies the requirement in *SYSC* 3.2.6R.

1.2.29 G The processes and systems are required for a *firm*'s internal assessment of the adequacy of its financial resources. The appropriateness of the internal process, and the degree of involvement of senior management in the process, will be taken into account by the *FSA* when reviewing a *firm's* assessment as part of the *FSA*'s own assessment of the adequacy of a *firm*'s financial resources. The processes and systems should ensure that the assessment of the adequacy of a *firm's* financial resources is reported to its senior management as often as is necessary. In addition, a *firm* would be expected to reassess the adequacy of its financial resources should the *firm* experience some material change to the nature or scale of its activities.

1.2.30 G The assessments undertaken by *firms in run-off* may not need to be as comprehensive or frequent compared to a *firm* not in run off since this may better reflect the reduced nature and complexity of its business and reduced access to new capital. Whilst a *firm in run-off* will still need to carefully monitor the progress of the run off, a more comprehensive assessment may only be appropriate on commencement of the run off or when considering a reduction in capital through the payment of a dividend or other capital distribution or if the *firm's* circumstances change materially.

1.2.31 R The processes and systems required by *PRU* 1.2.26R must enable the *firm* to identify the major sources of risk to its ability to meet its liabilities as they fall due, including the major sources of risk in each of the following categories:

(1) credit risk;

(2) *market risk*;

(3) *liquidity risk*;

(4) operational risk; and

(5) insurance risk.

1.2.32 G In *PRU* 1.2.31R:

(1) operational risk refers to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events; and

(2) insurance risk refers to the inherent uncertainties as to the occurrence, amount and timing of insurance liabilities.

1.2.33 R The processes and systems required by *PRU* 1.2.26R must enable the *firm* to carry out an assessment of how it intends to deal with each of the major sources of risk identified in accordance with *PRU* 1.2.31R.

1.2.34 G Certain risks such as systems and controls weaknesses may not be adequately addressed by, for example, holding additional capital and a more appropriate response would be to rectify the weakness. In such circumstances, the amount of financial resources required to address these risks, which may not be adequately addressed by holding additional capital, will be zero. However, a *firm* must, in accordance with *PRU* 1.2.37R, document the approaches taken to manage these risks.

1.2.35 R For each of the major sources of risk identified in accordance with *PRU* 1.2.31R, the *firm* must carry out stress tests and scenario analyses that are appropriate to the nature of those major sources of risk, as part of which the *firm* must:

(1) take reasonable steps to identify an appropriate range of realistic adverse

circumstances and events in which the risk identified crystallises; and

(2) estimate the financial resources the *firm* would need in each of the circumstances and events considered in order to be able to meet its liabilities as they fall due.

1.2.36 G Stress tests and scenario analyses should be carried out at least annually. A *firm* should, however, consider whether the nature of the major sources of risks identified by it in accordance with *PRU* 1.2.31R and their possible impact on its financial resources suggest that such tests and analyses should be carried out more frequently. For instance, a sudden change in the economic outlook may prompt a *firm* to revise the parameters of some of its stress tests and scenario analyses. Similarly, if a *firm* has recently become exposed to a particular sectoral concentration, it may wish to add some stress tests and scenario analyses in order to reflect that concentration. *PRU* 5.1.61E is an *evidential provision* relating to *PRU* 1.2.35R concerning scenario analysis in relation to *liquidity risk*.

1.2.37 R A *firm* must make a written record of its assessment of the adequacy of its financial resources, including:

(1) the major sources of risk identified in accordance with *PRU* 1.2.31R;

(2) how it intends to deal with those risks; and

(3) details of the stress tests and scenario analyses carried out and the resulting financial resources estimated to be required in accordance with *PRU* 1.2.35R.

1.2.38 R A *firm* must retain the records of its assessment of the adequacy of its financial resources for at least three years.

1.2.39 G Where a *firm* follows the *guidance* set out in *PRU* 2.3.35G to *PRU* 2.3.48G and assesses the adequacy of the *capital resources requirement* (*CRR*) in its particular circumstances as a basis for deciding what financial resources are adequate, it should include this in the documentation produced in accordance with *PRU* 1.2.37R.

Stress tests and scenario analyses

1.2.40 G A large part of the process of managing a *firm* is based on an understanding of the expected outcomes of its business operations and outside events and the normal variation about these expected outcomes. To gain a comprehensive view of the risks being run by a *firm*, an analysis of extreme events is also needed. Such analysis may take the form of stress tests and scenario analyses. For example, a *firm* may normally expect interest rates to increase or decrease by 1 or 2 percentage points due to normal variations in economic conditions. However, in some extreme circumstances, interest rates may change by a much greater amount. The use of stress tests and scenario analyses can give a *firm's* management a better understanding of the *firm's* true exposure in extreme circumstances.

1.2.41 G Stress testing typically refers to shifting the values of individual parameters that affect the financial position of a *firm* and determining the effect on the *firm's* business.

1.2.42 G Scenario analysis typically refers to a wider range of parameters being varied at the same time. Scenario analyses often examine the impact of catastrophic events on the *firm's* financial position, for example, simultaneous movements in a number of risk categories affecting all of a *firm's* business operations such as business volumes, investment values and interest rate movements.

1.2.43 G Scenarios generally could also be considered under three broad categories. For example, changes to the business plan, scenarios that involve changes in business cycles and those relating to extreme events. The scenarios can be derived in a variety of ways including stochastic models, analysis of historic experience or a repetition of an historical event. Scenarios can be developed with varying degrees of precision and depth.

1.2.44 G Both stress tests and scenario analyses can be undertaken by *firms* to further a better understanding of the vulnerabilities that they face under extreme conditions. They are based on the analysis of the impact of unlikely, but not impossible, events. These events can be financial, operational, legal or relate to any other risk that might have an economic impact on the *firm*.

1.2.45 G *PRU* 1.2.35R requires a *firm*, as part of carrying out stress tests and scenario analyses, to take reasonable steps to identify an appropriate range of realistic circumstances and events in which a risk would crystallise. In particular:

(1) a *firm* need only carry out stress tests and scenario analyses in so far as the circumstances or events are reasonably foreseeable, that is to say, their occurrence is not too remote a possibility; and

(2) a *firm* should also take into account the relative costs and benefits of carrying out the stress tests and scenario analyses in respect of the circumstances and events identified.

1.2.46 G The purpose of stress tests and scenario analyses is to test the adequacy of overall financial resources. Scenarios need only be identified, and their impact assessed, in so far as this facilitates that purpose. In particular, the nature, depth and detail of the analysis depend, in part, upon the *firm's* capital strength and the robustness of its risk prevention and risk mitigation measures.

1.2.47 G Both stress testing and scenario analyses are prospective analysis techniques, which seek to anticipate possible losses that might occur if an identified risk crystallises. In applying them, a *firm* needs to decide how far forward to look. This should depend upon:

(1) how quickly it would be able to identify events or changes in circumstances that might lead to a risk crystallising resulting in a loss; and

(2) after it has identified the event or circumstance, how quickly and effectively it could act to prevent or mitigate any loss resulting from the risk crystallising and to reduce exposure to any further adverse event or change in circumstance.

1.2.48 G The time horizon over which stress tests and scenario analysis would need to be carried out for the *market risk* arising from the holding of *investments*, for example, should depend upon:

(1) the extent to which there is a regular, open and transparent market in those assets, which would allow fluctuations in the value of the *investment* to be more readily and quickly identified; and

(2) the extent to which the market in those assets is liquid (and would remain liquid in the changed circumstances contemplated in the stress test or scenario analysis) which would allow the *firm*, if needed, to sell its holding so as to prevent or reduce exposure to future price fluctuations.

1.2.49 G In identifying scenarios, and assessing their impact, a *firm* should take into account, where material, how changes in circumstances might impact upon:

(1) the nature, scale and mix of its future activities; and

(2) the behaviour of *counterparties*, and of the *firm* itself, including the exercise of choices (for example, options embedded in financial instruments or *contracts of insurance*).

1.2.50 G In determining whether it would have adequate financial resources in the event of each identified realistic adverse scenario, a *firm* should:

(1) only include financial resources that could reasonably be relied upon as being available in the circumstances of the identified scenario; and

(2) take account of any legal or other restriction on the purposes for which financial resources may be used.

1.2.51 G A *firm* should consider conducting stress tests and scenario analyses which enable it to assess its exposure not only in its current position in the economic and business cycles, but also the possible changes in the cycles which might be expected over, say, the next three to five years.

1.2.52 G A *firm* may consider scenarios in which expected future profits will provide capital reserves against future risks. However, it would only be appropriate to take into account profits that can be foreseen with some certainty as arising before the risk against which they are being held could possibly arise. In estimating future reserves, a *firm* should deduct future dividend payment estimates from projections of future profits.

1.2.53 G A *firm* may substitute for traditional stress tests and scenario analyses more sophisticated modelling techniques and this approach is acceptable providing major risks are identified and the modelling has the effect of calculating the effect on a *firm's* financial position where the risks crystallise or are assumed to crystallise with a particular probability.

1.2.54 G Additional *guidance* on stress tests and scenario analyses for the assessment of *capital resources* is available in *PRU* 2.3.

1.2.55 G Additional *guidance* in relation to stress tests and scenario analysis for *liquidity risk* is available in *PRU* 5.1.58G to *PRU* 5.1.62G.

Annex B

PRU 1.3

In this Annex, all the text is new and is not underlined.

1.3 Valuation

Application

1.3.1 R *PRU* 1.3 applies to an *insurer*, unless it is:

(1) a *non-directive friendly society;* or

(2) an *incoming EEA firm;* or

(3) an *incoming Treaty firm.*

1.3.2 G The scope of application of *PRU* 1.3 is not restricted to *firms* that are subject to relevant EC directives. It applies, for example, to *pure reinsurers.*

1.3.3 R (1) *PRU* 1.3 applies to a *firm* in relation to the whole of its business.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, *PRU* 1.3 applies separately to each type of business.

Purpose

1.3.4 G *PRU* 1.3 sets out, for the purposes of *PRU, rules* and *guidance* as to how a *firm* should recognise and value assets, liabilities, equity and income statement items. Except where a *rule* in *PRU* makes different provision, *PRU* 1.3 applies whenever a *rule* in *PRU* refers to the value or amount of an asset, liability, equity or income statement item

General requirements: accounting principles to be applied

1.3.5 R Except where a *rule* in *PRU* provides for a different method of recognition or valuation, whenever a *rule* in *PRU* refers to an asset, liability, equity or income statement item, a *firm* must, for the purpose of that *rule,* recognise the asset, liability, equity or income statement item and measure its value in accordance with:

(1) the *insurance accounts rules*, or the Friendly Societies (Accounts and Related Provisions) Regulations 1994;

(2) Financial Reporting Standards and Statements of Standard Accounting Practice issued or adopted by the Accounting Standards Board; and

(3) Statements of Recommended Practice, issued by industry or sectoral bodies recognised for this purpose by the Accounting Standards Board;

as applicable to the *firm* (or as would be applicable if the *firm* were a company with its head office in the *United Kingdom*).

1.3.6 G *PRU* 1.3.5R provides that unless a *rule* in *PRU* provides for a different method of recognition or valuation, the applicable provisions of the Companies Act 1985, the Companies Act (Northern Ireland) Order 1986 or the Friendly Societies (Accounts and Related Provisions) Regulations 1994, as supplemented by Financial Reporting Standards, Statements of Standard Accounting Practice, and Statements of Recommended Accounting Practice, should be used to determine the recognition and valuation of assets, liabilities, equity and income statement items for the purposes of *PRU*, including:

(1) whether, and when, to recognise or de-recognise an asset or liability;

(2) the amount at which to value an asset, liability, equity or income statement item;

(3) which description to place on an asset, liability, equity or income statement item.

1.3.7 G In particular, unless an exception applies, *PRU* 1.3.5R should be applied for the purposes of *PRU* to determine how to account for:

(1) netting of amounts due to or from the *firm*;

(2) the securitisation of assets and liabilities (see also *PRU* 1.3.8G);

(3) leased tangible assets;

(4) assets transferred or received under a *sale and repurchase* or *stock lending* transaction; and

(5) assets transferred or received by way of initial or variation margin under a *derivative* or similar transaction.

1.3.8 G Where assets or liabilities are securitised, *PRU* 1.3.5R only permits de-recognition where Financial Reporting Standard 5 permits either de-recognition or the linked presentation. However, the *FSA* will consider granting a *waiver* to permit de-recognition in other circumstances provided that the *firm* can demonstrate that securitisation has effectively transferred risk

1.3.9 G Specific provisions for the methods and assumptions to be used by a *firm* in calculating its *mathematical reserves* are made in *PRU* 7.3.

1.3.10 G *PRU* 1.3.5R implements the requirements of Articles 23.3(viii) and 24.2(iv) of the *Consolidated Life Directive*. These articles require assets of a *firm* that are managed on its behalf by a *subsidiary undertaking* to be taken into account for the purposes of determining the *firm's admissible assets* and its assets in excess of concentration limits. The application of *PRU* 1.3.5R will result in such assets remaining on the balance sheet of the *firm*.

Investments, derivatives and quasi-derivatives

1.3.11 R Subject to *PRU* 1.3.31R, for the purposes of *PRU*, a *firm* must apply *PRU* 1.3.12R to *PRU* 1.3.30R in order to determine how to account for:

(1) *investments* that are, or amounts owed arising from the disposal of:

(a) *debt securities,* bonds and other money- and capital-market instruments; or

(b) loans; or

(c) *shares* and other variable yield participations; or

(d) *units* in *UCITS schemes, non-UCITS retail schemes, recognised schemes* and any other *collective investment scheme* that invests only in *admissible assets* (including any *derivatives* or *quasi-derivatives* held by the scheme); and

(2) *derivatives* and *quasi-derivatives.*

Marking to market

1.3.12 R Wherever possible, a *firm* must use mark to market in order to measure the value of the *investments* referred to in *PRU* 1.3.11R. Marking to market is valuation at readily available close out prices from independent sources.

1.3.13 G For the purposes of *PRU* 1.3.12R, examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers.

1.3.14 R When marking to market, a *firm* must use the more prudent side of bid/offer price unless the *firm* is a significant market maker in a particular position type and it can close out at the mid-market price.

Marking to model

1.3.15 R Where marking to market is not possible, a *firm* must use mark to model in order to measure the value of the *investments* referred to in *PRU* 1.3.11R. Marking to model is any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input.

1.3.16 R When the model used is developed by the *firm*, that model must be:

(1) based on appropriate assumptions which have been assessed and challenged by suitably qualified parties independent of the development process; and

(2) independently tested, including validation of the mathematics, assumptions, and software implementation.

1.3.17 R A *firm* must ensure that its senior management are aware of the positions which are subject to mark to model and understand the materiality of the uncertainty this creates in the reporting of the performance of the business of the *firm* and the risks to which it is subject.

1.3.18 R A *firm* must source market inputs in line with market prices so far as possible and assess the appropriateness of the market inputs for the position being valued and the parameters of the model on each valuation date.

1.3.19 R A *firm* must use generally accepted valuation methodologies for particular products where these are available.

1.3.20 R A *firm* must establish formal change control procedures, hold a secure copy of the model, and periodically use that model to check valuations.

1.3.21 R A *firm* must ensure that its risk management functions are aware of the weakness of the models used and how best to reflect those in the valuation output.

1.3.22 R A *firm* must periodically review the model to determine the accuracy of its performance.

1.3.23 G Examples of periodical review are assessing the continued appropriateness of the assumptions and comparison of actual close out values to model inputs.

Independent price verification

1.3.24 R In addition to marking to market or marking to model, a *firm* must perform independent price verification. This is the process by which market prices or model inputs are regularly verified for accuracy and independence.

1.3.25 G For independent price verification, where independent pricing sources are not available or pricing sources are more subjective, for example, only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

Valuation adjustments or reserves

1.3.26 R A *firm* must establish and maintain procedures for considering valuation adjustments or reserves. These procedures must be compliant with the requirements set out in *PRU* 1.3.29R.

1.3.27 R A *firm* using third-party valuations, or marking to model, must consider whether valuation adjustments are necessary.

1.3.28 R A *firm* must consider the need for establishing reserves for less liquid positions and, on an ongoing basis, review their continued appropriateness in accordance with the requirements set out in *PRU* 1.3.29R.

1.3.29 R The requirements referred to in *PRU* 1.3.26R and *PRU* 1.3.28R are:

(1) a *firm* must consider the following adjustments or reserves: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, future administrative costs and, where appropriate, model risk; and

(2) a *firm* must consider several factors when determining whether a valuation reserve is necessary for less liquid items. These factors include the amount of time it would take to hedge out the position/risks within the position; the average and volatility of bid/offer spreads; the availability of market quotes (number and identity of market makers); and the average and volatility of trading volumes.

1.3.30 R If the result of establishing adjustments or reserves under *PRU* 1.3.26R to *PRU* 1.3.29R is a valuation which differs from the fair value determined in accordance with Financial Reporting Standards issued or adopted by the Accounting Standards Board, a *firm* must reconcile the two valuations.

Shares in, and debts due from, related undertakings

1.3.31 R *PRU* 1.3.11R does not apply to *shares* in, and *debts* due from, a *related undertaking* that is:

(1) a *regulated related undertaking;* or

(2) an *ancillary services undertaking*; or

(3) any other *subsidiary undertaking,* the *shares* of which a *firm* elects to value in accordance with *PRU* 1.3.35R.

1.3.32 G The effect of *PRU* 1.3.31R is that *shares* in, and *debts* due from, *related undertakings* of the types referred to are not valued on a mark to market basis. As a result, *debts* due from these *undertakings*, and *shares* in *related undertakings* which are *ancillary services undertakings*, are valued at their accounting book value in accordance with *PRU* 1.3.5R. *Shares* in *related undertakings* referred to in *PRU* 1.3.31R(1) or (3) are valued in accordance with *PRU* 1.3.33R to *PRU* 1.3.38R.

1.3.33 R Except where the contrary is expressly stated in *PRU,* whenever a rule in *PRU* refers to *shares* held in, and *debts* due from, an *undertaking* referred to in *PRU* 1.3.31R(1) or *PRU* 1.3.31R(3), a *firm* must value the *shares* held in accordance with *PRU* 1.3.35R.

1.3.34 R In relation to *shares* in, and *debts* due from, an *undertaking* referred to in *PRU* 1.3.31R(1), *PRU* 1.3.33R does not apply for the purposes of *PRU* 2.2.78R and *PRU* 8.3.

1.3.35 R For the purposes of *PRU* 1.3.33R, the value of the *shares* held in an *undertaking* referred to in *PRU* 1.3.31R(1) or *PRU* 1.3.31R(3) is the sum of:

(1) the regulatory surplus value of that *undertaking*; less

(2) for the purposes of *PRU* 2.2.90R, the book value of the total investments in the tier one capital resources and tier two capital resources of that *undertaking* by the *firm* and its *related undertakings*; or

(3) for other purposes in *PRU*, the sum of:

(a) the book value of the investments by the *firm* and its *related undertakings* in the tier two capital resources of the *undertaking*; and

(b) if the *undertaking* is an *insurance undertaking*, its ineligible surplus capital and any restricted assets of the *undertaking* which have been excluded under *PRU* 8.3.41R(1).

1.3.36 R For the purposes of *PRU* 1.3.35R(1), the regulatory surplus value of an *undertaking* referred to in *PRU* 1.3.31R(1) or *PRU* 1.3.31R(3) is, subject to *PRU* 1.3.37R, the sum of:

(1) the tier one capital resources of the *undertaking*; plus

(2) the tier two capital resources of the *undertaking*; less

(3) the individual capital resources requirement of the *undertaking*.

1.3.37 R (1) Subject to *PRU* 1.3.38R, for the purposes of *PRU* 1.3.36R, only the relevant proportion of the:

(a) tier one capital resources of the *undertaking*;

(b) tier two capital resources of the *undertaking*;

(c) individual capital resources requirement of the *undertaking*;

is to be taken into account.

(2) In (1), the relevant proportion is the proportion of the total number of *shares* issued by the *undertaking* held, directly or indirectly, by the *firm*.

1.3.38 R If the individual capital resources requirement of an *undertaking* in *PRU* 1.3.31R(1) that is a *subsidiary undertaking* exceeds the sum of its tier one capital resources and tier two capital resources, the full amount of the items referred to in *PRU* 1.3.37R(1) are to be taken into account for the purposes of *PRU* 1.3.36R.

1.3.39 R For the purposes of *PRU* 1.3.35R to *PRU* 1.3.38R:

(1) in relation to an *undertaking* referred to in *PRU* 1.3.31R(1):

(a) individual capital resources requirement has the meaning given by *PRU* 8.3.34R;

(b) the following expressions are to be construed in accordance with *PRU* 8.3.37R:

(i) tier one capital resources; and

(ii) tier two capital resources;

(c) ineligible surplus capital has the meaning given by *PRU* 8.3.67R;

(2) in relation to an *undertaking* referred to in *PRU* 1.3.31R(3), the following expressions are to be construed as if that *undertaking* were an *insurance holding company*:

(a) individual capital resources requirement;

(b) tier one capital resources; and

(c) tier two capital resources.

1.3.40 G *PRU* 1.3.35R to *PRU* 1.3.39R set out several different valuation bases for a *firm's shares* in *related undertakings*. The regulatory surplus value (defined in *PRU* 1.3.36R) measures the *related undertaking's* own capital surplus or deficit. This is used: (i) in *PRU* 1.3.35R as a basis for calculating the impact on the *firm's* position of its investments in *related undertakings*; and (ii) in *PRU* 8.3 as a starting point for the calculation of ineligible surplus capital.

1.3.41 G *PRU* 1.3.35R determines how, for the purposes of the solo capital adequacy calculation of a *firm*, that *firm's capital resources* should be adjusted to take into account its investments in *related undertakings*.

1.3.42 G The *rules* that specify how, for the purposes of the adjusted solo capital calculation, a *firm* must incorporate its *related undertakings* into its *capital resources* and *capital resources requirement* are set out in *PRU* 8.3.

Community co-insurance operations: general insurance business

1.3.43 R Where a *relevant insurer* determines the amount of a liability in order to make provision for outstanding *claims* under a *Community co-insurance operation,* then, if the *leading insurer* has informed the *relevant insurer* of the amount of the provision made by the *leading insurer* for such *claims*, the amount determined by the *relevant insurer*:

(1) must be at least as great as the amount of the provision made by the *leading insurer;* or

(2) in a case where it is not the practice in the *United Kingdom* to make such provision separately, must be sufficient, when all liabilities are taken into account, to include provision at least as great as that made by the *leading insurer* for such *claims*;

due regard being had in either case to the proportion of the risk covered by the *relevant insurer* and by the *leading insurer* respectively.

Annex C

PRU 1.4

In this Annex, all the text is new and is not underlined.

1.4 Prudential risk management and associated systems and controls

Application

1.4.1 R *PRU* 1.4 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

1.4.2 R *PRU* 1.4 applies to:

(1) an *EEA-deposit insurer*; and
(2) a *Swiss general insurer*;

only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

Purpose

1.4.3 G *PRU* 1.4 sets out some *rules* and *guidance* on the establishment and maintenance of systems and controls for the management of a *firm's* prudential risks. A *firm's* prudential risks are those that can reduce the adequacy of its financial resources, and as a result may adversely affect confidence in the financial system or prejudice *consumer*s. Some key prudential risks are credit, market, liquidity, operational, insurance and group risk.

1.4.4 G The purpose of *PRU* 1.4 is to serve the *FSA's regulatory objectives* of consumer protection and market confidence. In particular, this section aims to reduce the risk that a *firm* may pose a threat to these *regulatory objectives*, either because it is not prudently managed, or because it has inadequate systems to permit appropriate senior management oversight and control of its business.

1.4.5 G Both adequate financial resources and adequate systems and controls are necessary for the effective management of prudential risks. A *firm* may hold financial resources to help alleviate the financial consequences of minor weaknesses in its systems and controls (to reflect possible impairments in the accuracy or timing of its identification, measurement, monitoring and control of certain risks, for example). However, financial resources cannot adequately compensate for significant weaknesses in a *firm*'s systems and controls that could fundamentally undermine its ability to control its affairs effectively.

How to interpret PRU 1.4

1.4.6 G *PRU* 1.4 is designed to amplify *Principle* 3 (*Management and control*) which requires that a *firm* take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems. *PRU* 1.4 is also designed to be complementary to *SYSC* 2, *SYSC* 3 and *SYSC* 3A in that it contains some additional *rules* and *guidance* on senior management arrangements and associated systems and controls for *firms* that could have a significant impact on the *FSA's* objectives in a *prudential context*.

1.4.7 G In addition to supporting *PRIN* and *SYSC*, *PRU* 1.4 lays the foundations for the more specific *rules* and *guidance* on the management of credit, market, liquidity, operational, insurance and group risks that are in *PRU* 3.1, *PRU* 4.1, *PRU* 5.1, *PRU* 6.1, *PRU* 7.1 and *PRU* 8.1 respectively. Many of the elements raised here in general terms are expanded upon in these sections.

1.4.8 G Appropriate systems and controls for the management of prudential risk will vary from *firm* to *firm*. Therefore most of the material in *PRU* 1.4 is *guidance*. In interpreting this *guidance*, a *firm* should have regard to its own particular circumstances. Following from *SYSC* 3.1.2G, this should include considering the nature, scale and complexity of its business, which may be influenced by factors such as:

(1) the diversity of its operations, including geographical diversity;
(2) the volume and size of its transactions; and
(3) the degree of risk associated with each area of its operation.

1.4.9 G The *guidance* contained within this section is not designed to be exhaustive. When establishing and maintaining its systems and controls a *firm* should have regard not only to other parts of the *Handbook*, but also to material that is issued by other industry or regulatory bodies.

The role of systems and controls in a prudential context

1.4.10 G In a *prudential context*, a *firm*'s systems and controls should provide its senior management with an adequate means of managing the *firm*. As such, they should be designed and maintained to ensure that senior management is able to make and implement integrated business planning and risk management decisions on the basis of accurate information about the risks that the *firm* faces and the financial resources that it has.

The prudential responsibilities of senior management and the apportionment of those responsibilities

1.4.11 G Ultimate responsibility for the management of prudential risks rests with a *firm's governing body* and relevant *senior managers*, and in particular with those individuals that undertake the *firm's governing functions* and the *apportionment and oversight function*. In particular, these responsibilities should include:

(1) overseeing the establishment of an appropriate business plan and risk management strategy;
(2) overseeing the development of appropriate systems for the management of prudential risks;

(3) establishing adequate *internal controls*; and

(4) ensuring that the *firm* maintains adequate financial resources.

The delegation of responsibilities within the firm

1.4.12 G Although authority for the management of a *firm's* prudential risks is likely to be delegated, to some degree, to individuals at all levels of the organisation, overall responsibility for this activity should not be delegated from its *governing body* and relevant *senior managers*.

1.4.13 G Where delegation does occur, a *firm* should ensure that appropriate systems and controls are in place to allow its *governing body* and relevant *senior managers* to participate in and control its prudential risk management activities. The *governing body* and relevant *senior managers* should approve and periodically review these systems and controls to ensure that delegated duties are being performed correctly.

Firms subject to risk management on a group basis

1.4.14 G Some *firms* organise the management of their prudential risks on a stand-alone basis. In some cases, however, the management of a *firm's* prudential risks may be entirely or largely subsumed within a whole *group* or *sub-group* basis.

(1) The latter arrangement may still comply with the *FSA's* prudential policy on systems and controls if the *firm's governing body* formally delegates the functions that are to be carried out in this way to the *persons* or bodies that are to carry them out. Before doing so, however, the *firm's governing body* should have explicitly considered the arrangement and decided that it is appropriate and that it enables the *firm* to meet the *FSA's* prudential policy on systems and controls. The *firm* should notify the *FSA* if the management of its prudential risks is to be carried out in this way.

(2) Where the management of a *firm*'s prudential risks is largely, but not entirely, subsumed within a whole *group* or *sub-group* basis, the *firm* should ensure that any prudential issues that are specific to the *firm* are:

(a) identified and adequately covered by those to whom it has delegated certain prudential risk management tasks; or

(b) dealt with by the *firm* itself.

1.4.15 G Any delegation of the management of prudential risks to another part of a *firm's group* does not relieve it of responsibility for complying with the *FSA's* prudential policy on systems and controls. A *firm* cannot absolve itself of such a responsibility by claiming that any breach of the *FSA's* prudential policy on systems and controls is effected by the actions of a third party *firm* to whom the *firm* has delegated tasks. The risk management arrangements are still those of the *firm*, even though personnel elsewhere in the *firm's group* are carrying out these functions on its behalf. Thus any references in *PRU* to what a *firm*, its personnel and its management should and should not do still apply, and do not need any adjustment to cover the situation in which risk management functions are carried out on a *group*-wide basis.

1.4.16 G Where it is stated in *PRU* that a particular task in relation to a *firm*'s systems and controls should be carried out by a *firm*'s *governing body* this task should not be delegated to another part of its *group*. Furthermore, even where the management of a *firm*'s prudential risks is delegated as described in *PRU* 1.4.14G, responsibility for its effectiveness and for ensuring that it remains appropriate remains with the *firm's governing body*. The *firm's governing body* should therefore keep any delegation under review to ensure that delegated duties are being performed correctly.

Business planning and risk management

1.4.17 G Business planning and risk management are closely related activities. In particular, the forward-looking assessment of a *firm's* financial resources needs, and of how business plans may affect the risks that it faces, are important elements of prudential risk management. A *firm's* business planning should also involve the creation of specific risk policies which will normally outline a *firm's* strategy and objectives for, as appropriate, the management of its market, credit, liquidity, operational, insurance and group risks and the processes that it intends to adopt to achieve these objectives. *PRU* 1.4.18R to *PRU* 1.4.25G set out some *rules* and *guidance* relating to business planning and risk management in a *prudential context* (see also *SYSC* 3.2.17G, which states that a *firm* should plan its business appropriately).

1.4.18 R A *firm* must take reasonable steps to ensure the establishment and maintenance of a business plan and appropriate systems for the management of prudential risk.

1.4.19 R When establishing and maintaining its business plan and prudential risk management systems, a *firm* must document:

(1) an explanation of its overall business strategy, including its business objectives;

(2) a description of, as applicable, its policies towards market, credit (including provisioning), liquidity, operational, insurance and group risk (that is, its risk policies), including its appetite or tolerance for these risks and how it identifies, measures or assesses, monitors and controls these risks;

(3) the systems and controls that it intends to use in order to ensure that its business plan and risk policies are implemented correctly;

(4) a description of how the *firm* accounts for assets and liabilities, including the circumstances under which items are netted, included or excluded from the *firm's* balance sheet and the methods and assumptions for valuation;

(5) appropriate financial *projections* and the results of its stress testing and scenario analysis (see *PRU* 1.2 Adequacy of financial resources); and

(6) details of, and the justification for, the methods and assumptions used in financial *projections* and stress testing and scenario analysis.

1.4.20 G The prudential risk management systems referred to in *PRU* 1.4.18R and *PRU* 1.4.19R are the means by which a *firm* is able to:

(1) identify the prudential risks that are inherent in its business plan, operating environment and objectives, and determine its appetite or tolerance for these risks;

(2) measure or assess its prudential risks;

(3) monitor its prudential risks; and

(4) control or mitigate its prudential risks.

PRU 5.1.78E is an *evidential provision* relating to *PRU* 1.4.18R concerning risk management systems in respect of *liquidity risk* arising from substantial exposures in foreign currencies.

1.4.21 G A *firm* should consider the relationship between its business plan, risk policies and the financial resources that it has available (or can readily access), recognising that decisions made in respect of one element may have consequences for the other two.

1.4.22 G A *firm's* business plan and risk management systems should be:

(1) effectively communicated so that all *employees* and contractors understand and adhere to the procedures related to their own responsibilities;

(2) regularly updated and revised, in particular when there is significant new information or when actual practice or performance differs materially from the documented strategy, policy or systems.

1.4.23 G The level of detail in a *firm's* business plan and its approach to the design of its risk management systems should be appropriate to the scale and complexity of its operations, and the nature and degree of risk that it faces.

1.4.24 G A *firm's* business plan and systems documentation should be accessible to the *firm*'s management in line with their respective responsibilities and, upon request, to the *FSA*.

1.4.25 G *PRU* 1.4.19R(5) requires a *firm* to *document* its financial projections and the results of its stress testing and scenario analysis. Such financial projections, stress tests and scenario analysis should be used by a *firm*'s *governing body* and relevant *senior managers* when deciding upon how much risk the *firm* is willing to accept in pursuit of its business objectives and how risk limits should be set. Further *rules* and *guidance* on stress testing and scenario analysis are outlined in *PRU* 1.2 (Adequacy of financial resources) and *PRU* 5.1 (Liquidity risk systems and controls).

Internal controls: introduction

1.4.26 G *Internal controls* should provide a *firm* with reasonable assurance that it will not be hindered in achieving its objectives, or in the orderly and legitimate conduct of its business, by events that may reasonably be foreseen. More specifically in a *prudential context*, *internal controls* should be concerned with ensuring that a *firm's* business plan and risk management systems are operating as expected and are being implemented as intended. The following *rule* (*PRU* 1.4.27R) reflects the importance of *internal controls* in a *prudential context*.

1.4.27 R A *firm* must take reasonable steps to establish and maintain adequate *internal controls*.

1.4.28 G The precise role and organisation of *internal controls* can vary from *firm* to *firm*. However, a *firm's internal controls* should normally be concerned with assisting its *governing body* and relevant *senior managers* to participate in ensuring that it meets the following objectives:

(1) safeguarding both the assets of the *firm* and its *customers*, as well as identifying and managing liabilities;

(2) maintaining the efficiency and effectiveness of its operations;

(3) ensuring the reliability and completeness of all accounting, financial and management information; and

(4) ensuring compliance with its internal policies and procedures as well as all applicable laws and regulations.

1.4.29 G When determining the adequacy of its *internal controls*, a *firm* should consider both the potential risks that might hinder the achievement of the objectives listed in *PRU* 1.4.28G, and the extent to which it needs to control these risks. More specifically, this should normally include consideration of:

(1) the appropriateness of its reporting and communication lines (see *SYSC* 3.2.2G);

(2) how the delegation or contracting of functions or activities to *employees*, *appointed representatives* or other third parties (for example *outsourcing*) is to be monitored and controlled (see *SYSC* 3.2.3G to *SYSC* 3.2.4G, *PRU* 1.4.12G to *PRU* 1.4.16G and *PRU* 1.4.33G; additional *guidance* on the management of *outsourcing* arrangements is also provided in *SYSC* 3A.9);

(3) the risk that a *firm*'s *employees* or contractors might accidentally or deliberately breach a *firm's* policies and procedures (see *SYSC* 3A.6.3G);

(4) the need for adequate segregation of duties (see *SYSC* 3.2.5G and *PRU* 1.4.30G to *PRU* 1.4.33G);

(5) the establishment and control of risk management committees (see *PRU* 1.4.34G to *PRU* 1.4.37G);

(6) the need for risk assessment and the establishment of a risk assessment function (see *SYSC* 3.2.10G and *PRU* 1.4.38G to *PRU* 1.4.41G); and

(7) the need for internal audit and the establishment of an internal audit function and audit committee (see *SYSC* 3.2.15G to *SYSC* 3.2.16G and *PRU* 1.4.42G to *PRU* 1.4.45G).

Internal controls: segregation of duties

1.4.30 G The effective segregation of duties is an important internal control in the *prudential context*. In particular, it helps to ensure that no one individual is completely free to commit a *firm's* assets or incur liabilities on its behalf. Segregation can also help to ensure that a *firm*'s *governing body* receives objective and accurate information on financial performance, the risks faced by the *firm* and the adequacy of its systems. In this regard, a *firm* should ensure that there is adequate segregation of duties between *employees* involved in:

(1) taking on or controlling risk (which could include risk mitigation);

(2) risk assessment (which includes the identification and analysis of risk); and

(3) internal audit.

1.4.31 G In addition, a *firm* should normally ensure that no single individual has unrestricted authority to do all of the following:

(1) initiate a transaction;

(2) bind the *firm*;

(3) make payments; and

(4) account for it.

1.4.32 G Where a *firm* is unable to ensure the complete segregation of duties (for example, because it has a limited number of staff), it should ensure that there are adequate compensating controls in place (for example, frequent review of an area by relevant *senior managers*).

1.4.33 G Where a *firm* outsources a *controlled function*, such as *internal audit*, it should take reasonable steps to ensure that every individual involved in the performance of this service is independent from the individuals who perform its external audit. This should not prevent services from being undertaken by a *firm's* external auditors provided that:

(1) the work is carried out under the supervision and management of the *firm's* own internal staff; and

(2) potential conflicts of interest between the provision of external audit services and the provision of *controlled functions* are properly managed.

Internal controls: risk management committees

1.4.34 G In many *firm*s, especially if there are multiple business lines, it is common for the *governing body* to delegate some tasks related to risk control and management to committees such as asset and liability committees (ALCO), credit risk committees and market risk committees.

1.4.35 G Where a *firm* decides to create one or more risk management committee(s), adequate *internal controls* should be put in place to ensure that these committees are effective and that their actions are consistent with the objectives outlined in *PRU* 1.4.28G. This should normally include consideration of the following:

(1) setting clear terms of reference, including membership, reporting lines and responsibilities of each committee;
(2) setting limits on their authority;
(3) agreeing routine reporting and non-routine escalation procedures;
(4) agreeing the minimum frequency of committee meetings; and
(5) reviewing the performance of these risk management committees.

1.4.36 G The decision to delegate risk management tasks, along with the terms of reference of the committees and their performance, should be reviewed periodically by the *firm*'s *governing body* and revised as appropriate.

1.4.37 G The effective use of risk management committees can help to enhance a *firm's internal controls*. In establishing and maintaining its risk management committees, a *firm* should consider:

(1) their membership, which should normally include relevant *senior managers* (such as the head of group risk, head of legal, and the heads of market, credit, liquidity and operational risk, etc.), business line managers, risk management personnel and other appropriately skilled people, for example, actuaries, lawyers, accountants, IT specialists, etc.;

(2) using these committees to:

(i) inform the decisions made by a *firm's governing body* regarding its appetite or tolerance for risk taking;
(ii) highlight risk management issues that may require attention by the *governing body*;
(iii) consider risk at the firm-wide level and, within delegated limits, to determine the allocation of risk limits and financial resources across business lines;
(iv) consider how exposures may be unwound, hedged, or otherwise mitigated, as appropriate.

Internal controls: risk assessment

1.4.38 G Risk assessment is the process through which a *firm* identifies and analyses (using both qualitative and quantitative methodologies) the risks that it faces. A *firm*'s risk assessment activities should normally include consideration of:

(1) its total exposure to risk at the firm-wide level (that is, its exposure across business lines and risk categories);
(2) capital allocation and the need to calculate risk weighted returns for different business lines;

(3) the potential correlations that can exist between the risks in different business lines; this should also include looking for risks to which a *firm*'s business plan is particularly sensitive, such as interest rate risk, or multiple dealings with the same *counterparty*;

(4) the use of stress tests and scenario analysis;

(5) whether there are risks inherent in the *firm's* business that are not being addressed adequately;

(6) the risk adjusted return that the *firm* is achieving; and

(7) the adequacy and timeliness of management information on market, credit, insurance, liquidity, operational and group risks from the business lines, including risk limit utilisation.

1.4.39 G In accordance with *SYSC* 3.2.10G a *firm* should consider whether it needs to set up a separate *risk assessment function* (or functions) that is responsible for assessing the risks that the *firm* faces and advising its *governing body* and *senior managers* on them.

1.4.40 G Where a *firm* does decide that it needs a separate *risk assessment function*, the *employees* or contractors that carry out this function should not normally be involved in risk taking activities such as business line management (see *PRU* 1.4.30G to *PRU* 1.4.33G on the segregation of duties).

1.4.41 G A summary of the results of the analysis undertaken by a *firm's risk assessment function* (including, where necessary, an explanation of any assumptions that were adopted) should normally be reported to relevant *senior managers* as well as to the *firm's governing body*.

Internal audit

1.4.42 G A *firm* should ensure that it has appropriate mechanisms in place to assess and monitor the appropriateness and effectiveness of its systems and controls. This should normally include consideration of:

(1) adherence to and effectiveness of, as appropriate, its market, credit, liquidity, operational, insurance, and group risk policies;

(2) whether departures and variances from its documented systems and controls and risk policies have been adequately documented and appropriately reported, including whether appropriate pre-clearance authorisation has been sought for material departures and variances;

(3) adherence to and effectiveness of its accounting policies, and whether accounting records are complete and accurate;

(4) adherence to and effectiveness of its management reporting arrangements, including the timeliness of reporting, and whether information is comprehensive and accurate; and

(5) adherence to *FSA rules* and regulatory prudential standards.

1.4.43 G In accordance with *SYSC* 3.2.15G and *SYSC* 3.2.16G, a *firm* should consider whether it needs to set up a dedicated *internal audit function*.

1.4.44 G Where a *firm* decides to set up an *internal audit function*, this function should provide independent assurance to its *governing body*, audit committee or an appropriate *senior manager* of the integrity and effectiveness of its systems and controls.

1.4.45 G In forming its judgements, the *person* performing the *internal audit function* should test the practical operation of a *firm's* systems and controls as well as its accounting and risk policies. This should include examining the adequacy of supporting records.

Management information

1.4.46 G Many individuals, at various levels of a *firm*, need management information relating to their activities. However, *PRU* 1.4.47G to *PRU* 1.4.50G concentrates on the management information that should be available to those at the highest level of a *firm*, that is, the *firm's governing body* and relevant *senior managers*. In so doing *PRU* 1.4.47G to *PRU* 1.4.50G amplifies *SYSC* 3.2.11G to *SYSC* 3.2.12G (which outlines the *FSA's* high level policy on senior management information) by providing some additional *guidance* on the management information that should be available in a *prudential context*.

1.4.47 G The role of management information should be to help a *firm*'s *governing body* and *senior managers* to understand risk at a firm-wide level. In so doing, it should help them to:

(1) determine whether a *firm* is prudently managed with adequate financial resources;

(2) make the decisions that fall within their ambit (for example, the high level business plans, strategy and risk tolerances of the *firm*); and

(3) oversee the execution of tasks for which they are responsible.

1.4.48 G A *firm* should consider what information needs to be made available to its *governing body* and *senior managers*. Some possible examples include:

(1) firm-wide information such as the overall profitability and value of a *firm* and its total exposure to risk;

(2) reports from committees to which the *governing body* has delegated risk management tasks, if applicable;

(3) reports from a *firm's internal audit* and *risk assessment functions*, if applicable, including exception reports, where risk limits and policies have been breached or systems circumvented;

(4) financial projections under expected and abnormal (that is, stressed) conditions;

(5) reconciliation of actual profit and loss to previous financial projections and an analysis of any significant variances;

(6) matters which require a decision from the *governing body* or *senior managers*, for example a significant variation to a business plan, amendments to risk limits, the creation of a new business line, etc;

(7) compliance with *FSA rules* and regulatory prudential standards;

(8) risk weighted returns; and

(9) liquidity and funding requirements.

1.4.49 G The management information that is provided to a *firm*'s *governing body* and *senior managers* should have the following characteristics:

(1) it should be timely, its frequency being determined by factors such as:

(a) the volatility of the business in which the *firm* is engaged (that is, the speed at which its risks can change);

(b) any time constraints on when action needs to be taken; and

(c) the level of risk that the *firm* is exposed to, compared to its available financial resources and tolerance for risk;

(2) it should be reliable, having regard to the fact that it may be necessary to sacrifice a degree of accuracy for timeliness; and

(3) it should be presented in a manner that highlights any relevant issues on which those undertaking *governing functions* should focus particular attention.

1.4.50 G The production of management and other information may require the collation of data from a variety of separate manual and automated systems. In such cases, responsibility for the integrity of the information may be spread amongst a number of operational areas. A *firm* should ensure that it has appropriate processes to validate the integrity of its information.

Record keeping

1.4.51 G *SYSC* 3.2.20R requires a *firm* to take reasonable care to make and retain adequate records. The following policy on record keeping supplements *SYSC* 3.2.20R by providing some additional *rules* and *guidance* on record keeping in a *prudential context*. The purpose of this policy is to:

(1) facilitate the prudential supervision of a *firm* by ensuring that adequate information is available regarding its past/current financial situation and business activities (which includes the design and implementation of systems and controls); and

(2) help the *FSA* to satisfy itself that a *firm* is operating in a prudent manner and is not prejudicing the interests of its *customers* or market confidence.

1.4.52 G In addition to the record keeping requirements in *PRU*, a *firm* should remember that it may be obliged, under other applicable laws or regulations, to keep similar or additional records.

1.4.53 R (1) A *firm* must make and regularly update accounting and other records that are sufficient to enable the *firm* to demonstrate to the *FSA*:

(a) that the *firm* is financially sound and has appropriate systems and controls;

(b) the *firm's* financial position and exposure to risk (to a reasonable degree of accuracy); and

(c) the *firm's* compliance with the *rules* in *PRU*.

(2) The records in (1) must be retained for a minimum of three years, or longer as appropriate**.**

1.4.54 G A *firm* should be able to make available the records described in *PRU* 1.4.53R within a reasonable timeframe when requested to do so by the *FSA*.

1.4.55 G The *FSA* recognises that not all records are specific to a particular point in time. As such, while it may be appropriate to update some records on a daily or continuous basis, for example expenditure and details of certain transactions, it may not be appropriate to update other records as regularly as this, for example those relating to its business plan and risk policies. A *firm* should decide how regularly it should update particular records.

1.4.56 G A *firm* should decide which records it needs to hold, noting that compliance with *PRU* 1.4.53R does not require it to hold records on every single aspect of its activities. Some specific *guidance* on the types of records that a *firm* should hold is set out in each of the risk specific sections on systems and controls (see *PRU* 3.1, *PRU* 4.1, *PRU* 5.1, *PRU* 6.1, *PRU* 7.1 and *PRU* 8.1).

1.4.57 G In deciding which records to hold, a *firm* should also take into account that failure to keep adequate records could make it harder for it to satisfy the *FSA* that it is compliant with the *rules* in *PRU*, and to defend any enforcement action taken against it.

1.4.58 G A *firm* should keep the records required in *PRU* in an appropriate format and language (in terms of format this could include holding them on paper or in electronic or some other form). However, whatever format or language a *firm* chooses, *SYSC* 3.2.20R requires that records be capable of being reproduced on paper and in English (except where they relate to business carried on from an establishment situated in a country where English is not an official language).

1.4.59 G In accordance with *SYSC* 3.2.20R, a *firm* should retain the records that it needs to comply with *PRU* 1.4.53R for as long as they are relevant for the purposes for which they were made.

1.4.60 R A *firm* must keep the *records* required in *PRU* 1.4.53R in the *United Kingdom*, except where:

(1) they relate to business carried on from an establishment in a country or territory that is outside the *United Kingdom*; and

(2) they are kept in that country or territory.

1.4.61 R When a *firm* keeps the records required in *PRU* 1.4.53R outside the *United Kingdom*, it must periodically send an adequate summary of those records to the *United Kingdom*.

1.4.62 G Where a *firm* outsources the storage of some or all of its records to a third party service provider, it should ensure that these records are readily accessible and can be reproduced within a reasonable time period. The *firm* should also ensure that these records are stored in compliance with the *rules* and *guidance* on record keeping in *PRU*. Additional *guidance* on the management of *outsourcing* agreements is provided in *SYSC* 3A.

1.4.63 G A *firm* may rely on records that have been produced by a third party (for example, another *group* company or an external agent, such as an outsource service provider). However where the *firm* does so it should ensure that these records are readily accessible and can be reproduced within a reasonable time period. The *firm* should also ensure that these records comply with the *rules* and *guidance* on record keeping in *PRU*.

1.4.64 G In accordance with *SYSC* 3.2.21G, a *firm* should have adequate systems and controls for maintaining the security of its records so that they are reasonably safeguarded against loss, unauthorised access, alteration or destruction.

Annex D

PRU 2

In this Annex, all the text is new and is not underlined.

2.1 Calculation of capital resources requirements

Application

2.1.1 R *PRU* 2.1 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or

(2) a *Swiss general insurer*; or

(3) an *EEA-deposit insurer*; or

(4) an *incoming EEA firm*; or

(5) an *incoming Treaty firm*.

2.1.2 G The scope of application of *PRU* 2.1 is not restricted to *firms* that are subject to the relevant EC Directives. It applies, for example, to *pure reinsurers*.

2.1.3 R (1) *PRU* 2.1 applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, *PRU* 2.1 applies separately to each type of business.

2.1.4 G The adequacy of a *firm's capital resources* needs to be assessed in relation to all the activities of the *firm* and the risks to which they give rise.

2.1.5 G The requirements in *PRU* 2.1 apply to a *firm* on a solo basis.

Purpose

2.1.6 G *Principle* 4 requires a *firm* to maintain adequate financial resources. *PRU* 2 sets out provisions that deal specifically with the adequacy of that part of a *firm's* financial resources that consists of *capital resources*. The adequacy of a *firm's capital resources* needs to be assessed both by the *firm* and the *FSA*. Through its *rules*, the *FSA* sets minimum *capital resources requirements* for *firms*. It also reviews a *firm's* own assessment of its capital needs, and the processes and systems by which that assessment is made, in order to see if the minimum *capital resources requirements* are appropriate (see *PRU* 2.3.2G to *PRU* 2.3.3G).

2.1.7 G This section (*PRU* 2.1) sets *capital resources requirements* for a *firm*. *PRU* 2.2 sets out how, for the purpose of this, the amounts or values of capital, assets and liabilities are to be determined. More detailed *rules* relating to capital, assets and liabilities are also set out in the following chapters and sections:

PRU 1.3 Valuation;
PRU 3 Credit risk;
PRU 4 Market risk;
PRU 5 Liquidity risk;
PRU 6 Operational risk;
PRU 7 Insurance risk; and
PRU 8 Group risk.

PRU 2.1 and *PRU* 2.2 include appropriate cross-references to these chapters and sections.

2.1.8 G *PRU* 2.1 implements minimum EC standards for the *capital resources* required to be held by a *firm* undertaking business that falls within the scope of the *Consolidated Life Directive* (2002/83/EC) or the *First Non-Life Directive* (73/239/EEC) as amended.

Main requirements

2.1.9 R (1) A *firm* must maintain at all times *capital resources* equal to or in excess of its *capital resources requirement* (*CRR)*.

(2) A *firm* which is a *participating insurance undertaking* and, in relation to its own *group capital resources*, is in compliance with *PRU* 8.3.9R, is deemed to comply with (1).

2.1.10 R A *firm* must comply with *PRU* 2.1.9R separately in respect of both its *long-term insurance business* and its *general insurance business*.

2.1.11 G In order to comply with *PRU* 2.1.10R, a *firm* carrying on both *general insurance business* and *long-term insurance business* will need to allocate its *capital resources* between its *general insurance business* and *long-term insurance business* so that the *capital resources* allocated to its *general insurance business* are equal to or in excess of its *CRR* for its *general insurance business* and the *capital resources* allocated to its *long-term insurance business* are equal to or in excess of its *CRR* for its *long-term insurance business.* Whereas *long-term insurance assets* cannot be used towards meeting a *firm's CRR* for its *general insurance business*, surplus general insurance assets may be used towards meeting the *CRR* for its *long-term insurance business* (see *PRU* 7.6.30R to *PRU* 7.6.32G). *PRU* 7.6 sets out the detailed requirements for the separation of *long-term* and *general insurance business*.

2.1.12 G *Firms* commonly use different terminology for the various *PRU* requirements. For example, the *MCR* is traditionally known as the required minimum margin.

2.1.13 G The *FSA* may impose a higher capital requirement than the minimum requirement set out in this section as part of the *firm's Part IV permission*. (See *PRU* 2.3).

Calculation of the CRR

2.1.14 R The *CRR* for any *firm* carrying on *general insurance business* is equal to the *MCR* in *PRU* 2.1.21R.

2.1.15 R The *CRR* for any *firm* to which this *rule* applies (see *PRU* 2.1.16R and *PRU* 2.1.17R) is the higher of:

(1) the *MCR* in *PRU* 2.1.22R**;** and

(2) the *ECR* in *PRU* 2.1.34R.

2.1.16 R Subject to *PRU* 2.1.17R, *PRU* 2.1.15R applies to a *firm* carrying on *long-term insurance business,* other than:

(1) a *non-directive mutual***;**

(2) a *firm* which has no *with-profits insurance liabilities;* and

(3) a *firm* which has *with-profits insurance liabilities* that are, and at all times since 31 December 2004 (the coming into force of *PRU* 2.1.15R) have remained, less than £500 million.

2.1.17 R *PRU* 2.1.15R also applies to a *firm* of a type listed in *PRU* 2.1.16R(3) if:

(1) the *firm* makes an election that *PRU* 2.1.15R is to apply to it; and

(2) that election is made by written notice given to the *FSA* in a way that complies with the requirements for written notice in *SUP* 15.7.

2.1.18 G The effect of *PRU* 2.1.16R(3) is that a *firm* to which *PRU* 2.1.15R applies because it has *with-profits insurance liabilities* of £500 million or more, will continue to be subject to *PRU* 2.1.15R even if its *with-profits insurance liabilities* fall below £500 million. However, if that happens, it may apply for a *waiver* from *PRU* 2.1.15R under section 148 of the *Act*. In exercising its discretion under section 148 of the *Act*, the *FSA* will have regard (among other factors) to whether there has been a material and permanent change to the *firm's* business and to the prospects of it continuing to have *with-profits insurance liabilities* of less than £500 million.

2.1.19 G A *firm* that has always had *with-profits insurance liabilities* of less than £500 million since *PRU* 2.1.15R came into force may wish to "opt in" to *PRU* 2.1.15R and therefore become a *realistic basis life firm*. By doing so, it becomes obliged to calculate a *with-profits insurance capital component* (see *PRU* 2.1.34R and *PRU* 7.4), but it also becomes entitled to certain modifications to the way that a *firm* is required to calculate its *mathematical reserves* (see *PRU* 7.3.46R and *PRU* 7.3.76R). The *firm* is also then required to report its liabilities on a realistic basis (see *IPRU(INS*) rule 9.31R(b)). In order to "opt in", the *firm* must make an election under *PRU* 2.1.17R that *PRU* 2.1.15R is to apply to it. If a *firm* that has elected to calculate and report its *with-profits insurance liabilities* on a realistic basis subsequently decides that it no longer wishes to do so, it may seek to "opt out" by applying for a *waiver* from *PRU* 2.1.15R under section 148 of the *Act*. In exercising its discretion under section 148 of the *Act,* the *FSA* will have regard (among other factors) to whether there has been a material and permanent change to the *firm's* business and to whether it continues to have *with-profits insurance liabilities* of less than £500 million.

2.1.20 R The *CRR* for a *firm* carrying on *long-term insurance business,* but to which *PRU* 2.1.15R does not apply, is equal to the *MCR* in *PRU* 2.1.22R.

Calculation of the MCR

2.1.21 R For a *firm* carrying on *general insurance business*, the *MCR* in respect of that business is the higher of:

(1) the *base capital resources requirement* for *general insurance business* applicable to that *firm*; and

(2) the *general insurance capital requirement***.**

2.1.22 R For a *firm* carrying on *long-term insurance business*, the *MCR* in respect of that business is the higher of:

(1) the *base capital resources requirement* for *long-term insurance business* applicable to that *firm*; and

(2) the sum of:

(a) the *long-term insurance capital requirement*; and

(b) the *resilience capital requirement.*

2.1.23 G The *MCR* gives effect to the EC Directive minimum requirements. For *general insurance business,* the EC Directive minimum is the higher of the *general insurance capital requirement* and the relevant *base capital resources requirement*. For *long-term insurance business*, the EC Directive minimum is the higher of the *long-term insurance capital requirement* and the *base capital resources requirement.* The *base capital resources requirement* is the minimum guarantee fund for the purposes of article 29(2) of the *Consolidated Life Directive* (2002/83/EC) and article 17(2) of the *First Non-Life Directive* (73/239/EEC) as amended. The *resilience capital requirement* is an *FSA* requirement that is additional to the EC minimum requirement for *long-term insurance business.*

2.1.24 G The calculation of the *resilience capital requirement* is set out in *PRU* 4.2.

Calculation of the base capital resources requirement

2.1.25 R The amount of a *firm's base capital resources requirement* is set out in Table 2.1.26R.

2.1.26 R Table: Base capital resources requirement

Firm type			Amount: Currency equivalent of
General insurance business			
	Liability *insurer* *(classes 10-15)*	Directive *mutual*	€2.25 million
		Non-directive insurer	€300,000
		Overseas firm	€1.5 million
		Other	€3 million
	Other *insurer*	Directive *mutual*	€1.5 million
		Non-directive insurer *(classes* 1 to 8, 16 or 18)	€225,000
		Non-directive insurer *(classes* 9 or 17)	€150,000
		Overseas firm	€1 million
		Other	€2 million
Long-term insurance business			
	Mutual	Directive	€2.25 million
		Non-directive	€600,000
	Overseas firm		€1.5 million
	Any other *insurer*		€3 million

2.1.27 R (1) Subject to (2) and (3), the amount of the *base capital resources requirement* specified in the last column of the table in *PRU* 2.1.26R for a *firm* which is not a *non-directive insurer* will increase each year, starting on the review date of 20 September 2005 (and annually after that), by the percentage change in the European index of consumer prices (comprising all EU member states, as published by Eurostat) from 20 March 2002, to the relevant review date, rounded up to a multiple of €100,000.

(2) In any year, if the percentage change since the last increase is less than 5%, then there will be no increase.

(3) The increase will take effect 30 days after the EU Commission has informed the European Parliament and Council of its review and the relevant percentage change.

2.1.28 G Any increases in the *base capital resources requirement* referred to in *PRU* 2.1.27R will be published on the *FSA* website.

2.1.29 R For the purposes of the *base capital resources requirement*, the exchange rate from the Euro to the pound sterling for each year beginning on 31 December is the rate applicable on the last day of the preceding October for which the exchange rates for the currencies of all the European Union member states were published in the Official Journal of the European Union.

Calculation of the general insurance capital requirement

2.1.30 R A *firm* must calculate its *general insurance capital requirement* as the highest of:

(1) the *premiums amount*;

(2) the *claims amount*; and

(3) the *brought forward amount*.

2.1.31 G The calculation of each of the *premiums amount*, *claims amount* and *brought forward amount* is set out in *PRU* 7.2.

Calculation of the long-term insurance capital requirement

2.1.32 R A *firm* must calculate its *long-term insurance capital requirement* as the sum of:

(1) the *insurance death risk capital component;*

(2) the *insurance health risk capital component;*

(3) the *insurance expense risk capital component;* and

(4) the *insurance market risk capital component.*

2.1.33 G The calculation of each of the capital components is set out in *PRU* 7.2.

Calculation of the ECR

2.1.34 R For a *firm* carrying on *long-term insurance business*, the *ECR* in respect of that business is the sum of:

(1) the *long-term insurance capital requirement*;

(2) the *resilience capital requirement*; and

(3) the *with-profits insurance capital component.*

2.1.35 G Details of the *resilience capital requirement* and the *with-profits insurance capital component* are set out in *PRU* 4.2 and *PRU* 7.4 respectively.

Monitoring requirements

2.1.36 R A *firm* must at all times monitor whether it is complying with *PRU* 2.1.9R and be able to demonstrate that it knows at all times whether it is complying with that *rule*.

2.1.37 G For the purposes of *PRU* 2.1.36R, a *firm* should have systems in place to enable it to be certain whether it has adequate *capital resources* to comply with *PRU* 2.1.9R at all times. This does not necessarily mean that a *firm* needs to measure the precise amount of its *capital resources* and its *CRR* on a daily basis. A *firm* should, however, be able to demonstrate the adequacy of its *capital resources* at any particular time if asked to do so by the *FSA*.

2.1.38 R A *firm* must notify the *FSA* immediately of any breach, or expected breach, of *PRU* 2.1.9R.

2.2 Capital resources

Application

2.2.1 R *PRU* 2.2 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) a *Swiss general insurer*; or
(3) an *EEA-deposit insurer*; or
(4) an *incoming EEA firm*; or
(5) an *incoming Treaty firm*.

Purpose

2.2.2 G *PRU* 2.1 sets out minimum *capital resources requirements* for a *firm*. This section (*PRU* 2.2) sets out how, for the purpose of these requirements, *capital resources* are defined and measured. *PRU* 2.2 also implements minimum EC standards for the composition of *capital resources* required to be held by a *firm* undertaking business that falls within the scope of the *Consolidated Life Directive* (2002/83/EC) or the *First Non-Life Directive* (73/239/EEC) as amended.

Principles underlying the definition of capital resources

2.2.3 G The *FSA* has divided its definition of capital into categories, or tiers, reflecting differences in the extent to which the capital instruments concerned meet the purpose and conform to the characteristics of capital listed in *PRU* 2.2.5G. The *FSA* generally prefers a *firm* to hold higher quality capital that meets the characteristics of permanency and loss absorbency that are features of *tier one capital*. Capital instruments falling into *core tier one capital* can be included in a *firm's* regulatory capital without limit. Typically, other forms of capital are either subject to limits (see *PRU* 2.2.16R to *PRU* 2.2.26R) or, in the case of some specialist types of capital, may only be included with the express consent of the *FSA* (which takes the form of a *waiver* under section 148 of the *Act*).

2.2.4 G Details of the individual components of capital are set out in *PRU* 2.2.14R.

Tier one capital

2.2.5 G *Tier one capital* typically has the following characteristics:

(1) it is able to absorb losses;
(2) it is permanent;
(3) it ranks for repayment upon winding up after all other debts and liabilities; and
(4) it has no fixed costs, that is, there is no inescapable obligation to pay dividends or interest.

2.2.6 G The forms of capital that qualify for *tier one capital* are set out in *PRU* 2.2.14R and include, for example, *share* capital, reserves, verified interim net profits and, for a *mutual*, the *initial fund* plus permanent members' accounts. *Tier one capital* is divided into *core tier one capital*, perpetual non-cumulative *preference shares*, and *innovative tier one capital*.

Upper and lower tier two capital

2.2.7 G *Tier two capital* includes forms of capital that do not meet the requirements for permanency and absence of fixed servicing costs that apply to *tier one capital*. *Tier two capital* includes, for example:

(1) capital which is perpetual (that is, has no fixed term) but cumulative (that is, servicing costs cannot be waived at the issuer's option, although they may be deferred – for example cumulative *preference shares*); perpetual capital instruments may be included in *upper tier two capital*; and

(2) capital which is not perpetual (that is, it has a fixed term) and which may also have fixed servicing costs that cannot generally be either waived or deferred, for example subordinated debt. Such capital should normally be of a medium to long-term maturity (that is, an original maturity of at least five years). Dated capital instruments are included in *lower tier two capital*.

Deductions from capital

2.2.8 G Deductions should be made at the relevant stage of the calculation of *capital resources* to reflect capital that may not be available to the *firm* or assets of uncertain value, for example, holdings of intangible assets and assets that are inadmissible for a *firm*.

2.2.9 G A full list of deductions from *capital resources* is shown in *PRU* 2.2.14R.

Calculation of capital resources

2.2.10 G *Capital resources* can be calculated either as the total of eligible assets less foreseeable liabilities (which is the approach taken in the *Insurance Directives*) or by identifying the components of capital. Both calculations give the same result for the total amount of *capital resources*. The approach taken in this section has been to specify the components of capital and the relevant deductions. This is set out in *PRU* 2.2.14R. This approach is the same as that used for the calculation of *capital resources* for *banks*, *building societies* and *investment firms*. A simple example, showing the reconciliation of the two methods, is given in *PRU* 2.2.11G.

2.2.11 G Table: Approaches to calculating capital resources

Liabilities		Assets	
Borrowings Ordinary *shares* Profit and loss account and other reserves Perpetual subordinated debt Total	100 200 100 150 550	Admissible assets Intangible assets Other inadmissible assets Total	350 100 100 550
Calculation of *capital resources*: eligible assets less foreseeable liabilities			
Total assets		550	
less intangible assets		(100)	
less inadmissible assets		(100)	
less liabilities (borrowings)		(100)	
Capital resources		250	
Calculation of *capital resources*: components of capital			
Ordinary *shares*		200	
Profit and loss account and other reserves		100	
Perpetual subordinated debt		150	
less intangible assets		(100)	
less inadmissible assets		(100)	
Capital resources		250	

2.2.12 R A *firm* must calculate its *capital resources* for the purpose of *PRU* in accordance with *PRU* 2.2.14R, subject to the limits in *PRU* 2.2.16R to *PRU* 2.2.26R.

2.2.13 G Where *PRU* 2.2.14R refers to related text, it is necessary to refer to that text in order to understand fully what is included in the descriptions of capital items and deductions set out in the table.

2.2.14 R Table: Capital resources (see *PRU* 2.2.12R)

	Related text	Included in the calculation of capital resources
		A ✓ denotes that the item is included in the calculation of a *firm's capital resources*: a × denotes that the item is not included in the calculation of a *firm's capital resources*.
(A) Core tier one capital:		
Permanent share capital	*PRU* 2.2.36R	✓
Profit and loss account and other reserves	*PRU* 2.2.76R and 2.2.77R	✓
Share premium account	None	✓
Externally verified interim net profits	*PRU* 2.2.82R	✓
Positive valuation differences	*PRU* 2.2.78R	✓
Fund for future appropriations	None	✓
(B) Perpetual non-cumulative preference shares		
Perpetual non-cumulative *preference shares*	*PRU* 2.2.50R	✓
(C) Innovative tier one capital		
Innovative tier one instruments	*PRU* 2.2.52R to 2.2.75R	✓
(D) Total tier one capital before deductions = A + B + C		
(E) Deductions from tier one capital:		
Investments in own *shares*	None	✓
Intangible assets	*PRU* 2.2.84R	✓
Amounts deducted from *technical provisions* for discounting and other negative valuation differences	*PRU* 2.2.78R to 2.2.81R	✓
(F) Total tier one capital after deductions = D – E		
(G) Upper tier two capital:		

	Related text	Included in the calculation of capital resources
Perpetual cumulative *preference shares*	*PRU* 2.2.101R	✓
Perpetual subordinated debt	*PRU* 2.2.101R	✓
Perpetual subordinated securities	*PRU* 2.2.101R	✓
(H) Lower tier two capital		
Fixed term *preference shares*	*PRU* 2.2.108R	✓
Fixed term subordinated debt	*PRU* 2.2.108R	✓
Fixed term subordinated securities	*PRU* 2.2.108R	✓
(I) Total tier two capital = G + H		
(J) Positive adjustments for related undertakings		
Related undertakings that are *regulated related undertakings (*other than *insurance undertakings)*	*PRU* 2.2.90R	✓
(K) Total capital after positive adjustments for regulated related undertakings that are not insurance undertakings but before deductions = F + I + J		
(L) Deductions from total capital		
Inadmissible assets	*PRU* 2.2.86R & *PRU* 2 Ann 1R	✓
Assets in excess of *market risk* and *counterparty* limits	*PRU* 3.2.22R	✓
Related undertakings that are *ancillary services undertakings*	*PRU* 2.2.89R	✓
Negative adjustments for *related undertakings* that are *regulated related undertakings (*other than *insurance undertakings)*	*PRU* 2.2.90R	✓
(M) Total capital after deductions = K – L		
(N) Other capital resources*:		
Unpaid *share* capital or, in the case of a *mutual*, *unpaid initial funds* and calls for supplementary contributions	*PRU* 2.2.126G to *PRU* 2.2.128G	×
Implicit items	*PRU* 2 Ann 2G	×
(O) Total capital resources after deductions = M + N		
* Items in section (N) of the table can be included in *capital resources* if subject to a *waiver* under section 148 of the *Act*.		

Limits on the use of different forms of capital

2.2.15 G As the various components of capital differ in the degree of protection that they offer the *firm* and its *customers*, restrictions are placed on the extent to which certain types of capital are eligible for inclusion in a *firm's capital resources*. These restrictions are set out in *PRU* 2.2.16R to *PRU* 2.2.26R.

2.2.16 R At least 50% of a *firm's MCR* must be accounted for by the sum of:

(1) the amount calculated at stage A of the calculation in *PRU* 2.2.14R; and

(2) notwithstanding *PRU* 2.2.20R(1), the amount calculated at stage B of the calculation in *PRU* 2.2.14R;

less the amount calculated at stage E of the calculation in *PRU* 2.2.14R.

2.2.17 R A *firm* carrying on *long-term insurance business* must meet the higher of:

(1) $^{1}/_{3}$ of the *long-term insurance capital requirement*; and

(2) the *base capital resources requirement*;

with the sum of the items listed at stages A, B, G and H less the sum of the items listed at stage E in *PRU* 2.2.14R.

2.2.18 R A *firm* carrying on *general insurance business* must meet the higher of:

(1) ⅓ of the *general insurance capital requirement*; and

(2) the *base capital resources requirement*;

with the sum of the items listed at stages A, B, G and H less the sum of the items listed at stage E in *PRU* 2.2.14R.

2.2.19 G The purposes of the requirements in *PRU* 2.2.16R to 2.2.18R are to comply with the *Insurance Directives'* requirement that *firms* maintain a *guarantee fund* of higher quality *capital resources* items and to ensure that at least 50% of the *firm's capital resources* needed to meet its *MCR* provide maximum loss absorbency to protect the *firm* from insolvency.

2.2.20 R In relation to a *firm's tier one capital resources* calculated at stage F of the calculation in *PRU* 2.2.14R:

(1) at least 50% must be accounted for by *core tier one capital*; and

(2) no more than 15% may be accounted for by *innovative tier one capital*.

2.2.21 G The purpose of the requirement in *PRU* 2.2.20R(1) is to ensure that at least 50% of the *firm's tier one capital resources* (net of *tier one capital* deductions) is met by *core tier one capital* which provides maximum loss absorbency on a going concern basis to protect the *firm* from insolvency. Although a perpetual non-cumulative *preference share* is in legal form a *share*, it behaves in many ways like a perpetual fixed interest debt instrument. Within the 50% limit on non-*core tier one capital, PRU* 2.2.20R(2) places a further sub-limit on the amount of *innovative tier one capital* that a *firm* may include in its *tier one capital resources*. This limit is necessary to ensure that most of a *firm's tier one capital* comprises items of capital of the highest quality.

2.2.22 G The amount of any capital item excluded from a *firm's tier one capital resources* under *PRU* 2.2.20R may form part of its *tier two capital resources* subject to the limits in *PRU* 2.2.23R.

2.2.23 R Subject to *PRU* 2.2.24R, a *firm* must exclude from the calculation of its *capital resources* the following:

(1) the amount (if any) by which *tier two capital resources* exceed the amount calculated at stage F of the calculation in *PRU* 2.2.14R; and

(2) the amount (if any) by which *lower tier two capital resources* exceed 50% of the amount calculated at stage F of the calculation in *PRU* 2.2.14R.

2.2.24 R At least 75% of a *firm's MCR* must be accounted for by the sum of:

(1) the amount calculated at stage A plus stage B less stage E of the calculation in *PRU* 2.2.14R; and

(2) the amount calculated at stage G of the calculation in *PRU* 2.2.14R.

2.2.25 G *PRU* 2.2.23R and *PRU* 2.2.24R give effect to the *Insurance Directives'* requirements that a *firm's tier two capital resources* must not exceed its *tier one capital resources* and that no more than 25% of a *firm's* "required solvency margin" should consist of *lower tier two capital resources.*

2.2.26 R A *firm* that carries on both *long-term insurance business* and *general insurance business* must apply the limits in *PRU* 2.2.16R to *PRU* 2.2.24R separately for each type of business.

Characteristics of tier one capital

2.2.27 R A *firm* may not include a *share* in, or another investment in, or external contribution to the capital of, that *firm* in its *tier one capital resources* unless it complies with the following conditions:

(1) it is included in one of the categories in *PRU* 2.2.28R;

(2) it is not excluded by any of the *rules* in *PRU* 2.2; and

(3) it complies with the conditions set out in *PRU* 2.2.29R.

2.2.28 R The categories referred to in *PRU* 2.2.27R(1) are:

(1) *permanent share capital*;

(2) a perpetual non-cumulative *preference share*; and

(3) an *innovative tier one instrument*.

2.2.29 R Subject to *PRU* 2.2.30R, an item of capital in a *firm* complies with *PRU* 2.2.27R(3) if:

(1) it is issued by the *firm*;

(2) it is fully paid and the proceeds of issue are immediately and fully available to the *firm*;

(3) it:

(a) cannot be redeemed at all or can only be redeemed on a winding up of the *firm*; or

(b) complies with the conditions in *PRU* 2.2.38R and *PRU* 2.2.39 R;

(4) any *coupon* is either non-cumulative or, if it is cumulative, it complies with *PRU* 2.2.40R;

(5) it is able to absorb losses to allow the *firm* to continue trading and in the case of an *innovative tier one instrument* it complies with *PRU* 2.2.56R to *PRU* 2.2.58R;

(6) it ranks for repayment upon winding up no higher than a *share* of a company incorporated under the Companies Act 1985 or the Companies (Northern Ireland) Order 1986 (whether or not it is such a *share*);

(7) the *firm* has the right to choose whether or not to pay a *coupon* on it in cash at any time;

(8) the description of its characteristics used in its marketing is consistent with the characteristics required to satisfy *PRU* 2.2.29R(1) to (7).

2.2.30 R (1) An item of capital does not comply with *PRU* 2.2.27R(3) if the issue of that item of capital by the *firm* is connected with one or more other transactions which, when taken together with the issue of that item, could produce the effect described in (2).

(2) The effect referred to in (1) is a reduction in the economic benefit intended to be conferred on the *firm* by the issue of the item of capital which means that the item of capital no longer displays all of the characteristics set out in *PRU* 2.2.29R(1) to (8).

2.2.31 R An item of capital does not comply with *PRU* 2.2.29R(5) if the holder of that item does not bear losses to at least the same degree as the holder of a *share* of a company incorporated under the Companies Act 1985 or the Companies (Northern Ireland) Order 1986 (whether or not it is such a *share*).

2.2.32 G *PRU* 2.2.29R(2) is stricter than the Companies Act definition of fully paid, which only requires an undertaking to pay.

2.2.33 G An item of capital does not comply with *PRU* 2.2.29R(8) if it is marketed as a capital instrument that would only qualify for a lower level of capital or on the basis that investing in it is like investing in a *lower tier two instrument*. For example, an undated capital instrument should not be marketed as a dated capital instrument if the terms of the capital instrument include an option by the issuer to redeem the capital instrument at a specified date in the future.

2.2.34 G For the purposes of *PRU* 2.2.30R, examples of connected transactions might include guarantees or any other side agreement provided to the holders of the capital instrument by the *firm* or a connected party or a related transaction designed, for example, to enhance their security or to achieve a tax benefit, but which may compromise the loss absorption capacity or permanence of the original capital item.

2.2.35 R A *firm* may not include a *share* in its *tier one capital resources* unless (in addition to complying with the other relevant *rules* in *PRU* 2.2):

(1) (in the case of a *firm* that is a company as defined in the Companies Act 1985 or the Companies (Northern Ireland) Order 1986) it is "called-up *share* capital" within the meaning given to that term in that Act or, as the case may be, that Order; or

(2) (in the case of any other *firm*) it is:

(a) in economic terms; and

(b) in its characteristics as capital (including loss absorbency, permanency, ranking for repayment and fixed costs);

substantially the same as called-up *share* capital falling into (1).

Core tier one capital: permanent share capital

2.2.36 R *Permanent share capital* means an item of capital which (in addition to satisfying *PRU* 2.2.29R) meets the following conditions:

(1) it is:

(a) an ordinary *share*; or

(b) a *members' contribution*; or

(c) part of the *initial fund* of a *mutual*;

(2) any *coupon* on it is not cumulative, and the *firm* has both the right to choose whether or not to pay a *coupon* and the right to choose the amount of that *coupon*; and

(3) the terms upon which it is issued do not permit redemption and it is otherwise incapable of being redeemed to at least the degree of an ordinary *share* issued by a company incorporated under the Companies Act 1985 or the Companies (Northern Ireland) Order 1986 (whether or not it is such a *share*).

2.2.37 G *PRU* 2.2.36R has the effect that the *firm* should be under no obligation to make any payment in respect of a *tier one instrument* if it is to form part of its *permanent share capital* unless and until the *firm* is wound up. A *tier one instrument* that forms part of *permanent share capital* could not therefore count as a liability before the *firm* is wound up. The fact that relevant company law permits the *firm* to make earlier repayment does not mean that the *tier one instruments* are not eligible. However, the *firm* should not be required by any contractual or other obligation arising out of the terms of that capital to repay *permanent share capital*. Similarly a *tier one instrument* may still qualify if company law allows dividends to be paid on this capital, provided the *firm* is not contractually or otherwise obliged to pay them. There should therefore be no fixed costs.

Basic rules about redemption and cumulative coupons

2.2.38 R In relation to a perpetual non-cumulative *preference share* which is redeemable, a *firm* may not include it in its *tier one capital resources* unless its contractual terms are such that:

(1) it is redeemable only at the option of the *firm*; and

(2) the *firm* cannot exercise that redemption right:

(a) on or before the fifth anniversary of its date of issue;

(b) unless it has given notice to the *FSA* in accordance with *PRU* 2.2.72R; and

(c) unless at the time of exercise of that right it complies with *PRU* 2.1.9R and will continue to do so after redemption.

2.2.39 R In relation to an *innovative tier one instrument* which is redeemable and which, either:

(1) is or may become subject to a *step-up*; or

(2) satisfies *PRU* 2.2.54R(2);

a *firm* may not include it in its *tier one capital resources* unless it complies with the conditions in *PRU* 2.2.38R, except that in *PRU* 2.2.38R(2)(a), "fifth anniversary" is replaced by "tenth anniversary".

2.2.40 R A *potential tier one instrument* with a cumulative *coupon* complies with *PRU* 2.2.29R(4) only if any such *coupon* must, if deferred, be paid by the *firm* in the form of *permanent share capital*.

2.2.41 G *PRU* 2.2.38R does not apply to *permanent share capital* because no item of capital that is either redeemable or that has a cumulative *coupon* can be *permanent share capital*.

Further guidance on redemption

2.2.42 G The *rules* in *PRU* 2.2 about redemption of *potential tier one instruments* fall into three classes:

(1) *rules* defining whether a *firm's potential tier one instruments* are eligible for inclusion in its *tier one capital resources* at all;

(2) *rules* defining whether a *firm's potential tier one instruments* are eligible for inclusion in its *permanent share capital*; and

(3) *rules* defining whether a *firm's potential tier one instruments* must be classified as *innovative tier one instruments*.

2.2.43 G The *rules* about redemption that are relevant to deciding whether a *firm's potential tier one instruments* are eligible for inclusion in its *tier one capital resources* at all are as follows.

(1) *PRU* 2.2.29R(3) and *PRU* 2.2.39R have the following provisions.

(a) Any capital instrument that is redeemable at the option of the holder cannot form part of a *firm's tier one capital resources*. Instead, if it is redeemable at all, a capital instrument should only be redeemable at the option of the *firm*.

(b) A redemption right should be exercisable no earlier than the fifth anniversary of the date of issue. However, if an instrument is an *innovative tier one instrument* which is subject to a *step-up* or any other economic incentive to redeem, any such redemption should be exercisable no earlier than the tenth anniversary.

(c) Any redemption proceeds should be payable only in cash or in *shares*.

(d) The terms of the capital instrument should provide that any redemption right should not be exercised unless and until the *firm* has given the notice to the *FSA* required under *PRU* 2.2.72R.

(e) Any redemption right should not be exercisable unless both before and after the redemption the *firm* complies with *PRU* 2.1.9R (which requires that a *firm* has sufficient *capital resources* to meet its *capital resources requirement*).

(2) Under *PRU* 2.2.70R, a *firm* should not include a *potential tier one instrument* that is redeemable in whole or in part in *permanent share capital* in its *tier one capital resources* unless the *firm* has:

(a) sufficient *permanent share capital* or sufficient authority to issue *permanent share capital* (and the authority to allot it) to meet any redemption obligations that have become due; and

(b) a prudent reserve of *permanent share capital* or sufficient authority to issue *permanent share capital* (and the authority to allot it) to meet possible future redemption obligations.

(3) *PRU* 2.2.65R contains limits on the amount of *permanent share capital* that may be issued on a redemption of a *potential tier one instrument* redeemable in *permanent share capital*.

2.2.44 G The *rules* defining whether a *firm's potential tier one instruments* are eligible for inclusion in its *permanent share capital* are to be found in *PRU* 2.2.36R. As far as redemption is concerned, it says that the capital instrument should be no more capable of being redeemed than a *share* under the Companies Act 1985 or the Companies (Northern Ireland) Order 1986. *PRU* 2.2.38R (which sets out the basic rules for redemption) does not apply to *permanent share capital* as a redeemable *potential tier one instrument* should not be included in *permanent share capital*.

2.2.45 G The *rules* about redemption that are relevant to deciding whether a *firm's potential tier one instruments* should be classified as *innovative tier one instruments* are as follows.

(1) Under *PRU* 2.2.53R, a redeemable *potential tier one instrument* is always treated as an *innovative tier one instrument* if the redemption proceeds are payable otherwise than in cash.

(2) Under *PRU* 2.2.54R, any feature of a *tier one instrument* that in conjunction with a call would make a *firm* more likely to redeem it or to have an incentive to do so will make it an *innovative tier one instrument*.

(3) Under *PRU* 2.2.62R a *step-up* coupled with a right of redemption results in a *potential tier one instrument* being treated as an *innovative tier one instrument*.

Further guidance on coupons

2.2.46 G The *rules* in *PRU* 2.2 about the *coupons* payable on *potential tier one instruments* fall into the same three classes that apply to the *rules* on redemption, as set out in *PRU* 2.2.42G.

2.2.47 G The *rules* about *coupons* that are relevant to deciding whether a *firm's potential tier one instruments* are eligible for inclusion in its *tier one capital resources* at all are as follows.

(1) Under *PRU* 2.2.29R(4) and *PRU* 2.2.40R, any deferred cumulative *coupon* should only be payable in *permanent share capital*. If a cumulative *coupon* is payable on a *potential tier one instrument* in another form, it should not be included in the *firm's tier one capital resources*.

(2) Under *PRU* 2.2.29R(7), the *firm* has the right not to pay a *coupon* in cash at any time.

(3) *PRU* 2.2.63R says that a *potential tier one instrument* that may be subject to a *step-up* that potentially exceeds defined limits should not be included in the *firm's tier one capital resources*. *PRU* 2.2.64R says that any *step-up* should not arise before the tenth anniversary of the date of issue if it is to be included in the *firm's tier one capital resources*.

(4) The provisions of *PRU* 2.2.70R summarised in *PRU* 2.2.43G(2) also apply to the payment of *coupons*.

2.2.48 G *PRU* 2.2.36R(2) says that a capital instrument on which a cumulative *coupon* is payable must not be included in a *firm's permanent share capital*. The payment of a *coupon* must be purely discretionary.

2.2.49 G The *rules* about *coupons* that are relevant to deciding whether a *firm's potential tier one instruments* should be classified as *innovative tier one instruments* are as follows:

(1) Under *PRU* 2.2.60R a *potential tier one instrument* with a cumulative *coupon* is an *innovative tier one instrument*.

(2) Under *PRU* 2.2.40R a *potential tier one instrument* with a *coupon* that if deferred must be paid in *permanent share capital* is an *innovative tier one instrument*.

(3) Under *PRU* 2.2.62R a *step-up* coupled with a right of redemption by the *firm* results in a *potential tier one instrument* being treated as an *innovative tier one instrument.*

Perpetual non-cumulative preference shares

2.2.50 R A perpetual non-cumulative *preference share* may be included at stage B of the calculation in *PRU* 2.2.14R if:

(1) it complies with *PRU* 2.2.29R, *PRU* 2.2.35R and *PRU* 2.2.38R;

(2) any *coupon* on it is not cumulative, and the *firm* has the right to choose whether or not to pay a *coupon* in all circumstances;

(3) it is not excluded from *tier one capital resources* by any of the *rules* in *PRU* 2.2; and

(4) it is not an *innovative tier one instrument*.

2.2.51 G Perpetual non-cumulative *preference shares* should be perpetual and redeemable only at the *firm's* option. Any feature that, in conjunction with a call, would make a *firm* more likely to redeem perpetual non-cumulative *preference shares* would normally result in classification as an *innovative tier one instrument*. Such features would include, but not be limited to, a *step-up*, bonus *coupon* on redemption or redemption at a premium to the original issue price of the *share*.

Innovative tier one instruments: general rules

2.2.52 R If an item of capital is stated to be an *innovative tier one instrument* by the *rules* in *PRU* 2.2, it cannot be included in stages A or B of the calculation in *PRU* 2.2.14R.

2.2.53 R If a *tier one instrument* is redeemable at the option of the *firm*, it is an *innovative tier one instrument* unless it is redeemable solely in cash.

2.2.54 R If a *tier one instrument*:

(1) is redeemable; and

(2) is issued on terms that are (or its terms are amended and the amended terms are) such that a reasonable *person* would (judging at or around the time of issue or amendment) think that:

(a) the *firm* is likely to redeem it; or

(b) the *firm* is likely to have a substantial economic incentive to redeem it;

that *tier one instrument* is an *innovative tier one instrument*.

2.2.55 G Any feature that in conjunction with a call would make a *firm* more likely to redeem a *tier one instrument* would normally result in classification as *innovative tier one capital resources*. *Innovative tier one instruments* include but are not limited to those incorporating a *step-up* or principal stock settlement.

Innovative tier one instruments: loss absorbency

2.2.56 R A capital instrument may only be included in *innovative tier one capital resources* if a *firm's* obligations under the instrument either:

(1) do not constitute a liability (actual, contingent or prospective) under section 123(2) of the Insolvency Act 1986; or

(2) do constitute such a liability but the terms of the instrument are such that:

(a) any such liability is not relevant for the purposes of deciding whether:

(i) the *firm* is, or is likely to become, unable to pay its debts; or

(ii) its liabilities exceed its assets;

(b) a creditor (including, but not limited to, a holder of the instrument) is not able to petition for the winding up or administration of the *firm* on the grounds that the *firm* is or may become unable to pay any such liability; and

(c) the *firm* is not obliged to take into account such a liability for the purposes of deciding whether or not the *firm* is, or may become, insolvent for the purposes of section 214 of the Insolvency Act 1986 (wrongful trading).

2.2.57 G The effect of *PRU* 2.2.56R is that if a *potential tier one instrument* does constitute a liability, this should only be the case when the *firm* is able to pay that liability but chooses not to do so. As *tier one capital resources* must be undated, this will generally only be relevant on a solvent winding up of the *firm*.

2.2.58 R A *firm* wishing to issue an *innovative tier one instrument* must obtain an opinion from Queen's Counsel, or where the opinion relates to the law of a jurisdiction outside the *United Kingdom*, from a lawyer in that jurisdiction of equivalent status, confirming that the criteria in *PRU* 2.2.29R(5) and *PRU* 2.2.31R are met.

2.2.59 G The holder should agree that the *firm* has no liability (including any contingent or prospective liability) to pay any amount to the extent to which that liability would cause the *firm* to become insolvent if it made the payment or to the extent that its liabilities exceed its assets or would do if the payment were made. The terms of the capital instrument should be such that the *directors* can continue to trade in the best interests of the senior creditors even if this prejudices the interests of the holders of the instrument.

Innovative tier one instruments: Coupons

2.2.60 R A *tier one instrument* with a cumulative *coupon* which complies with *PRU* 2.2.40R is an *innovative tier one instrument*.

2.2.61 G An item of capital does not fall into *PRU* 2.2.60R merely because a *firm* has come under an obligation to pay a particular *coupon* in *permanent share capital* where that obligation is the result of a voluntary election by the holder or the *firm* to be paid the *coupon* in that form. Thus, for example, if a shareholder of a *firm* is allowed to elect to be paid a dividend in the form of a conventional scrip dividend, that does not make the *share* into an *innovative tier one instrument*.

Innovative tier one instruments and other tier one instruments: step-ups

2.2.62 R If:

(1) a *potential tier one instrument* is or may become subject to a *step-up*; and

(2) that *potential tier one instrument* is redeemable at any time (whether before, at or after the time of the *step-up*);

that *potential tier one instrument* is an *innovative tier one instrument*.

2.2.63 R If a *potential tier one instrument* is or may become subject to a *step-up*, a *firm* must not include it in its *tier one capital resources* if the amount of the *step-up* exceeds or may exceed;

(1) 100 basis points; and

(2) 50% of the *initial credit spread*.

2.2.64 R A *firm* must not include a *potential tier one instrument* that is or may become subject to a *step-up* in its *tier one capital resources* if the *step-up* can arise earlier than the tenth anniversary of the date of issue of that item of capital.

Innovative tier one instruments: principal stock settlement

2.2.65 R A *firm* must not include a *potential tier one instrument* that is redeemable in whole or in part in *permanent share capital* in its *tier one capital resources* if:

(1) the conversion ratio as at the date of redemption may be greater than the conversion ratio as at the time of issue by more than 200%; or

(2) the issue or market price of the conversion instruments issued in relation to one unit of the original capital item (plus any cash element of the redemption) may be greater than the issue price (or, as the case may be, market price) of that original capital item.

2.2.66 R In *PRU* 2.2.65R to *PRU* 2.2.69R:

(1) the original capital item means the capital item that is being redeemed; and

(2) the conversion instrument means the *permanent share capital* issued on its redemption.

2.2.67 R In *PRU* 2.2.65R to *PRU* 2.2.69R, the conversion ratio means the ratio of:

(1) the number of units of the conversion instrument that the *firm* must issue to satisfy its redemption obligation (so far as it is to be satisfied by the issue of conversion instruments) in respect of one unit of the original capital item; to

(2) one unit of the original capital item.

2.2.68 R In *PRU* 2.2.65R, the conversion ratio as at the date of issue of the original capital item is calculated as if the original capital item were redeemable at that time.

2.2.69 R If the conversion instruments or the original capital item are subdivided or consolidated or subject to any other occurrence that would otherwise result in like not being compared with like, the conversion ratio calculation in *PRU* 2.2.65R must be adjusted accordingly.

Requirement to have sufficient unissued stock

2.2.70 R (1) This *rule* applies to a *potential tier one instrument* of a *firm* where either:

(a) the redemption proceeds; or

(b) any *coupon* on that capital item;

can be satisfied by the issue of another *tier one instrument*.

(2) A *firm* may only include an item of capital to which this *rule* applies in its *tier one capital resources* if the *firm* has authorised and unissued *tier one instruments* of the kind in question (and the authority to issue them):

(a) that are sufficient to satisfy all such payments then due; and

(b) are of such amount as is prudent in respect of such payments that could become due in the future.

Notifying the *FSA* of the issue and redemption of tier one instruments

2.2.71 R A *firm* must not include any perpetual non-cumulative *preference shares* or *innovative tier one instruments* in its *tier one capital resources* for the purpose of *PRU* 2.2 unless it has notified the *FSA* of its intention at least one month before it first includes them.

2.2.72 R A *firm* must not redeem any *tier one instrument* that it has included in its *tier one capital resources* for the purpose of *PRU* 2.2 unless it has notified the *FSA* of its intention at least one month before it does so.

Non standard capital instruments

2.2.73 G There may be examples of capital instruments that, although based on a standard form, contain structural features that make the rules in *PRU* 2.2 difficult to apply. In such circumstances, a *firm* may seek individual *guidance* on the application of those *rules* to the capital instrument in question. See *SUP* 9 for the process to be followed when seeking individual *guidance*.

Step-ups

2.2.74 R In relation to a *tier one instrument*, a *step-up* means any change in the *coupon* rate on that instrument that results in an increase in the amount payable at any time, including a change already provided in the original terms governing those payments. A *step-up*:

(1) includes (in the case of a fixed rate) an increase in that *coupon* rate;

(2) includes (in the case of a floating rate calculated by adding a fixed amount to a fluctuating amount) an increase in that fixed amount;

(3) includes (in the case of a floating rate) a change in the identity of the benchmark by reference to which the fluctuating element of the *coupon* is calculated that results in an increase in the absolute amount of the *coupon*;

(4) does not include (in the case of a floating rate) an increase in the absolute amount of the *coupon* caused by fluctuations in the fluctuating figure by reference to which the absolute amount of the *coupon* floats.

2.2.75 R Where a *rule* in *PRU* 2.2 says that a particular treatment applies to an item of capital that is subject to a *step-up* of a specified amount, the question of whether that *rule* is satisfied must be judged by reference to the cumulative amount of all *step-ups* since the issue of that item of capital rather than just by reference to a particular *step-up*.

Profit and loss account and other reserves

2.2.76 R Negative amounts, including any interim net losses, must be deducted from *tier one capital resources*.

2.2.77 R Dividends must be deducted from reserves as soon as they are declared.

Valuation differences

2.2.78 R Valuation differences are all differences between the valuation of assets and liabilities as valued in *PRU* and the valuation that the *firm* uses for its external financial reporting purposes, except valuation differences which are dealt with elsewhere in *PRU* 2.2.14R. The sum of these valuation differences must either be added to (if positive) or deducted from (if negative) a *firm's capital resources* in accordance with *PRU* 2.2.14R.

2.2.79 G Additions to and deductions from *capital resources* will arise from the application of asset and liability valuation and admissibility *rules* (see *PRU* 1.3, *PRU* 2.2.86R and *PRU* 2 Ann 1R). Downward adjustments include *discounting* of *technical provisions* for *general insurance business* (which is optional for financial reporting but not permitted for regulatory valuation – see *PRU* 2.2.80R to *PRU* 2.2.81R). Details of valuation differences relating to *technical provisions* and liability adjustments for *long-term insurance business* are set out in *PRU* 7.3. In particular, contingent loans or other arrangements which are not valued as a liability under *PRU* 7.3.79R(2) result in a positive valuation difference.

2.2.80 R *PRU* 2.2.81R applies to a *firm* that carries on *general insurance business*, except a *pure reinsurer*, and which *discounts* or reduces its *technical provisions* for *claims* outstanding to take account of its investment income as permitted by Article 60(1)(g) of the *Annual Accounts Directive*.

2.2.81 R A *firm* of a kind referred to in *PRU* 2.2.80R must deduct from its *capital resources* the difference between the undiscounted *technical provisions* or *technical provisions* before deductions as disclosed in the notes on the accounts, and the discounted *technical provisions* or *technical provisions* after deductions. This adjustment must be made for all *general insurance business classes*, except for risks listed under *classes* 1 and 2. For *classes* other than 1 and 2, no adjustment needs to be made in respect of the discounting of annuities included in *technical provisions*.

Externally verified interim net profits

2.2.82 R Externally verified interim net profits are interim profits verified by a *firm's* external auditors after deduction of tax, declared dividends and other appropriations.

2.2.83 G The *FSA* may request a *firm* to provide it with a copy of the external auditor's opinion on whether the interim profits are fairly stated.

Intangible assets

2.2.84 R A *firm* must deduct from its *tier one capital resources* the value of intangible assets.

2.2.85 G Intangible assets include goodwill, capitalised development costs, brand names, trademarks and similar rights, and licences.

Inadmissible assets

2.2.86 R For the purposes of *PRU* 2.2.14R, a *firm* must deduct from total *capital resources* the value of any asset which is not an *admissible asset* as listed in *PRU* 2 Ann 1R.

2.2.87 G *PRU* 2.2.86R does not apply to intangible assets which must be deducted from *tier one capital resources* under *PRU* 2.2.84R.

2.2.88 G The list of *admissible assets* has been drawn with the aim of excluding assets:

(1) for which a sufficiently objective and verifiable basis of valuation does not exist; or

(2) whose realisability cannot be relied upon with sufficient confidence; or

(3) whose nature presents an unacceptable custody risk; or

(4) the holding of which may give rise to significant liabilities or onerous duties.

Adjustments for related undertakings

2.2.89 R A *firm* must deduct from its *capital resources* the value of its investments in each of its *related undertakings* that is an *ancillary services undertaking*.

2.2.90 R In relation to each of its *related undertakings* that is a *regulated related undertaking* (other than an *insurance undertaking*) a *firm* must add to (if positive), at stage J in *PRU* 2.2.14R, or deduct from (if negative), at stage L in *PRU* 2.2.14R, its *capital resources* the value of its *shares* in that *undertaking* calculated in accordance with *PRU* 1.3.35R.

2.2.91 G For the purposes of *PRU* 2.2.89R, investments must be valued at their accounting book value in accordance with *PRU* 1.3.5R.

2.2.92 G *Related undertakings* which are also *insurance undertakings* are not included in *PRU* 2.2.90R because a *firm* that is a *participating insurance undertaking* is subject to the requirements of *PRU* 8.3.

Additional requirements for a tier one or tier two instrument issued by a firm carrying on with-profits insurance business

2.2.93 R A *firm* carrying on *with-profits insurance business* must, in addition to the other requirements in respect of *capital resources* elsewhere in *PRU* 2.2, meet the following conditions before a capital instrument can be included in the *firm's capital resources*:

(1) the *firm* must manage the *with-profits fund* so that discretionary benefits under a *with-profits insurance contract* are calculated and paid disregarding, insofar as is necessary for its *customers* to be treated fairly, any liability the *firm* may have to make payments under the capital instrument;

(2) the intention to manage the *with-profits fund* on the basis set out in *PRU* 2.2.93R(1) must be disclosed in the *firm's Principles and Practices of Financial Management*; and

(3) no amounts, whether interest, principal, or other amounts, must be payable by the *firm* under the capital instrument if the *firm's* assets would then be insufficient to enable it to declare and pay under a *with-profits insurance contract* discretionary benefits that are consistent with the *firm's* obligations under *Principle* 6.

2.2.94 G The purpose of *PRU* 2.2.93R is to achieve practical subordination of capital instruments if they are to qualify as capital resources to the liabilities a *firm* has to *with-profits policyholders*, including liabilities which arise from the regulatory duty to treat *customers* fairly in setting discretionary benefits. (*Principle* 6 (Customers' interests) requires a *firm* to pay due regard to the interests of its *customers* and treat them fairly.) It is not sufficient for a capital instrument to be subordinated to such liabilities only on winding up of the *firm* because such *liabilities to policyholders* may have been reduced by the inappropriate use of management discretion to enable funds to be applied in repaying subordinated capital instruments before winding up proceedings commence.

2.2.95 G *PRU* 2.2.93R is an additional requirement to all other rules in *PRU* 2.2 concerning the eligibility of a capital instrument to count as a component of a *firm's capital resources*. Subordinated debt instruments will be the main type of capital instrument to which this *rule* is relevant, including both *upper tier two* (undated) and *lower tier two* (dated) subordinated debt instruments. Subordinated debt instruments which are issued by a *related undertaking* are not intended to be covered by this *rule* and may be included in *group capital resources* as appropriate if the other eligibility criteria are met.

2.2.96 G *PRU* 2.2.29R(8) and *PRU* 2.2.108R(10) contain provisions concerning the marketing of a capital instrument. In relation to a *firm* to which *PRU* 2.2.93R applies, in order to comply with *PRU* 2.2.29R(8) and *PRU* 2.2.108R(10), it should draw to the attention of subscribers the risk that payments may be deferred or cancelled in order to operate the *with-profits fund* so as to give priority to the payment of discretionary benefits to *with-profits policyholders*.

2.2.97 G (1) *Upper tier two instruments* must meet the requirements of *PRU* 2.2.101R(3) which goes beyond the requirement in *PRU* 2.2.93R(3) since it requires a *firm* to have the option to defer payments in all circumstances, not just if necessary to treat *customers* fairly. However, for *lower tier two instruments*, *PRU* 2.2.93R(3) represents an additional requirement since a failure to pay amounts of interest or principal on a due date must not constitute an event of default under *PRU* 2.2.108R(2) for *firms* carrying on *with-profits insurance business*.

(2) For *firms* which are *realistic basis life firms* compliance with *PRU* 2.2.93R(3) would usually be achieved if the capital instrument provides that no amounts will be payable under it unless the *firm's capital resources* exceed its *capital resources requirement*. However, such *firms* should ensure that the terms of the capital instrument refer to *FSA capital resources requirements* in force from time to time, including the current realistic reserving requirements and are not restricted to former minimum capital requirements based only on the *Insurance Directives'* required minimum margin of solvency. For *firms* which are not *realistic basis life firms*, compliance with *PRU* 2.2.93R(3) will probably require specific reference to be made to treating *customers* fairly in the terms of the capital instrument.

Tier two capital

2.2.98 G *Tier two capital resources* is split into upper and lower tiers. The principal distinction between *upper* and *lower tier two capital* is that perpetual instruments may be included in *upper tier two capital* whereas dated instruments, such as fixed term *preference shares* and dated subordinated debt, are included in *lower tier two capital*.

2.2.99 G *Tier two capital instruments* are capital instruments that combine the features of debt and equity in that they are structured like debt, but exhibit some of the loss absorption and funding flexibility features of equity.

Upper tier two capital

2.2.100 G Examples of capital instruments which may be eligible to count in *upper tier two capital resources* include the following:

(1) perpetual cumulative *preference shares*;
(2) perpetual subordinated debt; and
(3) other instruments that have the same economic characteristics as (1) or (2).

2.2.101 R A capital instrument must meet the following conditions before it can be included in a *firm's upper tier two capital resources*:

(1) it must meet the general conditions described in *PRU* 2.2.108R;
(2) it must have no fixed maturity date;
(3) the contractual terms of the instrument must provide for the *firm* to have the option to defer any interest payment in cash on the debt; and
(4) the contractual terms of the instrument must provide for the loss-absorption capacity of the debt and unpaid interest, whilst enabling the *firm* to continue its business.

2.2.102 R A capital instrument does not meet *PRU* 2.2.101R(4) unless it meets *PRU* 2.2.103R and *PRU* 2.2.105R.

2.2.103 R A capital instrument may only be included in *upper tier two capital resources* if a *firm's* obligations under the instrument either:

(1) do not constitute a liability (actual, contingent or prospective) under section 123(2) of the Insolvency Act 1986; or

(2) do constitute such a liability but the terms of the instrument are such that:

(a) any such liability is not relevant for the purposes of deciding whether:

(i) the *firm* is, or is likely to become, unable to pay its debts; or

(ii) its liabilities exceed its assets;

(b) a creditor (including but not limited to a holder of the instrument) is not able to petition for the winding up or administration of the *firm* on the grounds that the *firm* is or may become unable to pay any such liability; and

(c) the *firm* is not obliged to take into account such a liability for the purposes of deciding whether or not the *firm* is, or may become, insolvent for the purposes of section 214 of the Insolvency Act 1986 (wrongful trading).

2.2.104 G The effect of *PRU* 2.2.103R is that if an *upper tier two instrument* does constitute a liability, this should only be the case when the *firm* is able to pay that liability but chooses not to do so. As *upper tier two capital resources* must be undated, this will generally only be relevant on a solvent winding up of the *firm*.

2.2.105 R A *firm* wishing to issue an *upper tier two instrument* other than a perpetual cumulative *preference share* must obtain an opinion from Queen's Counsel, or where the opinion relates to the law of a jurisdiction outside the *United Kingdom*, from a lawyer in that jurisdiction of equivalent status, confirming that the criteria in *PRU* 2.2.101R(4) are met.

2.2.106 G For the purpose of *PRU* 2.2.103R(2)(b) above, the holder should agree that the *firm* has no liability (including any contingent or prospective liability) to pay any amount to the extent to which that liability would cause the *firm* to become insolvent if it made the payment or to the extent that its liabilities exceed its assets or would do if the payment were made. The terms of the capital instrument should be such that the *directors* can continue to trade in the best interests of the senior creditors even if this prejudices the interests of the holders of the instrument.

Lower tier two capital

2.2.107 G Capital instruments that meet the general conditions described in *PRU* 2.2.108R may be included in *lower tier two capital resources*.

General conditions for eligibility as tier two capital

2.2.108 R A capital instrument must not form part of the *tier two capital resources* of a *firm* unless it meets the following conditions:

(1) the claims of the creditors must rank behind those of all unsubordinated creditors;

(2) the only events of default must be non-payment of any amount falling due under the terms of the capital instrument or the winding-up of the *firm*;

(3) the remedies available to the subordinated creditor in the event of non-payment or other breach of the written agreement or instrument must be limited to petitioning for the winding-up of the *firm* or proving for the debt and claiming in the liquidation of the *firm*;

(4) any events of default and any remedy described in (3) must not prejudice the matters in (1) and (2);

(5) in addition to the requirement about repayment in (1), the debt must not become due and payable before its stated final maturity date (if any) except on an event of default complying with (2);

(6) the debt agreement or terms of the capital instrument are governed by the law of England and Wales, or of Scotland or of Northern Ireland;

(7) to the fullest extent permitted under the laws of the relevant jurisdictions, creditors must waive their right to set off amounts they owe the *firm* against subordinated amounts included in the *firm's capital resources* owed to them by the *firm*;

(8) the terms of the capital instrument must be set out in a written agreement that contains terms that provide for the conditions set out in (1) to (7);

(9) the debt must be unsecured and fully paid up;

(10) the description of its characteristics used in its marketing is consistent with the characteristics required to satisfy (1) to (9); and

(11) the *firm* has obtained a properly reasoned external legal opinion stating that the requirements in (1) to (10) have been met.

2.2.109 G For the purposes of *PRU* 2.2.108R(5) the debt agreement or terms of the instrument should not contain any clause which might require early repayment of the debt (e.g. cross default clauses, negative pledges and restrictive covenants). A cross default clause is a clause which says that the loan goes into default if any of the borrower's other loans go into default. It is intended to prevent one creditor being repaid before other creditors, e.g. obtaining full repayment through the courts. A negative pledge is a clause which puts the loan into default if the borrower gives any further charge over its assets. A restrictive covenant is a term of contract that directly, or indirectly, could lead to early repayment of the debt. Some covenants, e.g. relating to the provision of management information or ownership restrictions, are likely to comply with *PRU* 2.2.108R(5) as long as monetary redress is ruled out, or any payments are covered by the subordination and limitation of remedies clauses (that is, if damages are unpaid, the only remedy is to petition for a winding up).

2.2.110 G The purpose of *PRU* 2.2.108R(7) is to ensure that all of the *firm's* assets are available to *customers* ahead of subordinated creditors. The waiver should apply both before and during liquidation.

2.2.111 R *PRU* 2.2.108R(6) does not apply if the *firm* has obtained a properly reasoned external legal opinion confirming that the same degree of subordination has been achieved under the law that governs the debt and the agreement as that which would have been achieved under the laws of England and Wales, Scotland, or Northern Ireland.

2.2.112 G An item of capital does not comply with *PRU* 2.2.108R(10) if it is marketed as a capital instrument that would only qualify for a lower level of capital or on the basis that investing in it is like investing in a lower tier capital instrument. For example, an undated capital instrument should not be marketed as a dated capital instrument if the terms of the capital instrument include an option by the issuer to redeem the capital instrument at a specified date in the future.

2.2.113 R (1) An item of capital does not comply with *PRU* 2.2.101R or *PRU* 2.2.108R if the issue of that item of capital by the *firm* is connected with one or more other transactions which, when taken together with the issue of that item, could produce the effect described in (2).

(2) The effect referred to in (1) is a reduction in the economic benefit intended to be conferred on the *firm* by the issue of the item of capital which means that the item of capital no longer displays all of the characteristics set out in *PRU* 2.2.101R or *PRU* 2.2.108R.

2.2.114 G For the purposes of *PRU* 2.2.113R, examples of connected transactions might include guarantees or any other side agreement provided to the holders of the capital instrument by the *firm* or a connected party or a related transaction designed, for example, to enhance their security or to achieve a tax benefit, but which may compromise the loss absorption capacity or permanence of the original capital item.

2.2.115 G The *FSA* is more concerned that the subordination provisions listed in *PRU* 2.2.108R should be effective than that they should follow a particular form. The *FSA* does not, therefore, prescribe that the loan agreement should be drawn up in a standard form.

2.2.116 R A *firm* must not amend the terms of the debt and the documents referred to in *PRU* 2.2.108R(8) unless:

(1) at least one month before the amendment is due to take effect, the *firm* has given the *FSA* notice in writing of the proposed amendment and the *FSA* has not objected; and

(2) that notice includes confirmation that the legal opinions referred to in *PRU* 2.2.108R(11) and, if applicable, *PRU* 2.2.105R and *PRU* 2.2.111R, continue in full force and effect in relation to the terms of the debt and documents, notwithstanding any proposed amendment.

2.2.117 R A *firm* must notify the *FSA* of its intention to repay a *tier two instrument* at least six months before the date of the proposed repayment (unless the *firm* intends to repay an instrument on its contractual repayment date) providing details of how it will meet its *capital resources requirement* after such repayment.

Step-ups

2.2.118 R In relation to a *tier two instrument*, a *step-up* in a *coupon* rate means:

(1) (in the case of a fixed rate) an increase in that rate;

(2) (in any other case) any change in the way that the interest or other payment is calculated that may result in an increase in the amount payable at any time, including a change already provided in the original terms governing those payments.

2.2.119 R Where a *tier two instrument* is subject to one or more *step-ups*, the first date that a *step-up* can take effect must be treated, for the purposes of this section, as the instrument's final maturity date if its actual maturity date occurs after that, unless the effect of the *step-up* or *step-ups* is to increase the *coupon* rate at which payments are to be made by no more than:

(1) 50 basis points in the first ten years of the life of the debt; or

(2) 100 basis points over the whole life of the debt.

2.2.120 R A *firm* may not include in its *tier two capital resources* a capital instrument the terms of which provide for a *step-up* in the first five years after issue.

2.2.121 R Where a *step-up* arises through a change from paying a *coupon* on a debt instrument to paying a dividend on a *share* issued in settlement of the *coupon*, then any cost to the *firm* arising from the tax treatment of the dividend may be excluded.

2.2.122 G Debt instruments containing embedded options, e.g. issues containing options for the interest rate after the *step-up* to be at a margin over the higher of two (or more) reference rates, or for the interest rate in the previous period to act as a floor, may affect the funding costs of the borrower and imply a *step-up*. In such circumstances, a *firm* may wish to seek individual *guidance* on the application of the *rules* relating to *step-ups* to the capital instrument in question. See *SUP* 9 for the process to be followed when seeking individual *guidance*.

Other conditions for eligibility as lower tier two capital

2.2.123 R A capital instrument may be included in *lower tier two capital resources* only if it has an original maturity of at least five years or, where it has no fixed maturity date, notice of repayment of not less than five years has been given.

2.2.124 R In its final five years to maturity, for the purposes of calculating the amount of a *lower tier two instrument* which may be included in a *firm's capital resources,* the principal amount must be amortised on a straight line basis.

2.2.125 G *PRU* 2.2.124R applies both to a *tier two instrument* with a fixed maturity and to a *tier two instrument* with no fixed maturity but where the *firm* has given five years' notice of repayment.

Unpaid share capital or initial funds and calls for supplementary contributions

2.2.126 G Unpaid *share* capital or, in the case of a *mutual*, *unpaid initial funds* and calls for supplementary contributions are excluded from the *capital resources* of a *firm* except to the extent allowed in a *waiver* under section 148 of the *Act*.

2.2.127 G Subject to a *waiver*, under the *Insurance Directives* a maximum of one half of unpaid *share* capital or, in the case of a *mutual*, one half of the *unpaid initial fund* may be included in a *firm's capital resources*, once the paid-up part amounts to 25% of that *share* capital or fund, up to 50% of total *capital resources*.

2.2.128 G In the case of a *mutual* carrying on *general insurance business* and subject to a *waiver*, calls for supplementary contributions within the *financial year* may only be included in a *firm's capital resources* up to a maximum of 50% of the difference between the maximum contributions and the contributions actually called in, subject to a limit of 50% of total *capital resources*. In the case of a *mutual* carrying on *long-term insurance business*, the *Consolidated Life Directive* does not permit calls for supplementary contributions to be included in a *firm's capital resources.*

2.3 Individual Capital Assessment

Application

2.3.1 R *PRU* 2.3 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or

(2) a *Swiss general insurer*; or

(3) an *EEA-deposit insurer*; or

(4) an *incoming EEA firm*; or

(5) an *incoming Treaty firm*.

Purpose

2.3.2 G *Principle 4* requires a *firm* to maintain adequate financial resources. *PRU* 2 sets out provisions that deal specifically with the adequacy of that part of a *firm's* financial resources that consists of *capital resources*. The adequacy of a *firm*'s *capital resources* needs to be assessed both by the *firm* and the *FSA*. In *PRU* 2.1, the *FSA* sets minimum *capital resources requirements* for *firms*. It also reviews a *firm's* own assessment of its capital needs, and the processes and systems by which that assessment is made, in order to see if the minimum *capital resources requirements* are appropriate. *PRU* 1.2 contains *rules* requiring a *firm* to identify and assess risks to its being able to meet its liabilities as they fall due, to assess how it intends to deal with those risks and to quantify the financial resources it considers necessary to mitigate those risks. To meet these requirements, a *firm* should consider the extent to which capital is an appropriate mitigant for the risks identified and assess the amount and quality of capital required. In accordance with *PRU* 1.2.37R, these assessments must be documented so that they can be easily reviewed by the *FSA* as part of the *FSA*'s assessment of the adequacy of the *firm*'s *capital resources*.

2.3.3 G This section (*PRU* 2.3) sets out *guidance* on how *firms* should assess the adequacy of their *capital resources*, both to comply with the *rules* in *PRU* 1.2 and to enable the *FSA* better to assess whether the minimum *capital resources requirements* in *PRU* 2.1 are appropriate. This section also requires *firms* carrying on *general insurance business* to calculate their *ECR*. The *ECR* for *firms* carrying on *general insurance business* is an indicative measure of the *capital resources* that a *firm* may need to hold based on risk sensitive calculations applied to its business profile. For *realistic basis life firms*, the *ECR* forms part of the calculation of the *firm*'s *capital resources requirement* (see *PRU* 2.1.15R). The *ECR* for such *firms* requires the calculation of a *with-profits insurance capital component* (see *PRU* 7.4) that supplements the *mathematical reserves* so as to ensure that a *firm* holds adequate financial resources for the conduct of its *with-profits insurance business*. In the case of *firms* carrying on *general insurance business* and *realistic basis life firms*, the *FSA* will use the *ECR* as a benchmark for its consideration of the appropriateness of the *firm*'s own capital assessment. For *firms* where an *ECR* is not calculated the *MCR* will provide a benchmark for the *firm*'s own capital assessment. For *firms* generally, the more thorough, objective and prudent a *firm*'s capital assessment is and can be demonstrated as being, the more reliance the *FSA* will be able to place on the results of that assessment. The *FSA* will consider the appropriateness of the *firm*'s capital assessment to establish the level of *capital resources* the *firm* needs. This may result in the *FSA*'s assessment of a *firm*'s *capital resources* needs being lower or higher than would otherwise be the case.

2.3.4 G There are two main purposes of this section:

(1) to enable *firms* to understand the issues which the *FSA* would expect to see assessed and the systems and processes which the *FSA* would expect to see in operation for capital adequacy assessments by the *firm* to be regarded as thorough, objective and prudent; and

(2) to enable *firms* to understand the *FSA's* approach to assessing whether the minimum *capital resources requirements* of *PRU* 2.1 are appropriate and what action may be taken if the *FSA* concludes that those requirements are not appropriate to a *firm's* circumstances.

Main requirements and guidance

2.3.5 G In making an assessment of capital adequacy, the *FSA* requires *firms* to identify the major risks they face and, where capital is appropriate to mitigate those risks, to quantify how much (and what type) of capital is appropriate. To do this, the *FSA* expects *firms* to conduct stress tests and scenario analyses in respect of each risk. For each risk the *firm* will then be able to estimate a range of probable outcomes and hence capital required to absorb losses which might arise. A *firm* must document the results of each of the stress tests and scenario analyses undertaken and should also document, as part of the details of those tests and analyses, the key assumptions including the aggregation of the results.

2.3.6 G The assessment which a *firm* makes should be based upon its future business plans and projections. This is the main area where the *firm's* assessment may diverge from its prescribed *capital resources requirement* which, necessarily, is based upon historic data.

2.3.7 G In assessing the quality and the amount of *capital resources* projected to be available to meet its projected *capital resources requirement*, a *firm* should consider the timing of its liabilities to repay existing capital together with the prospects for raising new capital in the scenarios considered.

2.3.8 G The *FSA* may ask for the results of a *firm's* assessment to be provided to it together with a description of the processes by which the assessment has been made, the range of results from each stress test or scenario analysis performed and the main assumptions made. The *FSA* may also carry out a more detailed examination of the details of the *firm's* processes and calculations.

2.3.9 G Based upon this information and other information available to the *FSA*, the *FSA* will consider whether the *capital resources requirement* applicable to the *firm* is appropriate. Where relevant, the *firm's ECR* will be a key input to the *FSA's* assessment of the adequacy of the *firm's capital resources*.

2.3.10 R A *firm* carrying on *general insurance business*, other than a *non-directive insurer,* must calculate the amount of its *ECR*.

2.3.11 R A *firm* to which *PRU* 2.3.10R applies must calculate its *ECR* in respect of its *general insurance business* as the sum of:

(1) the *asset-related capital requirement*; and

(2) the *insurance-related capital requirement*; less

(3) the *firm's equalisation provisions*.

2.3.12 G Details of the calculation of the *asset-related capital requirement* are set out in *PRU* 3.3.10R to 3.3.16R. Details of the calculation of the *insurance-related capital requirement* are set out in *PRU* 7.2.76R to 7.2.79R.

2.3.13 G Where the *FSA* considers that a *firm* will not comply with *PRU* 1.2.22R (adequate financial resources, including *capital resources*) by holding the *capital resources* required by *PRU* 2.1, the *FSA* may give the *firm* individual *guidance* advising it of the amount and quality of *capital resources* which the *FSA* considers it needs to hold in order to meet that *rule*.

2.3.14 G The individual *guidance* will be given taking into consideration *capital resources* consistent with a 99.5% confidence level over a one year timeframe or, if appropriate to the *firm's* business, an equivalent lower confidence level over a longer timeframe. *Firms* should therefore prepare an individual capital assessment on the same basis. Throughout whatever timeframe is adopted by *firms*, *firms* should ensure that their projected assets are, and will continue to be, sufficient, to enable their projected liabilities to be paid, and it would be reasonable for *firms* to test that this is the case at the end of each year of the timeframe. *Firms* may also wish to make estimates of capital adequacy using other assumptions for their own internal purposes and are free to do so if they so choose.

2.3.15 G If a *firm* considers that the individual *guidance* is inappropriate to its circumstances, then the *firm* should inform the *FSA* that it does not intend to follow that *guidance*. Informing the *FSA* of such an intention would be expected if a *firm* is to comply with *Principle* 11 (relations with regulators).

2.3.16 G The *FSA* expects most disagreements about the adequacy of capital will be resolved through further analysis and discussion. The *FSA* may consider the use of its powers under section 166 of the *Act* (Reports by skilled persons) to assist in such circumstances. If the *FSA* and the *firm* still do not agree on an adequate level of capital, then the *FSA* may consider using its powers under section 45 of the *Act* to, on its own initiative, vary a *firm's Part IV permission* so as to require it to hold capital in accordance with the *FSA's* view of the capital necessary to comply with *PRU* 1.2.22R. *SUP* 7 provides further information about the *FSA*'s powers under section 45.

2.3.17 G Where a *firm* or the *FSA* considers that the *capital resources requirements* of *PRU* 2.1 require the holding of more capital than is needed for the *firm* to comply with *PRU* 1.2.22R then the *firm* may apply to the *FSA* for a *waiver* of the requirements in *PRU* 2.1 under section 148 of the *Act*. This section sets out the factors which the *FSA* will consider in deciding whether to grant such a *waiver* request, and if so, the terms and extent of any modification to the *rules* in *PRU* 2.1. In addition to the statutory tests under section 148, these will include the thoroughness, objectivity, and prudence of a *firm's* own capital assessment and the extent to which the *guidance* in this section has been followed. The *FSA* will not grant a *waiver* that would cause a breach of the minimum capital requirements under the *Insurance Directives*.

Stress and scenario requirement

2.3.18 G *PRU* 1.2.35R requires a *firm* to carry out stress tests and scenario analyses for each of the sources of risk identified in accordance with *PRU* 1.2.31R. Using each of the risk categories set out in *PRU* 1.2.31R, 2.3.19G to 2.3.34G set out the factors that a *firm* should consider. *PRU* 2 Ann 3G provides a practical illustration of how a small *firm* carrying on *general insurance business* might undertake this analysis.

Factors to consider when assessing credit risk

2.3.19 G Credit risk refers to the risk of loss if another party fails to perform its obligations or fails to perform them in a timely fashion.

2.3.20 G In assessing potential credit risk events that may affect the *firm's* solvency, a *firm* should allow for:

(1) the financial effect of non-payment of *reinsurance*, considering the likelihood both of non-payment of outstanding *claims* and for the fact that *reinsurance* cover purchased for underwritten risks may not be effective (that is, offsetting potential liabilities); and

(2) the financial effect of non-payment of *premium* debtors such as intermediaries and *policyholders*.

2.3.21 G Some further areas to consider in developing the credit risk stress tests and scenario analyses might include:

(1) the adequacy of the *reinsurance* programme and whether it is appropriate for the risks selected by the *firm* and adequately takes account of the underwriting and business plans of the *firm* generally;

(2) the collapse of a *reinsurer* or several *reinsurers* on the *firm's reinsurance* programme and the subsequent impact this may have on the *firm's* outstanding *reinsurance* recoveries and *IBNR* recoveries;

(3) a deterioration in the creditworthiness of the *firm's reinsurers*, intermediaries or other *counterparties*;

(4) the degree of credit concentration. For example, the degree to which a *firm* is exposed to a single *counterparty* or *group*;

(5) the degree of concentration of exposure to *reinsurers* of particular rating grades;

(6) the prospect of *reinsurance* rates increasing substantially or *reinsurance* being unavailable;

(7) any existing or possible future disputes relating to *reinsurance* contracts on a pessimistic basis and the extent that they are not already reflected in the value attributed to the *reinsurances*;

(8) greater losses from bad debts than anticipated;

(9) deterioration in the extent and quality of *collateral*; and

(10) guarantees given by the *insurer* of the performance of others, whether under *contracts of insurance* or otherwise.

Factors to consider when assessing market risk

2.3.22 G *Market risk* includes the risks that arise from fluctuations in values of, or income from, assets or in interest or exchange rates.

2.3.23 G In assessing potential *market risk* events that may affect the *firm's* solvency, a *firm* should allow for:

(1) reduced market values of *investments*;

(2) variation in interest rates and the effect on the market value of *investments*;

(3) a lower level of investment income than planned; and

(4) the possibility of *counterparty* defaults.

2.3.24 G Some further areas to consider in developing the *market risk* scenario might include:

(1) the possibility of a severe economic or market downturn or upturn leading to adverse interest rate movements affecting the *firm's* investment position;

(2) unanticipated losses and defaults of issuers;

(3) price shifts in asset classes, and their impact on the entire portfolio;

(4) inadequate valuation of assets;

(5) the direct impact on the portfolio of currency devaluation, as well as the effect on related markets and currencies;

(6) extent of any mismatch of assets and liabilities, including reinvestment risk;

(7) the impact on the portfolio value of a dramatic change in the spread between a market index of interest rates and the risk-free interest rates; and

(8) the extent to which market moves could have non-linear effects on values, such as *derivatives*.

Factors to consider when assessing liquidity risk

2.3.25 G In accordance with *PRU* 1.2.31R a *firm* should consider the major sources of risk, including *liquidity risks*, and assess its response should each risk materialise.

2.3.26 G *PRU* 5.1 (liquidity risk systems and controls) contains evidential provisions and *guidance* on how *firms* should meet *PRU* 1.2.22R for liquidity purposes.

(1) *PRU* 5.1.61E states that a scenario analysis in relation to *liquidity risk* required under *PRU* 1.2.35R should include a cash-flow projection for each scenario tested, based on reasonable estimates of the impact of that scenario on the *firm*'s funding needs and sources.

(2) *PRU* 5.1.86E states that a *firm* should have a contingency funding plan for taking action to ensure, so far as it can, that in each of the scenarios tested under *PRU* 1.2.35R(2), it would still have sufficient liquid financial resources to meet liabilities as they fall due.

2.3.27 G When assessing *liquidity risk*, the *firm* should consider the extent of mismatch between assets and liabilities and the amount of assets held in highly liquid, marketable forms should unexpected cashflows lead to a liquidity problem. The price concession of liquidating assets is a prime concern when assessing such *liquidity risk* and should be built into any assessment of capital adequacy.

2.3.28 Some further areas to consider in developing the *liquidity risk* scenario might include:

(1) any mismatching between expected asset and liability cash flows;

(2) the inability to sell assets quickly;

(3) the extent to which the *firm*'s assets have been pledged;

(4) the cash-flow positions generally of the *firm* and its ability to withstand sharp, unexpected outflows of funds via *claims*, or an unexpected drop in the inflow of *premiums*; and

(5) the possible need to reduce large asset positions at different levels of market liquidity, and the related potential costs and timing constraints.

Factors to consider when assessing operational risk

2.3.29 G Operational risk refers to the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

2.3.30 G A *firm* may wish to refer to *SYSC* 3A and *PRU* 6.1 when carrying out its operational risk assessment.

2.3.31 G Examples of some issues that a *firm* might want to consider include:

(1) the likelihood of fraudulent activity occurring that may impact upon the financial or operational aspects of the *firm*;

(2) the obligation a *firm* may have to fund a pension scheme for its employees;

(3) the technological risks that the *firm* may be exposed to regarding its operations. For example, risks relating to both the hardware systems and the software utilised to run those systems;

(4) the reputational risks to which the *firm* is exposed. For example, the impact on the *firm* if the *firm's* brand is damaged resulting in a loss of *policyholders* from the underwriting portfolio;

(5) the marketing and distribution risks that the *firm* may be exposed to. For example, the dependency on intermediary business or a *firm's* own sales force;

(6) the impact of legal risks. For example a non-insurance related legal action being pursued against the *firm*;

(7) the management of employees – for instance staff strikes, where dissatisfied staff may withdraw goodwill and may indulge in fraud or acts giving rise to reputational loss;

(8) the resourcing of key functions such as the risk management function by staff in appropriate numbers and with an appropriate mix of skills such as underwriting, claims handling, accounting, actuarial and legal expertise.

2.3.32 G A *firm* may consider that investigation of operational weaknesses and corrective action is a better response than holding capital and may consider that a certain degree of operational risk is within its pre-defined risk tolerance. However, until the *firm* corrects any identified deficiencies a *firm* should consider capital as a (interim) response to the risk.

Factors to consider when assessing insurance risk

2.3.33 G As a result of the differences between the nature of *general* and *long-term insurance business*, some aspects of the risk assessment vary depending on the type of business written. In assessing potential insurance risk events that may affect the *firm's* solvency, *general* and *long-term insurance business firms* should:

(1) analyse the potential for catastrophic losses, including both risk and event losses, the cost of reinstatement *premiums* and any possible *reinsurance* exhaustion; and

(2) determine the likelihood of any other feature of insurance risk that may lead to a variation in projected outcomes.

(3) *Firms* carrying on *general insurance business* should in addition:

(a) analyse the potential for *claims* reserves to deteriorate beyond the current reserving level; and

(b) determine the effect of loss ratios being higher than planned by analysing historic loss ratio experience and volatility.

(4) *Firms* carrying on *long-term insurance business* should in addition:

(a) analyse the potential for *mathematical reserves* subsequently to prove inadequate compared with the current reserving level; and

(b) determine the effect of *claims* experience being more costly than planned by analysing historic *claims* experience, volatility and trends in experience.

2.3.34 G Some further areas to consider in developing the insurance risk scenario might include:

(1) For underwriting risks, *general insurance business* and *long-term insurance business firms*:

(a) the adequacy of the *firm's* pricing. For example, the *firm* should be able to satisfy itself that it can charge adequate rates, taking into account the business and the risk profile of different products, the business environment (e.g. *premium* cycle-non-life) and its own internal profit targets;

(b) the uncertainty of *claims* experience;

(c) the dependence on intermediaries for a disproportionate share of the *insurer's premium* income; the effects of a high level of uncertainty in pricing in new or emerging underwriting markets due to a lack of information needed to enable the *insurer* to make a proper assessment of the price of the risk; the geographical mix of the portfolio or whether any geographical or jurisdictional concentrations exist;

(d) the appropriateness of *policy* wordings;

(e) the risk of mis-selling, for example, the number of complaints or disputed *claims*; and

(f) the tolerance for expense reserve variations or variations in expenses (including indirect costs).

(2) For *firms* carrying on *general insurance business*, in addition:
   (a) the length of tail of the *claims* development and latent *claims*; and
   (b) the effects of rapid growth or decline in the volume of the underwriting portfolio.
(3) For *firms* carrying on *long-term insurance business*, in addition:
   (a) the uncertainty of future investment returns;
   (b) the effects of rapid growth or decline in the volume and nature of new business written; and
   (c) the ability of *firms* to adjust *premium* rates or charges for some products.
(4) For reserving and *claims* risks, both *general insurance business* and *long term insurance business firms*:
   (a) the frequency and size of large *claims*;
   (b) possible outcomes relating to any disputed *claims*, particularly where the outcome is subject to legal proceedings;
   (c) the ability of the *firm* to withstand catastrophic events, increases in unexpected exposures, latent *claims* or aggregation of *claims*;
   (d) the possible exhaustion of *reinsurance* arrangements, both on a per risk and per event basis;
   (e) social changes regarding an increase in the propensity to claim and to sue; and
   (f) other social, economic and technological changes.
(5) For *firms* carrying on *general insurance business*:
   (a) the adequacy and uncertainty of the technical *claims* provisions, such as outstanding *claims*, *IBNR* and *claims* handling expense reserves;
   (b) the adequacy of other underwriting provisions, such as the provisions for *unearned premium* and unexpired risk reserves;
   (c) the appropriateness of catastrophe models and underlying assumptions used, such as possible maximum loss (PML) factors used;
   (d) unanticipated legal judgements and legal change with retrospective effect specifically with regard to the *claims* reserves; and
   (e) the effects of inflation.
(6) For *firms* carrying on *long-term insurance business*:

   (a) the adequacy and sensitivity of the *mathematical reserves* to variations in future experience, including:
      (i) the risk that investment returns differ from those assumed in the reserving assumptions;
      (ii) the risk of variations in mortality, morbidity and persistency experience and in the exercise of options under contracts;
      (iii) the rates of taxation applied, in particular where there is uncertainty over the tax treatment; and
   (b) unanticipated legal judgements and legal change with retrospective effect specifically with regard to the impact on *mathematical reserves*.

Other assessments of the adequacy of capital resources

2.3.35 G *Firms* must assess the adequacy of their financial resources and this will entail an assessment of both *capital resources* and liquidity resources. The stress tests and scenario analyses which a *firm* must carry out will assist with both assessments.

However, *firms* may also find it helpful to approach their assessment of capital in another way.

2.3.36 G *Firms* may also wish to carry out an additional assessment to inform their view as to whether their *capital resources* are adequate. The additional assessment is to consider the extent to which the *capital resources requirement* (*CRR*) produces adequate capital for a *firm's* particular circumstances. In considering this, *firms* that are required to calculate an *Enhanced Capital Requirement (ECR)* may wish to note that the *ECR* as calculated is based upon the assumptions that a *firm's* business is well diversified, well managed with assets matching its liabilities and good controls, and stable with no large, unusual, or high risk transactions. *Firms* may find it helpful to assess the extent to which their actual business differs from these assumptions and therefore what adjustments it might be reasonable to make to the *CRR* or *ECR* to arrive at an adequate level of *capital resources*.

2.3.37 G *Firms* may find it helpful for their own assessment process if they also consider divergences from the assumptions described in *PRU* 2.3.36G under the headings set out below. These are the areas which the *FSA* considers when forming its view of the adequacy of a *firm's capital resources*.

Business risk factors:

(1) *market risk*;
(2) securitisation risk;
(3) residual risk;
(4) concentration risk;
(5) high impact, low probability events; and
(6) cyclicality and capital planning.

Control risk factors:

(1) systems and controls.

2.3.38 G *Market risk*: a *firm* should assess its exposure to those elements of *market risk* that are not captured by the *CRR*. In doing so, *firms* may wish to use stress tests to determine the impact on their balance sheets of an appropriate move in market conditions. The results of this test should then be used by the *firm* to determine its *market risk*.

2.3.39 G Securitisation risk: a *firm* should assess its exposure to risks transferred through the securitisation of assets should those transfers fail for whatever reason. For instance, *firms* may contemplate two broad types of securitisation: 'embedded value securitisation' – the transfer of the value emerging from an existing block of business to bondholders; and 'risk transfer securitisation' – the purchase of protection against catastrophic risks to the *insurer* through the issuance of bonds whose repayment is contingent upon the non-occurrence of such risks. In either case, *firms* should consider the effect on their financial position of a failure of such complex arrangements to operate as anticipated or the values and risks transferred not emerging as expected.

2.3.40 G Residual risk: a *firm* should assess its exposure to the residual risks that may result from the partial performance or failure of risk mitigation techniques for reasons that are unconnected with their intrinsic value. This could result from (for example): ineffective documentation, a delay in payment or the inability to realise payment from a guarantor in a timely manner. Given that residual risks can always be present, *firms* should assess the appropriateness of their *capital resources requirement* against their assumptions for the risk mitigation measures that they may have in place.

2.3.41 G Concentration risk: a *firm* should assess and monitor its exposure to: sector, geographic, liability and asset concentrations, as well as granularity. The *FSA* considers that concentrations in these areas increase the *firm's* credit risk and where the *firm* identifies concentrations then they should consider the adequacy of the *capital resources requirement*. For instance, *firms* should monitor concentrations of exposure to particular *reinsurers* and ensure that they are aware of the implications of several of their *reinsurers* failing at the same time.

2.3.42 G High impact, low probability events: *firms* should consider stress tests and scenario analyses which are realistic – that is not too remote a possibility. However, should a *firm* decide to enter into a high impact, low probability transaction, the *firm* should satisfy itself that it has sufficient financial resources to meet its resulting financial obligation in the event the single risk materialises. For instance, a *firm* should not accept individual risks in circumstances where, if that single risk materialised, the *claim* arising would exceed the financial resources available to the *firm*.

2.3.43 G A *firm* should also consider the value of the financial obligation arising where the risks from a combination of high impact, low probability transactions that the *firm* has entered into materialise at the same time. A *firm* should ensure that in no circumstances would a combination of any consequent *claims* materially exceed the financial resources available to it.

2.3.44 G Cyclical and capital planning: a *firm's capital resources requirement* may vary as business cycles and economic conditions fluctuate over time. *Firms* should be aware that a deterioration in business or economic conditions could require them to raise capital or alternatively to contract their businesses at a time when market conditions are most unfavourable to raising capital. Such an effect is known as procyclicality.

2.3.45 G To reduce the impact of cyclical effects, *firms* should look to build-up capital levels through the course of an upturn in business and economic cycles to ensure that they have sufficient capital available to protect themselves against adverse conditions.

2.3.46 G To assess its expected capital requirements over the economic and business cycles, a *firm* may wish to project forward its financial position taking account of its business strategy and expected growth under a range of environmental assumptions. Projections over a three to five year period would be appropriate in most circumstances. *Firms* may then calculate their projected *capital resources requirement* and assess whether that requirement could be met from expected financial resources.

2.3.47 G Systems and controls: a *firm* may decide to hold additional *capital resources* to mitigate weaknesses in its overall control environment. Weaknesses might be indicated by the following:

(1) a failure by the *firm* to complete an assessment of its systems and controls in line with *SYSC* 3.1 (Systems and Controls) and *PRU* 1.4;

(2) a failure by the *firm's* senior management to approve its financial results; and

(3) a failure by the *firm* to consider an analysis of relevant internal and external information on its business and control environment.

2.3.48 G In considering any systems and control weaknesses and their effect on the adequacy of the *capital resources requirement*, a *firm* may wish to be able to demonstrate to the *FSA* that all the issues identified in *SYSC* 3.2 (Areas covered by systems and controls) have been considered; and that appropriate plans and procedures exist to deal adequately with adverse scenarios.

Capital models

2.3.49 G A *firm* may approach its assessment of adequate *capital resources* by developing a model for some or all of its business risks. Where such a model captures some of the risks identified in accordance with *PRU* 1.2.31R then this will usually satisfy the requirement to perform stress tests in respect of those risks. However, the assumptions required to aggregate risks modelled and the confidence levels adopted should be considered by the *firm's* senior management. A *firm* should also consider whether any risks are not captured by the model and also the extent to which systems and control risks are not incorporated in the model.

2.3.50 G A *firm* should not expect the *FSA* to accept as adequate any particular model that it develops or that the results from the model are automatically reflected in any individual *guidance* given to the *firm* for the purpose of determining adequate *capital resources*. However, the *FSA* will take into account the results of any sound and prudent model when giving individual *guidance* or considering applications for a *waiver* under section 148 of the *Act* of the *capital resources requirement* in *PRU* 2.1. This section sets out the types of issues the *FSA* would consider before giving individual *guidance* or granting a *waiver* based on the results of a model.

2.3.51 G There is no prescribed modelling approach for how a *firm* develops its internal model. However, *firms* should be able to demonstrate:

(1) the extent of use of the internal capital model within the *firm's* capital management policy;

(2) that sound and appropriate risk-management techniques are employed and are embedded in the daily operations and financial resources requirements of the *firm;*

(3) that all material risks to which the *firm* is exposed have been adequately addressed by quantitative and qualitative means as appropriate;

(4) the confidence levels set and whether these are linked to the *firm's* corporate strategy;

(5) the time horizons set for the different types of business that the *firm* undertakes;

(6) the extent of historic data used and back testing carried out; and

(7) whether sufficient accuracy and validation in the internal capital model has been undertaken.

Quantitative factors

2.3.52 G The *firm's* model should be based on an appropriate probability of insolvency over an appropriate time period. A *firm* should be able to demonstrate the selected probability of insolvency and time horizon it has derived and explain why these are appropriate for its business.

2.3.53 G Good models will have as inputs (in addition to the specific examples given under the stress and scenario guidance):

For both *firms* carrying on *general insurance business* and *long-term insurance business*:

(1) assumed future investment returns. In particular, assumptions for future interest rates (to the extent that they impact on interest income on funds on deposit, price of and yield on fixed stock that may be purchased in future and interest income on variable interest rate assets), equity prices, dividend income, property prices, property rental income and inflation. The assumptions should take account of likely volatility and historic volatility in interest rates and asset prices;

(2) five-year predictions as to *premium* rates in each homogeneous category of business taking account of the effect of underwriting cycles;

(3) predictions of exposures written in each homogeneous category of business in the next five years;

(4) predictions of *premium* volume and expected growth under a five year business plan;

(5) expenses and commission;

(6) catastrophic events, aggregations of *claims* and *claims* affecting more than one *class* of business;

(7) inflation in terms of how it might affect future *claims*, non-settled *claims* that have occurred to date, future expenses, future *reinsurance* costs and future investment returns;

(8) *reinsurance* programmes in place, allowing for changing term conditions, reinstatements and loss experience features;

(9) estimates of non-recovery of *reinsurance* and other debtors taking account of the financial strength of each *reinsurance* or other *counterparty*; and

(10) foreign exchange movements.

For *firms* carrying on *general insurance business* in particular:

(11) frequency and severity of *claims* (including costs associated with *claims* such as professional fees) for each homogeneous category of business, allowing for any impact of future social, legal and inflationary effects (especially concerning price, earnings, medical and *claims*) on future *claims* costs;

(12) settlement patterns of *claims* and *reinsurance* recoveries for each homogeneous category of business (including occurred and future *claims*);

(13) unintended coverage of risks; and

(14) correlation between these risks.

For *firms* carrying on *long-term insurance business* in particular:

(15) projected *claims* experience for each homogeneous category of business allowing for trends in mortality/ morbidity experience;

(16) assumptions for future *policyholder* actions such as lapsing or surrendering a *policy*, ceasing to pay *premiums* or choosing to exercise an option under the contract; and

(17) for business where management has discretion over the level of benefits or charges, assumptions about management reactions to changes in economic conditions and consequent changes to the benefits or charges.

2.3.54 G The *FSA* places credence in approaches to financial models to aid the assessment of capital adequacy which involve the production of a Dynamic Financial Analysis ("DFA") model. These models transform each element in the financial projection into a statistical distribution with a range of possible outcomes, and are therefore stochastic. They would generally incorporate a suitable economic model integrated into the DFA model and linked into the generation of insurance related assumptions. The model would, as far as possible, cover all risks and all areas of business. The future time period over which projections are made should be determined with reference to the type of insurance business written, the asset profile and the insurance cycle. It may be appropriate to consider several different time periods.

2.3.55 G Due regard should also be given to the historical experience of both the *firm* and the wider relevant industry and market when assigning values to the above inputs.

2.3.56 G The values assigned to each of the above inputs should be derived either stochastically, by assuming the value of an item can follow an appropriate probability distribution and by selecting appropriate values at the tail of the distribution, or deterministically, using appropriate prudent assumptions. For *long-term insurance business* which includes options or guarantees that change in value significantly in certain economic or demographic circumstances, a stochastic approach would normally be appropriate.

Annex 1R
Admissible assets in insurance

(1) Investments that are, or amounts owed arising from the disposal of:
- (a) *debt securities*, bonds and other money and capital market instruments;
- (b) loans;
- (c) *shares* and other variable yield participations;
- (d) *units* in *UCITS schemes*, *non-UCITS retail schemes*, *recognised schemes* and any other *collective investment scheme* that invests only in *admissible assets* (including any *derivatives* or *quasi-derivatives* held by the scheme);
- (e) land, buildings and immovable property rights;
- (f) an *approved derivative* or *quasi-derivative* transaction that satisfies the conditions in *PRU* 4.3.5R or an *approved stock lending* transaction that satisfies the conditions in *PRU* 4.3.36R.

(2) Debts and claims
- (a) debts owed by *reinsurers*, including *reinsurers'* shares of *technical provisions*;
- (b) *deposits* with and debts owed by ceding *undertakings*;
- (c) debts owed by *policyholders* and *intermediaries* arising out of direct and *reinsurance* operations (except where overdue for more than 3 months and other than *commission* prepaid to agents or *intermediaries*);
- (d) for *general insurance business* only, claims arising out of salvage and subrogation;
- (e) for *long-term insurance business* only, advances secured on, and not exceeding the *surrender value* of, *long-term insurance contracts* issued by the *insurer*;
- (f) tax recoveries;
- (g) claims against *compensation funds*.

(3) Other assets
- (a) tangible fixed assets, other than land and buildings;
- (b) cash at bank and in hand, *deposits* with *credit institutions* and any other bodies authorised to receive *deposits*;
- (c) for *general insurance business* only, *deferred acquisition costs*;
- (d) accrued interest and rent, other accrued income and prepayments;
- (e) for *long-term insurance business* only, reversionary interests.

Annex 2G

Guidance on applications for waivers relating to implicit items

Implicit items under the Act

1. *PRU* 2.2.14R does not permit *implicit items* to be included in the calculation of a *firm's capital resources*, except subject to a *waiver* under section 148 of the *Act*. Article 27(4) of the *Consolidated Life Directive* states that *implicit items* can be included in the calculation of a *firm's capital resources*, within limits, provided that the supervisory authority agrees. Certain *implicit items*, however, are not eligible for inclusion beyond 31 December 2009 (see paragraph 5). The *FSA* may be prepared to grant a *waiver* from *PRU* 2.2.14 R to allow *implicit items*, in line with the purpose of the *Consolidated Life Directive*, and provided the conditions as set out in article 27(4) of the *Consolidated Life Directive* are met. Such a *waiver* would allow an *implicit item* to count towards the *firm's capital resources* available to count against its *capital resources requirement* (*CRR*) set out for *realistic basis life firms* in *PRU* 2.1.15R and for *regulatory basis only life firms* in *PRU* 2.1.20R. Where a *firm* applies for an *implicit item waiver* the *firm* may also apply for a *waiver* from *PRU* 2.2.16R, which requires at least 50% of a *firm's MCR* to be covered by *core tier one capital* and perpetual non-cumulative *preference shares*. Under *PRU* 2.2.17R a *firm* must meet the *guarantee fund* from the sum of the items listed at stages A, B, G and H less the sum of the items listed at stage E of *PRU* 2.2.14R. *PRU* 2.2.17R addresses the requirement in article 29(1) of the *Consolidated Life Directive* that *implicit items* should be excluded from capital eligible to cover the *guarantee fund*. Where an *implicit items waiver* is granted, an *implicit item* may potentially count as either *tier one* or *tier two capital*, but not *core tier one capital*. *PRU* 2.2.20R requires that at least 50 % of a *firm's tier one capital resources* must be accounted for by *core tier one capital*.

2. Under section 148 of the *Act*, the *FSA* may, on the application of a *firm*, grant a *waiver* from *PRU*. There are general requirements that must be met before any *waiver* can be granted. As explained in *SUP* 8, the *FSA* may not give a *waiver* unless the *FSA* is satisfied that:

   (1) compliance by the *firm* with the *rules* will be unduly burdensome, or would not achieve the purpose for which the *rules* were made; and

   (2) the *waiver* would not result in undue risk to *persons* whose interests the *rules* are intended to protect.

3. The *FSA* will assess compliance with the requirements in the light of all the relevant circumstances. This will include consideration of the costs incurred by compliance with a particular *rule* or whether a *rule* is framed in a way that would make compliance difficult in view of the *firm's* circumstances. For example, the *firm* may demonstrate that if an *implicit item* were not allowed, the *firm* would either have to suffer increased (and unwarranted) costs in injecting further *capital resources* or operate with a lower equity backing ratio (see case studies in paragraph 43). Even if a *firm* can demonstrate a case for an *implicit item waiver*, it should not assume that the *FSA* will grant the *waiver* requested, or that any *waiver* will be granted for the full

amount of the *implicit item* which could be granted, as set out in this annex. The *FSA* will consider each application on its own merits, and taking into account all relevant circumstances, including the financial situation and business prospects of the *firm*.

4. *Implicit items* are economic reserves which are contained within the *long-term insurance business* provisions. Article 27(4) of the *Consolidated Life Directive* identifies three types of *implicit item,* in respect of: future profits, *zillmerisation* and hidden reserves. This annex is intended to amplify the *guidance* in *SUP* 8 relating to the granting of *waiver*s for *implicit items* and to provide *guidance* on other aspects. Whilst this *guidance* applies to applications for *waivers* for *implicit items* generally, for a *realistic basis life firm*, to the extent that an *implicit item* is allocated to a *with-profits fund*, this *guidance* relates to *implicit items* for the purposes of determining the *regulatory value of assets* (see *PRU* 7.4.24R).

5. The *Consolidated Life Directive* (reflecting the changes introduced by the *Solvency 1 Directive)* requires member states to end a *firm's* ability to take into account future profits *implicit items* by (at the latest) 31 December 2009. Until then, the maximum amount of the *implicit item* relating to future profits permitted under the *Consolidated Life Directive* is limited to 50% of the product of the estimated annual profits and the average period to run (not exceeding six years) on the *policies* in the portfolio. The *Consolidated Life Directive* further limits the maximum amount of these economic reserves that can be counted to 25% of the lesser of the available solvency margin and the required solvency margin. The changes introduced by the *Solvency 1 Directive* take effect for financial years beginning on or after 1 January 2004. However, the *Consolidated Life Directive* allows for a transitional period of five years, which runs from 20 March 2002 (the publication date of the *Solvency 1 Directive*), for *firms* to become fully compliant with these new requirements. *Firms* will need to consider the potential impact of these changes when engaging in future capital planning. When applying for an *implicit item waiver* a *firm* should provide the *FSA* with a plan showing how the *firm* intends to maintain its capital adequacy over the period to 31 December 2009. *Firms* should also be aware that the *FSA* will typically only grant *waivers* for a maximum of 12 months.

Future Profits

6. The future profits *implicit item* allows *firms* to take credit for margins in the *mathematical reserves* to the extent that these are expected to emerge from in force business. The future profit from in force business should be assessed, in the first instance, on prudent assumptions, to demonstrate that there is an 'economic reserve'. Having demonstrated that it exists, the amount should be limited to an amount calculated using a formula that takes into account the actual profit which has emerged over the last five years (see paragraph 28).

Zillmerisation

7. *Zillmerisation* is an allowance for acquisition costs that are expected, under prudent assumptions, to be recoverable from future *premiums*. *Firms* can make a direct adjustment to their reserves for *zillmerisation*, subject to the *rules* on *mathematical reserves*. However, where no such adjustment has been made, the *FSA* will consider an application for a *waiver* to take into account an *implicit item*.

Hidden reserves

8. Hidden reserves are reserves resulting from the underestimation of assets (other than *mathematical reserves*).

Process for applying for a waiver, including limits applicable when a waiver is granted

9. This annex sets out the procedures to be followed and the form of calculations and data which should be submitted by *firm*s to the *FSA*. This *guidance* should also be read in conjunction with the general requirements relating to the *waiver* process described in *SUP* 8. The *FSA* expects that applications for *waiver*s in respect of future profits and *zillmerising* will not normally be considered to pass the “not result in undue risk to persons whose interests the *rules* are intended to protect” test unless the relevant criteria set out in this *guidance* have been satisfied and an application for such a *waiver* may require further criteria to be satisfied for this test to be passed. As set out below, *waiver*s in respect of either *zillmerising* or hidden reserves will not normally be given except in very exceptional circumstances.

Timing

10. A *long-term insurer* may apply to the *FSA* for a *waiver* in respect of *implicit items*. A *waiver* will not apply retrospectively (see *SUP* 8.3.6G). Consequently, applications intended for a particular accounting reference date will normally need to be made well before that reference date. Applications by *firms* must be made to the *FSA* in writing and include the relevant details specified under *SUP* 8.3.3D. Given the uncertainty in predicting the future, *waiver*s will normally be granted for a maximum of 12 months at a time and any further applications will need to be made accordingly.

11. The information that will be required to enable an application to be considered as set out below, should normally include a demonstration of how the *capital resources requirement* is to be met, with and without the *waiver*. Clearly, up-to-date information may not be available before the *financial year*-end. In some cases information from the previous year-end’s *return* may be used, as long as any known significant changes in the structure of the *firm*, or the assumptions used, have been taken into account.

12. If the application for a *waiver* is granted, when a *firm* submits its next *return* the amount of the *implicit item* shown should not exceed that supported by the *firm’s* calculations as at the valuation date. In the event that the amount of the future profits item calculated by the *firm* based on these updated assumptions is less than the amount calculated at the time of the *firm’s waiver* application, the lower figure should be used in the *return*.

13. An *implicit item* in respect of *zillmerising* or hidden reserves is related to the basis on which liabilities or assets have been valued. In the case of hidden reserves, as explained below, the granting of a *waiver* will be dependent on the overall *capital resources* of the *firm*. *Waiver*s in respect of these *implicit items* will, therefore, only be made in relation to the position shown in a particular set of *returns* and it will be essential for *firms* to submit applications to the *FSA* well in advance of the latest date for the submission of the relevant *return*.

14. *Waivers* may be withdrawn by the *FSA* at any time (e.g. where the *FSA* considers the amount in respect of which a *waiver* has been given can no longer be justified). This may be as a result of changes in the *firm's* position or as a result of queries arising on scrutiny of the *returns*.

Information to be submitted

15. An application for a *waiver* (which includes an application for an extension to or other variation of a *waiver*) should be prepared using the standard application form for a *waiver* (see *SUP* 8 Ann 2D). In addition, the application should be accompanied by full supporting information to enable the *FSA* to arrive at a decision on the merits of the case. In particular, the application should state clearly the nature and the amounts of the *implicit items* that a *firm* wishes to count against its *capital resources requirement* and the treatment it proposes to adopt in counting the *implicit items* towards the *firm's capital resources*. Furthermore, the application should demonstrate that in allowing for *implicit items* there has been no double counting of future margins and that the basis for valuing such margins is prudent.

16. The *FSA* recognises that the assessment of the insurance *technical provisions* reflects the contractual obligations of the *firm*. *Implicit items* are therefore margins over and above an economic assessment in these *technical provisions* only. Non-contractual "constructive" obligations arising from a *firm's* regulatory duty to treat *customers* fairly e.g. regarding future terminal bonuses, are not fully captured by the *technical provisions*. A *firm* must instead be satisfied that it has sufficient *capital resources* at all times to meet its obligations under *Principle* 6. The granting of a *waiver* for an *implicit item* does not in any way detract from this requirement and a *firm* will need to be satisfied that this condition is still met.

17. As a minimum, applications for a future profits *implicit item* should be supported by the information contained in Forms 13, 14, 18, 19, 40, 41, 42, 48, 49, the answers to questions 1 to 12 of the abstract of the valuation report, Appendix 9.4 of *IPRU(INS)*, the abstract of the valuation report for the realistic valuation, Appendix 9.4A of *IPRU(INS)* and Forms 51, 52, 53, 54 and 58. For a *zillmerisation implicit item,* only those items noted above forming part of the abstract valuation report will normally be needed. Applications for a *waiver* in respect of a hidden reserves *implicit item* will normally be considered only if accompanied by the information which is contained in the annual regulatory *returns*. In particular, the balance sheet forms, *long-term insurance business* revenue accounts, and abstract of the valuation report as set out in Appendices 9.1, 9.3 and 9.4 of *IPRU(INS)* should be provided. This is not to say that a full regulatory *return* must be provided in the specified format, simply that the information contained in these forms should be provided. Where appropriate, the information may be summarised.

18. The following supporting information relating to the calculation of the amounts claimed should be supplied for each type of *implicit item* in respect of which a *waiver* is sought:

    Future profits: in addition to information related to the prospective calculation and retrospective calculation described below, the profits reported in each of the last five *financial years* up to the date of the most recent available valuation under *rule* 9.4 of

IPRU(INS) which has been submitted to the *FSA* prior to, or together with, the application, and the amounts and nature of any exceptional items left out of account; the method used for calculating the average period to run and the results for each of the main categories of business, both before and after allowing for premature termination (where the calculation has been made in two stages); and the basis on which this allowance has been made.

Zillmerising: the categories of contracts for which an item has been calculated and the percentages of the *relevant capital sum* in respect of which an adjustment has been made.

Hidden reserves: particulars, with supporting evidence, of the undervaluation of assets for which recognition is sought.

Continuous monitoring by firms

19. *Firms* should take into account any material changes in financial conditions or other relevant circumstances that may have an impact on the level of future profits that can prudently be taken into account. *Firms* should also re-evaluate whether an application to vary an *implicit item waiver* should be made whenever circumstances have changed. In the event that circumstances have changed such that an amendment is appropriate, the *firm* must contact the *FSA* as quickly as possible in accordance with *Principle* 11. (See *SUP* 8.5.1R). In this context, the *FSA* would expect notice of any matter that materially impacts on the *firm's* financial condition, or any *waiver*s granted.

Future profits - factors to take into account when submitting calculations to support waiver applications

20. Where an application is made in respect of a *firm* which has separate *with-profits funds* and *non-profit funds*, the *firm* should ensure that the *capital resources requirement* in respect of the *non-profit fund* is not covered by future profits attributable to *policyholders* arising in the *with-profits fund*. Furthermore, for a *realistic basis life firm* the amount of the *implicit item* allocated to each *with-profits fund* should be calculated separately, as the amount allocated to each *with-profits fund* will be taken into consideration in the calculation of the *with-profits insurance capital component* (see *PRU* 7.4.24R)

21. *Firms* need to assess prospective future profit (i.e. how much can reasonably be expected to arise) and compare this to maximum limits (in article 27(4) of the *Consolidated Life Directive*), which relate to past profits.

Future profits - prospective calculation

22. The application for a *waiver* should be supported by details of a prospective calculation of future profits arising from in-force business. The information supplied to the *FSA* should include a description of the method used in the calculation and of the assumptions made, together with the results arising. From 31 December 2009 at the latest, future profits *implicit items* will no longer be permitted under the *Consolidated Life Directive*. Where a *firm* first applies for an *implicit items waiver* after *PRU* 2.2 comes into effect, under the prospective calculation a *firm* should only take into

consideration future profits that are expected to emerge in the period up to 31 December 2009. *Implicit item waivers* granted before *PRU* 2.2 comes into effect will continue to operate under the terms of those *waivers*, but an application to vary the terms of such a *waiver*, for example to extend the effective period, is an application for a new *waiver* for which a *firm* should usually only take into consideration future profits that are expected to emerge in the period up to 31 December 2009.

Assumptions

23. The assumptions made should be prudent, rather than best estimate, assumptions of future experience (that is, the prudent assumptions should allow for the fair market price for assuming that risk including associated expenses). In particular, it would not normally be considered appropriate for the projected return on any asset to be taken to be higher than the risk-free yield (that is, assessed by reference to the yield arrived at using a model of future risk free yields properly calibrated from the forward gilts market). It may also be appropriate to bring future withdrawals into account on a suitably prudent basis. For *with-profits business*, the assumptions for future investment returns should not capitalise future bonus loadings except where the *with-profits policyholders* share in risks other than the investment performance of the fund. Furthermore, the rate at which future profits are discounted should include an appropriate margin over a risk free rate of return. Calculations should also be carried out to demonstrate that the prospective calculation of the future profits arising from the in-force business supporting the application for the *implicit item* would be sufficient to support the amount of the *implicit item* under each scenario described for use in determining the *resilience capital requirement* – where the *waiver* relates to an *implicit item* allocated to more than one fund, this should be demonstrated separately for that element of the *implicit item* allocated to each fund. For an *implicit item* allocated to a *with-profits fund*, proper allowance should be made for any shareholder transfers to ensure that the *implicit item* is not supported by future profits which will be required to support those transfers. To the extent, if any, that future profits are dependent on the levying of explicit expense related charges (for example as in the case of unit-linked business) the documentation submitted should include a demonstration of the prudence of the assumptions made as to the level at which future charges will be levied and expenses incurred.

Other limitations on the extent to which waivers for implicit items will be granted to a realistic basis life firm

24. Where a *waiver* in respect of an *implicit item* is granted to a *realistic basis life firm* additional limits may apply by reference to a comparison of *realistic excess capital* and *regulatory excess capital* including allowance for the effect of the *waiver*. Where the *waiver* relates to an *implicit item* allocated partly or entirely to a *with-profits fund*, the *waiver* will contain a limitation to the effect that the *regulatory excess capital* for that *with-profits fund*, allowing for the effect of the *waiver*, may not exceed that fund's *realistic excess capital*. This limitation will apply on an ongoing basis so that, for example, in the case of an *implicit item* allocated to a *with-profits fund*, the amount of the *implicit item* would be limited to zero whenever the *regulatory excess capital* exceeded the *realistic excess capital* of that fund.

Other charges to future profits

25. To avoid double counting, no account should be taken of any future surplus arising from assets corresponding to explicit items which have been counted towards the *capital resources requirement* such as shareholders funds, surplus carried forward or investment reserves. Deductions should be made in the calculation of future surpluses for the impact of any other arrangements which give rise to a charge over future surplus emerging (e.g. financial *reinsurance* arrangements, subordinated loan capital or contingent loan agreements). Deductions should also be made to the extent that any credit has been taken for the purposes of *PRU* 7.4.45R(2)(c) for the present value of future profits relating to non-profit business written in a *non-profit fund*. The information supplied to the *FSA* should identify the amount and reason for any adjustments made to the calculation of the prospective amount of future profits.

26. The *firm* should confirm to the *FSA* that the calculations have been properly carried out and that there are no other factors that should be taken into account.

Future profits - retrospective calculation

Overriding limit

27. The maximum amount of the *implicit item* relating to future profits permitted under the *Consolidated Life Directive* is 50% of the product of the estimated annual profit and the average period to run (not exceeding six years (ten years during the transitional period referred to in paragraph 5)) on the *policies* in the portfolio. Article 27(4) of the *Consolidated Life Directive* also imposes a further limit on the amount of the *implicit item* equal to 25% of the lower of:

(1) the *firm's capital resources*; and

(2) the higher of its *base capital resources requirement* for *long-term insurance business* and its *long-term insurance capital requirement*.

Once the transitional period set out in article 71(1) of the *Consolidated Life Directive* has expired in 2007 (see paragraph 5), the *FSA* will not allow a *waiver* for more than the amount permitted by article 27(4) of the Directive.

Definition of profits

28. The estimated annual profit should be taken as the average annual surplus arising in the *long-term insurance fund* over the last five *financial years* up to the date of the most recent available valuation which has been submitted to the *FSA* prior to, or together with, the application. For this purpose, deficiencies arising should be treated as negative surpluses. Where a *firm's financial year* has altered, the surplus arising in a period falling partly outside the relevant five year period should be assumed to accrue uniformly over the period in question for the purpose of estimating the profits arising within the five year period. When there has been a transfer of a block of business into the *firm* (or out of the *firm*) during the period, the impact of the transfer will need to be taken into account to reflect the remaining portfolio.

29. Where a *firm* has been carrying on *long-term insurance business* for less than 5 years, the total profits made during the past five years should be taken to be the aggregate of any surpluses that have arisen during the period in which *long-term insurance business* has been carried on less any deficiencies that may have arisen during that period. The resulting total should still be divided by five to obtain the estimated annual profit.

Exceptional items

30. Substantial items of an exceptional nature should be excluded from the calculation of the estimated annual profit. Such items include profits arising from an exceptional change in the value at which assets are brought into account, where this is not reflected in a similar change in the amount of the liabilities, and profits arising from a change in the overall valuation approach between one year and another. An exceptional loss (i.e. a reduction of an exceptional nature in the surplus arising) may be excluded from the calculation only to the extent that it can be set against a profit or profits up to the amount of the loss and arising from a similar cause. It is not intended, however, that any adjustment should be made for the effect on surplus of a net strengthening of reserves for costs associated with an expansion of the business or for special capital expenditure, such as the purchase of computer systems.

Double counting

31. The inclusion of investment income arising from the assets representing the explicit components of *capital resources* (as part of the estimated annual profit for the purpose of determining the future profits *implicit item*) would result in double-counting. If those assets were required to meet the effects of adverse developments, this would automatically result in the cessation of the contribution to profits from the associated investment income. It would clearly not be appropriate for the *FSA* to grant a *waiver* which would enable a *firm* to meet the *capital resources requirement* on the basis of counting both the capital values of the assets and the value of the income flow which they can be expected to generate.

32. The definition of the estimated annual profit as the surplus arising in the *long-term insurance fund* ensures that any contribution to surplus arising from transfers from the profit and loss account, including investment income on shareholders' assets, is not included in the estimated annual profit. Thus double-counting should not arise in respect of shareholders' assets. Double-counting may arise, however, in respect of the investment income from the assets representing the explicit components of *capital resources* carried within the *long-term insurance fund* (e.g. surplus carried forward or investment reserves), but the amount of such investment income is not separately identified in the *return*.

33. Where there is reason to suspect that the elimination of any such double-counting would reduce a *firm's capital resources* to close to or below the required level, or would otherwise be significant, the *FSA* will request this information with a view to taking account of this factor in determining the amount of the *implicit item*. Additional information concerning investment income should be furnished with an application for a *waiver*, if a *firm* believes that any double-counting would fall into one of the categories mentioned above.

Average period to run

34. The average number of years remaining to run on *policies* should be calculated on the basis of the weighted average of the periods for individual *contracts of insurance*, using as weights the actuarial present value of the benefits payable under the contracts. A separate weighted average should be calculated for each of the various categories of contract and the results combined to obtain the weighted average for the portfolio as a whole. Approximate methods of calculation, which the *firm* considers will give results similar to the full calculation, will be accepted. In particular, the *FSA* will normally accept the calculation of an average period to run for a specific category of contract on the basis of the average valuation factor for future benefits derived from data contained in the abstract of the valuation report in the regulatory *returns*. A *firm* will be asked to demonstrate the validity of the method adopted only where an abnormal distribution of the business in force gives grounds for doubt about its accuracy.

35. Calculations will normally be requested only for the main categories of *insurance business*, accounting for not less than 90% of the *mathematical reserves*, except where there are grounds for expecting that the exclusion of certain categories of *policies* under this provision might have a significant effect on the resulting average period to run. Detailed calculations will not be required where a *waiver* is sought in respect of a low multiple of the annual profits, well within the average period to run for the *firm*.

36. Where, for a particular category of business, a method of valuation is used which does not involve the calculation of the value of future benefits and which is significant for the *firm* in question, the calculation of the average period to run should be based on estimates of the value of future benefits.

Premature termination of contracts

37. Allowance should be made for the premature termination of *contracts of insurance*, based on the actual experience of the *firm* over the last five years, or other appropriate period, and taking into account specific features of contracts such as options which can be expected to lead to premature termination (e.g. guaranteed surrender values on income bonds written as *long-term insurance contracts* and option dates on flexible whole-life contracts). The adjustment should be made separately for each of the main categories of business. The use of industry-wide rates of termination will be acceptable where a *firm* is satisfied that this will result in sufficient allowance being made having regard to the *firm's* own experience. Methods of calculation that involve a degree of approximation will be permitted.

38. For certain types of contract, where the period left to run is most naturally defined as the term to a fixed maturity or expiry date, the allowance for premature termination should also take into account terminations resulting from death.

Overall limit

39. The overall average period left to run calculated as described above should be limited to a maximum of six years under article 27(4) of the *Consolidated Life Directive* (or a maximum of ten years during the transitional period referred to in paragraph 5) before

applying it to the estimated annual profit in order to determine the maximum value of the future profits *implicit item*.

Definition of period to run

40. The definition of the period to run and the basis of the allowance for early termination should clearly be considered together. For certain types of contracts (e.g. pension contracts with a range of retirement ages or other options), there is inherent uncertainty about the likely term to run. In such circumstances any estimate for determining the amount of the future profits *implicit item* for which a *waiver* is sought should be based on prudent assumptions tending, if anything, to underestimate the average period to run.

Zillmerising

41. The *FSA* does not normally expect to grant *waiver*s permitting *implicit items* due to *zillmerisation* except in very exceptional circumstances. *Zillmerisation* is an allowance for acquisition costs that are expected, under prudent assumptions, to be recoverable from future *premiums*. *Firms* can make a direct adjustment to their reserves for *zillmerisation*, subject to the requirements on *mathematical reserves* set out in *PRU* 7.3.43R, and this is the usual approach. However, where no such adjustment has been made, or where the maximum adjustment has not been made in the *mathematical reserves*, the *FSA* will consider an application for an *implicit item*, if the amount is consistent with the amount that would have been allowed as an adjustment to *mathematical reserves* under *PRU* 7.3.43R.

Hidden reserves

42. The *FSA* will grant *waivers* permitting *implicit items* due to hidden reserves only in very exceptional circumstances. These items relate to hidden reserves resulting from the underestimation of assets. The *rules* for the valuation of assets and liabilities (see *PRU* 1.3) which apply to assets and liabilities other than *mathematical reserves* are based on the valuation used by the *firm* for the purposes of its external accounts, with adjustments for regulatory prudence such as concentration limits for large holdings, and would not normally be expected to contain hidden reserves.

Case studies on "unduly burdensome"

43. Some examples of situations where the existing *rules* might be considered to be unduly burdensome are given below:

A *firm* writes *with-profits business*. The *firm's* investment policy is affected by its published financial position. Application of the *rules* without an *implicit item* would result in the *firm* adopting a lower equity backing ratio. It may be possible to demonstrate that, in the circumstances, it would be unduly burdensome to require the *firm* to incur costs (which might prejudice *policyholders*) resulting from the lower equity backing ratio, rather than take allowance for an *implicit item*.

A *firm* has purchased a block of in-force business, on which the future profits may be reasonably estimated. However, this asset is given no value under the *rules*. It may be possible to demonstrate that it is unduly burdensome for the *firm* to recognise the cost of acquiring the assets whilst giving no value to the asset acquired.

A *firm* has a block of in-force business, on which the future profits may be reasonably estimated. Application of the *rules* without an *implicit item* would result in a need to obtain additional capital. It may be possible to demonstrate that it is unduly burdensome, having regard to the particular circumstances of the *firm*, to require it to incur the costs involved in the injection of further capital rather than take allowance for an *implicit item*.

A *firm* has purchased matching assets for guaranteed annuity liabilities. The operation of the asset and liability valuation *rules* leads to statutory losses in certain circumstances in spite of good matching of assets and liabilities on a realistic basis of assessment. It may be possible to demonstrate that it is unduly burdensome to require the *firm* to incur the costs involved in the injection of further capital rather than take allowance for an *implicit item*.

Conditions which will typically be applied to implicit items waivers

Limits

44. Where *implicit items waiver*s are granted, the value cannot exceed (and will normally be less than) the monetary limits described in paragraph 27, except that during the transitional period the pre-Solvency I limits will apply. In addition, time limits will apply and *waiver*s will normally only last for 12 months.

Publicity

45. The *FSA* will publish the *waiver* (see *SUP* 8.6 and *SUP* 8.7). Public disclosure is standard practice unless the *FSA* is satisfied that publication is inappropriate or unnecessary (see section 148 of the *Act*). Any request that a direction not be published should be made to the *FSA* in writing with grounds in support, as set out in *SUP* 8.6.

Disclosure of a *waiver* will normally be required in the *firm's* annual *returns*.

	Annex 3G	
A1	This annex provides an illustrative qualitative example of how a small *firm* could undertake its stress and scenario analysis without this being disproportionate to the size and complexity of its business so as to comply with *PRU* 1.2.35R. For these reasons, the example does not provide any quantitative guidance as we believe this would be impractical given the diverse nature of each *firm's* individual circumstances.	
A2	This example is based on *guidance* contained in *PRU* 2.3. The areas discussed are not exhaustive and it is likely that in practice a *firm* will need to consider a range of other issues.	
A3	The scenarios that the *firm* generates as part of its analysis should aim to reflect the degree of risk in a variety of areas. How extreme these scenarios are will influence the ultimate level of capital required by the *firm*. The *firm* should not necessarily develop scenarios based on the current trading or economic conditions, but on possible trading or economic conditions that could occur during the next three to five years.	
A4	In addition to examining its event scenarios, a *firm* should also be able to meet any individual risk (however unlikely) that it has accepted (or proposes to accept through its business plan) from *policyholders*. It therefore should analyse its exposures and ensure that it has sufficient capital or available *reinsurance* to cover its largest individual risks and accumulations.	
	Worked example	
	Background	
A5	The *firm* used for this example is an *insurer* carrying on *general insurance business* within a large *group*, writing predominantly personal lines, household and motor policies of approximately £25m *gross written premium*. This business has a reasonable geographical spread, sourced significantly from within the *United Kingdom*. The *firm* has purchased appropriate *reinsurance* cover from a variety of *reinsurers* and has a demonstrated record of utilising this cover. Its settlement pattern for *claims* averages three years, however, there is a small element of the account with longer tail liability *claims*. The *firm's* investments and IT support are outsourced.	
	Insurance risk	
A6	The risk of incorrect or inaccurate pricing of business over the scenario period can be addressed by examining typical uncertainties within the pricing basis and the volatility of *claims* experience.	
A7	In examining the adequacy of its pricing, the *firm* establishes its underwriting and *claims* trend over a ten-year base period by reviewing profit and loss accounts (particularly underwriting profit). In particular it examines the following:	
	(i)	the volatility of losses in a particular line of business;
	(ii)	whether the loss ratio exceeded 100% in any line of business; and
	(iii)	whether the *deferred acquisition cost* (DAC) amount had been written down; e.g. whether an unexpired risk provision (URP) was necessary.
A8	The *firm* also examines whether its *premiums* over the last ten years have been:	

	(i)	reasonably stable;
	(ii)	responsive enough to changes in *claim* exposures (so that profitability is maintained);
	(iii)	providing adequately for contingencies (such as major losses e.g. hail, earthquake etc);
	(iv)	encouraged loss control (through the use of deductibles, no claim bonuses etc);
A9	The *firm* also reviews its method of pricing. The *firm* considers and performs the following:	
	(i)	a review of acceptable rates, e.g. *premiums* being charged by competitors for similar products;
	(ii)	an examination of whether there have been any difficulties in the past with delegated authorities in relation to pricing including the ability and experience of staff members setting or recommending *premium* prices;
	(iii)	an examination of whether the *firm* has the appropriate mechanisms in place regarding *premium* rate changes (that is, who makes these decisions, frequency, and on what basis?); and
	(iv)	a benchmark price assessment (e.g. the ability to provide adequate competitive *premium* rates). For example, indicative rates being determined through the use of industry statistics, competitor statistics and the *firm's* own analysis for all classes.
A10	Other factors the *firm* considers are:	
	(i)	changes in environment (e.g. legislation, social, economic etc);
	(ii)	changes in *policy* conditions and deductibles; and
	(iii)	impact of market segments (e.g. the effects of different *claim* frequencies and costs impacting the price charged).
A11	Having completed its analysis, the *firm* makes the following assumptions to define its underwriting risk:	
	(i)	*claims* costs. The *firm* assumes these are X% higher than in the *premium* basis;
	(ii)	*claims* inflation. The *firm* assumes a X% *claims* inflation over the scenario period, compared to Y% in the pricing basis;
	(iii)	*policy* expenses (fixed and variable) are X% higher than anticipated in the pricing basis;
	(iv)	*reinsurance* charges are X% higher than anticipated in the pricing basis; and
	(v)	investment income is X% lower than anticipated in the pricing basis.
As a result of the above analysis on a per risk basis, the *firm* considers that capital of between £X and £Y would cover the possibility of material deviations to projected results.		
	Allowing for catastrophes	
A12	The allowance for catastrophic events within the insurance risk scenario should reflect both the severity and the frequency of these events.	
A13	After considering the catastrophe *reinsurance* programme it may be clear that the upper limit is set at a level unlikely to be breached e.g. a 1 in 200 year event. Thus, for the purposes of the capital assessment, it would not be necessary to assume losses in excess of this retention.	

A14	However, it may be determined that there is possible exhaustion of free reinstatements or of horizontal cover in total. For example, if there were a significant chance of three catastrophic losses in any one period but the *reinsurance* allowed only one free reinstatement, then the assessment may be to hold two retentions and the entire gross loss for the third event.
As a result of the above analysis, the *firm* considers it appropriate to hold capital sufficient to absorb three catastrophic losses: one European windstorm of £X, one UK flood of £Y, and one large man made explosion of £Z.	
The *reinsurance* structure in place allows for X number of reinstatements at full *premium*.	
	Deterioration of reserves
A15	The *firm* considers the adequacy of its *claims* reserves by focussing on the liability valuation.
A16	The liability valuation may contain a range of answers that might indicate possible reserve variability. Also, the valuation will contain areas where judgement has been applied and assumptions formulated which are subjective. These areas are considered and stressed as appropriate.
A17	The *firm* also reviews the historic level of *claims* reserves and subsequent level of settlements to help determine the size of any historic levels of under and over reserving.
A18	*Reinsurance* arrangements are considered and the extent to which these arrangements protect against reserve deterioration is assessed.
A19	For *unearned premium*, where losses have yet to occur, the *firm* considers that the level of uncertainty is greater and considers similar factors to those relating to underwriting risk in addition to those discussed above.
As a result of the above analysis, the *firm* considers it appropriate to apply a X% loading to the outstanding *claims* provision, a Y% loading to the *unearned premium* provision and Z% to all other liability values. The *firm* considers that capital of between £X and £Y would adequately cover reserve deterioration.	
	Credit risk
A20	Credit risk relates to the risk of default by *counterparties*. The *firm* believes its exposure to credit risk results from financial transactions with *counterparties* including issuers, debtors, borrowers, brokers, *policyholders*, *reinsurers* and guarantors.
A21	When assessing credit risk the *firm* makes an assessment of the creditworthiness of *counterparties* to the assets of the *firm*.
A22	The assessment includes an evaluation of the credit risk associated with loans and investment portfolios; the quality of on and off balance sheet assets; the ongoing management of the loans and investment portfolios; as well as loss provisions and reserves.
A23	The *firm* believes its exposure to credit risk also arises due to its exposure to its *reinsurers*. In this regard, the *firm* uses the credit ratings assigned to particular *counterparties* as a measure of credit risk, most notably Standard & Poor's, Moody's Investors Service and AM Best's (particularly for *reinsurers*).
A24	When forming an opinion on credit risk the *firm* considers:
	Reinsurance
A25	The *firm's* strategy is to lessen exposure to a single lead *reinsurer* to less than 30%, with other participants holding no more than 15%. In all cases,

	the panel of *reinsurers* all have a specified rating. The *firm* has no prior experience of disputes, and their working relationship with the panel may be excellent, and thus the *firm* does not envisage any future difficulties arising in this regard.
A26	Bond default rates could then be used to assess a likely credit risk figure for *reinsurance* recoveries (including *IBNR* recoveries).
The *firm* considers that capital of between £X and £Y would cover *reinsurance* defaults, with no additional allowance for disputes.	
	Overseas financial institutions and banks
A27	The *firm* investigates its business relationships with overseas financial institution *counterparties* including *banks*, and decides no additional allowance is required.
	Quality of counterparties and trends in counterparty risk
A28	The *firm* assesses the level and age of debtors, focussing particularly upon unpaid *premiums*, especially those greater than three months old, and reviews the level and trend of contingent liabilities. For example, the *firm* estimates that the credit risk scenario equates to taking a 10% reduction in the asset value of debtors, based on bond default rates and age of debt.
The *firm* considers that capital of between £X and £Y would cover credit risk to counterparties.	
	Off-balance sheet transactions
A29	The *firm* investigates any unfunded commitments, credit *derivatives*, commercial or standby letters of credit. Where these exist the possibility of a loss on these instruments is considered in relation to the requirement of the credit risk scenario.
The *firm* considers that no additional capital is necessary.	
	Market risk
A30	*Market risk* encompasses an adverse movement in the value of the assets as a consequence of market movements such as interest rates, foreign exchange rates, equity prices, etc. which is not matched by a corresponding movement in the value of the liabilities.
A31	In examining possible market risks, the *firm* considers its sensitivity to *market risk* by evaluating the degree to which changes in interest rates, foreign exchange rates, equity prices, or other areas can adversely affect the *firm's* earnings or capital.
A32	The *firm* believes its assets and liabilities are approximately matched e.g. there is no existence of large unmatched or unhedged currency positions; short tail business is backed by cash/fixed interest assets of suitable term and long tail business with real assets e.g. shares/property. If mismatching does exist this should be allowed for within the estimate.
A33	In developing the scenario the *firm* estimates the effect of a X% increase in interest rates on bond values.
A34	Similarly, the *firm* estimates the effect on equity values of a major recession to estimate the possible reduction in the value of equity capital. Also, it uses a suitable equity index to determine the size of historical falls in equity values and indicate possible future falls.
A35	*Counterparty* risk might be allowed for by assuming one or several major corporate bond holding defaults.
A36	For all investments, the stability of trading revenues should be examined to

	determine the volatility of investment.
From the above analysis, the *firm* considers that capital of between £X and £Y would be appropriate to protect it against adverse movement in *market risk*.	
	Liquidity risk
A37	*Liquidity risk* is the potential that the *firm* may be unable to meet its obligations as they fall due as a consequence of having a timing mismatch. The *firm* considers *liquidity risk* relates to the risk associated with the processes of managing timing relationship between asset and liability cash flow patterns.
A38	When assessing *liquidity risk*, the *firm* considers the extent of mismatch between assets and liabilities and the amount of assets held in a highly liquid, marketable form should unexpected cashflows lead to a liquidity crunch.
A39	The price concession of liquidating assets is a prime concern when assessing *liquidity risk* and is built into the scenario.
A40	In examining the *liquidity risk*, the *firm* examines the following:
	Marketability, quality and liquidity of assets
A41	The *firm* considers the assets held and makes an assessment regarding the quality and liquidity of these assets. Even though the assets matched the liabilities, residual risk remains given that timings are uncertain and there is a possibility that assets will be realised at unfavourable times. This is allowed for by assuming a 2.5% reduction in the market value of assets at realisation compared to the current market value.
The *firm* considers that capital of between £X and £Y would cover timing risk to *counterparties*.	
	Reliance on new business income
A42	The *firm* relies partially upon new business cash flows to meet current liabilities as they fall due. The *firm* analyses the sensitivity of future cash flow projections and new business assumptions and considers the effect of a reduced level of new business.
A43	The *firm* finds that it did not have immediate alternatives in place in case these expected new business cash flows were reduced. In this regard, it considers that these sources should be stressed by X%.
The *firm* considers that capital of between £X and £Y would cover possible effects of adjusting the asset portfolio to switch to more liquid assets.	
A44	The *firm* also examines the volatility and cost of on- and off-balance sheet funding sources. The *firm* is satisfied that no concerns need to be raised and that there should not be any impact on its liquidity position.
A45	The *firm* believes it is well placed to manage unplanned changes in funding sources as well as react to changes in market conditions that affect its ability to quickly liquidate assets with minimal loss. The *firm* assesses that it has reasonable access to money markets and other sources of funding such as lines of credit.
A46	The *firm* has no previous problems or delays in meeting obligations (or accessing external funding).
Overall, from the above analysis, the *firm* considers that capital of between £X and £Y would be necessary to withstand the effects of deterioration in liquidity.	
	Governance Risk
A47	Governance risk relates to the risk associated with the board and/or senior

	management of the *firm* not effectively performing their respective roles.
A48	The existence and level of directors and officers insurance in place is investigated compared to known incidence of *claims* of this type.
A49	The *firm* assesses whether the current level of governance is appropriate for the *firm*, and the likelihood that the *firm's* practices may result in the board and/or senior management not adequately undertaking their roles. The cost of altering and strengthening the current board structure is considered.
A50	In this regard, the *firm* makes an assessment that it may be reliant on only a few senior executives, and may be exposed if they experience any misadventure.
The *firm* considers that capital of between £X and £Y would cover governance risk.	
	Strategic Risk
A51	Strategic risk arises from an inability to implement appropriate business plans and strategies, make decisions, allocate resources or adapt to changes in the business environment.
A52	The *firm* therefore assesses the prudence and appropriateness of its business strategy in the context of the *firm's* competitive and economic environment. In particular the assumptions, forecasting and projections are assessed considering the possibility of a fundamental market change due, for example, to higher numbers of competitors, changes in sales channels, new forms of insurance or changes in legislation. This review includes whether the *reinsurance* programme is appropriate for the risks selected by the *firm* and whether it adequately takes account of the underwriting and business plans of the *firm* generally.
A53	The *firm* considers the likelihood of a fundamental strategic shift too remote to include within the scenario given the maturity of the market in which they operate.
	Operational risks
A54	In reviewing the operational risk exposures, the *firm* has examined its administration, compliance, event, fraud, governance, strategic and technological risks.
	Administration
A55	The *firm* considers the risk of error or failure associated with the administrative aspects of the operation of its business. In this regard, the *firm* considers likelihood of financial loss and reputation harm due to failure or errors occurring and the likely size of these losses.
A56	None of the *firm's* administration is out-sourced to service providers.
A57	In undertaking the assessment, the *firm* considers the history of failure or error from transaction processing or control within the *firm*. Exception reports are produced on a quarterly basis. Past reports highlighted past administrative deficiencies. The biggest event in the past 10 years related to a situation where *claim*-handling staff shared access codes to the *claims* administration system. This resulted in an overpayment to some clients.
A58	The *firm* also examines the nature and extent of centralised and decentralised functions within the *firm*. Three branches report regularly to the central office and an appropriate system is in place to record financial information, handle complaints etc.
A59	The *firm* also reviews the segregation of duties between staff. It is satisfied that an adequate segregation of duties between underwriting *claims* and

	payments divisions exist in terms of acceptance, authorisation and payments. It is also satisfied that sufficient interaction between the front, middle and back offices exist in terms of financial control and risk management. For example, it is confident that its guidelines for accepting risks are adequate and that any breach would be picked up by exception reporting.
A60	The *firm* also investigates the level of staff expertise and training to administer its product range/services.
The *firm* considers that capital of between £X and £Y would cover the risk of future administration issues.	
	Compliance Risk
A61	The *firm* believes its main compliance risk relates to the risk of non-adherence to legislative and internal *firm* requirements.
A62	An investigation into compliance over the last 10 years finds no history of non-compliance with *firm* policy and control systems nor have there been any reported areas of non-compliance with legislation or other requirements.
A63	Regulatory reforms including corporate and consumer law are considered and it is assumed that expenses costs will rise as a result of developments in the next 5 years. As a result an additional X% of *premium* income was assumed for the expense ratio.
The *firm* considers that capital of between £X and £Y would cover the risk of future compliance issues.	
	Event risk
A64	Event risk relates to risks associated with the potential impact of significant events (e.g., financial system crisis, major change in fiscal system, natural disaster) on the operations of the *firm*.
A65	The definition of event risk is not intended to cover events that are directly associated with products and services offered, for example, events which may directly impact on the *general insurance business*.
A66	The *firm* concludes that no additional specific allocation is required.
	Fraud Risk
A67	Fraud risk relates to the risk associated with intentional misappropriation of funds, undertaken with the objective of personal benefit at the expense of the *firm*.
A68	In assessing fraud risk, the *firm* considers the possibility of fraudulent acts occurring within the *firm* and the extent of controls which management has established to mitigate such acts.
A69	The *firm* examines fraud issues over a period of 10 years and finds one major incident where it was subject to a fraudulent activity. This involved fraudulent payments being made by a member of staff which resulted in a loss for the *firm* of £Xm. Based on this previous incident and allowing for improvements in controls, the company assessed a financial figure that it believes is consistent with the probability for this scenario.
The *firm* considers that capital of between £X and £Y would cover the risk of future fraud.	
	Technology Risk
A70	The *firm* considers the risk of error or failure associated with the technological aspects (IT systems) of its operations. Specifically, technology risk refers to both the hardware systems and the software utilised to run those systems.

A71	In relation to the *firm's* information systems, the *firm* assesses the past reliability and future functionality and believes them to be adequate. It does not have any future plans to either replace its systems or make major systems modifications.
A72	Concerning business continuity management and disaster recovery planning (and testing of plans), the *firm* reviews these plans regularly and tests them quarterly. A full back-up site exists with full recovery capabilities. Costs associated with utilising the site and associated business interruption insurance was estimated.
The *firm* considers that capital of between £X and £Y would cover technology risk.	
	Group risk
A73	The size of the group risk element within operational risk will depend on the ownership structure of the *firm* and how it is funded by the parent.
A74	The *firm* considers the likelihood and financial consequences of both insolvency and credit downgrading of its parent. Given the *firm* shares the parent's name there is a large risk of association.
A75	The *firm* considers it within the scope of the scenario to allow for a single downgrade of the parent's credit rating from AA to A. It does not believe the chance of insolvency great enough to allow for directly.
A76	The *firm* estimates the effect on its business plan and profit margins of the downgrade. It estimates the amount of business lost and the increase in marketing costs required to maintain the client base. It also allows for a change in the pricing basis to incorporate a reduced profit margin (with knock on impacts on the business volume and loss ratios).
From the above analysis, the *firm* considers that capital of between £X and £Y would be required to cover group risks.	
	Overall assessment
A77	After individually assessing each risk area, the *firm* considers the capital that it has estimated might be absorbed under each scenario. In aggregate the range of capital absorbed is between £X and £Y. It considers how many of these scenarios might reasonably occur within a period and the extent to which it could replace capital within that period. It takes into account scenarios which might reasonably be linked, the difficulty with which capital might be replaced if the scenarios occurred, and the changes in strategy which might need to be adopted if the scenarios occurred.
A78	The *firm* decides that the worst realistic combination of circumstances that might arise would absorb capital of between £A and £B.

Annex E

PRU 3

In this Annex, all the text is new and is not underlined.

3.1 Credit risk management systems and controls

Application

3.1.1 G *PRU* 3.1 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

3.1.2 G *PRU* 3.1 applies to:

(1) an *EEA-deposit insurer*; and
(2) a *Swiss general insurer*;

only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

Purpose

3.1.3 G This section provides *guidance* on how to interpret *PRU* 1.4 insofar as it relates to the management of credit risk.

3.1.4 G Credit risk is incurred whenever a *firm* is exposed to loss if another party fails to perform its financial obligations to the *firm*, including failing to perform them in a timely manner. It arises from both on and off balance sheet items. For contracts for traded *financial instruments*, for example the purchase and sale of *securities* or *over the counter derivatives*, risks may arise if the *firm's counterparty* does not honour its side of the contract. This constitutes counterparty risk, which can be considered a subset of credit risk. Another risk is issuer risk, which could potentially result in a *firm* losing the full price of a market instrument since default by the issuer could result in the value of its bonds or stocks falling to nil. In insurance *firms*, credit risk can arise from *premium* debtors, where cover under *contracts of insurance* may either commence before *premiums* become due or continue after their non-payment. Credit risk can also arise if a *reinsurer* fails to fulfil its financial obligation to repay a *firm* upon submission of a *claim*.

3.1.5 G Credit risk concerns the *FSA* in a *prudential context* because inadequate systems and controls for credit risk management can create a threat to the *regulatory objectives* of market confidence and consumer protection by:

(1) the erosion of a *firm*'s capital due to excessive credit losses thereby threatening its viability as a going concern;

(2) an inability of a *firm* to meet its own obligations to depositors, *policyholders* or other market *counterparties* due to capital erosion.

3.1.6 G Appropriate systems and controls for the management of credit risk will vary with the scale, nature and complexity of the *firm*'s activities. Therefore the material in this section is *guidance*. A *firm* should assess the appropriateness of any particular item of *guidance* in the light of the scale, nature and complexity of its activities as well as its obligations as set out in *Principle* 3 to organise and control its affairs responsibly and effectively.

Requirements

3.1.7 G High level requirements for prudential systems and controls, including those for credit risk, are set out in *PRU* 1.4. In particular:

(1) *PRU* 1.4.19R(2) requires a *firm* to document its policy for credit risk, including its risk appetite and how it identifies, measures, monitors and controls that risk;

(2) *PRU* 1.4.19R(2) requires a *firm* to document its provisioning policy. Documentation should describe the systems and controls that it intends to use to ensure that the policy is correctly implemented;

(3) *PRU* 1.4.18R requires it to establish and maintain risk management systems to identify, measure, monitor and control credit risk (in accordance with its credit risk policy), and to take reasonable steps to ensure that its systems are adequate for that purpose;

(4) In line with *PRU* 1.4.11G, the ultimate responsibility for the management of credit risk should rest with a *firm*'s *governing body*. Where delegation of authority occurs the *governing body* and relevant *senior managers* should approve and periodically review systems and controls to ensure that delegated duties are being performed correctly.

Credit risk policy

3.1.8 G *PRU* 1.4.18R requires a *firm* to establish, maintain and document a business plan and risk policies. They should provide a clear indication of the amount and nature of credit risk that the *firm* wishes to incur. In particular, they should cover for credit risk:

(1) how, with particular reference to its activities, the *firm* defines and measures credit risk;

(2) the *firm's* business aims in incurring credit risk including:

(a) identifying the types and sources of credit risk to which the *firm* wishes to be exposed (and the limits on that exposure) and those to which the *firm* wishes not to be exposed (and how that is to be achieved, for example how exposure is to be avoided or mitigated);

(b) specifying the level of diversification required by the *firm* and the *firm's* tolerance for risk concentrations (and the limits on those exposures and concentrations); and

(c) drawing the distinction between activities where credit risk is taken in order to achieve a return (for example, lending) and activities where credit exposure arises as a consequence of pursuing some other objective (for example, the purchase of a *derivative* in order to mitigate *market risk*);

(3) how credit risk is assessed both when credit is granted or incurred and subsequently, including how the adequacy of any security and other risk mitigation techniques is assessed;

(4) the detailed limit structure for credit risk which should:

(a) address all key risk factors, including intra-*group* exposure*s* and indirect exposures (for example, exposures held by *related* and *subsidiary undertakings*);

(b) be commensurate with the volume and complexity of activity;

(c) be consistent with the *firm's* business aims, historical performance, and its risk appetite;

(5) procedures for:

(a) approving new or additional exposures to *counterparties*;

(b) approving new products and activities that give rise to credit risk;

(c) regular risk position and performance reporting;

(d) limit exception reporting and approval; and

(e) identifying and dealing with problem exposures caused by the failure or the downgrading of a *counterparty*;

(6) the methods and assumptions used for the stress testing and scenario analysis required by *PRU* 1.2 (Adequacy of financial resources), including how these methods and assumptions are selected and tested;

(7) the allocation of responsibilities for implementing the credit risk policy and for monitoring adherence to, and the effectiveness of, the policy.

Counterparty assessment

3.1.9 G The *firm* should make a suitable assessment of the risk profile of the *counterparty*. The factors to be considered will vary according to both the type of credit and the *counterparty* being considered. This may include:

(1) the purpose of the credit, the duration of the agreement and the source of repayment;

(2) an assessment and continuous monitoring of the credit quality of the *counterparty*;

(3) an assessment of the *claims* payment record where the *counterparty* is a *reinsurer*;

(4) an assessment of the nature and amount of risk attached to the *counterparty* in the context of the industrial sector or geographical region or country in which it operates, as well as the potential impact on the *counterparty* of political, economic and market changes; and

(5) the proposed terms and conditions attached to the granting of credit, including ongoing provision of information by the *counterparty*, covenants attached to the facility as well as the adequacy and enforceability of *collateral*, security and guarantees.

3.1.10 G It is important that sound and legally enforceable documentation is in place for each agreement that gives rise to credit risk as this may be called upon in the event of a default or dispute. A *firm* should therefore consider whether it is appropriate for an independent legal opinion to be sought on documentation used by the *firm*. Documentation should normally be in place before the *firm* enters into a contractual obligation or releases funds.

3.1.11 G Where *premium* payments are made via *brokers* or *intermediaries*, the *firm* should describe how it monitors and controls its exposure to those *brokers* and *intermediaries*. In particular, the policy should identify whether the risk of default by the *broker* or *intermediary* is borne by the *firm* or the *policyholder*.

3.1.12 G Any variation from the usual credit policy should be documented.

3.1.13 G A *firm* involved in loan syndications or consortia should not rely on other parties' assessment of the credit risks involved. It will remain responsible for forming its own judgement on the appropriateness of the credit risk thereby incurred with reference to its stated credit risk policy. Similarly a *firm* remains responsible for assessing the credit risk associated with any insurance or *reinsurance* placed on its behalf by other parties.

3.1.14 G Where a credit scoring approach or other *counterparty* assessment process is used, the *firm* should periodically assess the particular approach taken in the light of past and expected future *counterparty* performance and ensure that any statistical process is adjusted accordingly to ensure that the business written complies with the *firm's* risk appetite.

3.1.15 G In assessing its contingent exposure to a *counterparty*, the *firm* should identify the amount which would be due from the *counterparty* if the value, index or other factor upon which that amount depends were to change.

Credit risk measurement

3.1.16 G A *firm* should measure its credit risk using a robust and consistent methodology which should be described in its credit risk policy; the appropriate method of measurement will depend upon the nature of the credit product provided. The *firm* should consider whether the measurement methodologies should be backtested and the frequency of such backtesting.

3.1.17 G A *firm* should also be able to measure its credit exposure across its entire portfolio or within particular categories such as exposures to particular industries, economic sectors or geographical areas.

3.1.18 G Where a *firm* is a member of a *group* that is subject to consolidated reporting, the *group* should be able to monitor credit exposures on a consolidated basis. See *PRU* 8 (Group risk).

3.1.19 G A *firm* should have the capability to measure its credit exposure to individual *counterparties* on at least a daily basis.

Risk monitoring

3.1.20 G A *firm* should implement an effective system for monitoring its credit risk which should be described in its credit risk policy.

3.1.21 G A *firm* should have a system of management reporting which provides clear, concise, timely and accurate credit risk reports to relevant functions within the *firm*. The reports could cover exceptions to the *firm's* credit risk policy, non-performing exposures and changes to the level of credit risk within the *firm's* credit portfolio. A *firm* should have procedures for taking appropriate action according to the information within the management reports, such as a review of *counterparty* limits, or of the overall credit policy.

3.1.22 G Individual credit facilities and overall limits should be periodically reviewed in order to check their appropriateness for both the current circumstances of the *counterparty* and the *firm's* current internal and external economic environment. The frequency of review should be appropriate to the nature of the facility.

3.1.23 G A *firm* should utilise appropriate stress testing and scenario analysis of credit exposures to examine the potential effects of economic or industry downturns, market events, changes in interest rates, changes in foreign exchange rates, changes in liquidity conditions and changes in levels of insurance losses where relevant.

Problem exposures

3.1.24 G A *firm* should have systematic processes for the timely identification, management and monitoring of problem exposures. These processes should be described in the credit risk policy.

3.1.25 G A *firm* should have adequate procedures for recovering exposures in arrears or that have had provisions made against them. A *firm* should allocate responsibility, either internally or externally, for its arrears management and recovery.

Provisioning

3.1.26 G *PRU* 1.4.19R(2) requires a *firm* to document its provisioning policy. A *firm*'s provisioning policy can be maintained either as a separate document or as part of its credit risk policy.

3.1.27 G At intervals that are appropriate to the nature, scale and complexity of its activities a *firm* should review and update its provisioning policy and associated systems.

3.1.28 G In line with *PRU* 3.1.6G, the *FSA* recognises that the frequency with which a *firm* reviews its provisioning policy once it has been established will vary from *firm* to *firm*. However, the *FSA* expects a *firm* to review at least annually whether its policy remains appropriate for the business it undertakes and the economic environment in which it operates.

3.1.29 G In line with *PRU* 1.4.12G, the provisioning policy referred to in *PRU* 3.1.26G must be approved by the *firm's governing body* or another appropriate body to which the *firm's governing body* has delegated this responsibility.

3.1.30 G In line with *PRU* 1.4.24G, the *FSA* may request a *firm* to provide it with a copy of its current provisioning policy.

3.1.31 G Provisions may be general (against the whole of a given portfolio), specific (against particular exposures identified as bad or doubtful) or both. The *FSA* expects contingent liabilities (for example guarantees) and anticipated losses to be recognised in accordance with accepted accounting standards at the relevant time, such as those embodied in the Financial Reporting Standards issued by the Accounting Standards Board.

Risk mitigation

3.1.32 G A *firm* may choose to use various credit risk mitigation techniques including the taking of *collateral*, the use of letters of credit or guarantees, or *counterparty netting* agreements to manage and control their *counterparty* exposures. The use of such techniques does not obviate the need for thorough credit analysis and procedures. The reliance placed by a *firm* on risk mitigation should be described in the credit risk policy.

3.1.33 G A *firm* should consider the legal and financial ability of a guarantor to fulfil the guarantee if called upon to do so.

3.1.34 G A *firm* should monitor the validity and enforceability of its *collateral* arrangements.

3.1.35 G The *firm* should analyse carefully the protection afforded by risk mitigants such as *netting* agreements or credit *derivatives*, to ensure that any residual risk is identified, measured, monitored and controlled.

Record keeping

3.1.36 G Prudential records made under *PRU* 1.4.53R should include appropriate records of:

(1) credit exposures, including aggregations of credit exposures, as appropriate, by:

(a) groups of connected *counterparties*;

(b) types of *counterparty* as defined, for example, by the nature or geographical location of the *counterparty*;

(2) credit decisions, including details of the decision and the facts or circumstances upon which it was made; and

(3) information relevant to assessing current *counterparty* and risk quality.

3.1.37 G Credit records should be retained as long as they are needed for the purpose described in *PRU* 3.1.36G (subject to the minimum three year retention period). In particular, a *firm* should consider whether it is appropriate to retain information regarding *counterparty* history such as a record of credit events as well as a record indicating how credit decisions were taken.

3.2 Credit risk in insurance

Application

3.2.1 R *PRU* 3.2 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or

(2) an *incoming EEA firm*; or

(3) an *incoming Treaty firm.*

3.2.2 R All of *PRU* 3.2, except *PRU* 3.2.20R and *PRU* 3.2.23R to *PRU* 3.2.32G, applies to:

(1) an *EEA-deposit insurer*; and

(2) a *Swiss general insurer*;

but only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

3.2.3 G The scope of application of *PRU* 3.2 is not restricted to *firms* that are subject to relevant EC directives. It applies, for example, to *pure reinsurers*.

3.2.4 R (1) This section applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, this section applies separately to each type of business.

Purpose

3.2.5 G The purpose of this section is to protect *policyholders* and potential *policyholders* by setting out the requirements applicable to a *firm* in respect of credit risk. Credit risk is incurred whenever a *firm* is exposed to loss if a *counterparty* fails to perform its contractual obligations including failure to perform them in a timely manner. Credit risk may therefore have an impact upon a *firm*'s ability to meet its valid *claims* as they fall due. Credit risk can also arise from underlying causes that have an impact upon the creditworthiness of all *counterparties* of a particular description or geographical location. A detailed explanation of credit risk is given at *PRU* 3.1.4G.

3.2.6 G The requirements in this section address both current and contingent exposure to credit risk. *PRIN*, *SYSC* and *PRU* 1.4 require a *firm* to establish adequate internal systems and controls for exposure to credit risk. This section requires a *firm* to restrict its exposure to different *counterparties* and assets to prudent levels and to ensure that those exposures are adequately diversified. It also requires a *firm* to make deductions from the value of assets in respect of exposures to one asset, *counterparty* or group of closely related *counterparties* in excess of prescribed limits.

3.2.7 G This section also sets limits on the *market risk* arising from holding assets including *securities* issued or guaranteed by *counterparties*. This *market risk* is incurred whenever a *firm* is exposed to loss if an asset were to reduce in value or even become worthless. These *market risk* limits are set out in this section rather than the *market risk* sections in *PRU* because they are closely linked to the *counterparty* limits set out in this section.

Overall limitation of credit risk

3.2.8 R Taking into account relevant risks, a *firm* must restrict its *counterparty* exposures and asset exposures to prudent levels and ensure that those exposures are adequately diversified.

3.2.9 R (1) For the purposes of *PRU* 3.2, *counterparty* exposure is the amount a *firm* would lose if a *counterparty* were to fail to meet its obligations (either to the *firm* or to any other *person*) and if simultaneously *securities* issued or guaranteed by the *counterparty* were to become worthless.

(2) For the purposes of *PRU* 3.2, asset exposure is the amount a *firm* would lose if an asset or class of identical assets (whether or not held directly by the *firm*) were to become worthless.

(3) For the purposes of (1) and (2), the amount of loss is the amount, if any, by which the *firm's* capital resources (as calculated in accordance with *PRU* 2.2.14R but without making any deduction for assets in excess of *market risk* and *counterparty* limits) would decrease as a result of the *counterparty* failing to meet its obligations and the *securities* or assets becoming worthless.

(4) In determining the amount of loss in accordance with (3), the *firm* must take into account decreases in its capital resources that would result not only from its own direct exposures but also from:

(a) exposures held by any of its *subsidiary undertakings*; and

(b) synthetic exposures arising from *derivatives* or *quasi-derivatives* held or entered into by the *firm* or any of its *subsidiary undertakings*.

(5) If a *firm* elects under *PRU* 3.2.35R to make a deduction in respect of *collateral*, the *firm* must deduct from the amount of loss determined in accordance with (3) so much of the value of that *collateral* as:

(a) would be realised by the *firm* were it to exercise its rights in relation to the *collateral*; and

(b) does not exceed any of the relevant limits in *PRU* 3.2.22R(3).

3.2.10 G Exposure is defined in terms of loss (which is decrease in capital). It does not include exposures arising from assets that are not represented in capital or exposures which if crystallised in a loss would be offset by a consequent gain, reduction in liabilities or release of provisions, but only in so far as that gain, reduction or release would itself lead to an offsetting increase in *capital resources*. Examples include:

(1) exposure from the holding of assets to which the *firm* has attributed no value;

(2) exposure from the holding of assets that the *firm* has deducted from *capital*

resources; and

(3) exposure in respect of which (and to the extent that) the *firm* has established a provision.

3.2.11 G In assessing the adequacy of diversification required by *PRU* 3.2.8R, a *firm* should take into account concentrations of exposure including those arising from:

(1) different types of exposure to the same *counterparty*, such as *deposits*, loans, *securities*, *reinsurance* and *derivatives*;

(2) links between *counterparties* such that default by one might have an impact upon the creditworthiness of another; and

(3) possible changes in circumstance that would have an impact upon the creditworthiness of all *counterparties* of particular description or geographical location.

3.2.12 G A *firm* should consider how the spreading of credit risk will impact on overall *counterparty* quality.

3.2.13 G In assessing its exposure to a *counterparty* for the purpose of *PRU* 3.2.8R, a *firm* should take into account:

(1) the period for which the exposure to that *counterparty* might continue;

(2) the likelihood of default during that period by the *counterparty*; and

(3) the loss that might result in the event of default.

3.2.14 G In assessing the loss that might result from the default of a *counterparty* for the purposes of *PRU* 3.2.8R, a *firm* should take into account the circumstances that might lead to default and, in particular, how these might have an impact upon:

(1) the amount of exposure to the *counterparty*; and

(2) the effectiveness of any loss mitigation techniques employed by the *firm*.

3.2.15 G Often the same circumstances which lead to the crystallisation of contingent credit exposure, e.g. a significant *claims* event or a significant movement in interest, currency or asset values, also lead to an increase in the risk of default by the *counterparty*. In particular, if a *reinsurer* or *derivative counterparty* is being relied upon to provide protection against the consequences of an event or circumstance, a *firm* should take into account how that event or circumstance might have an impact upon the creditworthiness of the *reinsurer* or *derivative counterparty*.

3.2.16 R For the purposes of *PRU* 3.2.8R and of determining *counterparty* exposure and asset exposure in accordance with *PRU* 3.2.9R and *reinsurance* exposure in accordance with *PRU* 3.2.25R, a *firm* must only rely upon a loss mitigation technique where it has good reason to believe that, taking into account the possible circumstances of default, it is likely to be effective.

3.2.17 G Loss mitigation techniques include:

(1) the right, upon default, to preferential access to some or all of the *counterparty*'s assets, for example by exercising rights of set off, holding *collateral* or assets deposited back, or exercising rights under fixed or floating charges;

(2) rights against third parties upon default by the *counterparty*, such as guarantees, credit insurance and credit *derivatives*; and

(3) where the *counterparty* is a *reinsurer*, having back-up or flexible *reinsurance* which covers the gap in coverage left by the *reinsurer's* default, for example 'top and drop' *reinsurance*.

3.2.18 R For the purposes of *PRU* 3.2.8R and of determining *counterparty* exposure and asset exposure in accordance with *PRU* 3.2.9R and *reinsurance* exposure in accordance with *PRU* 3.2.25R, a *firm* must not rely upon preferential access to assets unless it has taken into account appropriate professional advice as to its effectiveness.

3.2.19 G In particular, a *firm* should consider whether any preferential access to a *counterparty*'s assets would be effective even if the *counterparty* were wound up by a court or other legal process or it were to be subject to any other insolvency process. A *firm* should also consider, where it is relying upon a right against a third party, whether, in the circumstances of the *counterparty*'s default, the creditworthiness of that third party might be impaired.

Large exposure limits

3.2.20 R (1) A *firm* must take reasonable steps to limit its *counterparty* exposure or asset exposure to:

(a) a single *counterparty*;

(b) each of the *counterparties* within a group of closely related *counterparties;* and

(c) an asset or class of identical assets;

to a level where, if a total default were to occur, the *firm* would not become unable to meet its liabilities as they fall due.

(2) In (1), a total default occurs where:

(a) the single *counterparty* or all of the *counterparties* within the group of closely related *counterparties* fail to meet its or their obligations and simultaneously any *securities* issued or guaranteed by it or any of them become worthless; or

(b) the asset becomes worthless or all of the assets within the identical class become worthless at the same time.

(3) (1) does not apply to:

(a) a *reinsurance* exposure; or

(b) a *counterparty* exposure or asset exposure to an *approved credit institution*.

3.2.21 G In assessing its exposure to a *counterparty* or group of closely related *counterparties*, a *firm* should consider exposures from different sources including *deposits*, loans, *securities* and *derivatives*.

Market risk and counterparty limits

3.2.22 R (1) A *firm* must calculate the amount of the deduction from total capital required by stage L in the Table in *PRU* 2.2.14R in respect of assets in excess of *market risk* and *counterparty* limits as the aggregate amount by which its *counterparty* exposures and asset exposures exceed the relevant limits set out in (3).

(2) Except where the contrary is expressly stated in *PRU*, whenever:

(a) a *rule* in *PRU* refers to assets of a *firm*, or of any part of a *firm,* or of any fund or part of a fund within a *firm*, which are assets of a kind referred to in any of the limits in (3); and

(b) the *firm's counterparty* exposure (or aggregate exposure arising from the *counterparty* exposures to each member of a group of closely related *persons)* or asset exposure in respect of those assets exceeds any of the limits in (3);

the *firm* must deduct from the measure of the value of those assets (as determined in accordance with *PRU* 1.3) the amount by which that exposure exceeds the relevant limit in (3), or that portion of the deduction that relates to the part of the *firm* or fund or part of a fund in question.

(3) The limits referred to in (1) and (2) are the following, expressed as a percentage of the *firm's* business amount:

(a) for a *counterparty* exposure to an individual, unincorporated body of individuals or the aggregate exposure arising from the *counterparty* exposures to each member of a group of closely related individuals or unincorporated bodies of individuals:

(i) ¼% for that part of the exposure that arises from *unsecured debt*;

(ii) 1% for the whole exposure (after deduction of the excess arising from the limit in (a)(i));

(b) for a *counterparty* exposure to an *approved counterparty* or the aggregate exposure arising from the *counterparty* exposures to each member of a group of closely related *approved counterparties:*

(i) 5% for that part of the exposure not arising from short term *deposits* made with an *approved credit institution*; this limit is increased to 10% if the total of such exposures which exceed 5% is less than 40%;

(ii) 20% or £2 million if larger for the whole exposure (after deduction of the excess arising from the limit in (b)(i));

(c) for a *counterparty* exposure to a *person*, or the aggregate exposure arising from the *counterparty* exposures to each member of a group of closely related *persons*, who do not fall into the categories of *counterparty* to whom (a) and (b) apply:

(i) 1% for that part of the exposure arising from *unsecured debt*; this limit is increased to 2.5% in the case of an exposure to a *regulated institution*;

(ii) 1% for that part of the exposure arising from *shares*, bonds, *debt securities* and other *money market instruments* and capital market instruments from the same *counterparty* that are not dealt in on a *regulated market*, or any beneficial interest in a *collective investment scheme* which is not a *UCITS scheme*, a *non-UCITS retail scheme* or a *recognised scheme;* the limit for that part of the exposure arising from *debt securities* (other than hybrid securities) issued by the same *regulated institution* is increased to 5%;

(iii) 5% for the whole exposure (after deduction of the excesses arising from the limits in (c)(i) and (ii));

(d) 5% for the aggregate of all *counterparty* exposures that fall within (c)(i) whether or not they arise from *persons* who are closely related, but excluding amounts that are in excess of the limit in (c)(i);

(e) 10% for the aggregate of all *counterparty* exposures that fall within (c)(ii) whether or not they arise from *persons* who are closely related, but excluding amounts that are in excess of the limit in (c)(ii);

(f) 5% for the aggregate of all *counterparty* exposures arising from unsecured loans, other than those falling within (3)(b);

(g) 3% for the asset exposure arising from all cash in hand;

(h) 10% for the asset exposure (including an exposure arising from a reversionary interest) arising from any one piece of land or building, or a number of pieces of land or buildings close enough to each other to be considered effectively as one investment.

(4) In (3) a *firm's* business amount means the sum of:

(a) the *firm's* total gross *technical provisions*;

(b) the amount of its other liabilities (except those included in the calculation of capital resources in accordance with *PRU* 2.2.14R); and

(c) such amount as the *firm* may select not exceeding the amount of the *firm's* total capital after deductions as calculated at stage M of the calculation in *PRU* 2.2.14R or, if higher:

(i) in the case of a *firm* carrying on *general insurance business*, the amount of its *general insurance capital requirement*; and

(ii) in the case of a *firm* carrying on *long-term insurance business*, the amount of its *long-term insurance capital requirement* and the amount of its *resilience capital requirement*.

(5) For the purpose of (4)(a), a *firm's* total gross *technical provisions* exclude *technical provisions* in respect of *index-linked liabilities* or *property-linked liabilities*, except that where the *linked long-term contract of insurance* in question includes a guarantee of investment performance or some other guaranteed benefit, the total gross *technical provisions* include the *technical provisions* in respect of that guaranteed element.

(6) In (3)(c)(ii) hybrid security means a *debt security*, other than an *approved security*, the terms of which provide, or have the effect that, the holder does not, or would not, have an unconditional entitlement to payment of interest and repayment of capital in full within 75 years of the date on which the *security* is being valued.

Large exposure calculation for reinsurance exposures

3.2.23 R A *firm* must notify the *FSA* in accordance with *SUP* 15.7 as soon as it first becomes aware that:

(1) a *reinsurance* exposure to a *reinsurer* or group of closely related *reinsurers* is reasonably likely to exceed 100% of its *capital resources*, excluding *capital resources* held to cover *property-linked liabilities*; or

(2) if (1) does not apply, that it has exceeded this limit.

3.2.24 R Upon notification under *PRU* 3.2.23R, a *firm* must:

(1) demonstrate that prudent provision has been made for the *reinsurance* exposure in excess of the 100% limit, or explain why in the opinion of the *firm* no provision is required; and

(2) explain how the *reinsurance* exposure is being safely managed.

3.2.25 R (1) For the purposes of *PRU* 3.2, a *reinsurance* exposure is the amount of loss which a *firm* would suffer if a *reinsurer* or group of closely related *reinsurers* were to fail to meet its or their obligations under contracts of *reinsurance* reinsuring any of the *firm's contracts of insurance*.

(2) For the purposes of (1), the amount of loss is the amount, if any, by which the *firm's* capital resources (as calculated in accordance with *PRU* 2.2.14R but without making any deduction for assets in excess of *market risk* and *counterparty* limits) would decrease as a result of the *reinsurer* or group of closely related *reinsurers* failing to meet its or their obligations under the contracts of *reinsurance*.

(3) If a *firm* elects under *PRU* 3.2.35R to make a deduction in respect of *collateral*, the *firm* must deduct from the amount of loss determined in accordance with (2) so much of the value of that *collateral* as:

(a) would be realised by the *firm* were it to exercise its rights in relation to the *collateral*; and

(b) does not exceed any of the relevant limits in *PRU* 3.2.22R(3).

3.2.26 R A *firm* must, in determining its *reinsurance* exposures for the purposes of *PRU* 3.2, aggregate any *reinsurance* exposure where the identity of the *reinsurer* is not known by the *firm* with the highest *reinsurance* exposure where it does know the identity of the *reinsurer*.

3.2.27 G *PRU* 3.2.8R provides that, taking into account relevant risks, a *firm* must restrict to prudent levels, and adequately diversify, its exposure to *counterparties*.

3.2.28 E (1) In each *financial year*, a *firm* should restrict the *gross earned premiums* which it pays to a *reinsurer* or group of closely related *reinsurers* to the higher of:

(a) 20% of the *firm's* projected *gross earned premiums* for that *financial year*; or

(b) £4 million.

(2) Compliance with this provision may be relied upon as tending to establish compliance with *PRU* 3.2.8R.

3.2.29 R A *firm* must notify the *FSA* immediately in accordance with *SUP* 15.7 if it has exceeded, or anticipates exceeding, the limit expressed in *PRU* 3.2.28E.

3.2.30 R Upon notification under *PRU* 3.2.29R, a *firm* must explain to the *FSA* how, despite the excess *reinsurance* concentration, the credit risk is being safely managed.

3.2.31 G For the purposes of *PRU* 3.2.24R and *PRU* 3.2.30R, a *firm's* explanation of how a *reinsurance* exposure is being safely managed should also describe the *reinsurance* market in which the exposure has occurred, and the nature of the *reinsurance* contract. If appropriate, the *firm* should also provide a detailed plan and timetable explaining how the excess exposure will be reduced to an acceptable level. The explanation should be approved by a person at the *firm* of appropriate seniority.

3.2.32 G Where a *firm* can demonstrate that the arrangement does not give rise to unacceptable levels of credit risk it is unlikely that further action will be required.

Exposures excluded from limits

3.2.33 R In *PRU* 3.2.20R and *PRU* 3.2.22R, references to a *counterparty* exposure or an asset exposure do not include such an exposure arising from:

(1) a debt which is fully secured on assets whose value at least equals the amount of the debt;

(2) *premium* debts;

(3) advances secured on, and not exceeding the *surrender value* of, *long-term insurance contracts* of the *firm*;

(4) rights of salvage or subrogation;

(5) *deferred acquisition costs*;

(6) assets held to cover *index-linked liabilities* or *property-linked liabilities*, except that where the *linked long-term contract of insurance* in question includes a guarantee of investment performance or some other guaranteed benefit, *PRU* 3.2.20R *and PRU* 3.2.22R will nevertheless apply to assets held to cover that guaranteed element;

(7) *moneys* due from, or guaranteed by, a *Zone A country*;

(8) an *approved security*;

(9) a holding in a *UCITS scheme*.

3.2.34 R In *PRU* 3.2.22R references to a *counterparty* exposure or an asset exposure do not include such an exposure arising from *reinsurance* debts and the *reinsurer's* share of *technical provisions*.

3.2.35 R If:

(1) a *firm* has a *counterparty* exposure*,* an asset exposure or a *reinsurance* exposure in respect of which it has rights over *collateral;* and

(2) the assets constituting that *collateral* would, if owned by the *firm*, be *admissible assets*;

the *firm* may, in determining the amount of that exposure, deduct the value of that *collateral* in accordance with *PRU* 3.2.9R(5) or, in the case of a *reinsurance* exposure, *PRU* 3.2.25R(3).

3.2.36 R If a *firm* has a *counterparty* exposure, asset exposure or *reinsurance exposure* the whole or any part of which is:

(1) guaranteed by a *credit institution* or an *investment firm* subject in either case to the *Capital Adequacy Directive* or supervision by a third country (non-EEA) supervisory authority with a *Capital Adequacy Directive*-equivalent regime; or

(2) adequately mitigated by a credit *derivative*;

the *firm* may, for the purposes of *PRU* 3.2.20R, *PRU* 3.2.22R and *PRU* 3.2.23R, treat that exposure, or that part of the exposure which is so guaranteed or mitigated, as an exposure to the guarantor or *derivative counterparty*, rather than to the original *counterparty*, asset or *reinsurer*.

3.2.37 R For the purposes of *PRU* 3.2.36R, references to an exposure being guaranteed include an exposure secured by a letter of credit, but to fall within *PRU* 3.2.36R the guarantee or letter of credit must be direct, explicit, unconditional and irrevocable.

3.2.38 G The portion of exposure which is guaranteed or mitigated by a credit *derivative* is itself, as an exposure to the guarantor or *derivative counterparty*, subject to the limits in *PRU* 3.2.20R and *PRU* 3.2.22R.

3.2.39 R For the purposes of *PRU* 3.2.20R and *PRU* 3.2.22R, a *UCITS scheme,* a *non-UCITS retail scheme,* a *recognised scheme* or any other *collective investment scheme* that invests only in *admissible assets* (including any *derivatives* or *quasi-derivatives* held by the scheme) is to be treated as closely related to the *issuer* of the *units* in that scheme.

Meaning of closely related

3.2.40 R For the purposes of *PRU* 3.2, a group of *persons* is closely related if it consists solely of two or more natural or legal persons who, unless it is shown otherwise, constitute a single risk because as between any two of them one or other of the following relationships apply:

(1) one of them, directly or indirectly, has control, as defined in *PRU* 3.2.41R, over the other or they are both controlled by the same third party; or

(2) there is no relationship of control as defined in *PRU* 3.2.41R but they are to be regarded as constituting a single risk because they are so interconnected that, if one of them were to experience financial problems, the other would be likely to encounter repayment difficulties.

3.2.41 R For the purposes of *PRU* 3.2.40R, control means the relationship between a *parent undertaking* and a *subsidiary undertaking* , as defined in Article 1 of the Consolidated Accounts Directive (83/349/EEC), or a similar relationship between any natural or legal person and an *undertaking*.

3.3 Asset-related Capital Requirement

Application

3.3.1 R *PRU* 3.3 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or

(2) a *Swiss general insurer*; or

(3) an *EEA-deposit insurer*; or

(4) an *incoming EEA firm*; or

(5) an *incoming Treaty firm*.

3.3.2 G The scope of application of *PRU* 3.3 is not restricted to *firms* that are subject to the relevant EC directives. It applies, for example, to *pure reinsurers*.

3.3.3 R *PRU* 3.3 applies to a *firm* only in relation to its *general insurance business*.

3.3.4 G The adequacy of a *firm's* financial resources needs to be assessed in relation to all the activities of the *firm* and the risks to which they give rise.

3.3.5 G The requirements in *PRU* 3.3 apply to a *firm* on a solo basis.

Purpose

3.3.6 G *PRU* 2.1.9R requires that a *firm* must maintain at all times *capital resources* equal to or in excess of its *capital resources requirement*. *PRU* 2.1.14R provides that for a *firm* carrying on *general insurance business* the *firm's capital resources requirement* is the *Minimum Capital Requirement*.

3.3.7 G The *FSA* will use the *Enhanced Capital Requirement* as the benchmark for individual capital *guidance* for a *firm* carrying on *general insurance business*, other than a *non-directive insurer*. The *Enhanced Capital Requirement* is the sum of the *asset-related capital requirement* and the *insurance-related capital requirement* less the *firm's equalisation provisions*. This section sets out *rules* and *guidance* relating to the *asset-related capital requirement*. *Rules* and *guidance* relating to the *insurance-related capital requirement* are set out in *PRU* 7.2.

3.3.8 G The *asset-related capital requirement* is a measure of the capital that a *firm* should hold against the risk of loss if another party fails to perform its financial obligations to the *firm* or from adverse movements in the value of assets.

3.3.9 G The *asset-related capital requirement* is calculated by applying capital charge factors, expressed as a percentage, to different categories of a *firm's* assets. A *firm* should refer to *PRU* 1.3 which sets out how a *firm* must recognise and value assets and liabilities.

Calculation of asset-related capital requirement

3.3.10 R A *firm* must calculate its *asset-related capital requirement* in accordance with *PRU* 3.3.11R.

3.3.11 R (1) The value of each of the *firm's* assets of a kind listed in the table in *PRU* 3.3.16R must be multiplied by the corresponding capital charge factor.

(2) If any amount which is to be multiplied by a capital charge factor is a negative amount, that amount shall be treated as zero.

(3) No account shall be taken of:

(a) the value of any asset which is not an *admissible asset*;

(b) the amount (if any) by which the value of any assets exceeds the limits on exposures to a type of asset or *counterparty* as set out in *PRU* 3.2.22R.

(4) Where a *firm* has entered into a *derivative,* then for the purposes of applying the appropriate capital charge factor as set out in *PRU* 3.3.16R, it must treat the value of the *derivative* and the value of the asset associated with the *derivative* as a single asset of a type and value which most closely reflects the economic risk to the *firm* of the combined rights and obligations associated with the *derivative* and the asset associated with the *derivative*.

(5) The amounts resulting from multiplying each of the asset items referred to in (1) by the corresponding capital charge factor must be aggregated.

(6) The *asset-related capital requirement* is the amount resulting from the aggregation in (5).

3.3.12 G *Options*: some *derivatives* may allow a *firm* an *option* whether to buy or sell a particular asset. If an *option* has a positive market value (that is, in-the-money) it is likely that the *firm* will exercise the *option* in the future and the current value of the *derivative* and associated asset will generally acquire new characteristics and volatility (a 'synthetic asset'). For instance, an *option* to acquire *shares* at a price below their current market value is likely to be exercised and the appropriate *asset-related capital requirement* calculation would be to combine the cash cost of acquiring the number of *shares* covered by the *option* with the value of the *derivative* and apply a factor of 16% to that combined value. If an *option* has no market value (that is, out-of-the-money) then it is unlikely that a *firm* would exercise the *option* in which case the appropriate *asset-related capital requirement* charge would be zero in respect of the *derivative*, and the corresponding capital charge contained in Table *PRU* 3.3.16R in relation to the asset associated with the *derivative*.

3.3.13 G *Futures* and *swaps*: *futures* or *swaps* may not allow the *firm* such an option in which case the appropriate asset-related capital charge factor to apply is the one corresponding to the asset that would be held on fulfilment of the contract and the value to which this should be applied would be the value of the asset held after the contract is fulfilled.

3.3.14 R (1) The asset-related capital charge factor for money market funds set out in the Table *PRU* 3.3.16R must be applied to exposures to funds that meet the definition in (2).

(2) In *PRU* 3.3 an investment in a money market fund means a participation in a *collective investment scheme* which satisfies the following conditions:

(a) the primary investment objective of the *collective investment scheme* is:

(i) to maintain the net asset value of the *collective investment scheme* constant at par (net of earnings); or

(ii) to maintain the net asset value of the *collective investment scheme* at the value of investors' initial capital plus earnings;

(b) in order to pursue its primary investment objective the *collective investment scheme* invests exclusively in cash or in short term instruments with characteristics similar to cash or both; and

(c) the *collective investment scheme* undertakes to abide by the following conditions:

(i) not to allow the assets held in the *collective investment scheme* to exceed a weighted average maturity of 60 days;

(ii) not to invest in equity or *securities* with characteristics similar to equity; and

(iii) on a basis of marking-to-market at least weekly, not to permit the value of each *collective investment scheme* unit at any point in time to move by more than 50 basis points (0.5% of total *collective investment scheme* value).

3.3.15 R In *PRU* 3.3.16R an insurance dependant means a *regulated related undertaking* which is an *insurance undertaking* or an *insurance holding company*.

3.3.16R Table: Asset-related capital charge factors

Asset item				ECR asset-related capital charge factor
Investments	Land and Buildings			7.5%
	Investments in *group undertakings* and participating interests	*Shares* in *group undertakings* excluding participating interests	Insurance dependants	0%
			Other	7.5%
		Debt securities issued by, and loans to, *group undertakings*		3.5%
		Participating interests		7.5%
		Debt securities issued by, and loans to, *undertakings* in which the *insurer* has a participating interest		3.5%
	Other financial *investments*	*Shares* and other variable-yield *securities* and units in unit trusts		16.0%
		Money market funds		0%
		Debt securities and other fixed income securities	*Approved securities*	3.5%
			Other	3.5%
		Participation in investment pools		16.0%
		Loans secured by mortgages		2.5%
		Other loans		2.5%
		Deposits with *approved credit institutions* and *approved financial institutions*		0%
		Other		7.5%
	Deposits with ceding *undertakings*			3.5%
Reinsurers' share of *technical provisions*	Provision for *unearned premium*			2.5%
	Claims outstanding			2.5%
	Other			2.5%
Debtors	Debtors arising out of direct insurance operations	*Policyholders*		4.5%
		Intermediaries		3.5%
	Debtors arising out of *reinsurance* operations			2.5%
	Other debtors			1.5%
	Called up *share* capital not paid			0%
Other Assets	Tangible assets			7.5%
	Cash at bank and in hand			0%
	Other			0%

Prepayments and accrued income	Accrued interest and rent	0%
	Deferred acquisition costs	0%
	Other prepayments and accrued income	0%

Annex F

PRU 4

In this Annex, all the text is new and is not underlined.

4.1 Market risk management systems and controls

Application

4.1.1 G *PRU* 4.1 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

4.1.2 G *PRU* 4.1 applies to:

(1) an *EEA-deposit insurer*; and
(2) a *Swiss general insurer*;

only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

4.1.3 G *Firms* should also see *PRU* 1.2 (*PRU* 1.2.40G to *PRU* 1.2.55G*)* and *PRU* 4.2.

Purpose

4.1.4 G (1) The purpose of this section is to amplify *PRU* 1.4 insofar as it relates to *market risk*.

(2) *Market risk* includes equity, interest rate, FX, commodity risk and interest rate risk on *long-term insurance contracts*. The price of *financial instruments* may also be influenced by other risks such as *spread risk*, *basis risk*, correlation, *specific risk* and *volatility risk*.

(3) This section does not deal with the risk management of *market risk* in a *group* context. A *firm* that is a member of a *group* should also read *PRU* 8.1 (Group risk systems and controls) which outlines the *FSA's* requirements for the risk management of *market risk* within a *group*.

(4) Appropriate systems and controls for the management of *market risk* will vary with the scale, nature and complexity of the *firm's* activities. Therefore the material in this section is *guidance*. A *firm* should assess the appropriateness of any particular item of *guidance* in the light of the scale, nature and complexity of its activities as well as its obligations as set out in *Principle* 3 to organise and control its affairs responsibly and effectively.

Requirements

4.1.5 G High level requirements for prudential systems and controls, including those for *market risk*, are set out in *PRU* 1.4. In particular:

(1) *PRU* 1.4.19R(2) requires a *firm* to document its policy for *market risk*, including its risk appetite and how it identifies, measures, monitors and controls that risk;

(2) *PRU* 1.4.19R(4) requires a *firm* to document its asset and liability recognition policy. Documentation should describe the systems and controls that it intends to use to comply with the policy;

(3) *PRU* 1.4.19R requires a *firm* to establish and maintain risk management systems to identify, measure, monitor and control *market risk* (in accordance with its *market risk* policy), and to take reasonable steps to establish systems adequate for that purpose;

(4) In line with *PRU* 1.4.11G, the ultimate responsibility for the management of *market risk* should rest with a *firm*'s *governing body*. Where delegation of authority occurs the *governing body* and relevant *senior managers* should approve and adequately review systems and controls to check that delegated duties are being performed correctly.

Market risk policy

4.1.6 G *PRU* 1.4 requires a *firm* to establish, maintain and document a business plan and risk policies. They should provide a clear indication of the amount and nature of *market risk* that the *firm* wishes to incur. In particular, they should cover for *market risk*:

(1) how, with particular reference to its activities, the *firm* defines and measures *market risk*;

(2) the *firm's* business aims in incurring *market risk* including:

(a) identifying the types and sources of *market risk* to which the *firm* wishes to be exposed (and the limits on that exposure) and those to which the *firm* wishes not to be exposed (and how that is to be achieved, for example how exposure is to be avoided or mitigated); and

(b) specifying the level of diversification required by the *firm* and the *firm's* tolerance for risk concentrations (and the limits on those exposures and concentrations).

4.1.7 G The *market risk* policy of a *firm* should be endorsed by the *firm's governing body* and implemented by its senior management, who should take adequate steps to disseminate the policy and train the relevant staff such that they can effectively implement the policy.

4.1.8 G The *market risk* policy of a *firm* should enforce the risk management and control principles and include detailed information on:

(1) the *financial instruments*, commodities, assets and liabilities (and mismatches between assets and liabilities) that a *firm* is exposed to and the limits on those exposures;

(2) the *firm's* investment strategy as applicable between each insurance fund;

(3) activities that are intended to hedge or mitigate *market risk* including mismatches caused by for example differences in the assets and liabilities and maturity mismatches; and

(4) the methods and assumptions used for measuring linear, non-linear and geared *market risk* including the rationale for selection, ongoing validation and testing. Methods might include stress testing and scenario analysis, option Greeks, asset/liability analysis, correlation analysis and Value-at-Risk (VaR). Exposure to non-linear or geared *market risk* is typically through the use of *derivatives*.

Risk identification

4.1.9 G A *firm* should have in place appropriate risk reporting systems that enable it to identify the types and amount of *market risk* to which it is, and potentially could be, exposed. The information that systems should capture may include but is not limited to:

(1) position information which may include a description of individual *financial instruments* and their cash flows; and

(2) market data which may consist of raw time series of market rates, index levels and prices and derived time series of benchmark yield curves, spreads, implied volatilities, historical volatilities and correlations.

Risk measurement

4.1.10 G Having identified the *market risk* that the *firm* is exposed to on at least a daily basis, a *firm* should be able to measure and manage that *market risk* on a consistent basis. This may be achieved by:

(1) regularly stress testing all or parts of the *firm's* portfolio to estimate potential economic losses in a range of market conditions including abnormal markets. Corporate level stress test results should be discussed regularly by risk monitors, senior management and risk takers, and should guide the *firm*'s *market risk* appetite (for example, stress tests may lead to discussions on how best to unwind or hedge a position), and influence the internal capital allocation process;

(2) measuring the *firm's* exposure to particular categories of *market risk* (for example, equity, interest rate, foreign exchange and commodities) as well as across its entire portfolio of *market risks*;

(3) analysing the impact that new transactions or businesses may have on its *market risk* position on an on-going basis; and

(4) regularly backtesting realised results against internal model generated *market risk* measures in order to evaluate and assess its accuracy. For example, a *firm* should keep a database of daily risk measures such as VaR and option Greeks, and use these to back test predicted profit and loss against actual profit and loss for all trading desks and business units, and monitor the number of exceptions from agreed confidence bands.

Valuation

4.1.11 G A *firm* should take reasonable steps to establish systems and control procedures such that the *firm* complies with the requirements of *PRU* 1.3 (Valuation).

4.1.12 G The systems and controls referred to in *PRU* 4.1.11G should include the following:

(1) the department responsible for the validation of the value of assets and liabilities should be independent of the business trading area, and should be adequately resourced by suitably qualified staff. The department should report to a suitably qualified individual, independent from the business trading area, who has sufficient authority to enforce the systems and controls policies and any alterations to valuation treatments where necessary;

(2) all valuations should be checked and validated at appropriate intervals. Where a *firm* has chosen not to validate all valuations on a daily basis this should be agreed by senior management;

(3) a *firm* should establish a review procedure to check that the valuation procedures are followed and are producing valuations in compliance with the requirements in this section. The review should be undertaken by suitably qualified staff independent of the business trading area, on a regular and ad hoc basis. In particular, this review procedure should include:

(a) the quality and appropriateness of the price sources used;

(b) valuation reserves held; and

(c) the valuation methodology employed for each product and consistent adherence to that methodology;

(4) where a valuation is disputed and the dispute cannot be resolved in a timely manner it should be reported to senior management. It should continue to be reported to senior management until agreement is reached;

(5) where a *firm* is marking positions to market it should take reasonable steps to establish a price source that is reliable and appropriate to enable compliance with the provisions in this section on an ongoing basis;

(6) a *firm* should document its policies and procedures relating to the entire valuation process. In particular, the following should be documented:

(a) the valuation methodologies employed for all product categories;

(b) details of the price sources used for each product;

(c) the procedures to be followed where a valuation is disputed;

(d) the valuation adjustment and reserving policies;

(e) the level at which a difference between a valuation assigned to an asset or liability and the valuation used for validation purposes will be reported on an exceptions basis and investigated;

(f) where a *firm* is using its own internal estimate to produce a valuation, it should document in detail the process followed in order to produce the valuation; and

(g) the review procedures established by a *firm* in relation to the requirements of this section should be adequately documented and include the rationale for the policy;

(7) a *firm* should maintain records which demonstrate:

(a) senior management's approval of the policies and procedures established; and

(b) management sign-off of the reviews undertaken in accordance with *PRU* 4.1.11G.

Risk monitoring

4.1.13 G Risk monitoring is the operational process by which a *firm* monitors compliance with defined policies and procedures of the *market risk* policy. The *firm's* risk monitoring system should be independent of the *employees* who are responsible for exposing the *firm* to *market risk*.

4.1.14 G The *market risk* policy of a *firm* may require the production of *market risk* reports at various levels within the *firm*. These reports should provide sufficiently accurate *market risk* data to relevant functions within the *firm*, and should be timely enough to allow any appropriate remedial action to be proposed and taken, for example:

(1) at *firm* wide level, a *market risk* report may include information:

(a) summarising and commenting on the total *market risk* that a *firm* is exposed to and *market risk* concentrations by business unit, asset class and country;

(b) on VaR reports against risk limits by business unit, asset class and country;

(c) commenting on significant risk concentrations and market developments; and

(d) on *market risk* in particular legal entities and geographical regions;

(2) at the business unit level, a *market risk* report may include information summarising *market risk* by currency, trading desk, maturity or duration band, or by instrument type;

(3) at the trading desk level, a *market risk* report may include detailed information summarising *market risk* by individual trader, instrument, position, currency, or maturity or duration band; and

(4) all risk data should be readily reconcilable back to the prime books of entry with a fully documented audit trail.

4.1.15 G Risk monitoring may also include information on:

(1) the procedures for taking appropriate action in response to the information within the *market risk* reports;

(2) ensuring that there are controls and procedures for identifying and reporting trades and positions booked at off-market rates;

(3) the process for new product approvals;

(4) the process for dealing with situations (authorised and unauthorised) where particular *market risk* exposures exceed predetermined risk limits and criteria; and

(5) the periodic review of the risk monitoring process in order to check its suitability for both current market conditions and the *firm's* overall risk appetite.

4.1.16 G Risk monitoring should be subject to periodic independent review by suitably qualified staff.

Risk control

4.1.17 G Risk control is the independent monitoring, assessment and supervision of business units within the defined policies and procedures of the *market risk* policy. This may be achieved by:

(1) setting an appropriate *market risk* limit structure to control the *firm's* exposure to *market risk*; for example, by setting out a detailed *market risk* limit structure at the corporate level, the business unit level and the trading desk level which addresses all the key *market risk* factors and is commensurate with the volume and complexity of activity that the *firm* undertakes;

(2) setting limits on risks such as price or rate risk, as well as those factors arising from *options* such as delta, gamma, vega, rho and theta;

(3) setting limits on net and gross positions, *market risk* concentrations, the maximum allowable loss (also called "stop-loss"), VaR, potential risks arising from stress testing and scenario analysis, gap analysis, correlation, liquidity and volatility; and

(4) considering whether it is appropriate to set intermediate (early warning) thresholds that alert management when limits are being approached, triggering review and action where appropriate.

Record keeping

4.1.18 G High level requirements for record keeping are set out in *PRU* 1.4.

4.1.19 G In relation to *market risk*, a *firm* should retain appropriate prudential records of:

(1) off and on market trades in *financial instruments*;

(2) the nature and amounts of off and on balance sheet exposures, including aggregations of exposures;

(3) trades in *financial instruments* and other assets and liabilities; and

(4) methods and assumptions used in stress testing and scenario analysis and in VaR models.

4.1.20 G A *firm* should keep a data history to enable it to perform back testing of methods and assumptions used for stress testing and scenario analysis and for VaR models.

4.2 Market risk in insurance

Application

4.2.1 R *PRU* 4.2 applies to an *insurer,* unless it is:

(1) a *non-directive friendly society*; or

(2) an *incoming EEA firm*; or

(3) an *incoming Treaty firm*.

4.2.2 G The scope of application of *PRU* 4.2 is not restricted to *firms* that are subject to the relevant EC directives. It applies, for example, to *pure reinsurers* (with the exception of *PRU* 4.2.53R).

4.2.3 R (1) *PRU* 4.2 applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, *PRU* 4.2 applies separately to each type of business.

Purpose

4.2.4 G This section sets out *rules* and *guidance* relating to *market risk*. Under *PRU* 7.2.20R, a *firm* is required to hold *admissible assets* of a value sufficient to cover *technical provisions*. In addition, *PRU* 7.2.34R sets the requirement that a *firm* must hold assets of appropriate amount, currency, term, safety and yield, to ensure that the cash inflows from those assets will be sufficient to meet expected cash outflows from its insurance liabilities as they are due.

4.2.5 G *Market risk* is the risk that as a result of market movements a *firm* may be exposed to fluctuations in the value of its assets, the amount of its liabilities, or the income from its assets. Sources of general *market risk* include movements in interest rates, equities, exchange rates and real estate prices. It is important to note that none of these sources of risk is independent of the others. For example, fluctuations in interest rates often have an impact upon equity and currency values and vice versa. Giving due consideration to these correlations is an important aspect of the prudent management of *market risk*.

4.2.6 G A *firm* may also be exposed to specific *market risk*, which is the risk that the *market value* of a specific asset, or income from that asset, may fluctuate for reasons that are not dependent on general market movements. The limits in *PRU* 3.2.22R cover *market risk* as well as *counterparty* risk.

4.2.7 G *PRU* 4.2 addresses the impact of *market risk* on *insurance business* in the ways set out below:

(1) Any *firm* that carries on *long-term insurance business* must comply with the *resilience capital requirement*. This requires the *firm* to hold capital to cover *market risk*. The *resilience capital requirement* is dealt with in *PRU* 4.2.9G to *PRU* 4.2.26R.

(2) For a *firm* that carries on *long-term insurance business*, the assets that it must hold must be of a value sufficient to cover the *firm's mathematical reserve* requirements. *PRU* 7.3 contains *rules* and *guidance* as to the methods and assumptions to be used in calculating these *mathematical reserves*. One of these assumptions is the assumed rate of interest to be used in calculating the present value of future payments by or to a *firm*. *PRU* 4.2.28R to *PRU* 4.2.48G set out the methodology to be used in relation to *long-term insurance liabilities*.

(3) *Firms* carrying on either *long-term insurance business* or *general insurance business* are also subject to currency risk. That is, the risk that fluctuations in exchange rates may impact adversely on a *firm*. *PRU* 4.2.49G to *PRU* 4.2.56G set out the requirements a *firm* must meet so as to cover this risk.

(4) For a *firm* carrying on *general insurance business*, the *Enhanced Capital Requirement* already captures some elements of *market risk*. In addition, the requirements as to the assumed rate of interest used in calculating the present value of *general insurance liabilities* are contained in the *insurance accounts rules*, and these requirements are outlined in *PRU* 4.2.27G.

(5) *Firms* carrying on *long-term insurance business* that have *property-linked liabilities* or *index-linked liabilities* must cover these liabilities by holding appropriate assets. *PRU* 4.2.57R and *PRU* 4.2.58R set out these cover requirements.

Definitions

4.2.8 R For the purposes of *PRU* 4.2:

(1) real estate means an interest in land, buildings or other immovable property;

(2) a significant territory is any country or territory in which more than 2.5% of a *firm's long-term insurance assets* (by *market value*), excluding assets held to cover *index-linked liabilities* or *property-linked liabilities* (see *PRU* 4.2.57R and *PRU* 4.2.58R), are invested; and

(3) the long term gilt yield means the annualised equivalent of the fifteen year gilt yield for the *United Kingdom* Government fixed-interest *securities* index jointly compiled by the Financial Times, the Institute of Actuaries and the Faculty of Actuaries.

Resilience capital requirement (applicable to long-term insurance business only)

4.2.9 G The *resilience capital requirement* forms part of the calculation of the *capital resources requirement* for all *firms* carrying on *long-term insurance business*. *PRU* 2.1.15R to *PRU* 2.1.20R set out the different elements of this calculation. These include the *Minimum Capital Requirement* and the *Enhanced Capital Requirement*. The *resilience capital requirement* forms part of both of these requirements (see *PRU* 2.1.22R(2) and *PRU* 2.1.34R(2)).

4.2.10 R (1) A *firm* that carries on *long-term insurance business* must calculate a *resilience capital requirement* in accordance with (2) to (5).

(2) From amongst its *long-term insurance assets*, the *firm* must identify assets which after applying the scenarios in (3) have a value that is equal to the *firm's long-term insurance liabilities* under those scenarios.

(3) For the purpose of (2), the scenarios are:

(a) for those assets invested in the *United Kingdom*, the *market risk* scenario set out in *PRU* 4.2.16R;

(b) subject to (c) and to *PRU* 4.2.26R, for those assets invested outside of the *United Kingdom*, the *market risk* scenario set out in *PRU* 4.2.23R; and

(c) where the assets in (b) are:

(i) held to cover *index-linked liabilities* or *property-linked liabilities;* or
(ii) not invested in a significant territory outside the *United Kingdom*;
the *market risk* scenario set out in *PRU* 4.2.16R.

(4) The *resilience capital requirement* is the result of deducting B from A, where:

(a) A is the value of the assets which will produce the result described in (2); and

(b) B is the *firm's long-term insurance liabilities.*

(5) In calculating the value of the *firm's long-term insurance liabilities* under any scenario, a *firm* is not required to adjust the provision made under *PRU* 1.3.5R in respect of a *defined benefits pension scheme*.

4.2.11 G The purpose of the *resilience capital requirement* is to cover adverse deviation from:

(1) the value of *long-term insurance liabilities*;

(2) the value of assets held to cover *long-term insurance liabilities*; and

(3) the value of assets held to cover the *resilience capital requirement;*

arising from the effects of *market risk* for equities, real estate and fixed interest *securities*. Other risks are not explicitly addressed by the *resilience capital requirement*.

4.2.12 G The amount of the *resilience capital requirement* calculated by the *firm* will depend on the *firm's* choice of assets held to cover the *resilience capital requirement*. The *resilience capital requirement* is held to cover not only the shortfall between the change in the value of *long-term insurance liabilities* and the change in the value of the assets identified to cover those liabilities, but also the change in the value of the assets identified to cover the *resilience capital requirement* itself.

4.2.13 G As part of the assessment of the financial resources a *firm* needs to hold to comply with *PRU* 1.2.22R, *PRU* 1.2.35R requires a *firm* to carry out stress tests and scenario analyses appropriate to the major sources of risk to its ability to meet its liabilities as they fall due identified in accordance with *PRU* 1.2.31R. In considering the stress tests and scenario analyses relevant to the major sources of risk in the category of *market risk*, a *firm* should consider the extent to which the *market risk* scenarios set out in *PRU* 4.2.16R to *PRU* 4.2.26R are appropriate to the nature of its asset portfolio. A *firm* may judge that given the nature of its portfolio, a more severe stress should be adopted. The *firm* may also wish to bring in other asset classes, such as index-linked bonds, which should be stressed on appropriate bases, and to consider the impact of currency mismatching and any *derivative* positions held.

4.2.14 G The *resilience capital requirement* requires *firms* to assume different adverse *market risk* scenarios for equities, real estate and fixed interest *securities* (see *PRU* 4.2.16R and *PRU* 4.2.23R) to those required by *PRU* 7.4.68R (UK and certain other assets) and *PRU* 7.4.73R (non-UK assets) in relation to the calculation of the *risk capital margin* for a *with-profits fund* by a *realistic basis life firm* calculating its *with-profits insurance capital component*.

4.2.15 G Where the *resilience capital requirement* is affected by the presence of *derivative* or *quasi-derivative* instruments, the *firm* will need to consider whether the protection afforded is of suitable length or security. The *firm* should include the exposure to *counterparties* in the credit considerations of *PRU* 4.2.41R both before and after calculating the *resilience capital requirement.* If the *derivative* protection is very short term the *firm* should consider whether issues arise under *PRU* 7.3.26R (Avoidance of future valuation strain); when a *derivative* expires the financial position of the *firm* may deteriorate as a result of, for example, falls in asset values. Unless the *firm* holds a further reserve, the *firm* is likely to need to have either undertaken a fresh protection strategy or carried through the alternative to the *derivative* protection (such as selling equities in place of a put *option*) if the existing protection expires before the financial year end. If the existing *derivative* protection continues beyond the time of financial year end the *firm* must have sufficient confidence that it can renew its *derivative* protection or an alternative to achieve the same effect.

Market risk scenario for assets invested in the United Kingdom

4.2.16 R In *PRU* 4.2.10R(3)(a), the *market risk* scenario for assets invested in the *United Kingdom* and for assets (including assets invested outside the *United Kingdom*) held to cover *index-linked liabilities* or *property-linked liabilities* which a *firm* must assume is:

(1) a fall in the *market value* of equities of at least 10% or, if greater, the lower of:

(a) a percentage fall in the *market value* of equities which would produce an earnings yield on the FTSE Actuaries All Share Index equal to $^4/_3$rds of the long-term gilt yield; and

(b) a fall in the *market value* of equities of 25% less the *equity market adjustment ratio* (see *PRU* 4.2.19R);

(2) a fall in real estate values of 20% less the *real estate market adjustment ratio* for an appropriate real estate index (see *PRU* 4.2.21R);

(3) (a) the more onerous of either a fall or rise in yields on all fixed interest *securities* by the percentage point amount determined in (b);

(b) for the purpose of (a), the percentage point amount is equal to 20% of the long-term gilt yield.

4.2.17 R For the purposes of *PRU* 4.2.16R(1) and (2), a *firm* must:

(1) assume that earnings for equities and rack rents for real estate fall by 10%, but dividends for equities remain unaltered (see *PRU* 4.2.36R to *PRU* 4.2.38R); and

(2) model a fall in equity and real estate markets as if the fall occurred instantaneously.

4.2.18 G An example of *PRU* 4.2.16R(3) is that, where the long-term gilt yield is currently 6%, a *firm* would assume an increase of 20% in that yield, that is, a change of 1.2 percentage points. For the purpose of the scenario in *PRU* 4.2.16R(3)(a), the *firm* would assume a fall or rise of 1.2 percentage points in yields on all fixed interest *securities*.

Equity market adjustment ratio

4.2.19 R The equity market adjustment ratio referred to in *PRU* 4.2.16R(1)(b) is:

(1) if the ratio calculated in (a) and (b) lies between 75% and 100%, the result of 100% less the ratio (expressed as a percentage) of:

(a) the current value of the FTSE Actuaries All Share Index; to

(b) the average value of the FTSE Actuaries All Share Index over the preceding 90 calendar days;

(2) 0%, if the ratio calculated in (1)(a) and (b) is more than 100%; and

(3) 25%, if the ratio calculated in (1)(a) and (b) is less than 75%.

4.2.20 R In *PRU* 4.2.19R, the average value of the FTSE Actuaries All Share Index over any period of 90 calendar days means the arithmetic mean based on levels at the close of business on each of the days in that period on which the London Stock Exchange was open for trading.

Real estate market adjustment ratio

4.2.21 R The real estate market adjustment ratio for a real estate index referred to in *PRU* 4.2.16R(2) and *PRU* 4.2.23R(2) is:

(1) if the ratio calculated in (a) and (b) lies between 90% and 100%, the result of 100% less the ratio (expressed as a percentage) of:

(a) the current value of the real estate index; to

(b) the average value of that real estate index over the three preceding *financial years*;

(2) 0%, if the ratio calculated in (1)(a) and (b) is more than 100%; and

(3) 10%, if the ratio calculated in (1)(a) and (b) is less than 90%.

4.2.22 G For the purpose of calculating the *real estate market adjustment ratio* in *PRU* 4.2.21R, a *firm* should select an appropriate index of real estate values such that:

(1) the constituents of the index are reasonably representative of the nature and territory of the real estate included in the range of assets identified in accordance with *PRU* 4.2.10R; and

(2) the frequency of, and historical data relating to, published values of the index are sufficient to enable an average value(s) of the index to be calculated over the three preceding *financial years*.

Market risk scenario for assets invested outside the United Kingdom

4.2.23 R In *PRU* 4.2.10R(3)(b), subject to *PRU* 4.2.26R, the *market risk* scenario for assets invested outside the *United Kingdom* (other than assets held to cover *index-linked liabilities* or *property-linked liabilities*) which a *firm* must assume is, for each significant territory in which assets are invested outside the *United Kingdom*:

(1) an appropriate fall in the *market value* of equities invested in that territory, which is at least equal to the percentage fall determined in *PRU* 4.2.16R;

(2) a fall in real estate values in that territory of 20% less the *real estate market adjustment ratio* for an appropriate real estate index for that territory (see *PRU* 4.2.21R); and

(3) (a) the more onerous of either a fall or a rise in yields on all fixed interest *securities* by the percentage point amount determined in (b);

(b) for the purpose of (a), the percentage point amount is equal to 20% of the nearest equivalent (in respect of the method of calculation) to the long term gilt yield.

4.2.24 R For the purposes of *PRU* 4.2.23R(1), an appropriate fall in the *market value* of equities invested in a significant territory must be determined having regard to:

(1) an appropriate equity market index for that territory; and

(2) the historical volatility of the equity market index selected in (1).

4.2.25 G For the purpose of *PRU* 4.2.24R(1), an appropriate equity market index for a territory is such that:

(1) the constituents of the index are reasonably representative of the nature of the equities held in that territory which are included in the range of assets identified in accordance with *PRU* 4.2.10R; and

(2) the frequency of, and historical data relating to, published values of the index are sufficient to enable an average value(s) and historical volatility of the index to be calculated over at least the three preceding *financial years*.

4.2.26 R Where the assets of a *firm* invested in a significant territory of a kind referred to in *PRU* 4.2.23R(1), (2) or (3)(a) represent less than 0.5% of the *firm's long-term insurance assets* (excluding assets held to cover *index-linked liabilities* or *property-linked liabilities*), measured by *market value*, the *firm* may assume for those assets the *market risk* scenario for assets of that kind invested in the *United Kingdom* set out in *PRU* 4.2.16R instead of the *market risk* scenario set out in *PRU* 4.2.23R.

Interest rate risk

Interest rates: general insurance liabilities

4.2.27 G The rates of interest to be used for the calculation of the present values of *general insurance liabilities* are specified in the *insurance accounts rules*. These state that the rate of interest to be used must not exceed the lowest of:

(1) a rate prudently estimated by the *firm* to be earned by assets of the *firm* that are appropriate in magnitude and nature to cover the provisions for *claims* being discounted, during the period necessary for the payment of such *claims*;

(2) a rate justified by the performance of such assets over the preceding five years; and

(3) a rate justified by the performance of such assets during the year preceding the balance sheet date.

Interest rates: long-term insurance liabilities

4.2.28 R The rates of interest to be used for the calculation of the present value of a *long-term insurance liability* must not exceed 97.5% of the risk-adjusted yield (see *PRU* 4.2.30R to *PRU* 4.2.48G) that is expected to be achieved on:

(1) the assets allocated to cover that liability;

(2) the reinvestment of sums expected to be received from those assets (see *PRU* 4.2.45R to *PRU* 4.2.48G); and

(3) the investment of future *premium* receipts (see *PRU* 4.2.45R to *PRU* 4.2.48G).

4.2.29 R For the purposes of *PRU* 4.2.28R, the rates of interest assumed must allow appropriately for the rates of tax that apply to the investment return on policyholder assets. The rates of tax assumed must be such that the *firm's* total implied liability for tax arising from the allocation of assets to liabilities is not less than the *firm's* actual expected liability for tax for the period in respect of which tax is to be assessed.

Risk-adjusted yield

4.2.30 R A risk-adjusted yield on an asset must be calculated by:

(1) taking the asset together with any covering *derivatives*, forward transactions and *quasi-derivatives*;

(2) assuming that the factors which affect the yield will remain unchanged after the valuation date (see *PRU* 4.2.33R);

(3) valuing the asset (together with any offsetting transaction) in accordance with *PRU* 1.3 (Valuation);

(4) making reasonable assumptions as to whether, and if so when, any options or other rights embedded in the asset (or in any offsetting transaction) will be exercised.

4.2.31 G Examples of calculating a combined yield for the purposes of *PRU* 4.2.30R(1):

(1) 1000 £1 *shares* (fully paid) of ABC plc covered by a sold *future* on the *shares*. Calculating the combined yield effectively results in a position that behaves like cash (with dividend income but no capital gain or loss on the value of the assets); and

(2) where a covering *derivative* contains an *option* exercisable by the *firm* (e.g. a bought put *option* or receiver swaption), the calculation of the risk adjusted yield should take into account the fact that on the valuation assumptions any time value will reduce over time (known as the 'wasting' nature of the time value of the *option*), for example, an at-the money *option* will expire worthless and hence the covering *derivative* will effectively be a negative yielding asset. There are various ways of allowing for this, for example a *firm* could treat the covering *derivative* and the asset as a single asset and calculate an internal rate of return on this combined asset. Alternatively, an explicit reserve could be set up equal and opposite to the time value of the covering *derivative* which would be written off in the same way as the time value on the covering *derivative*.

4.2.32 G The requirements in relation to offsetting transactions are set out in *PRU* 4.3. The options and other rights referred to in *PRU* 4.2.30R(4) include those exercisable by the *firm* as well as those exercisable by other parties.

4.2.33 R For the purpose of *PRU* 4.2.30R(2), the factors that affect yield should be ascertained as at the valuation date (that is, the date to which present values of cash flows are being calculated). All changes known to have occurred by that date must be taken into account including:

(1) changes in the rental income from real estate;

(2) changes in dividends or audited profit on equities;

(3) known or forecast changes in dividends which have been publicly announced by the issuer by the valuation date;

(4) known or forecast changes in earnings which have been publicly announced by the issuer by the valuation date;

(5) alterations in capital structure; and

(6) the value (at the most recent date at or before the valuation date for which it is known) of any determinant of the amount of any future interest or capital payment.

4.2.34 R The risk-adjusted yield is either:

(1) (for equities and real estate) a running yield (see *PRU* 4.2.36R to *PRU* 4.2.38R, *PRU* 4.2.41R and *PRU* 4.2.44R); or

(2) (for all other assets) the internal rate of return (see *PRU* 4.2.39R, *PRU* 4.2.41R and *PRU* 4.2.44R).

4.2.35 R The risk-adjusted yield on a basket of assets is the arithmetic mean of the risk-adjusted yield on each asset weighted by that asset's *market value*.

The running yield for real estate

4.2.36 R For real estate the running yield is the ratio of:

(1) the rental income arising from the real estate over the previous 12 months; to

(2) the *market value* of the real estate.

The running yield for equities

4.2.37 R For equities the running yield is:

(1) the dividend yield, if the dividend yield is more than the earnings yield;

(2) otherwise, the sum of the dividend yield and the earnings yield, divided by two.

4.2.38 R For the purposes of *PRU* 4.2.37R:

(1) the dividend yield is the ratio (expressed as a percentage) of dividend income over the previous 12 months from the equities for which the running yield is being calculated ("the relevant equities") to the *market value* of those equities;

(2) the earnings yield is the ratio (expressed as a percentage) of the audited profit (including exceptional items and extraordinary items) for the preceding *financial year* of the issuer of the relevant equities to the *market value* of those equities;

(3) the earnings yield must be calculated in accordance with whichever is most appropriate (to the issuer of the relevant equities) of *United Kingdom*, US or international generally accepted accounting practice.

The internal rate of return

4.2.39 R The internal rate of return on an asset is the annual rate of interest which, if used to calculate the present value of future income (before deduction of tax) and of repayments of capital (before deduction of tax) would result in the sum of those amounts being equal to the *market value* of the asset.

4.2.40 G The risk adjusted yield for a *collective investment scheme* may be determined as the weighted average of the yields on each of the investments held by the *collective investment scheme*.

Credit risk

4.2.41 R In both the running yield and internal rate of return the yield must be reduced to exclude that part of the yield that represents compensation for credit risk arising from the asset.

4.2.42 G An allowance for credit risk should be made for all *securities* except risk-free *securities*.

4.2.43 G Provision for credit risk for credit-rated *securities* may be made by reference to historic default rates of *securities* with a similar credit rating. However, allowance should be made both for any recent or expected changes in market conditions that may invalidate historic default rates and for the likelihood that the credit ratings on *securities* may deteriorate or (following such deterioration) that the issuer may default.

4.2.44 R Provision for credit risk for *securities* that are not credit-rated must be made on principles at least as prudent as those adopted for credit-rated *securities*.

Investment and reinvestment

4.2.45 R Except as provided in *PRU* 4.2.46R:

(1) the risk-adjusted yield assumed for the investment or reinvestment of sterling sums (other than sums expected to be received within the next three years) must not exceed the lowest of:

(a) the long-term gilt yield;

(b) 3% per annum, increased by two thirds of the excess, if any, of the long-term gilt yield over 3% per annum; and

(c) 6.5% per annum; and

(2) the risk-adjusted yield assumed for the investment or reinvestment of those sterling sums expected to be received within the next three years must not exceed the risk-adjusted yield on the assets actually held adjusted linearly over the three-year period to the risk-adjusted yield determined under (1).

4.2.46 R For the *with-profits insurance contracts* of a *realistic basis life firm*, the risk-adjusted yield assumed for the investment or reinvestment of sums denominated in sterling must be no more than rates derived from the forward gilts yield.

4.2.47 R The risk-adjusted yield assumed for the investment or reinvestment of non-sterling sums must be at least as prudent as in *PRU* 4.2.45R and *PRU* 4.2.46R.

4.2.48 G The purpose of *PRU* 4.2.45R to *PRU* 4.2.47R is to help protect against 'reinvestment risk'. Reinvestment risk is the risk that, when the sums are actually received, interest rates (and so yields available on assets) might have fallen below current expectations.

Currency risk

Sources of currency risk

4.2.49 G Fluctuations in foreign exchange rates may impact adversely upon a *firm*, including where it holds an open position in a foreign currency. This is where future cash outflows (that is liabilities) in one currency are matched by future cash inflows (that is assets) in a different currency. The circumstances in which this could arise include where the *firm*:

(1) has entered into contracts for the purchase or sale of foreign currency; or

(2) has entered into *contracts of insurance* under which *claims* are payable in, or determined by reference to a value or price expressed in, a foreign currency; or

(3) holds assets denominated in a foreign currency.

Cover for spot and forward currency transactions

4.2.50 R A *firm* must cover a contract providing for the purchase or sale of foreign currency by:

(1) holding the currency that must be paid by the *firm* under the contract; or

(2) being subject to an offsetting transaction.

4.2.51 G The requirements in relation to cover and offsetting transactions are set out in *PRU* 4.3.

Currency matching of assets and liabilities

4.2.52 G *PRU* 7.2.34R requires a *firm* to cover its liabilities with assets that enable it to match, in timing, amount and currency, the cash inflows and outflows from those assets and liabilities. This permits some currency mismatching of assets and liabilities, but only if sufficient excess assets are held to cover the exposure arising from such mismatching. The level of permitted currency mismatching is also limited by *PRU* 4.2.53R.

4.2.53 R Subject to *PRU* 4.2.54R, a *firm* must hold *admissible assets* in each currency of an amount equal to at least 80% of the amount of its liabilities (excluding, for a *firm* that carries on *general insurance business*, any *equalisation provision*) in that currency, except where the amount of those assets does not exceed 7% of the assets in other currencies.

4.2.54 R *PRU* 4.2.53R does not apply to:

(1) a *pure reinsurer*; or

(2) assets held to cover *index-linked liabilities* or *property-linked liabilities*.

4.2.55 R For the purpose of *PRU* 4.2.53R, the currency of the liability under a *contract of insurance* is the currency in which the cover under the *contract of insurance* is expressed or, if the contract does not specify a currency:

(1) the currency of the country or territory in which the risk is situated; or

(2) if the *firm* on reasonable grounds so decides, the currency in which the *premium* payable under the contract is expressed; or

(3) if, taking into account the nature of the risks insured, the *firm* considers it more appropriate:

(a) the currency (based on past experience) in which it expects the *claims* to be paid; or

(b) if there is no past experience, the currency of the country or territory in which the *firm* or relevant branch is established:

(i) for contracts covering risks falling within *general insurance business classes* 4, 5, 6, 7, 11, 12 and 13 (producer's liability only); and

(ii) for contracts covering risks falling within any other *general insurance business class* where, in accordance with the nature of the risks, the *firm's* liabilities are liabilities to be provided in a currency other than that which would result from the application of (1) or (2); or

(4) (where a *claim* has been notified to the *firm* and the *firm's* liability in respect of that *claim* is payable in a currency other than that which would result from the application of (1), (2) or (3)) the currency in which the *claim* is to be paid; or

(5) (where a *claim* is assessed in a currency known to the *firm* in advance and is a currency other than that which would result from the application of (1), (2), (3) or (4)) the currency in which the *claim* is to be assessed.

4.2.56 G The reasonable grounds in *PRU* 4.2.55R(2) include if, from the time the contract is entered into, it appears likely that a *claim* will be paid in the currency of the *premium* and not in the currency of the country in which the risk is situated.

Covering linked liabilities

4.2.57 R A *firm* must cover its *property-linked liabilities* with:

(1) (as closely as possible) the assets to which those liabilities are linked; or

(2) a property-linked *reinsurance* contract; or

(3) a combination of (1) and (2).

4.2.58 R A *firm* must cover its *index-linked liabilities* with:

(1) either:

(a) the assets which represent that index; or

(b) assets of appropriate security and marketability which correspond, as closely as possible, to the assets which are comprised in, or which form, the index or other reference of value to which those liabilities are linked; or

(2) a portfolio of assets whose value or yield is reasonably expected to correspond closely with the *index-linked liability*; or

(3) an index-linked *reinsurance* contract; or

(4) an index-linked *approved derivative*; or

(5) an index-linked *approved quasi-derivative*; or

(6) a combination of any of (1) to (5).

4.2.59 G For the purposes of *PRU* 4.2.57R and *PRU* 4.2.58R, a *firm* is not permitted to hold different assets and to cover the mismatch by holding excess assets.

4.2.60 G If a *firm* has incurred a *policy* liability which cannot be exactly matched by appropriate assets (for example the Limited Price Index (LPI) and Earnings Index), the *firm* should seek to match assets that at least cover the liabilities. For example, an LPI limited to 5% per annum may be matched by a 5% fixed interest bond or a RPI bond.

4.2.61 G In selecting the appropriate cover, the *firm* should ensure that both credit risk, and the risk that the value or yield in the assets will not, in all circumstances, match fluctuations in the relevant index, are within acceptable limits. *Rules* and *guidance* relating to credit risk are set out in *PRU* 3.2.

4.3 Derivatives in insurance

Application

4.3.1 R This section applies to an *insurer*, unless it is:

(1) a *non-directive friendly society*; or

(2) an *incoming EEA firm*; or

(3) an *incoming Treaty firm*.

4.3.2 G The scope of application of *PRU* 4.3 is not restricted to *firms* that are subject to the relevant EC directives. It applies, for example, to *pure reinsurers*.

4.3.3 (1) This section applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, this section applies separately to each type of business.

Purpose

4.3.4 G *PRU* 2.2.12R requires a *firm* to calculate its *capital resources* for the purpose of *PRU* in accordance with Table *PRU* 2.2.14R, subject to the limits in *PRU* 2.2.16R to *PRU* 2.2.26R. Table *PRU* 2.2.14R and *PRU* 2.2.86R require a *firm* to deduct from total *capital resources* the value of any asset included in an insurance fund which is not an *admissible asset* as listed in *PRU* 2 Ann 1R. *PRU* 2 Ann 1R provides that a *derivative, quasi-derivative* or *stock lending transaction* will only be an *admissible asset* if it is approved. This section sets out the criteria for determining when a *derivative, quasi-derivative* or *stock lending transaction* is approved for this purpose. *PRU* 4.3.5R to *PRU* 4.3.35R set out the criteria for *derivatives* and *quasi-derivatives*. *PRU* 4.3.36R to *PRU* 4.3.41R set out the criteria for *stock lending transactions.*

Derivatives and quasi-derivatives

4.3.5 R For the purpose of *PRU* 2 Ann 1R (Admissible assets in insurance), a *derivative* or *quasi-derivative* is approved if:

(1) it is held for the purpose of efficient portfolio management (*PRU* 4.3.6R to *PRU* 4.3.7R) or reduction of investment risk (*PRU* 4.3.8R to *PRU* 4.3.13G);

(2) it is covered (*PRU* 4.3.14R to *PRU* 4.3.33G); and

(3) it is effected or issued:

(a) on or under the rules of a *regulated market*; or

(b) off-market with an *approved counterparty* and, except for a forward transaction, on approved terms and is capable of valuation (*PRU* 4.3.34R to 4.3.35R).

Efficient portfolio management

4.3.6 R A *derivative* or *quasi-derivative* is held for the purpose of efficient portfolio management if the *firm* reasonably believes the *derivative* or *quasi-derivative* (either alone or together with any other covered transactions) enables the *firm* to achieve its investment objectives by one of the following:

(1) generating additional capital or income in one of the ways described in *PRU* 4.3.7R; or

(2) reducing tax or investment cost in relation to *admissible assets*; or

(3) acquiring or disposing of rights in relation to *admissible assets*, or their equivalent, more efficiently or effectively.

Generation of additional capital or income

4.3.7 R The generation of additional capital or income falls within *PRU* 4.3.6R(1) where it arises from:

(1) taking advantage of pricing imperfections in relation to the acquisition and disposal (or disposal and acquisition) of rights in relation to assets the same as, or equivalent to, *admissible assets*; or

(2) receiving a premium for selling a covered call *option* or its equivalent, the underlying of which is an *admissible asset*, even if that additional capital or income is obtained at the expense of surrendering the chance of greater capital or income.

Reduction of investment risk

4.3.8 R A *derivative* or *quasi-derivative* is held for the purpose of reducing investment risk if the *derivative* or *quasi-derivative* (either alone or together with other fully covered transactions) reduces any aspect of investment risk without significantly increasing any other aspect of that risk.

Significant increase in risk

4.3.9 R For the purposes of *PRU* 4.3.8R, an increase in risk from a *derivative* or *quasi-derivative* is significant unless:

(1) relative to any reduction in investment risk it is both small and reasonable; or

(2) the risk is remote.

4.3.10 G *PRU* 4.3.8R does not require that a *derivative* or *quasi-derivative* has no possible adverse consequences. Often a *derivative* or *quasi-derivative* is effected to protect against a severe adverse consequence that only arises in one circumstance. In all other circumstances it may itself lead to adverse consequences, even if only because it expires worthless resulting in the loss of the purchase price. Conversely a *derivative* or *quasi-derivative* may reduce risk in a wide range of circumstances but lead to adverse consequences when a particular circumstance arises, e.g. the default of the *counterparty*. Only rarely does a *derivative* or *quasi-derivative* give rise to no adverse consequences in any circumstances. The test is merely that the increase in risk should not be significant, that is it should be both small and reasonable, or the risk should be remote.

4.3.11 G *Firms* are reminded that *PRU* 3.2 (Credit risk in insurance) sets out the different types of loss mitigation techniques.

Investment risk

4.3.12 R For the purposes of *PRU* 4.3.8R, investment risk is the risk that the assets held by a *firm*:

(1)

(where they are *admissible assets* held by the *firm* to cover its *technical provisions*) might not be:

(a) of a value at least equal to the amount of those *technical provisions* as required by *PRU* 7.2.20R; or

(b) of appropriate safety, yield and marketability as required by *PRU* 7.2.34R(1)(a); or

(c) of an appropriate currency match as required by *PRU* 4.2.53R;

(2) (where they are held to cover *index-linked liabilities*) might not be appropriate cover for those liabilities as required by *PRU* 4.2.58R; and

(3) (where they are held to cover *property-linked liabilities*) might not be appropriately selected in accordance with contractual and constructive liabilities as required by *PRU* 7.6.36R and appropriate cover for those liabilities as required by *PRU* 4.2.57R.

4.3.13 G In assessing whether investment risk is reduced, the impact of a transaction on both the assets and liabilities should be considered. In particular, where the amount of liabilities depends upon the fluctuations in an index or other factor, investment risk is reduced where assets whose value fluctuates in the same way match those liabilities. In appropriate circumstances this may include:

(1) a *derivative* or *quasi-derivative* that is linked to the same index as the liabilities from the index-linked contracts; and

(2) a *derivative* or *quasi-derivative* whose value depends upon the factors which give rise to general insurance claims, e.g. a weather *quasi-derivative*.

Cover

4.3.14 R A *firm* must cover an obligation to transfer assets or pay monetary amounts that arises from:

(1) a *derivative* or *quasi-derivative*; or

(2) a contract (other than a *contract of insurance*) for the purchase, sale or exchange of assets.

4.3.15 R An obligation to transfer assets or pay monetary amounts (see *PRU* 4.3.14R) must be covered:

(1) by assets, a liability or a provision (see *PRU* 4.3.16R to *PRU* 4.3.24R); or

(2) by an offsetting transaction (see *PRU* 4.3.25R to *PRU* 4.3.27R).

4.3.16 R An obligation to transfer assets (other than *money*) or to pay monetary amounts based on the value of, or income from, assets is covered if the *firm* holds:

(1) those assets; or

(2) in the case of an index or basket of assets, a reasonable approximation to those assets.

4.3.17 R An obligation to pay a monetary amount (whether or not falling in *PRU* 4.3.16R) is covered if:

(1) the *firm* holds *admissible assets* that are sufficient in value so that the *firm* reasonably believes that following reasonably foreseeable adverse variations (relying solely on cashflows from, or from realising, those assets) it could pay the monetary amount in the right currency when it falls due; or

(2) the obligation to pay the monetary amount is offset by a liability. An obligation is offset by a liability where an increase in the amount of that obligation would be offset by a decrease in the amount of that liability; or

(3) a provision at least equal to the value of the assets in (1) is implicitly or explicitly set up. A provision is implicitly set up to the extent that the obligation to pay the monetary amount is recognised under *PRU* 1.3 (Valuation) either by offset against an asset or as a separate liability. A provision is explicitly set up if it is in addition to an implicit provision.

4.3.18 R A *firm* must implicitly or explicitly set up a provision equal to the value of the assets or offsetting transactions held to cover a non-approved *derivative* or *quasi-derivative* transaction.

4.3.19 G Where a *firm* partially covers a *derivative* (or other contract falling within *PRU* 4.3.14R(1) and (2)), the *firm* may split the *derivative* into a covered portion and an uncovered portion. The portion of the *derivative* that is covered (after taking into account the requirement to cover reasonably foreseeable adverse variations in *PRU* 4.3.17R(1)) is an *approved derivative*, provided it also meets the requirements in *PRU* 4.3.5R(1) and (3); the uncovered portion is not an *approved derivative*.

4.3.20 G Exposure to a transaction includes exposure that arises from a right at the *firm's* (or its *subsidiary undertaking's*) option to dispose of assets.

4.3.21 G Cover serves three purposes. First, it protects against exposure to loss from the transaction which is being covered. The value of the cover increases (or if the cover is a liability the amount of that liability decreases) to match any increase in obligations under the transaction.

4.3.22 G The second purpose of cover is that it prevents excessive gearing in the investment portfolio by the use of *options* and their equivalent. A *firm* is required to cover all obligations under an admissible transaction including obligations that would arise only at the option of the *firm*, e.g. the liability to pay the exercise price under a bought *option*.

4.3.23 G The third purpose of cover is that it protects against the risk that the *firm* may not be able to deliver assets (including *money* in any currency) of the right type when the obligation falls due under the transaction. An obligation to deliver assets is covered only if the *firm* holds those assets or has entered into an offsetting transaction that would deliver those assets when needed. An obligation to pay *money* is offset only if the *firm* holds cash in the right currency, its equivalent or assets that could reliably be converted into cash in the right currency.

4.3.24 R Cover used for one transaction must not be used for cover in respect of another transaction or any other agreement to acquire, or dispose of, assets or to pay or repay *money*.

Offsetting transactions

4.3.25 R An offsetting transaction means:

(1) an *approved derivative*, *approved stock lending transaction* or an *approved quasi-derivative*; or

(2) a covered transaction with an *approved counterparty* for the purchase of assets.

4.3.26 R A transaction offsets an obligation to transfer assets away from the *firm* only if it provides for the transfer to the *firm* of those assets, or their value, at the time, or before, the obligation falls due.

4.3.27 R A transaction offsets an obligation to pay a monetary amount only if it provides for that monetary amount to be paid to the *firm* at or before the earliest date on which the obligation might fall due.

Lending and borrowing assets

4.3.28 R Assets that have been lent by the *firm* are not available for cover, unless:

(1) they are non-monetary assets that have been lent under a transaction that fulfils the conditions in *PRU* 4.3.36R; and

(2) the *firm* reasonably believes the assets to be obtainable (by return or re-acquisition) in time to meet the obligation for which cover is required.

4.3.29 R Assets that have been borrowed by the *firm* are not available for cover except as allowed by *PRU* 4.3.30R.

4.3.30 R Borrowed *money* may be used as cover only where:

(1) the *money* has been advanced or an *approved credit institution* has committed itself to advance the *money*; and

(2) the borrowing is or would be covered.

4.3.31 G *PRU* 4.3.30R in effect allows borrowings to be used to bridge the gap between an obligation under a transaction that might fall due at one date and cash or its equivalent that would only become due at a later date. Borrowings may not be used to gear the investment portfolio.

Examples of cover requirements

4.3.32 G Examples of cover by assets for the purposes of *PRU* 4.3.16R :

(1) a bought put *option* (or a sold call *option*) on 1000 £1 *shares* (fully paid) of ABC plc is covered by an existing holding in the fund of 1000 £1 *shares* (fully paid) of ABC plc;

(2) a bought call *option* (or sold put *option*) on 1000 ordinary £1 *shares* (fully paid) of ABC plc is covered by cash (or its equivalent) which is sufficient in amount to meet the purchase price of the *shares* on exercise of the *option*;

(3) a bought or sold *contract for differences* on short-dated sterling is covered by cash (or its equivalent), the value of which together at least match the notional principal of the contract. For example, a LIFFE short sterling contract, or a successive series of such contracts, is covered by £500,000; and

(4) a sold *future* on the FT-SE 100 index is covered by holdings of equities, which satisfy the reasonable approximation test for cover in *PRU* 4.3.16R(2) in relation to that *future*, and the values of which together at least match the current mark to market valuation of the *future*. For example, if the multiplier per full point is £10, and if the eventual obligation under the *future* is currently 2800, the valuation of the *futures* position is 2800 x £10 = £28,000.

4.3.33 G Examples of cover by offsetting transactions for the purpose of *PRU* 4.3.25R would include a bought *future* which is guaranteed to deliver to the *firm* at the relevant time sufficient assets to cover liabilities under a sold call *option*.

Over the counter transactions

4.3.34 R For the purpose of *PRU* 4.3.5R(3)(b), a transaction is on approved terms only if the *counterparty* has agreed to enter into a further transaction to close out the first transaction at a price based on current market conditions.

4.3.35 R A transaction is capable of valuation only if the *firm*, throughout the life of the transaction, will be able to value it with reasonable accuracy on a reliable basis reflecting an up-to-date mark-to-market value.

Stock lending

4.3.36 R For the purposes of *PRU* 2 Ann 1R (Admissible assets in insurance), a *stock lending* transaction is approved if:

(1) the assets lent are *admissible assets*;

(2) the *counterparty* is an *authorised person* or an *approved counterparty*; and

(3) adequate and sufficiently immediate *collateral* (*PRU* 4.3.38R to *PRU* 4.3.41R) is obtained to secure the obligation of the *counterparty*.

4.3.37 G *PRU* 4.3.36R refers only to *stock lending* transactions where the *firm* is the lender. There are no special *rules* for a transaction under which the *firm* borrows *securities.*

Collateral

4.3.38 R For the purposes of *PRU* 4.3.36R(3), *collateral* is adequate only if it:

(1) is transferred to the *firm* or its agent;

(2) is, at the time of the transfer, at least equal in value to the value of the *securities* transferred, or consideration provided, by the *firm*; and

(3) is of adequate quality.

4.3.39 G For the purposes of assessing adequate quality in *PRU* 4.3.38R(3), reference should be made to the criteria for credit risk loss mitigation set out in *PRU* 3.2.16R. The valuation rules in *PRU* 1.3 apply for the purpose of determining the value of both *collateral* received and the *securities* transferred. In addition, *collateral* that is not an *admissible asset* does not have a value (see *PRU* 2 Ann 1R).

4.3.40 R For the purposes of *PRU* 4.3.36R(3), *collateral* is sufficiently immediate only if:

(1) it is transferred before, or at the same time as, the transfer of the *securities* by the *firm*; or

(2) it will be transferred, at latest, by the close of business on the day of the transfer.

4.3.41 R *Collateral* continues to be adequate only if its value is at all times at least equal to the value of the *securities* transferred by the *firm*. This will be satisfied in respect of *collateral* the validity of which is about to expire or has expired where sufficient *collateral* will again be transferred at the latest by the close of business on the day of expiry.

Annex G

PRU 5

In this Annex, all the text is new and is not underlined.

5.1 Liquidity risk systems and controls

Application

5.1.1 R *PRU* 5.1 applies to an *insurer* unless *PRU* 5.1.8R applies.

5.1.2 R All of *PRU* 5.1, except *PRU* 5.1.17G, *PRU* 5.1.27G, *PRU* 5.1.58G to *PRU* 5.1.60G, *PRU* 5.1.61E, *PRU* 5.1.62G, *PRU* 5.1.85G, *PRU* 5.1.86E, and *PRU* 5.1.87G to *PRU* 5.1.91G, applies to:

(1) an *EEA-deposit insurer*; and

(2) a *Swiss general insurer*;

but only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

5.1.3 R Subject to *PRU* 5.1.5R, *PRU* 5.1.6R and *PRU* 5.1.8R, the following provisions of *PRU* 5.1 apply to a *firm* described in *PRU* 5.1.4R:

(1) *PRU* 5.1.18G;

(2) *PRU* 5.1.58G to *PRU* 5.1.60G;

(3) *PRU* 5.1.61E;

(4) *PRU* 5.1.62G;

(5) *PRU* 5.1.85G;

(6) *PRU* 5.1.86E; and

(7) *PRU* 5.1.87G to *PRU* 5.1.91G.

5.1.4 R The *firms* referred to in *PRU* 5.1.3R are:

(1) a *building society*;

(2) a *bank* or an *own account dealer* (other than a *venture capital firm*) that is a *UK firm*;

(3) an *incoming EEA firm* which:

(a) is a *full BCD credit institution*; and

(b) has a *branch* in the *United Kingdom*;

(4) an *overseas firm* which is a *bank* or an *own account dealer* (other than a *venture capital firm*) but which is not:

(a) an *incoming EEA firm*; or

(b) a *lead-regulated firm*;

(5) an *overseas firm* which:

(a) is a *bank*;

(b) is a *lead-regulated firm*;

(c) is not an *incoming EEA firm*; and

(d) has a *branch* in the *United Kingdom*.

5.1.5 R For a *firm* described in *PRU* 5.1.4R(3) or *PRU* 5.1.4R(5), *PRU* 5.1 applies only with respect to the *branch*.

5.1.6 R This section applies to an *incoming EEA firm* only to the extent that the relevant matter is not reserved by the relevant *Single Market Directive* to the *firm's Home State regulator*.

5.1.7 R If a *firm* carries on:

(1) *long-term insurance business*; and

(2) *general insurance business*;

this section applies separately to each type of business.

5.1.8 R This section does not apply to:

(1) a *non-directive friendly society*; or

(2) a *UCITS qualifier*; or

(3) an *ICVC*; or

(4) an *incoming EEA firm* (unless *PRU* 5.1.4R applies); or

(5) an *incoming Treaty firm*.

5.1.9 R For the purposes of this section, the *guidance* in *PRU* 1.4.14G to *PRU* 1.4.16G applies to a *firm* described in *PRU* 5.1.4R.

Purpose

5.1.10 G The purpose of this section is to amplify parts of *PRU* in their application to *liquidity risk* and, in so doing, to suggest minimum standards for systems and controls in respect of that risk. The main relevant part, *PRU* 1.4, itself amplifies *Principle* 3 (Management and control) and *SYSC* (Senior management arrangements, Systems and Controls).

5.1.11 G Appropriate systems and controls for the management of *liquidity risk* will vary with the scale, nature and complexity of the *firm*'s activities. Most of the material in this section is, therefore, *guidance*. The section lays out some of the main issues that the *FSA* expects a *firm* to consider in relation to *liquidity risk*. A *firm* should assess the appropriateness of any particular item of *guidance* in the light of the scale, nature and complexity of its activities as well as its obligations as set out in *Principle* 3 to organise and control its affairs responsibly and effectively.

5.1.12 G For *insurers*, references to *liquidity risk* in this section are intended to cover only those aspects of *liquidity risk* that do not fall under the heading of insurance risk. For such *firms*, the *FSA* sees the coverage of this section, broadly, as the management of risk arising from short-term cash-flows, rather than the risk arising from longer-term matching of assets and liabilities, which is part of insurance risk. *Guidance* on systems and controls for managing insurance risk is set out in *PRU* 7.1.

5.1.13 G The *FSA* recognises that a typical *firm* of a type described in *PRU* 5.1.4R generally faces *liquidity risk* from a wider range of sources and of greater significance than a typical *insurer*. This section therefore explicitly applies some items of *guidance* to *firms* in *PRU* 5.1.4R. Other parts of the *guidance* are also not relevant to many *insurers*. In particular, where the *guidance* refers to factors that a *firm* should consider in relation to a specific type of business, a *firm* that does not undertake such business does not need to carry out such consideration.

5.1.14 G This section addresses the need to have appropriate systems and controls to deal both with liquidity management issues under normal market conditions, and with stressed or extreme situations resulting from either general market turbulence or firm-specific difficulties.

Requirements

5.1.15 G High level requirements for prudential systems and controls including for *liquidity risk* are set out in *PRU* 1.4. In particular:

(1) *PRU* 1.4.18R requires a *firm*, among other things, to take reasonable steps to ensure the establishment of a business plan and appropriate systems for the management of prudential risk; and

(2) *PRU* 1.4.19R(2) requires a *firm*, among other things, to document its policy for managing *liquidity risk*, including its appetite or tolerance for this risk and how it identifies, measures, monitors and controls this risk.

5.1.16 G This section sets out *guidance* on each of these areas, and notes a number of matters which the *FSA* would expect a *firm* to deal with in its *liquidity risk* policy statement as follows:

(1) its *liquidity risk* strategy (see *PRU* 5.1.23G to *PRU* 5.1.25G), including:

(a) the role of marketable, or otherwise realisable, assets (see *PRU* 5.1.32G); and

(b) its strategy for mitigating *liquidity risk* on the liability side (see *PRU* 5.1.37G);

(2) its method for measuring *liquidity risk* (see *PRU* 5.1.55G);

(3) its system for monitoring *liquidity risk* (see *PRU* 5.1.63G); and

(4) its system for controlling *liquidity risk* (see *PRU* 5.1.71G).

5.1.17 G High level requirements in relation to carrying out stress testing and scenario analysis are set out in *PRU* 1.2. In particular, *PRU* 1.2.35R requires a *firm* to carry out appropriate stress testing and scenario analysis. This section gives *guidance* in relation to these tests in the case of *liquidity risk*.

Firms with group liquidity management

5.1.18 G *Firms* with group liquidity management should refer to *PRU* 1.4.14G to 1.4.16G.

Managing liquidity risk

5.1.19 G This section amplifies the general requirements in *PRU* 1.4 by describing the key high level arrangements that the *FSA* would normally expect to be in place to ensure that a *firm*'s *liquidity risk* management system is adequate.

Governing body and senior management oversight

5.1.20 G *PRU* 1.4.11G amplifies *SYSC* 2.1.1R and *SYSC* 2.1.3R which require the apportionment, and allocation, of significant responsibilities to be such that the business and affairs of the *firm* can be adequately monitored and controlled by the *directors*, relevant senior executives and *governing body* of the *firm*. Effective *liquidity risk* management entails an informed board, capable management and appropriate staffing. The *governing body* and senior management are responsible for understanding the nature and level of *liquidity risk* assumed by the *firm* and the tools used to manage that risk.

5.1.21 G In relation to *liquidity risk*, the *governing body's* responsibilities should normally include:

(1) approving the *firm's liquidity risk* policy, which includes taking reasonable steps to ensure that it is consistent with the *firm*'s expressed risk tolerance (see *PRU* 5.1.23G to *PRU* 5.1.25G);

(2) establishing a structure for the management of *liquidity risk* including the allocation of appropriate *senior managers* who have the authority and responsibility to manage *liquidity risk* effectively, including the establishment and maintenance of the *firm*'s *liquidity risk* policy;

(3) monitoring the *firm*'s overall *liquidity risk* profile on a regular basis and being made aware of any material changes in the *firm*'s current or prospective *liquidity risk* profile; and

(4) taking reasonable steps to ensure that *liquidity risk* is adequately identified, measured, monitored and controlled.

5.1.22 G A *firm* should have an appropriate senior management structure in place to oversee the daily and long-term management of *liquidity risk* in line with the *governing body*-approved *liquidity risk* policy (see *PRU* 5.1.23G to *PRU* 5.1.25G). The *FSA* would normally expect the senior management to:

(1) oversee the development, establishment and maintenance of procedures and practices that translate the goals, objectives and risk tolerances approved by the *governing body* into operating standards that are consistent with the *governing body's* intent and understood by the relevant members of a *firm*'s personnel;

(2) adhere to the lines of authority and responsibility that the *governing body* has established for managing *liquidity risk*;

(3) oversee the establishment and maintenance of management information (see *PRU* 5.1.66G to *PRU* 5.1.70G) and other systems that identify, measure, monitor and control the *firm*'s *liquidity risk*; and

(4) oversee the establishment of effective *internal controls* over the *liquidity risk* management process (see *PRU* 5.1.71G to *PRU* 5.1.90G (Controlling liquidity risk)).

Liquidity risk policy

5.1.23 G *SYSC* 3.2.17G gives *guidance*, which amplifies *SYSC* 3.2.6R, on the need for a *firm* to plan its business appropriately so that it is able to identify, measure, monitor and control risks of regulatory concern. A *firm* should, therefore, have an agreed policy for the day-to-day and longer term management of *liquidity risk* which is appropriate to the nature, scale and complexity of the activities carried on.

5.1.24 G The *liquidity risk* policy should cover the general approach that the *firm* will take to *liquidity risk* management, including, as appropriate, various quantitative and qualitative targets. This general approach should be communicated to all relevant functions within the organisation and be included in the *firm*'s *liquidity risk* policy statement.

5.1.25 G The policy for managing *liquidity risk* should cover specific aspects of *liquidity risk* management. So far as appropriate to the nature, scale and complexity of the activities carried on, such aspects might include:

(1) the basis for managing liquidity (for example, regional or central);

(2) the degree of concentrations, potentially affecting *liquidity risk*, that are acceptable to the *firm*;

(3) a policy for managing the liability side of *liquidity risk* (see *PRU* 5.1.37G);

(4) the role of marketable, or otherwise realisable, assets (see *PRU* 5.1.32G);

(5) ways of managing both the *firm's* aggregate foreign currency liquidity needs and its needs in each individual currency;

(6) ways of managing market access;

(7) the use of *derivatives* to minimise *liquidity risk*; and

(8) the management of intra-day liquidity, where this is appropriate, for instance where the *firm* is a member of or participates (directly or indirectly) in a system for the intra-day settlement of payments or transactions in investments.

Identifying liquidity risk

5.1.26 G In order to manage *liquidity risk* successfully, a *firm* should be aware of the ways in which its activities can affect its *liquidity risk* profile, and how outside influences may affect its liquidity position. A *firm* should consider not only its current *liquidity risk*, but how existing activities may affect its *liquidity risk* profile in the future; it should also consider the implications of new products or business lines. This section identifies the main sources of *liquidity risk* and the key factors that a *firm* might consider when analysing its *liquidity risk* profile.

5.1.27 G *PRU* 1.2.22R states that a *firm* must maintain overall financial resources adequate, both as to amount and quality, to ensure that there is no significant risk that its liabilities cannot be met as they fall due. The *firm* should, therefore, ensure that, overall, its financial resources are of appropriate maturity, and in a form which is sufficiently marketable or otherwise realisable, having regard to the expected timing of liabilities and the risk that liabilities may fall due earlier than expected (for which prudent allowance must be made when assessing whether assets are of appropriate maturity or sufficiently realisable).

Asset liquidity

5.1.28 G A *firm's* asset portfolio can provide liquidity in three major ways:

(a) through the maturity of an asset;

(b) the sale of an asset for cash; or

(c) the use of an asset as *collateral* to back other transactions, such as for secured borrowing (including repos), or for deposits with insureds or cedants to back insurance or *reinsurance* transactions.

5.1.29 G A *firm* may incur *liquidity risk* where inflows from the realisation of assets (at either maturity or time of sale) are less than anticipated because of the crystallisation of credit risk or *market risk*. Inflows arising from the renewal of secured funding, including repos, are similarly affected, if the haircut (the difference between the value of an asset and the amount lent to the *firm* by the counterparty using that security as *collateral*) required by a *firm's* counterparty is larger than anticipated (see *PRU* 5.1.39G).

5.1.30 G Asset concentrations often increase these sources of *liquidity risk*. A *firm* should, therefore, identify significant concentrations within its asset portfolio, including in relation to:

(1) individual counterparties or related groups of counterparties;

(2) credit ratings of the assets in its portfolio;

(3) the proportion of an issue held;

(4) instrument types;

(5) geographical regions; and

(6) economic sectors.

Marketable assets

5.1.31 G Criteria for the marketability of its assets should be decided by the *firm* and may reflect the *firm*'s access to, and expertise in, individual markets. In determining the appropriateness of the marketability or realisability of assets, a *firm* may take into account:

(1) the depth and liquidity of the market, including:

(a) the speed with which assets may be realised;

(b) the likelihood and extent of forced-sale loss; and

(c) the potential for using the asset as *collateral* in secured funding and the size of the haircut (see *PRU* 5.1.29G) likely to be required by the counterparty;

(2) the expected date of maturity, redemption, repayment or disposal;

(3) the proportion of an issue held;

(4) the credit ratings of the assets;

(5) the impact of exchange rate risk on the realised value of the asset, where assets are denominated in different currencies from its liabilities; and

(6) where applicable, the impact on certain assets' liquidity of their use as eligible *collateral* either in open-market operations conducted by, or in real-time or other payment systems operated by, a central bank.

5.1.32 G The role of marketable, or otherwise realisable, assets in a *firm*'s *liquidity risk* policy, in both normal and stressed conditions, should be set out in its *liquidity risk* policy statement.

5.1.33 G In considering the marketability of an asset, a *firm* should assess how its value and liquidity would be affected in a variety of scenarios (see *PRU* 5.1.58G to *PRU* 5.1.60G, *PRU* 5.1.61E and *PRU* 5.1.62G).

Adjusting for the behavioural characteristics of assets

5.1.34 G In order to manage its *liquidity risk* effectively, a *firm* should be able to adjust for the behavioural characteristics of the repayment profiles of assets, that is how their actual behaviour may vary from that suggested by their contractual terms. Such an adjustment may be necessary in order to reduce the risk of wrongly estimating the inflows in relation to, in particular:

(1) standby facilities or other commitments that have already been drawn down;

(2) retail and wholesale overdrafts;

(3) mortgages; and

(4) credit cards.

5.1.35 G The repayment profiles should be considered under both normal market conditions and stressed conditions resulting from either general market turbulence or *firm*-specific difficulties (see *PRU* 5.1.58G to *PRU* 5.1.60G, *PRU* 5.1.61E and *PRU* 5.1.62G, and *PRU* 5.1.85G, *PRU* 5.1.86E, and *PRU* 5.1.87G to *PRU* 5.1.90G).

Inflows from off balance sheet items

5.1.36 G Where a *firm* has in place a committed facility for the provision of a portion of its funding, it should take care to monitor any covenants included in the agreement. It should also make efforts to retain a good relationship with the provider of the facility and, where possible without jeopardising that relationship, regularly test access to the funds. A *firm* should also assess the extent to which committed facilities can be relied upon under stressed conditions (see *PRU* 5.1.62G(1)(c) and *PRU* 5.1.88G(4)).

Liability liquidity

5.1.37 G Holding marketable, or otherwise realisable, assets is not the only way for a *firm* to mitigate the *liquidity risk* it faces. There are a number of liability-side strategies that can be used to reduce a *firm*'s *liquidity risk*, such as ensuring a spread of maturities and lengthening the term structure of its liabilities. In order to manage its *liquidity risk* effectively a *firm* should have a liability-side policy that is appropriate to the nature and scale of its activities; this policy should be described in its *liquidity risk* policy statement.

5.1.38 G When determining the appropriate mix of liabilities, a *firm*'s management should consider potential concentrations. A concentration exists when a single decision or factor could cause a significant and sudden claim on liabilities. What constitutes a liability concentration depends on the nature and scale of a *firm*'s activities. A *firm* should, however, normally consider:

(1) the term structure of its liabilities;

(2) the credit-sensitivity of its liabilities;

(3) the mix of secured and unsecured funding;

(4) concentrations among its liability providers, or related groups of liability providers;

(5) reliance on particular instruments or products;

(6) the geographical location of liability providers; and

(7) reliance on intra-group funding.

5.1.39 G A *firm* with credit-sensitive liabilities should be aware that, in times of market turbulence, a proportion of that funding may be withdrawn, particularly funding which is unsecured. Secured funding may also be affected, with counterparties seeking better quality *collateral* or larger haircuts (see *PRU* 5.1.29G) on *collateral*. A *firm* should recognise these characteristics of its credit-sensitive liabilities and take account of them in its stress testing and scenario analysis and *contingency funding plan* (see *PRU* 5.1.58G to *PRU* 5.1.60G, *PRU* 5.1.61E and *PRU* 5.1.62G, and *PRU* 5.1.85G, *PRU* 5.1.86E, and *PRU* 5.1.87G to *PRU* 5.1.90G).

5.1.40 G A *firm* should consider the dynamics of its *liquidity risk* including, for example, the normal level of roll-overs, and growth, of liabilities.

Adjusting for the behavioural characteristics of liabilities

5.1.41 G In order to meet the requirement to maintain sufficient liquid financial resources (see *PRU* 5.1.27G), a *firm* should consider the behavioural characteristics of its liabilities, that is how their actual behaviour may vary from that suggested by their contractual terms.

5.1.42 G In assessing how to adjust for the behavioural characteristics of its liabilities in the context of *liquidity risk*, an *insurer* may take into account:

(1) the type of *insurance business*;

(2) the past history of volatility in the pattern of *claims* payment;

(3) options available to *policyholders* and the circumstances in which they are likely to be exercised;

(4) options available to the *insurer* and any incentive for the *insurer* to exercise them;

(5) any relevant requirements to deposit *collateral* either with the insured (or cedants) under the terms of the insurance Treaty or by requirements of overseas regulators as a condition for covering risks in a particular territory; and

(6) the other cash flow needs of the business.

Outflows from off balance sheet items

5.1.43 G The contingent or optional nature of many off balance sheet instruments adds to the complexity of managing off balance sheet cash flows. In particular, in stressed conditions off balance sheet commitments may be a significant drain on liquidity.

5.1.44 G A *firm* should consider how its wholesale off balance sheet activities affect its cash flows and *liquidity risk* profile under both normal and stressed conditions. In particular, as appropriate, it should consider the amount of funding required by:

(1) commitments given;

(2) standby facilities given;

(3) wholesale overdraft facilities given;

(4) proprietary *derivatives* positions; and

(5) liquidity facilities given for securitisation transactions.

5.1.45 G Similarly, a *firm* with retail *customers* should be able to assess the likely draw-down on retail products under a variety of circumstances and taking into account seasonal factors. In particular, as appropriate, it should consider the amount of funding required in relation to:

(1) mortgages that have been agreed but not yet drawn down;

(2) overdrafts; and

(3) credit cards.

Asset securitisations

5.1.46 G If controlled properly, asset securitisation can be a useful tool in enhancing a *firm*'s liquidity. However, features of certain securitisations, such as early amortisation triggers, as well as excessive reliance on a single funding vehicle, can increase *liquidity risk*.

5.1.47 G The implications of securitisations on a *firm*'s liquidity position should be considered for both day-to-day liquidity management and its contingency planning for *liquidity risk*. A contemplated securitisation should be analysed for its impact on *liquidity risk*. A *firm* using securitisation should consider:

(1) the volume of *securities* issued in connection with the securitisation that are scheduled to amortise during any particular period;

(2) the existence of early amortisation triggers (see also *PRU* 5.1. 62G(3)(c));

(3) its plans for meeting its funding requirements (including their timing);

(4) strategies for obtaining substantial amounts of liquidity at short notice (see also *PRU* 5.1.86E and *PRU* 5.1.88G); and

(5) operational issues associated with the rollover of short-dated *securities*, particularly commercial paper.

5.1.48 G If a *firm* is a provider of liquidity facilities for securitisation transactions it should be able to assess the probability and scale of draw-down and make provision for it.

5.1.49 G A *firm* using securitisation should also be aware that its ability to securitise assets may diminish in stressed market conditions and take account of this in its stress testing and *contingency funding plan*. In addition, the time taken to organise a securitisation transaction may mean that it cannot be relied upon to provide liquidity at short notice.

Foreign currency liquidity

5.1.50 G Foreign currency *liquidity risk* arises where a *firm* faces actual or potential future outflows in a particular currency which it may not be able to meet from likely available inflows in that currency. A *firm*'s exposure to foreign currency *liquidity risk* depends on the nature, scale and complexity of its business. Where a *firm* has significant, unhedged liquidity mismatches in particular currencies, it should consider:

(1) the volatilities of the exchange rates of the mismatched currencies;

(2) likely access to the foreign exchange markets in normal and stressed conditions; and

(3) the stickiness of deposits in those currencies with the *firm* in stressed conditions.

5.1.51 G A possible strategy for mitigating foreign currency *liquidity risk*, which is effective and simple, is for a *firm* to hold assets in a particular currency in an amount equal to, and realisable at maturities no later than, its liabilities in that currency. This strategy may be worth considering particularly where, as a result of the nature, scale and complexity of its business, a *firm*'s *liquidity risk* is relatively small.

Intra-day liquidity

5.1.52 G *SYSC* 3.1.1R requires a *firm* to take reasonable care to establish and maintain systems and controls appropriate to its business. This includes appropriate systems and controls over activities that give rise to significant *market*, credit, *liquidity*, insurance, operational or group risk, including over the processes of settling and paying debts and other commitments that arise from those activities.

5.1.53 G Structural and operational changes in payment systems have increased the importance of intra-day liquidity for many *firm*s. Within real time gross settlement systems, for example, a *firm* needs to take appropriate steps to ensure that it has sufficient *collateral* to cover cash positions and has systems capable of monitoring intra-day liquidity positions and cash needs.

5.1.54 G A *firm* should be aware that in stressed conditions it is likely to require more intra-day liquidity than in normal market conditions, for a variety of reasons including payments due to the *firm* being delayed and wholesale depositors withdrawing from the market. A *firm* should take account of this in its stress testing and scenario analysis.

Measuring liquidity risk

5.1.55 G A *firm* should establish and maintain a process for the measurement of *liquidity risk*, using a robust and consistent method which should be described in its *liquidity risk* policy statement.

5.1.56 G A number of techniques can be used for measuring *liquidity risk*, ranging from simple calculations to highly sophisticated modelling; a *firm* should use a measurement method which is appropriate to the nature, scale and complexity of its activities.

5.1.57 G The method that a *firm* uses for measuring *liquidity risk* should be capable of:

(1) measuring the extent of the *liquidity risk* it is incurring;

(2) dealing with the dynamic aspects of a *firm*'s liquidity profile (for example, rollovers of funding and assets or new business);

(3) assessing the behavioural characteristics of its on and off balance sheet instruments; and

(4) where appropriate, measuring the *firm*'s exposure to foreign currency *liquidity risk*.

Stress testing and scenario analysis

5.1.58 G *PRU* 1.2.26R, *PRU* 1.2.27R, *PRU* 1.2.31R, *PRU* 1.2.33R and *PRU* 1.2.35R entail that, for the purposes of determining the adequacy of its overall financial resources, a *firm* must carry out appropriate stress testing and scenario analysis, including taking reasonable steps to identify an appropriate range of realistic adverse circumstances and events in which *liquidity risk* might occur or crystallise.

5.1.59 G *PRU* 1.2.36G and *PRU* 1.2.40G to *PRU* 1.2.55G give guidance on stress testing and scenario analysis, including on how to choose appropriate scenarios, but the precise scenarios that a *firm* chooses to use will depend on the nature of its activities. For the purposes of testing *liquidity risk*, however, a *firm* should normally consider scenarios based on varying degrees of stress and both *firm*-specific and market-wide difficulties. In developing any scenario of extreme market-wide stress that may pose systemic risk, it may be appropriate for a *firm* to make assumptions about the likelihood and nature of central bank intervention.

5.1.60 G A *firm* should review frequently the assumptions used in stress testing scenarios to gain assurance that they continue to be appropriate.

5.1.61 E (1) A scenario analysis in relation to *liquidity risk* required under *PRU* 1.2.35R should include a cash-flow projection for each scenario tested, based on reasonable estimates of the impact (both on and off balance sheet) of that scenario on the *firm*'s funding needs and sources.

(2) Contravention of (1) may be relied on as tending to establish contravention of *PRU* 1.2.35R.

5.1.62 G In identifying the possible on and off balance sheet impact referred to in *PRU* 5.1.61E(1), a *firm* may take into account:

(1) possible changes in the market's perception of the *firm* and the effects that this might have on the *firm*'s access to the markets, including:

(a) (where the *firm* funds its holdings of assets in one currency with liabilities in another) access to foreign exchange markets, particularly in less frequently traded currencies;

(b) access to secured funding, including by way of repo transactions; and

(c) the extent to which the *firm* may rely on committed facilities made available to it;

(2) (if applicable) the possible effect of each scenario analysed on currencies whose exchange rates are currently pegged or fixed; and

(3) that:

(a) general market turbulence may trigger a substantial increase in the extent to which *persons* exercise rights against the *firm* under off balance sheet instruments to which the *firm* is party;

(b) access to *OTC derivative* and foreign exchange markets are sensitive to credit-ratings;

(c) the scenario may involve the triggering of early amortisation in asset securitisation transactions with which the *firm* has a connection; and

(d) its ability to securitise assets may be reduced.

Monitoring liquidity risk

5.1.63 G A *firm* should establish and maintain an appropriate system for monitoring its *liquidity risk*, which should be described in its *liquidity risk* policy statement.

5.1.64 G A *firm* should establish and maintain a system of management reporting which provides clear, concise, timely and accurate *liquidity risk* reports to relevant functions within the *firm*. These reports should alert management when the *firm* approaches, or breaches, predefined thresholds or limits, including quantitative limits imposed by the *FSA* or another regulator.

5.1.65 G Where a *firm* is a member of a *group*, it should be able to assess the potential impact on it of *liquidity risk* arising in other parts of the *group*.

Management information systems

5.1.66 G A *firm* should have adequate information systems for controlling and reporting *liquidity risk*. The management information system should be used to check for compliance with the *firm*'s established policies, procedures and limits.

5.1.67 G Reports on *liquidity risk* should be provided on a timely basis to the *firm*'s *governing body*, senior management and other appropriate personnel. The appropriate content and format of reports depends on a *firm*'s liquidity management practices and the nature, scale and complexity of the *firm*'s business. Reports to the *firm's governing body* may be less detailed and less frequent than reports to senior management with responsibility for managing *liquidity risk*.

5.1.68 G For a *firm* described in *PRU* 5.1.4R, management information would normally contain the following:

(1) a cash-flow or funding gap report;

(2) a funding maturity schedule;

(3) a list of large providers of funding; and

(4) a limit monitoring and exception report.

5.1.69 G When considering what else might be included in *liquidity risk* management information, a *firm* should consider other types of information that may be important for understanding its *liquidity risk* profile.

5.1.70 G For a *firm* described in *PRU* 5.1.4R, the additional information referred to in *PRU* 5.1.69G may include:

(1) asset quality and trends;

(2) any changes in the *firm*'s funding strategy;

(3) earnings projections; and

(4) the *firm*'s reputation in the market and the condition of the market itself.

Controlling liquidity risk

5.1.71 G A *firm* should establish and maintain an appropriate system for controlling its *liquidity risk*, which should be described in its *liquidity risk* policy statement. Such a system should allow the *firm's governing body* and senior management to review compliance with established limits and operating procedures.

5.1.72 G A *firm* should have in place appropriate approval processes, limits and other mechanisms designed to provide reasonable assurance that the *firm*'s *liquidity risk* management processes are adhered to.

5.1.73 G When revisions or enhancements to *internal controls* are warranted, a *firm* should implement them in a timely manner.

5.1.74 G The effectiveness of a *firm*'s *liquidity risk* management system should be regularly reviewed and evaluated by individuals unconnected with day-to-day *liquidity risk* management in order to check that personnel are following established policies and procedures, and that procedures accomplish the intended objectives.

5.1.75 G In addition to the regular review and evaluation described in *PRU* 5.1.74G, a *firm*'s internal audit function should periodically review the *liquidity risk* management process in order to identify any weaknesses or problems. Any weaknesses should be addressed by management in a timely and effective manner.

Limit setting

5.1.76 G A *firm*'s senior management should decide what limits need to be set, in accordance with the nature, scale and complexity of its activities. The structure of limits should reflect the need for a *firm* to have systems and controls in place to guard against a spectrum of possible risks, from those arising in day-to-day *liquidity risk* management to those arising in stressed conditions.

5.1.77 G *PRU* 1.4.18R states that a *firm* must take reasonable steps to ensure the establishment and maintenance of a business plan and appropriate systems for the management of prudential risk.

5.1.78 E (1) If a *firm* has *liquidity risk* that arises because it has substantial exposures in foreign currencies, the risk management systems of the *firm* referred to in *PRU* 1.4.18R should include systems and procedures that are designed to ensure that the *firm* does not, except in accordance with those procedures, exceed limits that are designed to limit:

(a) the aggregate amount of its *liquidity risk* for all exposures in foreign currencies; and

(b) the amount of its *liquidity risk* for each individual currency in which it has a significant exposure.

(2) Contravention of (1) may be relied upon as tending to establish contravention of *PRU* 1.4.18R.

5.1.79 G The *FSA* would normally expect a *firm* described in *PRU* 5.1.4R to consider setting limits on:

(1) liability concentrations in relation to:

(a) individual, or related groups of, liability providers;

(b) instrument types;

(c) maturities, including the amount of debt maturing in a particular period; and

(d) retail and wholesale liabilities; and

(2) where appropriate, *net leverage* and *gross leverage*.

5.1.80 G A *firm* should periodically review and, where appropriate, adjust its limits when conditions or risk tolerances change.

5.1.81 G Policy or limit exceptions should receive the prompt attention of the appropriate management and should be resolved according to processes described in approved policies.

Managing market access

5.1.82 G A *firm* should periodically review its efforts to establish and maintain relationships with liability providers, to maintain adequate diversification of liabilities, and to ensure adequate capacity to sell assets, or use them as *collateral* in secured funding. Where possible the *firm* should aim regularly to test its access to the individual markets in assets that it holds for liquidity purposes.

5.1.83 G Market access should be assessed under a variety of normal and stressed conditions.

5.1.84 G In some circumstances, the disclosure of information about a *firm* may be useful in managing the public perception of its organisation and soundness. A *firm* should consider the role of disclosure in managing the *liquidity risk* to which it is exposed.

Contingency funding plans

5.1.85 G *PRU* 1.2.22R states that a *firm* must at all times maintain overall financial resources adequate to ensure that there is no significant risk that its liabilities cannot be met as they fall due. *PRU* 1.2.35R(2) states that for the purposes of determining the adequacy of its overall financial resources, a *firm* must estimate the financial resources it would need in each of the circumstances and events considered in carrying out its stress testing and scenario analysis in order to meet its liabilities as they fall due.

5.1.86 E (1) A *firm* should have a *contingency funding plan* for taking action to ensure, so far as it can, that, in each of the scenarios analysed under *PRU* 1.2.35R(2), it would still have sufficient liquid financial resources to meet liabilities as they fall due.

(2) The *contingency funding plan* should cover what events or circumstances will lead the *firm* to put into action any part of the plan.

(3) Contravention of (1) or (2) may be relied upon as tending to establish contravention of *PRU* 1.2.22R.

5.1.87 G A *firm* should adequately document the *contingency funding plan* referred to in *PRU* 5.1.86E.

5.1.88 G The *contingency funding plan* of a *firm* described in *PRU* 5.1.4R should cover the extent to which the actions in *PRU* 5.1.86E(1) include:

(1) selling, using as *collateral* in secured funding (including repo), or securitising, its assets;

(2) otherwise reducing its assets;

(3) modifying the structure of its liabilities or increasing its liabilities; and

(4) the use of committed facilities.

5.1.89 G A *firm*'s *contingency funding plan* should, where relevant, take account of the impact of stressed market conditions on:

(1) the behaviour of any credit-sensitive liabilities it has; and

(2) its ability to securitise assets.

5.1.90 G The *contingency funding plan* should contain administrative policies and procedures that will enable the *firm* to manage the plan's implementation effectively, including:

(1) the responsibilities of senior management;

(2) names and contact details of members of the team responsible for implementing the *contingency funding plan*;

(3) where, geographically, team members will be assigned;

(4) who within the team is responsible for contact with head office (if appropriate), analysts, investors, external auditors, press, significant *customers*, regulators, lawyers and others; and

(5) mechanisms that enable senior management and the *governing body* to receive management information that is both relevant and timely.

Documentation

5.1.91 G *PRU* 1.2.37R states that a *firm* must document its assessment of the adequacy of its liquidity financial resources, how it intends to deal with those risks, and details of the stress tests and scenario analyses carried out and the resulting financial resources estimated to be required. Accordingly, a *firm* should document both its stress testing and scenario analysis (see *PRU* 5.1.58G) and its *contingency funding plan* (see *PRU* 5.1.85G).

Annex H

PRU 6

In this Annex, all the text is new and is not underlined.

6.1 Operational Risk: Prudential Systems and Controls

Application

6.1.1 G *PRU* 6.1 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

6.1.2 G *PRU* 6.1 applies to:

(1) an *EEA-deposit insurer*; and
(2) a *Swiss general insurer*;

only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

Purpose

6.1.3 G This section provides *guidance* on how to interpret *PRU* 1.4.18R and *PRU* 1.4.19R(2) (which relate to the design and documentation of risk management systems) in so far as they relate to the management of operational risk in a *prudential context*. Operational risk has been described by the Basel Committee on Banking Supervision as "the risk of loss, resulting from inadequate or failed internal processes, people and systems, or from external events". Thus this section covers systems and controls relating to risks concerning any of the *firm*'s operations, whether caused by internal or external matters. However, it does not cover systems and controls as they relate to credit, market, liquidity and insurance risk. Examples of operational risk exposures that the systems and controls covered in this section are meant to address include internal and external fraud; failure to comply with employment law or meet workplace safety standards; damage to physical assets; business disruptions and system failures; and transaction processing failures.

6.1.4 G Operational risk concerns the *FSA* in a *prudential context* because inappropriate systems and controls for the management of operational risk can adversely affect the solvency or business continuity of a *firm*, threatening the *regulatory objectives* of market confidence and consumer protection.

6.1.5 G This section contains *guidance* on how a *firm* should determine, in a *prudential context*, its policy for operational risk management and its processes for the identification, assessment, monitoring and control of operational risk. In addition, *guidance* is provided on record keeping in relation to operational risk.

6.1.6 G The *guidance* contained within this section is not designed to be exhaustive. When establishing and maintaining its systems and controls for operational risk, a *firm* should have regard to other parts of the *Handbook* as well as the material that is issued by other industry or regulatory bodies. In particular, a *firm* should read this section in conjunction with *SYSC* 3A (Operational Risk Systems and Controls) which contains high level *guidance* on the management of people, processes and systems, and external events in relation to operational risk. *SYSC* 3A also outlines some *guidance* on the areas that are covered by operational risk systems and controls (including the *FSA's* interpretation of some frequently used risk management terms in relation to operational risk), business continuity management, outsourcing, and the role of insurance in financing operational risk. In addition, a *firm* should read *PRU* 1.4, which contains the *FSA's* general policy on prudential systems and controls. *PRU* 1.4 contains some *rules* and *guidance* on which this section offers additional *guidance*.

6.1.7 G *Guidance* on the application of this section to a *firm* that is a member of a *group* is provided in *PRU* 8.1 (Group Risk Systems and Controls).

6.1.8 G Appropriate systems and controls for the management of operational risk will vary with the scale, nature and complexity of a *firm's* activities. Therefore the material in this section is *guidance*. A *firm* should assess the appropriateness of any particular item of *guidance* in the light of the scale, nature and complexity of its activities as well as its obligations as set out in *Principle* 3 to organise and control its affairs responsibly and effectively.

General Requirements

6.1.9 G High level *rules* and *guidance* for prudential systems and controls including those for operational risk are set out in *PRU* 1.4. In particular:

(1) *PRU* 1.4.18R requires a *firm* to take reasonable steps to ensure that the risk management systems put in place to identify, assess, monitor and control operational risk are adequate for that purpose;

(2) *PRU* 1.4.19R(2) requires a *firm* to document its policy for operational risk, including its risk appetite and how it identifies, assesses, monitors and controls that risk; and

(3) *PRU* 1.4.27 R requires a *firm* to take reasonable steps to establish and maintain adequate *internal controls* to enable it to assess and monitor the effectiveness and implementation of its business plan and prudential risk management systems.

Operational risk policy

6.1.10 G Much of the management of operational risk is about identifying, assessing, monitoring and controlling failures or inadequacies in a *firm's* systems and controls. As such, a *firm* may often find that there is no clear boundary between its risk management systems for operational risk and all its other systems and controls. When drafting its operational risk policy, a *firm* should try to distinguish between its systems and controls for credit, market, liquidity and insurance risk**,** and its systems and controls for operational risk. Where such a distinction is not possible a *firm* should still try to identify those systems and controls that are used in the management of operational risk, even when they have other purposes as well.

6.1.11 G A *firm* should document its policy for managing operational risk. This policy should outline a *firm's* strategy and objectives for operational risk management and the processes that it intends to adopt to achieve these objectives. In complying with *PRU* 1.4.19R(2), the documented operational risk policy of a *firm* should include:

(1) an analysis of the *firm's* operational risk profile (see the *FSA's* interpretation of this term in *SYSC* 3A.5.1G(3)), including where relevant some consideration of the effects that operational risk may have on the *firm,* including consideration of those operational risks within a *firm* that may have an adverse impact upon the quality of service afforded to its *clients*;

(2) the operational risks that the *firm* is prepared to accept and those that it is not prepared to accept, including where relevant some consideration of its appetite or tolerance (see *PRU* 6.1.13G) for specific operational risks;

(3) how the *firm* intends to identify, assess, monitor, and control its operational risks, including an overview of the people, processes and systems that are used; and

(4) where assessments of the *firm's* risk exposures are used for internal capital allocation purposes, a description of how operational risk is incorporated into this methodology.

6.1.12 G A *firm* may also wish to set threshold levels in its operational risk policy for particular types of operational risk (based on its risk appetite or tolerance for risk), which when exceeded trigger a response (such as the allocation of more resources to control the risk or a reappraisal of business plans).

6.1.13 G Given its association with a willingness to take risk, a *firm* may wish to replace the term appetite for tolerance when drafting its operational risk policy. Tolerance describes the types and degree of operational risk that a *firm* is prepared to incur (based on factors such as the adequacy of its resources and the nature of its operating environment). Tolerance may be described in terms of the maximum budgeted (that is, expected) costs of an operational risk that a *firm* is prepared to bear, or by reference to risk indicators such as the cost or number of system failures, available spare capacity and the number of failed trades.

6.1.14 G The term risk assessment can be used to represent both the qualitative and quantitative evaluation or measurement of operational exposures.

Risk identification

6.1.15 G In order to understand its operational risk profile, a *firm* should identify the types of operational risk that it is exposed to as far as reasonably possible. This might include, but is not limited to, consideration of:

(1) the nature of a *firm's customers*, products and activities, including sources of business, distribution mechanisms, and the complexity and volumes of transactions;

(2) the design, implementation, and operation of the processes and systems used in the end-to-end operating cycle for a *firm's* products and activities;

(3) the risk culture and human resource management practices at a *firm*; and

(4) the business operating environment, including political, legal, socio-demographic, technological, and economic factors as well as the competitive environment and market structure.

6.1.16 G A *firm* should recognise that it may face significant operational exposures from a product or activity that may not be material to its business strategy. A *firm* should consider the appropriate level of detail at which risk identification is to take place, and may wish to manage the operational risks that it faces in risk categories that are appropriate to its organisational and legal structures.

6.1.17 G The *FSA's* interpretation of the term operational exposure is provided in *SYSC* 3A.5.1G(2).

Risk assessment

6.1.18 G The *FSA* recognises that risk management systems for operational risk are still developing, and that it may be neither feasible nor appropriate to measure certain types of operational risk in a quantitative way. A *firm* may wish to take a qualitative approach to the assessment of its operational risks using, for example, relative estimates (such as high, medium, low) to understand its exposure to them.

6.1.19 G In order to understand the effects of its operational exposures a *firm* should continually assess its operational risks. This might include, but is not limited to, consideration of:

(1) actual operational losses that have occurred within a *firm*, or events that could have resulted in significant operational losses, but were avoided (for example, the waiving of financial penalties by a third party as a gesture of goodwill or where by chance the *firm* realised profits);

(2) internal assessment of risks inherent in its operations and the effectiveness of controls implemented to reduce these risks (through activities such as self-assessment or stress testing and scenario analysis);

(3) other risk indicators, such as *customer* complaints, processing volumes, *employee* turnover, large numbers of reconciling items, process or system failures, fragmented systems, systems subject to a high degree of manual intervention and transactions processed outside a *firm's* mainstream systems;

(4) reported external (peer) operational losses and exposures; and

(5) changes in its business operating environment.

6.1.20 G When assessing its operational risks, a *firm* may be able to differentiate between expected and unexpected operational losses. A *firm* should consider whether it is appropriate to adopt a more quantitative approach to the assessment of its expected operational losses, for example by defining tolerance, setting thresholds, and measuring and monitoring operational losses and exposures. In contrast, a *firm* may wish to take a more qualitative approach to assessing its unexpected losses.

6.1.21 G Although a *firm* may currently be unable to assess certain operational risks with a high degree of accuracy or consistency, it should, according to the nature, scale and complexity of its business, consider the use of more sophisticated qualitative and quantitative techniques as they become available.

Risk monitoring

6.1.22 G In monitoring its operational risks, a *firm* should:

(1) as appropriate, regularly report to the relevant level of management its operational exposures, loss experience (including if possible cumulative losses), and authorised deviations from the *firm's* operational risk policy;

(2) engage in exception-based escalation to management of:

(a) unauthorised deviations from the *firm's* operational risk policy;

(b) likely or actual breaches in predefined thresholds for operational exposures and losses, where set; and

(c) significant increases in the *firm's* exposure to operational risk or alterations to its operational risk profile.

Risk control

6.1.23 G A *firm* should control its operational risks, as appropriate, through activities for the avoidance, transfer, prevention or reduction of the likelihood of occurrence or potential impact of an operational exposure. This might include, but is not limited to, consideration of:

(1) adjusting a *firm's* risk culture and creating appropriate incentives to facilitate the implementation of its risk control strategy (see *SYSC* 3A.6 People);

(2) adapting internal processes and systems (see *SYSC* 3A.7 Processes and systems);

(3) transferring or changing the operational exposure through mechanisms such as *outsourcing* (see *SYSC* 3A.9 Outsourcing) and insurance (see *SYSC* 3A.10 Insurance);

(4) the active acceptance of a given operational risk within the *firm*'s stated risk appetite or tolerance; and

(5) providing for expected losses, and maintaining adequate financial resources against unexpected losses that may be encountered in the normal course of a *firm's* business activities.

Record keeping

6.1.24 G The *FSA's* high level *rules* and *guidance* for record keeping are outlined in *SYSC* 3.2.20R (Records). Additional *rules* and *guidance* in relation to the *prudential context* are set out in *PRU* 1.4.51G to *PRU* 1.4.64G (Record keeping). In complying with these *rules* and all associated *guidance*, a *firm* should retain an appropriate record of its operational risk management activities. This may, for example, include records of:

(1) the results of risk identification, measurement, and monitoring activities;

(2) actions taken to control identified risks;

(3) where relevant, any exposure thresholds that have been set for identified operational risks;

(4) an assessment of the effectiveness of the risk control tools that are used; and

(5) actual exposures against stated risk appetite or tolerance.

Annex I

PRU 7

In this Annex, all the text is new and is not underlined.

7.1 Insurance risk systems and controls

Application

7.1.1 G *PRU* 7.1 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

7.1.2 G *PRU* 7.1 applies to:

(1) an *EEA-deposit insurer*; and
(2) a *Swiss general insurer*;

only in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*.

Purpose

7.1.3 G This section provides *guidance* on how to interpret *PRU* 1.4 (Prudential risk management and associated systems and controls) in so far as it relates to the management of insurance risk. Insurance risk refers to fluctuations in the timing, frequency and severity of insured events, relative to the expectations of the *firm* at the time of underwriting. Insurance risk can also refer to fluctuations in the timing and amount of *claim* settlements. For *general insurance business* some specific examples of insurance risk include variations in the amount or frequency of *claims* or the unexpected occurrence of multiple *claims* arising from a single cause. For *long-term insurance business* examples include variations in the mortality and persistency rates of *policyholders*, or the possibility that guarantees could acquire a value that adversely affects the finances of a *firm* and its ability to treat its *policyholders* fairly consistent with the *firm's* obligations under *Principle* 6. More generally, insurance risk includes the potential for expense overruns relative to pricing or provisioning assumptions.

7.1.4 G Insurance risk concerns the *FSA* in a *prudential context* because inadequate systems and controls for its management can create a threat to the *regulatory objectives* of market confidence and consumer protection. Inadequately managed insurance risk may result in:

(1) the inability of a *firm* to meet its contractual insurance liabilities as they fall due; and

(2) the inability of a *firm* to treat its *policyholders* fairly consistent with the *firm's* obligations under *Principle* 6 (for example, in relation to bonus payments).

7.1.5 G *Guidance* on the application of this section to a *firm* that is a member of a *group* is provided in *PRU* 8.1 (Group risk systems and controls).

7.1.6 G The *guidance* contained within this section should be read in conjunction with *SYSC* and *PRU* 1.4.

7.1.7 G Appropriate systems and controls for the management of insurance risk will vary with the scale, nature and complexity of a *firm's* activities. Therefore, the material in this section is *guidance*. A *firm* should assess the appropriateness of any particular item of *guidance* in the light of the scale, nature and complexity of its activities as well as its obligations, as set out in *Principle* 3, to organise and control its affairs responsibly and effectively.

General requirements

7.1.8 G High level *rules* and *guidance* for prudential systems and controls for insurance risk are set out in *PRU* 1.4. In particular:

(1) *PRU* 1.4.18R requires a *firm* to take reasonable steps to establish and maintain a business plan and appropriate risk management systems;

(2) *PRU* 1.4.19R(2) requires a *firm* to document its policy for insurance risk, including its risk appetite and how it identifies, measures, monitors and controls that risk; and

(3) *PRU* 1.4.27R requires a *firm* to take reasonable steps to establish and maintain adequate *internal controls* to enable it to assess and monitor the effectiveness and implementation of its business plan and prudential risk management systems.

Insurance risk policy

7.1.9 G A *firm's* insurance risk policy should outline its objectives in carrying out *insurance business,* its appetite for insurance risk and its policies for identifying, measuring, monitoring and controlling insurance risk. The insurance risk policy should cover any activities that are associated with the creation or management of insurance risk. For example, underwriting, *claims* management and settlement, assessing *technical provisions* in the balance sheet, risk mitigation and risk transfer, record keeping and management reporting. Specific matters that should normally be in a *firm's* insurance risk policy include:

(1) a statement of the *firm's* willingness and capacity to accept insurance risk;

(2) the classes and characteristics of *insurance business* that the *firm* is prepared to accept;

(3) the underwriting criteria that the *firm* intends to adopt, including how these can influence its rating and pricing decisions;

(4) its approach to limiting significant aggregations of insurance risk, for example, by setting limits on the amount of business that can be underwritten in one region or with one *policyholder*;

(5) where relevant, the *firm's* approach to pricing *long-term insurance contracts*, including the determination of the appropriate level of any reviewable *premiums*;

(6) the *firm*'s policy for identifying, monitoring and managing risk when it has delegated underwriting authority to another party (additional *guidance* on the management of *outsourcing* arrangements is provided in SYSC 3A.9);

(7) the *firm's* approach to managing its expense levels, including acquisition costs, recurring costs, and one-off costs, taking account of the margins available in both the prices for products and in the *technical provisions* in the balance sheet;

(8) the *firm's* approach to the exercise of any discretion (e.g. on charges or the level of benefits payable) that is available in its *long-term insurance contracts*, in the context also of the legal and regulatory constraints existing on the application of this discretion;

(9) the *firm's* approach to the inclusion of options within new *long-term insurance contracts* and to the possible exercise by *policyholders* of options on existing contracts;

(10) the *firm's* approach to managing persistency risk;

(11) the *firm's* approach to managing risks arising from timing differences in taxation or from changes in tax laws;

(12) the *firm's* approach to the use of *reinsurance* or the use of some other means of risk transfer;

(13) how the *firm* intends to assess the effectiveness of its risk transfer arrangements and manage the residual or transformed risks (for example, how it intends to handle disputes over contract wordings, potential payout delays and *counterparty* performance risks);

(14) a summary of the data and information to be collected and reported on underwriting, *claims* and risk control (including internal accounting records), management reporting requirements and external data for risk assessment purposes;

(15) the risk measurement and analysis techniques to be used for setting underwriting *premiums*, *technical provisions* in the balance sheet, and assessing capital requirements; and

(16) the *firm's* approach to stress testing and scenario analysis, as required by *PRU* 1.2 (Adequacy of financial resources), including the methods adopted, any assumptions made and the use that is to be made of the results.

7.1.10 G Further, more detailed, *guidance* is given in *PRU* 7.1.11G to *PRU* 7.1.37G on the identification, measurement, monitoring and control (including the use of *reinsurance* and other forms of risk transfer) of insurance risk. A *firm* should consider what additional material to that set out above should be included in its insurance risk policy on each of these for its various activities.

Risk identification

7.1.11 G A *firm* should seek to identify the causes of fluctuations in the occurrence, amount and timing of its insurance liabilities. A *firm* should also seek to identify aggregations of risk that may give rise to large single or multiple *claims*.

7.1.12 G The identification of insurance risk should normally include:

(1) in connection with the *firm's* business plan:

(a) processes for identifying the types of insurance risks that may be associated with a new product and for comparing the risk types that are present in different classes of business (in order to identify possible aggregations in particular insurance risks); and

(b) processes for identifying business environment changes (for example landmark legal rulings) and for collecting internal and external data to test and modify business plans;

(2) at the point of sale, processes for identifying the underwriting risks associated with a particular *policyholder* or a group of *policyholders* (for example, processes for identifying potential claims for mis-selling and for collecting information on the *claims* histories of *policyholders*, including whether they have made any potentially false or inaccurate *claims*, to identify possible adverse selection or moral hazard problems);

(3) after the point of sale, processes for identifying potential and emerging *claims* for the purposes of *claims* management and *claims* provisioning; this could include:

(a) identifying possible judicial rulings;

(b) keeping up to date with developments in market practice; and

(c) collecting information on industry wide initiatives and settlements.

7.1.13 G A *firm* should also identify potential pricing risks, where the liabilities or costs arising from the sale of a product may not be as expected.

Risk measurement

7.1.14 G A *firm* should have in place appropriate systems for collecting the data it needs to measure insurance risk. At a minimum this data should be capable of allowing a *firm* to evaluate the types of *claims* experienced, *claims* frequency and severity, expense levels, persistency levels and, where relevant, potential changes in the value of guarantees and options in *long-term insurance contracts*.

7.1.15 G A *firm* should ensure that the data it collects and the measurement methodologies that it uses are sufficient to enable it to evaluate, as appropriate:

(1) its exposure to insurance risk at all relevant levels, for example, by contract, *policyholder*, product line or insurance class;

(2) its exposure to insurance risk across different geographical areas and time horizons;

(3) its total, firm-wide, exposure to insurance risk and any other risks that may arise out of the *contracts of insurance* that it issues;

(4) how changes in the volume of business (for example via changes in *premium* levels or the number of new contracts that are underwritten) may influence its exposure to insurance risk;

(5) how changes in *policy* terms may influence its exposure to insurance risk; and

(6) the effects of specific loss scenarios on the insurance liabilities of the *firm*.

7.1.16 G A *firm* should hold data in a manner that allows for it to be used in a flexible way. For example, data should be sufficiently detailed and disaggregated so that contract details may be aggregated in different combinations to assess different risks.

7.1.17 G A *firm* should be able to justify its choice of measurement methodologies. This justification should normally be documented.

7.1.18 G A *firm* should periodically review the appropriateness of the measurement methodologies that it uses. This could, for example, include back testing (that is, by comparing actual versus expected results) and updating for changes in market practice.

7.1.19 G A *firm* should ensure that it has access to the necessary skills and resources that it needs to measure insurance risk using its chosen methodology.

7.1.20 G When measuring its insurance risks, a *firm* should consider how emerging experience could be used to update its underwriting process, in particular in relation to contract terms and pricing and also its assessment of the *technical provisions* in the balance sheet.

7.1.21 G A *firm* should have the capability to measure its exposure to insurance risk on a regular basis. In deciding on the frequency of measurement, a *firm* should consider:

(1) the time it takes to acquire and process all necessary data;

(2) the speed at which exposures could change; and

(3) that it may need to measure its exposure to certain types of insurance risk on a daily basis (for example, weather catastrophes).

Risk monitoring

7.1.22 G A *firm* should provide regular and timely information on its insurance risks to the appropriate level of management. This could include providing reports on the following:

(1) a statement of the *firm's* profits or losses for each class of business that it underwrites (with an associated analysis of how these have arisen for any *long-term insurance contracts*), including a variance analysis detailing any deviations from budget or changes in the key performance indicators that are used to assess the success of its business plan for insurance;

(2) the *firm's* exposure to insurance risk at all relevant levels (see *PRU* 7.1.15G(1)), as well as across different geographical areas and time zones (see *PRU* 7.1.15G(2)), also senior management should be kept informed of the *firm's* total exposure to insurance risk (see *PRU* 7.1.15G(3));

(3) an analysis of any internal or external trends that could influence the *firm's* exposure to insurance risk in the future (e.g. new weather patterns, socio-demographic changes, expense overruns etc);

(4) any new or emerging developments in *claims* experience (e.g. changes in the type of *claims*, average *claim* amounts or the number of similar *claims*);

(5) the results of any stress testing or scenario analyses;

(6) the amount and details of new business written and the amount of business that has lapsed or been cancelled;

(7) identified fraudulent *claims*;

(8) a watch list, detailing, for example, material/catastrophic events that could give rise to significant numbers of new *claims* or very large *claims*, contested *claims*, client complaints, legal and other developments;

(9) the performance of any *reinsurance*/risk transfer arrangements; and

(10) progress reports on matters that have previously been referred under escalation procedures (see *PRU* 7.1.23G).

7.1.23 G A *firm* should establish and maintain procedures for the escalation of appropriate matters to the relevant level of management. Such matters may include:

(1) any significant new exposures to insurance risk, including for example any landmark rulings in the courts;

(2) a significant increase in the size or number of *claims*;

(3) any breaches of the limits set out in *PRU* 7.1.27G and *PRU* 7.1.28G, in particular senior management should be informed where any maximum limits have been breached (see *PRU* 7.1.29G); and

(4) any unauthorised deviations from its insurance risk policy (including those by a *broker*, *appointed representative* or other delegated authority).

7.1.24 G A *firm* should regularly monitor the effectiveness of its analysis techniques for setting provisions for *claims* on *general insurance contracts*.

7.1.25 G A *firm* should have appropriate procedures in place to allow managers to monitor the application (and hence the effect) of its *reinsurance* programme. This would include, for a general *insurer*, procedures for monitoring how its *reinsurance* programme affects the gross provisions that it makes for outstanding *claims* (including *claims* that are incurred but not reported).

Risk control

7.1.26 G A *firm* should take appropriate action to ensure that it is not exposed to insurance risk in excess of its risk appetite. In so doing, the *firm* should be both reactive, responding to actual increases in exposure, and proactive, responding to potential future increases. Being proactive should involve close co-ordination between the processes of risk control, risk identification and risk measurement, as potential future exposures need to be identified and understood before effective action can be taken to control them.

7.1.27 G A *firm* should consider setting limits for its exposure to insurance risk, which trigger action to be taken to control exposure. Periodically these limits should be amended in the light of new information (e.g. on the expected number or size of *claims*). For example, limits could be set for:

(1) the *firm's* aggregate exposure to a single source of insurance risk or for events that may be the result of a number of different sources;

(2) the *firm's* exposure to specific geographic areas or any other groupings of risks whose outcomes may be positively correlated;

(3) the number of fraudulent *claims*;

(4) the number of very large *claims* that could arise;

(5) the number of unauthorised deviations from its insurance risk policy;

(6) the amount of insurance risk than can be transferred to a particular *reinsurer*;

(7) the level of expenses incurred in respect of each relevant business area; and

(8) the level of persistency by product line or distribution channel.

7.1.28 G A *firm* should also consider setting individual underwriting limits for all *employees* and agents that have the authority to underwrite insurance risk. This could include both monetary limits and limits on the types of risk that they can underwrite. Where individual underwriting limits are set, the *firm* should ensure that they are adhered to.

7.1.29 G In addition to setting some 'normal' limits for insurance risk, a *firm* should consider setting some maximum limits, beyond which immediate, emergency action should be taken. These maximum limits could be determined through stress testing and scenario analysis.

7.1.30 G A *firm* should pay close attention to the wording of its *policy* documentation to ensure that these wordings do not expose it to more, or higher, *claims* than it is expecting. In so doing, the *firm* should consider:

(1) whether it has adequate in-house legal resources;

(2) the need for periodic independent legal review of *policy* documentation;

(3) the use of standardised documentation and referral procedures for variation of terms;

(4) reviewing the documentation used by other insurance companies;

(5) revising documentation for new *policies* in the light of past experience; and

(6) the operation of law in the jurisdiction of the *policyholder*.

7.1.31 G A *firm* should ensure that it has appropriate systems and controls for assessing the validity of *claims*. This could involve consideration of the evidence that will be required from *policyholders* and how this evidence is to be tested as well as procedures to determine when experts such as loss adjusters, lawyers or accountants should be used.

7.1.32 G Particular care should be taken to ensure that a *firm* has appropriate systems and controls to deal with large *claims* or large groups of *claims* that could significantly deplete its financial resources. This should include systems to ensure that senior management (that is, the *governing body* and relevant *senior managers*) is involved in the processing of such *claims* from the outset.

7.1.33 G A *firm* should consider how it intends to use *reinsurance* or some other form of insurance risk transfer agreement to help to control its exposure to insurance risk. Additional *guidance* on the use of *reinsurance*/risk transfer is provided below.

Reinsurance and other forms of risk transfer

7.1.34 G Before entering into or significantly changing a *reinsurance* agreement, or any other form of insurance risk transfer agreement, a *firm* should:

(1) analyse how the proposed *reinsurance*/risk transfer agreement will affect its exposure to insurance risk, its underwriting strategy and its ability to meet its regulatory obligations;

(2) ensure there are adequate legal checking procedures in respect of the draft agreement;

(3) conduct an appropriate due diligence of the *reinsurer's* financial stability (that is, solvency) and expertise; and

(4) understand the nature and limits of the agreement (particular attention should be given to the wording of contracts to ensure that all of the required risks are covered, that the level of available cover is appropriate, and that all the terms, conditions and warranties are unambiguous and understood).

7.1.35 G In managing its *reinsurance* agreements, or any other form of insurance risk transfer agreement, a *firm* should have in place appropriate systems that allow it to maintain its desired level of cover. This could involve systems for:

(1) monitoring the risks that are covered (that is, the scope of cover) by these agreements and the level of available cover;

(2) keeping underwriting staff informed of any changes in the scope or level of cover;

(3) properly co-ordinating all *reinsurance*/risk transfer activities so that, in aggregate, the desired level and scope of cover is maintained;

(4) ensuring that the *firm* does not become overly reliant on any one *reinsurer* or other risk transfer provider;

(5) conducting regular stress testing and scenario analysis to assess the resilience of its *reinsurance* and risk transfer programmes to catastrophic events that may give rise to large and or numerous *claims*.

7.1.36 G In making a claim on a *reinsurance* contract (that is, its *reinsurance* recoveries) or some other risk transfer contract a *firm* should ensure:

(1) that it is able to identify and recover any money that it is due in a timely manner; and

(2) that it makes adequate financial provision for the risk that it is unable to recover any money that it expected to be due, as a result of either a dispute with or a default by the *reinsurer*/risk transfer provider. Additional *guidance* on credit risk in *reinsurance*/risk transfer contracts is provided in *PRU* 3.2 (Credit risk in insurance).

7.1.37 G Where the planned level or scope of cover from a *reinsurance*/risk transfer contract is not obtained, a *firm* should consider revising its underwriting strategy.

Record keeping

7.1.38 G The *FSA's* high level *rules* and *guidance* for record keeping are outlined in *SYSC* 3.2.20R (Records). Additional *rules* and *guidance* in relation to the *prudential context* are set out in *PRU* 1.4.51G to *PRU* 1.4.64G. In complying with these *rules* and *guidance*, a *firm* should retain an appropriate record of its insurance risk management activities. This may, for example, include records of:

(1) each new risk that is underwritten (noting that these records may be held by agents or cedants, rather than directly by the *firm* provided that the *firm* has adequate access to those records);

(2) any material aggregation of exposure to risk from a single source, or of the same kind or to the same potential catastrophe or event;

(3) each notified *claim* including the amounts notified and paid, precautionary notices and any re-opened *claims*;

(4) *policy* and contractual documents and any relevant representations made to *policyholders*;

(5) other events or circumstances relevant to determining the risks and commitments that arise out of *contracts of insurance* (including discretionary benefits and charges under any *long-term insurance contracts*);

(6) the formal wordings of *reinsurance* contracts; and

(7) any other relevant information on the *firm's reinsurance* or other risk-transfer arrangements, including the extent to which they:

(a) have been exhausted by recoveries on paid *claims*; and

(b) will be exhausted by recoveries on reported *claims* and, to the extent known, on incurred but not reported *claims*.

7.1.39 G A *firm* should retain its underwriting and *claims* histories for as long as they may be needed to inform pricing or provisioning decisions.

7.2 Capital resources requirements and technical provisions for insurance business

Application

7.2.1 R *PRU* 7.2 applies to an *insurer* unless it is:

(1) a *non-directive friendly society*; or

(2) an *incoming EEA firm*; or

(3) an *incoming Treaty firm*.

7.2.2 R (1) This section applies to a *firm* in relation to the whole of its business, except where a particular provision provides for a narrower scope.

(2) Where a *firm* carries on both *long-term insurance business* and *general insurance business*, this section applies separately to each type of business.

7.2.3 R For a *non-EEA direct insurer* with a *branch* in the *United Kingdom*, the part of this section headed "Capital requirements for insurers" (*PRU* 7.2.43G to *PRU* 7.2.91R) applies to its world-wide activities, whilst the parts of this section headed "Establishing technical provisions" (*PRU* 7.2.12R to *PRU* 7.2.19G), "Assets of a value sufficient to cover technical provisions" (*PRU* 7.2.20R to *PRU* 7.2.29G), "Matching of assets and liabilities" (*PRU* 7.2.34R to *PRU* 7.2.40G) and "Premiums for new business" (*PRU* 7.2.41R to *PRU* 7.2.42G) apply in respect of its activities carried on from a *branch* in the *United Kingdom*. The part of this section headed "Localisation" (*PRU* 7.2.30R to *PRU* 7.2.33R) does not apply (see *PRU* 7.6 (Internal contagion risk)).

7.2.4 R For an *EEA-deposit insurer* or a *Swiss general insurer*, the parts of this section headed "Establishing technical provisions" (*PRU* 7.2.12R to *PRU* 7.2.19G), "Assets of a value sufficient to cover technical provisions" (*PRU* 7.2.20R to *PRU* 7.2.29G), "Matching of assets and liabilities" (*PRU* 7.2.34R to *PRU* 7.2.40G) and "Premiums for new business" (*PRU* 7.2.41R to *PRU* 7.2.42G) apply in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*. The parts of this section headed "Capital requirements for insurers" (*PRU* 7.2.43G to *PRU* 7.2.91R) and "Localisation" (*PRU* 7.2.30R to *PRU* 7.2.33R) do not apply.

7.2.5 R For an *UK-deposit insurer*, the part of this section headed "Capital requirements for insurers" (*PRU* 7.2.43G to *PRU* 7.2.91R) applies to its world-wide activities, whilst the parts of this section headed "Establishing technical provisions" (*PRU* 7.2.12R to *PRU* 7.2.19G), "Assets of a value sufficient to cover technical provisions" (*PRU* 7.2.20R to *PRU* 7.2.29G), "Matching of assets and liabilities" (*PRU* 7.2.34R to 7.2.40G) and "Premiums for new business" (*PRU* 7.2.41R to *PRU* 7.2.42G) apply in respect of the activities of the *firm* carried on from *branches* in *EEA States*. The part of this section headed "Localisation" (*PRU* 7.2.30R to *PRU* 7.2.33R) does not apply (see *PRU* 7.6 (Internal contagion risk)).

7.2.6 G This section may apply in cases where a *firm* has its head office in another *EEA State* but is neither an *incoming EEA firm* nor an *incoming Treaty firm*; this could arise in the case of a *non-directive mutual* or a *pure reinsurer*.

Purpose

7.2.7 G *PRU* 7.2 has the aim of reducing the risk that a *firm* may fail to meet its liabilities to its *policyholders* as a result of insurance risk, that is, the risk that arises from the inherent uncertainties as to the occurrence, amount and timing of insurance liabilities.

7.2.8 G This section requires that the *technical provisions* that *firms* establish are adequate to meet their liabilities to *policyholders* under *contracts of insurance*. It also requires that *firms* hold assets of a value sufficient to cover their liabilities, including *technical provisions*, and that there is suitable matching of assets and liabilities. *Technical provisions* are the on-balance sheet provisions made by a *firm* in respect of liabilities arising under or in connection with *contracts of insurance*. There are different *rules* and *guidance* applicable to the calculation of *technical provisions* for *general insurance business* and for *long-term insurance business*.

7.2.9 G This section implements requirements of the *Insurance Directives* for both *general insurance business* and *long-term insurance business* with regard to the *technical provisions*. The relevant articles of the Directives include:

(1) article 15 of the *First Non-Life Directive*, as substituted by article 17 of the *Third Non-Life Directive*; and

(2) article 20 of the *Consolidated Life Directive* (this Directive consolidates the provisions of the previous *First*, *Second* and *Third Life Directives*).

7.2.10 G This section also sets out detailed *rules* and *guidance* on the calculation of the following elements of a *firm's capital resources requirement* (*CRR*) (see *PRU* 2.1):

(1) the *general insurance capital requirement*; and

(2) the *long-term insurance capital requirement*.

7.2.11 G These requirements are dealt with in the part of this section headed "Capital requirements for insurers" (see *PRU* 7.2.43G to *PRU* 7.2.91R). That part of this section also contains *rules* about the calculation of the *insurance-related capital requirement*, which forms part of the *enhanced capital requirement* for *firms* carrying on *general insurance business*. The *asset-related capital requirement* for *firms* carrying on *general insurance business* is set out in *PRU* 3.3.

Establishing technical provisions

7.2.12 R For *general insurance business*, a *firm* must establish adequate technical provisions:

(1) in accordance with the *rules* in *PRU* 7.5 for *equalisation provisions*; and

(2) otherwise, in accordance with *PRU* 1.3.5R.

7.2.13 G For *general insurance business*, the *technical provisions* include outstanding *claims* provisions, *unearned premiums* provisions, unexpired risk provisions and *equalisation provisions*. These provisions take into account the expected ultimate cost of *claims,* including those not yet incurred*,* related expenses and include an allowance for smoothing *claims* (the *equalisation provision*).

7.2.14 G *Discounting* (that is discounting for the time value of money) *general insurance business technical provisions* may be carried out only in limited circumstances and on a prudent basis (see *PRU* 2.2.80R and *PRU* 2.2.81R and paragraph 48 of the *insurance accounts rules*). The fact that the expected liabilities are generally not *discounted* helps to protect against risk from inherent uncertainty in the timing, but not necessarily the amount, of *claims*.

7.2.15 G For some categories of *general insurance business*, *equalisation provisions* are required. These ensure that a *firm* retains additional assets to provide some extra protection against uncertainty as to the amount of *claims*. *Equalisation provisions* are particularly suitable for volatile business, where *claims* in any future year may be subject to significant adverse deviation from recent or average expected *claims* experience, or where trends in *claims* experience may be subject to change. Such volatile *claims* experience arises in a number of types of business, for example, property, marine and aviation, nuclear, certain *non-proportional reinsurance treaty* business, and credit insurance. The *equalisation provisions* help to equalise fluctuations in loss ratios in future years (see *PRU* 7.5 (*Equalisation provisions*)).

7.2.16 R For *long-term insurance business*, a *firm* must establish adequate technical provisions:

(1) for its *long-term insurance contracts*, in accordance with the *rules* and *guidance* in *PRU* 7.3 relating to *mathematical reserves*, and with due regard to generally accepted actuarial practice; and

(2) for *long-term insurance liabilities* which have fallen due, in accordance with *PRU* 1.3.5R.

7.2.17 G *Rules* and *guidance* for calculating *mathematical reserves* are set out in *PRU* 7.3. *Firms* are advised by the *actuarial function* (see *SUP* 4) on the methods and assumptions to be used in calculating the *mathematical reserves*. The standards and guidance issued by the Faculty and Institute of Actuaries to assist actuaries appointed to the *actuarial function* are important sources of evidence as to generally accepted actuarial practice, as referred to in *PRU* 7.2.16R(1).

7.2.18 G For *long-term insurance business*, the *technical provisions* include the *mathematical reserves*. These are actuarial estimates of a *firm's* liabilities in respect of future benefits due to *policyholders*, including bonuses already declared. The *mathematical reserves* may be reduced by the actuarial value of that component of future *premiums* attributable to meeting future liabilities (see *PRU* 7.3 (*Mathematical reserves*)).

7.2.19 G For *long-term insurance business*, the *mathematical reserves* are typically valued on a discounted basis but include valuation margins intended to provide protection against adverse deviations in experience (see *PRU* 7.3).

Assets of a value sufficient to cover technical provisions

7.2.20 R A *firm* must hold *admissible assets* of a value at least equal to the amount of the *technical provisions* that it is required to establish under *PRU* 7.2.12R and *PRU* 7.2.16R (excluding *technical provisions* for *property-linked* and *index-linked benefits* and the assets held to cover them under *PRU* 4.2.57R and *PRU* 4.2.58R).

7.2.21 R A *composite firm* must ensure that:

(1) its separately identified *long-term insurance assets* have a value at least equal to the amount of:

(a) its *technical provisions* for *long-term insurance liabilities*; and

(b) any other liabilities connected with *long-term insurance business*; and

(2) that it has other *admissible assets* of a value at least equal to the amount of its *technical provisions* for *general insurance liabilities*.

7.2.22 G *PRU* 7.6 (Internal-contagion risk) sets out the *rules* and *guidance* on identifying and holding in a separate fund *long-term insurance assets*.

7.2.23 G When valuing assets for the purposes of *PRU* 7.2.20R and *PRU* 7.2.21R, a *firm* should bear in mind:

(1) that the *technical provisions* should be covered by *admissible assets* (see *PRU* 2 Ann 1R); and

(2) the market and *counterparty* limits set out in *PRU* 3.2 (Credit risk in *insurance*). *PRU* 3.2 requires that a *firm* restrict to prudent levels its exposure to *reinsurer* and other *counterparties*, and, in particular, that for the purpose of its balance sheet, a *firm* must not take into account any exposure which exceeds the large exposure limits.

7.2.24 G *Rules* and *guidance* on the valuation of assets are set out in *PRU* 1.3 (Valuation), including the treatment of *shares* in, and debts due from, *related undertakings* in *PRU* 1.3.31R to *PRU* 1.3.42G. *PRU* 4.2 (Market risk in insurance) addresses *market risk* and sets out the matching requirements for linked assets and liabilities. *PRU* 4.2 also sets out *rules* and *guidance* on the matching by currency of assets and liabilities, to reduce a *firm's* exposure to currency *market risk*.

7.2.25 R For the purpose of determining the value of assets available to meet *long-term insurance liabilities* in accordance with *PRU* 7.2.20R, *PRU* 7.2.21R, *PRU* 7.2.27R and *PRU* 7.2.28R, no value is to be attributed to debts and *claims* other than in respect of:

(1) amounts that have already fallen due;

(2) tax recoveries and claims against *compensation funds* to the extent not already offset in *mathematical reserves*.

7.2.26 G Certain debts and *claims* are excluded from *PRU* 7.2.20R, *PRU* 7.2.21R, *PRU* 7.2.27R and *PRU* 7.2.28R to avoid double-counting. The *rules* and *guidance* in *PRU* 7.3 (*Mathematical reserves*) set out how a *firm* may offset debts and *claims* against liabilities in calculating the *mathematical reserves* required for *long-term insurance business*. Tax recoveries and claims against *compensation funds* in *PRU* 7.2.25R(2) are set out in the list of *admissible assets* (see *PRU* 2 Ann 1R).

7.2.27 R A *firm* carrying on *long-term insurance business* must ensure that it has *admissible assets* in each of its *with-profits funds* of a value sufficient to cover the *technical provisions* in respect of all the business written in that *with-profits fund*.

7.2.28 R In addition to complying with *PRU* 7.2.27R, a *realistic basis life firm* must also ensure that the *realistic value of assets* for each of its *with-profits funds* is at least equal to the *realistic value of liabilities* of that fund.

7.2.29 G *PRU* 7.2.27R and *PRU* 7.2.28R support the funding of *policyholder* benefits by requiring *firms* to maintain *admissible assets* in *with-profits funds* to cover the *technical provisions* relating to all the business in that fund and, in the case of a *realistic basis life firm*, realistic assets to cover the realistic liabilities of the *with-profits insurance contracts* written in the fund.

Localisation (UK firms only)

7.2.30 R (1) Subject to (2), a *UK firm* must hold *admissible assets* held pursuant to *PRU* 4.2.53R:

(a) (where the *admissible assets* cover *technical provisions* in pounds sterling), in any *EEA State*; and

(b) (where the *admissible assets* cover *technical provisions* in any currency other than pounds sterling), in any *EEA State* or in the country of that currency.

(2) In the case of a *community co-insurance operation* and a *relevant insurer*, the *admissible assets* covering *technical provisions* must be held in any *EEA State*.

7.2.31 G *PRU* 7.6 (Internal contagion risk) sets out the *rules* and *guidance* on localisation for *firms* other than *UK firms*.

7.2.32 R *PRU* 7.2.30R does not apply to:

(1) a *pure reinsurer*; or

(2) debts owed by *reinsurers*; or

(3) *insurance business* carried on by a *UK firm* outside the *EEA States*; or

(4) *general insurance business class* groups 3 and 4 in IPRU(Ins), Annex 11.2, Part II.

7.2.33 R For the purposes of *PRU* 7.2.30R:

(1) a tangible asset is to be treated as held in the country or territory where it is situated;

(2) an *admissible asset* consisting of a claim against a debtor is to be treated as held in any country or territory where it can be enforced by legal action;

(3) a *listed security* is to be treated as held in any country or territory where there is a *regulated market* on which the *security* is dealt; and

(4) a *security* which is not a *listed security* is to be treated as held in the country or territory in which the *issuer* has its head office.

Matching of assets and liabilities

7.2.34 R (1) Subject to (4), the assets held by a *firm* to cover its *technical provisions* (see *PRU* 7.2.20R and *PRU* 7.2.21R) must:

(a) have characteristics of safety, yield and marketability which are appropriate to the type of business carried on by the *firm*;

(b) be diversified and adequately spread; and

(c) comply with (2).

(2) The assets referred to in (1) must, in addition to meeting the criteria set out in (1)(a) and (b), be of a sufficient amount, and of an appropriate currency and term, to ensure that the cash inflows from those assets will meet the expected cash outflows from the *firm's* insurance liabilities as they become due.

(3) For the purpose of (2), a *firm* must take into consideration in determining expected cash outflows any options which exist in the *firm's contracts of insurance*.

(4) (1) does not apply to assets held to cover *index-linked liabilities* or *property-linked liabilities*, except that where the *linked long-term contract of insurance* in question includes a guarantee of investment performance or some other guaranteed benefit, (1) will nevertheless apply to assets held to cover that guaranteed element.

7.2.35 G A *firm* should take account of the amount, currency and timing of its expected cash outflows in determining whether the assets it holds to cover its *technical provisions* meet the requirements of *PRU* 7.2.34R(2).

7.2.36 G For the purpose of *PRU* 7.2.34R(2), the relevant cash inflows are those which the *firm* reasonably expects to receive from the *admissible assets* which it holds to cover its *technical provisions*. A *firm* may receive cash inflows as a result of:

(1) selling assets or closing out transactions;

(2) holding assets that generate dividends, interest or other income; and

(3) receiving future *premiums* for existing business.

7.2.37 G Anticipated cash inflows from future new business should not be included, for example where the *customer* has not yet contracted to pay the *premium*, and where the associated liabilities and potential cash outflows should also not be included.

7.2.38 G A *firm* should compare cash inflows and outflows based on current expectations of amounts and timings. Current market expectations of future asset values, interest rates and currency exchange rates should be used. Where inflows are received in a currency different from that in which outflows are to be paid, account should be taken of the cost of converting the currency received.

7.2.39 G In considering the value and suitability of assets required to ensure that the *firm's* liabilities are met as they become due, a *firm* should take account of the risk of default on inflows from those assets, and other risks that may mean that future inflows are reduced relative to outflows.

7.2.40 G *PRU* 7.2.20R lays down a general requirement for a *firm* that carries on *long-term insurance business* to hold *admissible assets* that are of a value sufficient to cover its *mathematical reserves* (calculated in accordance with the *rules* in *PRU* 7.3). The *PRU* 7.2.34R(2) requirement to match liabilities with assets that allow cash outflows to be met with suitable inflows as the outflows become due may mean that a *firm* has to hold assets of a value greater than would otherwise be required by the general *rule* in *PRU* 7.2.20R.

Premiums for new business

7.2.41 R A *firm* must not enter into a *long-term insurance contract* unless it is satisfied on reasonable actuarial assumptions that:

(1) the *premiums* receivable and the investment income expected to be earned from those *premiums*; and

(2) the *reinsurance* arrangements made in respect of the risk or risks covered by that new contract;

are sufficient to enable it, when taken together with the *firm's* other resources, to:

(a) establish adequate *technical provisions* as required by *PRU* 7.2.16R;

(b) hold *admissible assets* of a value at least equal to the amount of the *technical provisions* as required by *PRU* 7.2.20R to *PRU* 7.2.28R; and

(c) maintain adequate overall financial resources as required by *PRU* 1.2.22R.

7.2.42 G For the purposes of *PRU* 7.2.41R, the adequacy of *premiums* may be assessed in the context of a *firm's* total portfolio of business and its other resources. It thus does not prevent a *firm* writing loss leaders nor writing contracts which might incur large losses, but only if the *firm* can meet the losses that might reasonably arise, including those that would arise from an event specifically insured against.

Capital requirements for insurers

7.2.43 G (1) *PRU* 2.1.9R requires a *firm* to maintain *capital resources* equal to or in excess of its *capital resources requirement* (*CRR*). *PRU* 2.1 sets out the overall framework of the *CRR*; in particular, *PRU* 2.1.14R requires that for a *firm* carrying on *general insurance business* the *CRR* is equal to the *minimum capital requirement* (*MCR*). *PRU* 2.1.15R requires that for *realistic basis life firms* the *CRR* is the higher of the *MCR* and the *ECR*. *PRU* 2.1.20R requires that for *regulatory basis only life firms* the *CRR* is equal to the *MCR*.

(2) For non-life *firms* the *MCR* represents the *minimum capital requirement* (or margin of solvency) prescribed by the *Insurance Directives*. *PRU* 2.1.21R provides that, for a *firm* carrying on *general insurance business*, the *MCR* in respect of that business is the higher of the *base capital resources requirement* for *general insurance business* applicable to that *firm* and the *general insurance capital requirement*. *PRU* 2.1.22R provides that, for a *firm* carrying on *long-term insurance business*, the *MCR* in respect of that business is the higher of the *base capital resources requirement* for *long-term insurance business* applicable to that *firm* and the sum of the *long-term insurance capital requirement* and the *resilience capital requirement*. As specified in *PRU* 2.1.10R, a *firm* carrying on both *general insurance business* and *long-term insurance business* must apply *PRU* 2.1.9R (referred to in paragraph (1) above) separately to its *general insurance business* and its *long-term insurance business*.

(3) The calculation of the *general insurance capital requirement* is set out in *PRU* 7.2.44G to *PRU* 7.2.72R below. *PRU* 7.2.73G to *PRU* 7.2.79R set out the calculation of the *insurance-related capital requirement* for non-life *firms*. The calculation of the *long-term insurance capital requirement* is set out in *PRU* 7.2.80G to *PRU* 7.2.91R below.

General insurance capital requirement

7.2.44 G In relation to the *MCR* (see *PRU* 7.2.43G), *PRU* 2.1.30R requires a *firm* to calculate its *general insurance capital requirement* (*GICR*) as the highest of the *premiums amount*, the *claims amount*, and the *brought forward amount*. The elements for this computation are set out in *PRU* 7.2 as follows:

(1) the *premiums amount* in *PRU* 7.2.45R;

(2) the *claims amount* in *PRU* 7.2.47R; and

(3) the *brought forward amount* in *PRU* 7.2.51R.

The premiums amount

7.2.45 R The *premiums amount* is:

(1) 18% of the *gross adjusted premiums amount*; less 2% of the amount, if any, by which the *gross adjusted premiums amount* exceeds €50 million; multiplied by

(2) the reinsurance ratio set out in *PRU* 7.2.54R.

7.2.46 G *Rules* and *guidance* as to how the *gross adjusted premiums amount* is to be calculated are set out in *PRU* 7.2.56R to *PRU* 7.2.59G.

The claims amount

7.2.47 R The *claims amount* is:

(1) 26% of the *gross adjusted claims amount*; less 3% of the amount, if any, by which the *gross adjusted claims amount* exceeds € 35 million; multiplied by

(2) the reinsurance ratio set out in *PRU* 7.2.54R.

7.2.48 G *Rules* and *guidance* as to how the *gross adjusted claims amount* is to be calculated are set out in *PRU* 7.2.60R to *PRU* 7.2.65G.

7.2.49 R (1) Subject to (2) and (3), the Euro amounts specified in *PRU* 7.2.45R(1) and 7.2.47R(1) will increase each year, starting on the first review date of 20 September 2005 (and annually after that), by the percentage change in the European index of consumer prices (comprising all European Union member states, as published by Eurostat) from 20 March 2002 to the relevant review date, rounded up to a multiple of €100,000.

(2) In any year, if the percentage change since the last increase is less than 5%, then there will be no increase.

(3) The increase will take effect 30 days after the EU Commission has informed the European Parliament and Council of its review and the relevant percentage change.

7.2.50 R For the purposes of *PRU* 7.2.45R(1) and *PRU* 7.2.47R(1), the exchange rate from the Euro to the pound sterling for each year beginning on 31 December is the rate applicable on the last day of the preceding October for which the exchange rates for the currencies of all the European Union member states were published in the Official Journal of the European Union.

The brought forward amount

7.2.51 R The *brought forward amount* is the *general insurance capital requirement* (*GICR*) for the prior *financial year*, multiplied, if the ratio is less than one, by the ratio (expressed as a percentage) of:

(1) the *technical provisions* (calculated net of *reinsurance*) for *claims* outstanding at the end of the prior *financial year*, determined in accordance with *PRU* 7.2.12R; to

(2) the *technical provisions* (calculated net of *reinsurance*) for *claims* outstanding at the beginning of the prior *financial year*, determined in accordance with *PRU* 7.2.12R.

7.2.52 G The *brought forward amount* is the same as the *GICR* for the prior *financial year*, except where *claims* outstanding have fallen during that *financial year*. If they have fallen, the *brought forward amount* is itself reduced by the same percentage fall.

7.2.53 G If the *GICR* for the prior *financial year* is less than the *premiums amount* or the *claims amount*, then a *brought forward amount* is not required to be calculated.

Reinsurance ratio used in calculating the premiums amount and the claims amount

7.2.54 R The reinsurance ratio referred to in *PRU* 7.2.45R(2) and *PRU* 7.2.47R(2) is:

(1) if the ratio lies between 50% and 100%, the ratio (expressed as a percentage) of:

(a) the *claims* incurred (net of *reinsurance*) in the *financial year in question* and the two previous *financial years*; to

(b) the gross *claims* incurred in that three-year period;

(2) 50%, if the ratio calculated in (a) and (b) of (1) is 50% or less; and

(3) 100%, if the ratio calculated in (a) and (b) of (1) is 100% or more.

7.2.55 G *Rules* and *guidance* as to how the net and gross *claims* are to be calculated are set out in *PRU* 7.2.66R to *PRU* 7.2.71R.

Gross adjusted premiums amount used in calculating the premiums amount

7.2.56 R For the purpose of *PRU* 7.2.45R, the *gross adjusted premiums amount* is the higher of the *written* and *earned gross premiums* (as determined in accordance with *PRU* 7.2.66R) for the *financial year in question*, adjusted by:

(1) except for a *pure reinsurer* that does not have *permission* under the *Act* to *effect contracts of insurance,* increasing by 50% the amount included in respect of the *premiums* for *general insurance business classes* 11, 12 and 13;

(2) deducting 66.7% of the *premiums* for *actuarial health insurance* that meets the conditions set out in *PRU* 7.2.72R; and

(3) multiplying the resulting figure by 12 and dividing by the number of months in the *financial year*. For the purposes of this calculation, the number of months in the *financial year* is the number of complete calendar months in the *financial year* plus any fractions of a month at the beginning and the end of the *financial year*.

7.2.57 G A *firm* may use statistical methods in order to allocate *premiums* in respect of the *classes* 11, 12 and 13 for the purposes of *PRU* 7.2.56R.

7.2.58 G *General insurance business classes* 11, 12 and 13 are, respectively, the marine liability, aviation liability and general liability insurance classes.

7.2.59 G Where the *firm* did not carry on *insurance business* in the *financial year in question*, the *gross adjusted premiums amount*, and therefore the *premiums amount*, is nil.

Gross adjusted claims amount used in calculating the claims amount

7.2.60 R For the purpose of *PRU* 7.2.47R and subject to *PRU* 7.2.62R, the *gross adjusted claims amount* is the amount of gross *claims* incurred (as determined in accordance with *PRU* 7.2.66R) over the reference period (as specified in *PRU* 7.2.63R) and adjusted by:

(1) except for a *pure reinsurer* that does not have *permission* under the *Act* to *effect contracts of insurance,* increasing by 50% the amount included in respect of the *claims* incurred for *general insurance business classes* 11, 12 and 13;

(2) deducting 66.7% of the *claims* for *actuarial health insurance* that meets the conditions set out in *PRU* 7.2.72R; and

(3) multiplying the resulting figure by 12 and dividing by the number of months in the reference period. For the purposes of this calculation, the number of months in the reference period is the number of complete calendar months in the reference period plus any fractions of a month at the beginning and the end of the reference period.

7.2.61 G A *firm* may use statistical methods in order to allocate *claims* in respect of *classes* 11, 12 and 13 for the purposes of *PRU* 7.2.60R.

7.2.62 R For the purposes of *PRU* 7.2.47R, in relation to *general insurance business class* 18, the amount of *claims* incurred used to calculate the *gross adjusted claims amount* must be the amount of costs recorded in the *firm's* books in the reference period as borne by the *firm* (whether or not borne in the reference period) in respect of the assistance given.

7.2.63 R (1) Except in those cases where paragraph (2) applies, the reference period to be used in *PRU* 7.2.60R and *PRU* 7.2.62R must be:

(a) the *financial year in question* and the two previous *financial years*; or

(b) the period the *firm* had been in existence at the end of the *financial year in question*, if shorter.

(2) In the case of a *firm* which underwrites only one or more of the *general insurance business* risks of credit, storm, hail or frost (including other business written in connection with such risks), the reference period to be used must be:

(a) the *financial year in question* and the six previous *financial years*; or

(b) the period the *firm* had been in existence at the end of the *financial year in question*, if shorter.

7.2.64 G The classification of the risks referred to in *PRU* 7.2.63R(2) is as follows: credit - as included in *general insurance business class* 14; storm – as included in *general insurance business class* 8; hail – as included in *general insurance business class* 9; and frost – as included in *general insurance business class* 9.

7.2.65 G Where the *firm* did not carry on *insurance business* in the reference period, the *gross adjusted claims amount*, and therefore the *claims amount*, is nil.

Accounting for premiums and claims

7.2.66 R For the purposes of *PRU* 7.2.54R, *PRU* 7.2.56R, *PRU* 7.2.60R and *PRU* 7.2.62R, amounts of *premiums* and *claims* must be:

(1) determined in accordance with *PRU* 1.3 (Valuation); and

(2) adjusted for transfers that were approved by the relevant authority (or became effective where approval by an authority was not required) before the end of the *financial year in question*:

(a) to exclude any amount included in, or adjustment made to, *premiums* and *claims* to reflect the consideration for a transfer of *contracts of insurance* to or from the *firm*;

(b) to exclude *premiums* and *claims* which arose from *contracts of insurance* that have been transferred by the *firm* to another body; and

(c) to account for *premiums* and *claims* which arose from *contracts of insurance* that have been transferred to the *firm* from another body as if they were receivable by or payable to the *firm*.

7.2.67 G To ensure that all rights and obligations under a *contract of insurance* are transferred, a number of alternative mechanisms could be used. These are: an *insurance business transfer* under Part VII of the *Act*; under earlier *United Kingdom* insurance legislation; under equivalent foreign legislation; or by novation of contracts. The term "relevant authority" in paragraph (2) of *PRU* 7.2.66R may refer to whatever body has responsibility in a country, whether within or outside the *EEA*, for the approval of transfers of portfolios of *contracts of insurance*; the body may be a supervisory authority for financial services as such or it may be a judicial authority which has the necessary responsibility.

7.2.68 G *PRU* 7.2.66R(2)(b) requires a *firm*, for the purpose of calculating its *GICR*, to account for *contracts of insurance* transferred by it to another body as if it had never written those contracts. All amounts of *premiums* and *claims* arising in respect of those contracts are excluded, including amounts that arose in the *financial year in question* or previous *financial years*.

7.2.69 G Conversely, *PRU* 7.2.66R(2)(c) requires a *firm*, for the purpose of calculating its *GICR*, to account for *contracts of insurance* transferred to it by another body as if it had been responsible for those contracts from inception and not merely from the date of transfer. All amounts of *premiums* and *claims* that arose from those contracts are included even where they arose prior to the date of transfer and were, in fact, receivable by or payable to the other body.

7.2.70 G For both transfers to and from the *firm*, the consideration receivable or payable in respect of the transfer is excluded from *premiums* and *claims* in order to avoid double counting.

7.2.71 R Where there has been a significant change in the business portfolio of the *firm* since the end of the *financial year in question*, for example, a line of business has been transferred to another *firm*, or the *firm* no longer carries on a particular *class* of *insurance business*, the *gross adjusted premiums amount* and the *gross adjusted claims amount* must both be recalculated to take into account the impact of this change. The recalculation must take into account the requirements of *PRU* 1.3 (Valuation).

Actuarial health insurance

7.2.72 R The conditions referred to in *PRU* 7.2.56R(2) and *PRU* 7.2.60R(2) are that:

(1) the health insurance is underwritten on a similar technical basis to that of life insurance;
(2) the *premiums* paid are calculated on the basis of sickness tables according to the mathematical method applied in insurance;
(3) a provision is set up for increasing age;
(4) an additional *premium* is collected in order to set up a safety margin of an appropriate amount;
(5) it is not possible for the *firm* to cancel the contract after the end of the third year of insurance; and

(6) the contract provides for the possibility of increasing *premiums* or reducing payments even for current contracts.

Insurance-related capital requirement (general insurance business only)

7.2.73 G *PRU* 2.3.11R requires *firms* carrying on *general insurance business*, other than a *non-directive insurer*, to calculate their *ECR* as the sum of the *asset-related capital requirement* and the *insurance-related capital requirement* less the *firm's equalisation provisions*. The *ECR* for *firms* carrying on *general insurance business* is an indicative measure of the *capital resources* that a *firm* may need to hold based on risk sensitive calculations applied to its business profile. For *firms* carrying on *general insurance business*, the *FSA* will use the *ECR* as a benchmark for individual capital *guidance* for a *firm* carrying on *general insurance business*. Details of the calculation of the *asset-related capital requirement* are set out in *PRU* 3.3. Details of the calculation of the *insurance-related capital requirement* are set out in *PRU* 7.2.76R to *PRU* 7.2.79R.

7.2.74 G The *insurance-related capital requirement* is a measure of the capital that a *firm* should hold against the risk of:

(1) an adverse movement in the value of a *firm's* liabilities, to recognise that there may be substantial volatility in *claims* and other *technical provisions* made by the *firm*. Such variations may be due to inflationary increases, interest rate changes, movements in the underlying provisions themselves, changes in expense costs, inadequate rate pricing or *premium* collections (or both) from intermediaries differing from projected assumptions; and

(2) the *premiums* a *firm* charges in respect of particular business not being adequate to fund future liabilities arising from that business.

7.2.75 G The *insurance-related capital requirement* is calculated by applying capital charge factors, expressed as a percentage, to the value of the *net written premiums* and the *technical provisions* in respect of different classes of business. *Firms* should refer to *PRU* 1.3.5R which sets out how a *firm* must recognise and value assets and liabilities.

Calculation of the insurance-related capital requirement

7.2.76 R A *firm* must calculate its *insurance-related capital requirement* in accordance with *PRU* 7.2.77R.

7.2.77 R (1) The value of:

(a) the *net written premiums*; and

(b) the *technical provisions*;

in respect of each class of business listed in the table in *PRU* 7.2.79R must be multiplied by the corresponding capital charge factor.

(2) If any amount which is to be multiplied by a capital charge factor is a negative amount, that amount shall be treated as zero.

(3) The amounts resulting from multiplying the *net written premiums* in respect of each such class of business by the corresponding capital charge factor must be aggregated.

(4) The amounts resulting from multiplying the *technical provisions* in respect of each such class of business by the corresponding capital charge factor must be aggregated.

(5) The *insurance-related capital requirement* is the sum of the amounts calculated in accordance with (3) and (4).

7.2.78 R In *PRU* 7.2.77R references to *technical provisions* comprise:

(1) outstanding *claims*;

(2) provisions for incurred but not reported (*IBNR*) *claims*;

(3) provisions for incurred but not enough reported (IBNER) *claims*;

(4) *unearned premium* reserves less *deferred acquisition costs*; and

(5) unexpired risk reserves;

in each case net of *reinsurance* receivables.

7.2.79 R Table: Insurance-related Capital Charge Factors

Class of Business	Net Written Premium capital charge factor	Technical provision capital charge factor
Reporting Group: Direct Personal Motor		
Private motor – comprehensive	10.0%	9.0%
Private motor – non-comprehensive	10.0%	9.0%
Motor cycle	10.0%	9.0%
Reporting Group: Direct Commercial Motor		
Fleets	10.0%	9.0%
Commercial vehicles (non-fleet)	10.0%	9.0%
Reporting Group: Direct Accident & Health		

Private medical insurance	5.0%	7.5%
HealthCare cash plans	5.0%	7.5%
Personal accident or sickness	5.0%	7.5%
Travel	5.0%	7.5%
Reporting Group: Direct Personal Lines Property		
Household and domestic all risks	10.0%	10.0%
Reporting Group: Direct Personal Lines Pecuniary Loss		
Assistance	25.0%	14.0%
Creditor	25.0%	14.0%
Extended warranty	25.0%	14.0%
Legal expenses	25.0%	14.0%
Reporting Group: Direct Commercial Lines Property		
Commercial property damage and theft	10.0%	10.0%
Engineering all risks	10.0%	10.0%
Contractors all risks	10.0%	10.0%
Energy	10.0%	10.0%
Mixed commercial package	10.0%	10.0%
Reporting Group: Direct Commercial Lines Liability		
Employers liability	14.0%	14.0%
Product liability	14.0%	14.0%
Public liability	14.0%	14.0%
Professional indemnity	14.0%	14.0%
Reporting Group: Direct Commercial Lines Pecuniary Loss		
Fidelity and contract guarantee	25.0%	14.0%
Mortgage indemnity	25.0%	14.0%
Credit	25.0%	14.0%

Consequential loss	25.0%	14.0%
Suretyship	25.0%	14.0%
Reporting Group: Direct Aviation		
Aviation liability	32.0%	14.0%
Aviation hull	32.0%	14.0%
Space and satellite	32.0%	14.0%
Reporting Group: Direct Marine		
Marine liability	22.0%	17.0%
Marine hull	22.0%	17.0%
Yacht	22.0%	17.0%
War risks	22.0%	17.0%
Protection and Indemnity	22.0%	17.0%
Freight demurrage and defence	22.0%	17.0%
Reporting Group: Direct Transport		
Goods in transit	12.0%	14.0%
Reporting Group: Direct Miscellaneous		
Miscellaneous direct business	25.0%	14.0%
Reporting Group: Non-Proportional Treaty		
Non-proportional accident & health	35.0%	16.0%
Non-proportional motor	10.0%	14.0%
Non-proportional transport	16.0%	15.0%
Non-proportional aviation	61.0%	16.0%
Non-proportional marine	38.0%	17.0%
Non-proportional property non-catastrophe	53.0%	12.0%
Non-proportional property catastrophe	53.0%	12.0%
Non-proportional liability (non-motor)	14.0%	14.0%

Non-proportional pecuniary loss	39.0%	14.0%
Non-proportional aggregate cover	53.0%	12.0%
Reporting Group: Proportional Treaty		
Proportional assumed accident & health	12.0%	16.0%
Proportional assumed motor	10.0%	12.0%
Proportional transport	12.0%	15.0%
Proportional aviation	33.0%	16.0%
Proportional marine	22.0%	17.0%
Proportional property	23.0%	12.0%
Proportional liability (non-motor)	14.0%	14.0%
Proportional pecuniary loss	25.0%	14.0%
Proportional aggregate cover	23.0%	12.0%
Reporting Group: Facultative Reinsurance Categories		
Facultative accident & health	5.0%	7.5%
Facultative motor	10.0%	9.0%
Facultative personal property	10.0%	10.0%
Facultative personal financial loss	25.0%	14.0%
Facultative commercial property	10.0%	10.0%
Facultative commercial liability	14.0%	14.0%
Facultative commercial financial loss	25.0%	14.0%
Facultative marine	22.0%	17.0%
Facultative aviation	32.0%	14.0%
Facultative transport	12.0%	14.0%
Reporting Group: Miscellaneous Reinsurance		
Miscellaneous reinsurance accepted business	39.0%	14.0%

Long-term insurance capital requirement

7.2.80 G *PRU* 2.1.9R requires a *firm* to which *PRU* 2 applies to maintain *capital resources* equal to or in excess of its *capital resources requirement*. *PRU* 2.1.15R defines the *capital resources requirement* for a *firm* to which that *rule* applies (a *realistic basis life firm*) as the higher of the *MCR* and the *ECR*. For other *firms* carrying on *long-term insurance business* (*regulatory basis only life firms*), the *capital resources requirement* is equal to the *MCR*. The *MCR* is defined as the higher of the *base capital resources requirement* and the sum of the *long-term insurance capital requirement* (*LTICR*) and the *resilience capital requirement* (see *PRU* 2.1.22R). *PRU* 2.1.32R defines the *LTICR* as the sum of the *insurance death*, *health*, *expense*, and *market risk capital components* (see *PRU* 7.2.81R to *PRU* 7.2.91R). *Rules* and *guidance* about the *resilience capital requirement* are set out in *PRU* 4.2.9G to *PRU* 4.2.26R.

Insurance death risk capital component

7.2.81 R The *insurance death risk capital component* is the aggregate of the amounts which represent the fractions specified by *PRU* 7.2.82R of the capital at risk, defined in *PRU* 7.2.83R, for those contracts where the capital at risk is not a negative figure, multiplied by the higher of:

(1) 50%; and

(2) the ratio as at the end of the preceding *financial year* of:

(a) the aggregate capital at risk net of *reinsurance* cessions; to

(b) the aggregate capital at risk gross of *reinsurance* cessions.

7.2.82 R For the purpose of *PRU* 7.2.81R, the fraction is:

(1) for *long-term insurance business classes* I, II and IX, except for a *pure reinsurer*:

(a) 0.1% for temporary insurance on death where the original term of the contract is three years or less;

(b) 0.15% for temporary insurance on death where the original term of the contract is five years or less but more than three years; and

(c) 0.3% in any other case;

(2) 0.3% for *long-term insurance business classes* III, VII and VIII, except for a *pure reinsurer*; and

(3) 0.1% for a *pure reinsurer*.

7.2.83 R For the purpose of *PRU* 7.2.81R, the capital at risk is:

(1) where the benefit under a *contract of insurance* payable as a result of death includes periodic or deferred payments, the present value of the benefits payable; and

(2) in any other case, the amount payable as a result of death;

less, in either case, the *mathematical reserves* for the contract.

7.2.84 G The *insurance death risk capital component* only relates to the risk of death. There is a separate risk component for insured health risks (*class* IV). *Tontines* (*class* V) and *capital redemption* operations (*class* VI) also have separate risk components. There is no specified risk margin for other insured risks.

Insurance health risk capital component

7.2.85 R The *insurance health risk capital component* is the highest of:

(1) the *premiums amount* (determined in accordance with *PRU* 7.2.45R);

(2) the *claims amount* (determined in accordance with *PRU* 7.2.47R); and

(3) the *brought forward amount* (determined in accordance with *PRU* 7.2.51R);

in respect of:

(a) *contracts of insurance* falling in *long-term insurance business class* IV (see *PRU* 7.2.86R); and

(b) risks falling in *general insurance business classes* 1 or 2 that are written as part of a *long-term insurance contract*.

7.2.86 R For the purposes of *PRU* 7.2.85R, in the case of *contracts of insurance* falling in *long-term insurance business class* IV, condition (3) as set out in *PRU* 7.2.72R (*Actuarial health insurance*) is modified to: "either the reserves include a provision for increasing age, or the business is conducted on a group basis.".

7.2.87 G The *insurance health risk capital component* only arises for *permanent health* insurance (*long-term insurance business class* IV) and *accident* and *sickness* insurance (*general insurance business classes* 1 and 2).

Insurance expense risk capital component

7.2.88 R The *insurance expense risk capital component* is:

(1) in respect of *long-term insurance business classes* III, VII and VIII, an amount equivalent to 25% of the net *administrative expenses* in the preceding *financial year* relevant to the business of each of those *classes*, in so far as the *firm* bears no investment risk and the allocation to cover *management expenses* in the *contract of insurance* does not have a fixed upper limit which is effective as a limit for a period exceeding 5 years from the commencement of the contract;

(2) in respect of any *tontine* (*long-term insurance business class* V), 1% of the assets of the *tontine*;

(3) in the case of any other *long-term insurance business*, 1% of the "adjusted *mathematical reserves*" (as defined in *PRU* 7.2.90R and *PRU* 7.2.91R).

Insurance market risk capital component

7.2.89 R The *insurance market risk capital component* is 3% of the "adjusted *mathematical reserves*" (as defined in *PRU* 7.2.90R and *PRU* 7.2.91R) for all *contracts of insurance* except those which:

(1) fall in *long-term insurance business classes* III, VII or VIII and in respect of which the *firm* does not bear any investment risk; or

(2) fall in *long-term insurance business class* V.

Adjusted mathematical reserves

7.2.90 R For the purpose of *PRU* 7.2.88R and *PRU* 7.2.89R, the "adjusted *mathematical reserves*" is the amount of *mathematical reserves* (gross of *reinsurance* cessions), multiplied by the higher of:

(1) 85% or, in the case of a *pure reinsurer*, 50%; and

(2) the ratio as at the end of the preceding *financial year* of:

(a) the *mathematical reserves* net of *reinsurance* cessions; to

(b) the *mathematical reserves* gross of *reinsurance* cessions.

7.2.91 R The "adjusted *mathematical reserves*" do not include:

(1) for the purposes of *PRU* 7.2.88R(3) and *PRU* 7.2.89R, amounts arising from *tontines* (*long-term insurance business class* V);

(2) for the purposes of *PRU* 7.2.88R(3), amounts arising from *insurance business* in *classes* III, VII or VIII, to the extent that such business meets the conditions in *PRU* 7.2.88R(1);

(3) for the purposes of *PRU* 7.2.89R, amounts arising from *insurance business* in *classes* III, VII or VIII, to the extent that such business meets the conditions in *PRU* 7.2.89R(1).

7.3 Mathematical reserves

Application

7.3.1 R *PRU* 7.3 applies to a *long-term insurer* unless it is:
(1) a *non-directive friendly society;* or
(2) an *incoming EEA firm*; or
(3) an *incoming Treaty firm*.

Purpose

7.3.2 G This section follows on from the overall requirement on *firms* to establish adequate *technical provisions* (see *PRU* 7.2.16R). The *mathematical reserves* form the main component of *technical provisions* for *long-term insurance business*. *PRU* 7.3 sets out *rules* and *guidance* as to the methods and assumptions to be used in calculating the *mathematical reserves*. The *rules* and *guidance* set out the minimum basis for *mathematical reserves*. Methods and assumptions that produce reserves that are demonstrably equal to or greater than the minimum basis may also be used, though they must meet the basic requirements for methods and assumptions set out in *PRU* 7.3.7R to *PRU* 7.3.27G.

7.3.3 G This section applies to all *firms* carrying on *long-term insurance business* and implements some of the requirements contained in article 20 of the *Consolidated Life Directive*. The implementation is designed to ensure that a *firm's mathematical reserves* in respect of *long-term insurance contracts* meet the minimum requirements set by the *Consolidated Life Directive*. A *firm* may use a prospective or a retrospective method to value its *mathematical reserves* (see *PRU* 7.3.7R).

7.3.4 G The required procedures are summarised in the flowchart in *PRU* 7 Ann 1G.

7.3.5 G *Firms* to which *PRU* 2.1.15R applies are required to calculate a *with-profits insurance capital component* (see *PRU* 2.1.34R). In order to calculate its *with-profits insurance capital component*, such a *firm* is required to carry out additional calculations of its liabilities on a realistic basis (see *PRU* 7.4), which it is required to report to the *FSA* (see Forms 18,19). A *firm* that reports its liabilities on a realistic basis is referred to in *PRU* as a *realistic basis life firm*. Such *firms* are subject to different *rules* relating to the calculation of *mathematical reserves* (see *PRU* 7.3.46R and *PRU* 7.3.76R) compared with those that apply to *firms* that report on a regulatory basis only (*regulatory basis only life firms*).

7.3.6 G A number of the *rules* in this section require a *firm* to take into account its regulatory duty to treat *customers* fairly. In this section, references to such a duty are to a *firm's* duty to pay due regard to the interests of its *customers* and to treat them fairly (see *Principle* 6 in *PRIN*). This duty is owed to both *policyholders* and potential *policyholders*.

Basic valuation method

7.3.7 R (1) Subject to (2), a *firm* must establish its *mathematical reserves* using a prospective actuarial valuation on prudent assumptions of all future cash flows expected to arise under, or in respect of, each of its *long-term insurance contracts*.
(2) But a *firm* may use a retrospective actuarial valuation where:
(a) a prospective method cannot be applied to a particular type of contract;

or

(b) the *firm* can demonstrate that the resulting amount of the *mathematical reserves* would be no lower than would be required by a prudent prospective actuarial valuation.

7.3.8 G A prospective valuation sets the *mathematical reserves* at the present value of future net cash flows. A retrospective method typically sets the *mathematical reserves* at the level of *premiums* received (and accumulated with investment return), less *claims* and expenses paid. A prospective valuation is preferred because it takes account of circumstances that might have arisen since the *premium* rate was set and of changes in the perception of future experience. Circumstances in which a retrospective valuation might be appropriate include:

(1) where the assumptions initially made in determining the *premium* rate were sufficiently prudent at inception and have not been overtaken by subsequent events; and

(2) where the liability depends on the emerging experience.

7.3.9 R Except in *PRU* 7.3.71R(1), *PRU* 7.3 does not apply to *final bonuses*. In addition, for *realistic basis life firms* only*, PRU* 7.3 does not apply to future *annual bonuses*.

Methods and assumptions

7.3.10 R In the actuarial valuation under *PRU* 7.3.7R, a *firm* must use methods and prudent assumptions which:

(1) are appropriate to the business of the *firm*;

(2) are consistent from year to year without arbitrary changes (see *PRU* 7.3.11G);

(3) are consistent with the method of valuing assets (see *PRU* 1.3);

(4) include appropriate margins for adverse deviation of relevant factors (see *PRU* 7.3.12G);

(5) recognise the distribution of profits (that is, emerging surplus) in an appropriate way over the duration of each *contract of insurance*;

(6) take into account its regulatory duty to treat its *customers* fairly (see *Principle* 6); and

(7) are in accordance with generally accepted actuarial practice.

7.3.11 G *PRU* 7.3.10R(2) prohibits only arbitrary changes in methods and assumptions, that is, changes made without adequate reasons. Any such changes would hinder comparisons over time as to the amount of the *mathematical reserves* and so obscure trends in solvency and the emergence of surplus.

7.3.12 G The relevant factors referred to in *PRU* 7.3.10R(4) may include, but are not limited to, factors such as future investment returns, expenses, mortality, morbidity, options, persistency and *reinsurance* (see also *PRU* 7.3.13R to *PRU* 7.3.19G).

Margins for adverse deviation

7.3.13 R The appropriate margins for adverse deviation required by *PRU* 7.3.10R(4) must be sufficiently prudent to ensure that there is no significant foreseeable risk that liabilities to *policyholders* in respect of *long-term insurance contracts* will not be met as they fall due.

7.3.14 G The margins for adverse deviation are a prudential margin in respect of the risks that arise under a *long-term insurance contract*.

7.3.15 G *PRU 7.3.1*3R sets the normal standard of prudence required for margins. *PRU*

7.3.16G suggests benchmarks against which a *firm* should compare the margins it has set in accordance with *PRU* 7.3.10R(4) and *PRU* 7.3.13R. *PRU* 7.3.17G gives *guidance* where a market risk premium is not readily obtainable.

7.3.16 G When setting the margins for adverse deviation required by *PRU* 7.3.10R(4) in relation to a particular contract, a *firm* should consider, where appropriate:

(1) the margin for adverse deviation included in the *premium* for similar *long-term insurance contracts*, if any, newly issued by the *firm*; and
(2) where a sufficiently developed and diversified market for transferring a risk exists, the risk premium that would be required by an unconnected party to assume the risk in respect of the contract.

The margin for adverse deviation of a risk should generally be greater than or equal to the relevant market price for that risk.

7.3.17 G Where a risk premium is not readily available, or cannot be determined, an external proxy for the risk should be used, such as adjusted industry mortality tables. Where there is a considerable range of possible outcomes, the *FSA* expects *firms* to use stochastic techniques to evaluate these risks. In time, for example, longevity risk, where this constitutes a significant risk for the *firm*, may fall into this category.

7.3.18 G The margins for adverse deviation should be recognised as profit only as the *firm* itself is released from risk over the duration of the contract.

7.3.19 G Further detailed *rules* and *guidance* on margins for adverse deviation are included in *PRU* 7.3.32G to *PRU* 7.3.91G. In particular, the cross-references for the different assumptions used in calculating the *mathematical reserves* are as follows:

(1) expenses (*PRU* 7.3.50R to *PRU* 7.3.58G);
(2) mortality and morbidity (*PRU* 7.3.59R to *PRU* 7.3.61G);
(3) options (*PRU* 7.3.62R to *PRU* 7.3.72G);
(4) persistency (*PRU* 7.3.73G to *PRU* 7.3.77G); and
(5) *reinsurance* (*PRU* 7.3.78G to *PRU* 7.3.91G).

The *rules* and *guidance* on margins for adverse deviation in respect of future investment returns, which are also required in the calculation of *mathematical reserves*, are set out in *PRU* 4.2.28R to *PRU* 4.2.48G.

Record keeping

7.3.20 R A *firm* must make, and retain for an appropriate period, a record of:

(1) the methods and assumptions used in establishing its *mathematical reserves*, including the margins for adverse deviation, and the reasons for their use; and
(2) the nature of, reasons for, and effect of, any change in approach, including the amount by which the change in approach increases or decreases its *mathematical reserves*.

7.3.21 G *PRU* 1.4.53R requires *firms* to maintain accounting and other records for a minimum of three years, or longer as appropriate. For the purposes of *PRU* 7.3.20R, a period of longer than three years will be appropriate for a *firm's long-term insurance business*. In determining an appropriate period, a *firm* should have regard to:

(1) the detailed *rules* and *guidance* on record keeping in *PRU* 1.4.51G to *PRU* 1.4.64G;
(2) the nature and term of the *firm's long-term insurance business*; and

(3) any additional provisions or statutory requirements applicable to the *firm* or its records.

Valuation of individual contracts

7.3.22 R (1) Subject to (2) and (3), a *firm* must determine the amount of the *mathematical reserves* separately for each *long-term insurance contract*.

(2) Approximations or generalisations may be made where they are likely to provide the same, or a higher, result.

(3) A *firm* must set up additional *mathematical reserves* on an aggregated basis for general risks that are not specific to individual contracts.

7.3.23 G *PRU* 7.3.22R to *PRU* 7.3.91G set out *rules* and *guidance* for the separate prospective valuation of each contract. These may be applied instead to groups of contracts where the conditions set out in *PRU* 7.3.22R(2) are satisfied.

Contracts not to be treated as assets

7.3.24 R A *firm* must not treat a *long-term insurance contract* as an asset.

7.3.25 G A separate prospective valuation for each contract may identify contracts for which the value of future cash inflows exceeds that of outflows, that is, the contracts have an asset value, rather than liability value. However, the *surrender value* of a contract is always greater than or equal to zero and the *Consolidated Life Directive* requires that no contract should be valued at less than its guaranteed *surrender value*. As a result, no contract should be treated as an asset.

Avoidance of future valuation strain

7.3.26 R (1) A *firm* must establish *mathematical reserves* for a *contract of insurance* which are sufficient to ensure that, at any subsequent date, the *mathematical reserves* then required are covered solely by:

(a) the assets covering the current *mathematical reserves*; and

(b) the resources arising from those assets and from the contract itself.

(2) For the purposes of (1), the *firm* must assume that:

(a) the assumptions adopted for the current valuation of liabilities remain unaltered and are met; and

(b) discretionary benefits and charges will be set so as to fulfil its regulatory duty to treat its *customers* fairly.

(3) (1) may be applied to a group of similar contracts instead of to the individual contracts within that group.

7.3.27 G The valuation of each contract, or group of similar contracts, should allow for the possibility, where it exists, that contracts may be surrendered (wholly or in part), lapsed or made paid-up at any time. The valuation assumptions include margins for adverse deviation (see *PRU* 7.3.13R). *PRU* 7.3.26R requires *mathematical reserves* to be established such that, if future experience is in line with the valuation assumptions, there would be no future valuation strain.

Cash flows to be valued

7.3.28 R In a prospective valuation, a *firm* must include the following in the cash flows to be valued:

(1) future *premiums (see PRU 7.3.35G to PRU 7.3.47G);*

(2) expenses, including *commissions (see PRU* 7.3.50R to *PRU* 7.3.58G*)*;

(3) benefits payable (see *PRU* 7.3.29R); and

(4) amounts to be received or paid in respect of the *long-term insurance*

contracts under contracts of *reinsurance* or analogous non-*reinsurance* financing agreements (*PRU* 7.3.78G to *PRU* 7.3.91G).

7.3.29 R For the purpose of *PRU* 7.3.28R(3), benefits payable include:

(1) all guaranteed benefits including guaranteed *surrender values* and paid-up values;

(2) vested, declared and allotted bonuses to which the *policyholder* is entitled;

(3) all options available to the *policyholder* under the terms of the contract; and

(4) discretionary benefits payable in accordance with the *firm's regulatory duty* to treat its *customers* fairly.

7.3.30 G All cash flows are to be valued using prudent assumptions in accordance with generally accepted actuarial practice. Cash flows may be omitted from the valuation calculations provided the reserves obtained as a result of leaving those cash flows out of the calculation are not less than would have resulted had all cash flows been included (see *PRU* 7.3.22R(2)). Provision for future expenses in respect of *with-profits insurance contracts* (excluding *accumulating with-profits policies*) may be made implicitly, using the *net premium* method of valuation (see *PRU* 7.3.43R below). For the purposes of *PRU* 7.3.28R(2), any charges included in expenses should be determined in accordance with the *firm's* regulatory duty to treat its *customers* fairly.

7.3.31 G *PRU* 7.3.29R(4) requires *regulatory basis only life firms* to make allowance for any future *annual bonus* that a *firm* would expect to grant, assuming future experience is in line with the assumptions used in the calculation of the *mathematical reserves*. *Final bonuses* do not have to be taken into consideration in these calculations (see *PRU* 7.3.9R). For *realistic basis life firms*, except for *accumulating with-profits policies,* the *mathematical reserves* may be calculated as the amount required to cover guaranteed benefits as for such *firms* full allowance for discretionary benefits is made in the calculation of the *realistic value of liabilities* (see *PRU* 7.4.105R(5)). The calculations required for *accumulating with-profits policies* are set out in *PRU* 7.3.71R(1).

Valuation assumptions: detailed rules and guidance

7.3.32 G More detailed *rules* and *guidance* about the valuation of cash flows are set out in *PRU* 7.3.33R to *PRU* 7.3.91G.

Valuation rates of interest

7.3.33 R In calculating the present value of future net cash flows, a *firm* must determine the rates of interest to be used in accordance with *PRU* 4.2.28R to *PRU* 4.2.47R.

7.3.34 G The *rules* in *PRU* 4.2.28R to *PRU* 4.2.47R set out the approach *firms* must take in setting margins for adverse deviation in the interest rates assumed in calculating the *mathematical reserves*. This includes a margin to allow for adverse deviation in *market risk* and, where relevant, credit risk. The requirements set out in *PRU* 4.2.28R to *PRU* 4.2.47R protect against the *market risk* that the return actually achieved on assets may fall below the market yields on assets at the *actuarial valuation date*.

Future premiums

7.3.35 G *PRU* 7.3.46R and *PRU* 7.3.47G apply to the valuation of *with-profits insurance liabilities* for a *realistic basis life firm*. *PRU* 7.3.38R to *PRU* 7.3.45G apply to *a regulatory basis only life firm*.

7.3.36 G For *non-profit insurance contracts* no specific method of valuation for future *premiums* is required by *PRU*. However, the method of valuation used should be sufficiently prudent taking into account, in particular, the risk of voluntary discontinuance by the *policyholder*.

Future premiums: firms reporting only on a regulatory basis

7.3.37 R *PRU* 7.3.38R to *PRU* 7.3.43R apply to a *regulatory basis only life firm.*

7.3.38 R (1) This *rule* applies to *with-profits insurance contracts* except *accumulating with-profits policies* written on a recurring single *premium* basis.
(2) The value attributed to a *premium* due in any future *financial year* (a future *premium*) must not exceed the lower of the value of:
(a) the actual *premium* payable under the contract; and
(b) the *net premium*.
(3) The *net premium* may be increased for *deferred acquisition costs* in accordance with *PRU* 7.3.43R.

7.3.39 G The valuation method for future *premiums* in *PRU* 7.3.38R retains the difference, if any, between the gross *premium* and the *net premium* as an implicit margin available to finance future bonuses, expenses and other costs. It thus helps to protect against the risk that adequate resources may not be available in the future to meet those costs.

7.3.40 R Where the terms of a *contract of insurance* have changed since it was first entered into, a *firm* must apply one of the methods in *PRU* 7.3.41R in determining the *net premium* for the purpose of *PRU* 7.3.38R(2)(b).

7.3.41 R A *firm* must treat the change referred to in *PRU* 7.3.40R as if either:
(1) it had been included in the original contract but came into effect from the time the change became effective; or
(2) the original contract were cancelled and replaced by a new contract (with an initial *premium* paid on the new contract equal to the liability under the original contract immediately prior to the change); or
(3) it gave rise to two separate contracts where:
(a) all *premiums* are payable under the first contract and that contract provides only for such benefits as those *premiums* could have purchased from the *firm* at the date the change became effective; and
(b) no *premiums* are payable under the second contract and that contract provides for all the other benefits.

7.3.42 G *PRU* 7.3.41R permits three alternative methods. However, the third method is only possible where a meaningful comparison can be made between the terms of the contract (as changed) and the terms upon which the *firm* was *effecting* its new *contracts of insurance* at the time the contract was changed.

Future net premiums: adjustment for deferred acquisition costs

7.3.43 R (1) The amount of any increase to the *net premium* for *deferred acquisition costs* must not exceed the equivalent of the recoverable acquisition expenses spread over the period of *premium* payments and calculated in accordance with the rates of interest, mortality and morbidity assumed in calculating the *mathematical reserves*.
(2) For the purpose of (1), recoverable acquisition expenses means the amount of expenses, after allowing for the effects of taxation, which it is reasonable to expect will be recovered from future *premiums* payable under the contract.
(3) The recoverable acquisition expenses in (1) must not exceed the lower of:
(a) the value of the excess of actual *premiums* over *net premiums*; and

(b) 3.5% of the *relevant capital sum*.

(4) Recoverable acquisition expenses may be calculated as the average for a group of similar contracts weighted by the *relevant capital sum* for each contract.

7.3.44 G *PRU* 7.3.43R allows a *firm* to spread acquisition costs over the lifetime of a *contract of insurance,* but only if it is reasonable to expect those costs to be recoverable from future *premium* income from that contract. Further prudence is provided by the limitation of recoverable acquisition expenses to 3.5% of the *relevant capital sum*. This adjustment for acquisition costs is sometimes termed a Zillmer adjustment.

7.3.45 G In determining the extent, if any, to which it is reasonable to expect acquisition costs to be recoverable from future *premium* income, the *firm* should make prudent assumptions as to levels of voluntary discontinuance by *policyholders*.

Future premiums: firms also reporting with-profits insurance liabilities on a realistic basis

7.3.46 R (1) Subject to (2), for a *realistic basis life firm,* the future *premiums* to be valued in the calculation of the *mathematical reserves* for its *with-profits insurance contracts* must not be greater than the gross *premiums* payable by the *policyholder*.

(2) This *rule* does not apply to *accumulating with-profits policies* written on a recurring single *premium* basis (see *PRU* 7.3.48R).

7.3.47 G The gross *premium* is the full amount of *premium* payable by the *policyholder* to the *firm*. The gross *premium* method contrasts with the *net premium* method which is required from *regulatory basis only life firms* (see *PRU* 7.3.37R to *PRU* 7.3.45G).

Future premiums: accumulating with-profits policies

7.3.48 R (1) This *rule* applies to *accumulating with-profits policies* written on a recurring single *premium* basis.

(2) A *firm* must not attribute any value to a future *premium* under the contract.

(3) Any liability arising only upon the payment of that *premium* may be ignored except to the extent that the value of that liability upon payment would exceed the amount of that *premium*.

7.3.49 G *PRU* 7.3.48R prohibits a *firm* from taking credit for recurring single *premiums* under *accumulating with-profits policies*. As there is no contractual commitment to pay any future *premiums* the amount and timing of which are uncertain, the recognition of any potential margins would not be prudent. Where the payment of a future *premium* would give rise to a liability in excess of the *premium* a provision should be established.

Expenses

7.3.50 R (1) A *firm* must make provision for expenses, either implicitly or explicitly, in its *mathematical reserves* of an amount which is not less than the amount expected, on prudent assumptions, to be incurred in fulfilling its *long-term insurance contracts*.

(2) For the purpose of (1), expenses must be valued:

(a) after taking account of the effect of taxation;

(b) having regard to the *firm's* actual expenses in the last 12 months before the *actuarial valuation date* and any increases in expenses expected to occur in the future;

(c) after making prudent assumptions as to the effects of inflation on future increases in prices and earnings; and

(d) at no less than the level that would be incurred if the *firm* were to cease to transact new business 12 months after the *actuarial valuation date*.

(3) A *firm* must not rely upon an implicit provision arising from the method of valuing future *premiums* except to the extent that:

(a) it is reasonable to assume that expenses will be recoverable from future *premiums*; and

(b) the expenses would only arise if the future *premiums* were received.

7.3.51 G For *with-profits insurance contracts* where the *net premium* valuation method applies, an implicit provision arises because the future *premiums* valued are limited to the *net premium* adjusted as permitted by *PRU* 7.3.43R. This excludes the allowance within the gross *premium* for expenses (other than recoverable acquisition expenses). It also excludes other margins within the actual *premium* that are a prudential margin in respect of the risks that arise under the contract or that are needed to provide for future discretionary benefits. To the extent that these other margins are not needed for the purpose for which they were originally established, they may also constitute an implicit provision for expenses.

7.3.52 G An implicit provision may also arise for other types of *long-term insurance contract* where, for example, no value is attributed to future *premiums*, but the *firm* is entitled to make deductions from future regular *premiums* before allocating them to secure *policyholder* benefits.

7.3.53 G A *firm* should only reduce the provision for future expenses to take account of expected taxation recoveries related to those expenses where recovery is reasonably certain, and after taking into account the assumption that the *firm* ceases to transact new business 12 months after the *actuarial valuation date*. An appropriate adjustment for discounting should be made where receipt of the taxation recoveries is not expected until significantly after the expenses are incurred.

7.3.54 G The *firm's* actual expenses in the 12 months prior to the *actuarial valuation date* may serve as a guide to the assumptions for future expenses, taking into consideration the mix of acquisition and renewal expenses. The expense assumptions should not be reduced to account for expected future improvements in efficiency until such efficiency improvements result in a reduced level of actual expenditure. However, the assumptions should take account of all factors which might increase costs including earnings and price inflation.

7.3.55 R The provisions for expenses (whether implicit or explicit) required by *PRU* 7.3.50R must be sufficient to cover all the expenses of running off the *firm's* existing *long-term insurance business* including:

(1) all discontinuance costs (for example, redundancy costs and closure costs) that would arise if the *firm* were to cease transacting new business 12 months after the *actuarial valuation date* in circumstances where (and to the extent that) the discontinuance costs exceed the projected surplus available to meet such costs;

(2) all costs of continuing to service the existing business taking into account the loss of economies of scale from, and any other likely consequences of, ceasing to transact new business at that time; and

(3) the lower of:

(a) any projected valuation strain from writing new business for the 12 months following the *actuarial valuation date* to the extent the actual amount of that strain exceeds the projected surplus on prudent assumptions from existing business in the 12 months following the *actuarial valuation date*; and

(b) any projected new business expense overrun from writing new business for the 12 months following the *actuarial valuation date* to the extent the projected expenses exceed the expenses that the new business can support on a prudent basis.

7.3.56 G The provision for future expenses, whether implicit or explicit, should include a prudent margin for adverse deviation in the level and timing of expenses (see *PRU* 7.3.13R to *PRU* 7.3.19G). The margin should cover the risk of underestimating expenses whether due to, for example, initial under-calculation or subsequent increases in the amount of expenses. In setting the amount of the margin, the *firm* should take into account the extent to which:

(1) an appropriately validated method based on reliable data is used to allocate expenses by product type, by distribution channel and as between acquisition and non-acquisition expenses;

(2) the volume of existing and new business and its distribution by product type or distribution channel is stable or predictable;

(3) costs vary in the short, medium or long term dependent upon the volume of existing or new business and its distribution by product type or distribution channel; and

(4) cost control is well-managed.

7.3.57 G In setting the margin, the *firm* should also take into account:

(1) the length of the period over which it is necessary to project costs;

(2) the extent to which it is reasonable to expect inflation to be stable or predictable over that period; and

(3) whether, if inflation is higher than expected, it is reasonable to expect that the excess would be offset by increases in investment returns.

7.3.58 G Where a *firm* has entered into an agreement with any other person for the sharing or reimbursement of costs, in setting the margin it should take into account the potential impact of that agreement and of its discontinuance.

Mortality and Morbidity

7.3.59 R A *firm* must set the assumptions for mortality and morbidity using prudent rates of mortality and morbidity that are appropriate to the country or territory of residence of the person whose life or health is insured.

7.3.60 G The rates of mortality or morbidity should contain prudent margins for adverse deviation (see *PRU* 7.3.13R to *PRU* 7.3.19G). In setting those rates, a *firm* should take account of:

(1) the systems and controls applied in underwriting *long-term insurance contracts* and whether they provide adequate protection against anti-selection (that is, selection against the *firm*) including:

(a) adequately defining and identifying non-standard risks; and

(b) where such risks are underwritten, allocating to them an appropriate weighting;

(2) the nature of the contractual exposure to mortality or morbidity risk including:

(a) whether lower mortality increases or decreases the *firm's* liability;

(b) the period of cover and whether risk charges can be varied during that period and, if so, how quickly; and

(c) whether the options in the contract give rise to a significant risk of anti-selection (for example, opportunities for voluntary discontinuance, guaranteed renewal at the option of the *policyholder* and rights for conversion of benefits);

(3) the credibility of the *firm's* actual experience as a basis for projecting future experience including:

(a) whether there is sufficient data (especially for medical or financial risks and for new types of benefit or new methods of distribution); and

(b) whether the data is reliable and has been appropriately validated;

(4) the availability and reliability of:

(a) any published tables of mortality or morbidity for the country or territory of residence of the person whose life or health is insured; and

(b) any other information as to the industry-wide insurance experience for that country or territory;

(5) anticipated or possible future trends in experience including, but only where they increase the liability:

(a) anticipated improvements in mortality;

(b) changes arising from improved detection of morbidity (including critical illnesses);

(c) diseases the impact of which may not yet be reflected fully in current experience; and

(d) changes in market segmentation (such as impaired life annuities) which, in the light of developing experience, may require different assumptions for different parts of the policy class.

7.3.61 G An additional provision for diseases covered by *PRU* 7.3.60G(5)(c) may be needed, in particular for unit-linked policies. In determining whether such a provision is needed a *firm* may take into consideration any ability to increase product charges commensurately (provided that such increase does not infringe on its regulatory duty to treat its *customers* fairly), but a provision would still be required for the period until such an increase could be brought into effect.

Options

7.3.62 R When a *firm* establishes its *mathematical reserves* in respect of a *long-term insurance contract*, the *firm* must include an amount to cover any increase in liabilities which might be the direct result of its *policyholder* exercising an option under, or by virtue of, that *contract of insurance.* Where the *surrender value* of a contract is guaranteed, the amount of the *mathematical reserves* for that contract at any time must be at least as great as the value guaranteed at that time.

7.3.63 G An option exists where a *policyholder* is given a choice between alternative forms of benefit, for example, a choice between receiving a cash benefit upon maturity or an annuity at a guaranteed rate. In some cases, the contract may designate one or other of these alternatives as the principal benefit and any other as an option. This designation, in itself, is not one of substance in the context of reserving since it does not affect the *policyholder's* choices. Other forms of option include:

(1) the right to convert to a different contract on guaranteed terms;

(2) the right to increase cover on guaranteed terms;

(3) the right to a specified amount on surrender; and

(4) the right to a paid up value.

7.3.64 G The *firm* should provide for the benefit which the *firm* anticipates the *policyholder* is most likely to choose. Except for the "option" of voluntary discontinuance in the case of *regulatory basis only life firms* (see *PRU* 7.3.74R), past experience may be used as a guide, but only if this is likely to give a reasonable estimate of future experience. For example, past experience of the take-up of a cash payment option instead of an annuity would not be a reliable guide, if, in the past, market rates exceeded those guaranteed in the annuity but no longer do so. Similarly, past experience on the take-up of options may not be relevant in the light of the assumptions made in respect of future interest rates and mortality rates in the valuation of the benefits.

7.3.65 G Many options are long-term and need careful consideration. Improving longevity, for example, can increase the value of guaranteed annuity options vesting further in the future. *Firms* also need to have regard to the fact that *policyholder* behaviour can change in the future as *policyholders* become more aware of the value of their options. The impact on *policyholder* behaviour of possible changes in taxation should also be considered.

7.3.66 G In accordance with *PRU* 7.3.7R and *PRU* 7.3.13R, take-up rates for guaranteed annuity options should be assessed on a prudent basis with assumptions that include margins for adverse deviation (see *PRU* 7.3.13R to *PRU* 7.3.19G) that take account of current experience and the potential for future change. The *firm* should reserve for option take-up at least at a prudent margin over current experience for options shortly to vest. For longer term options where the option becomes increasingly valuable in the future due to projected mortality improvements, increased take-up rates should be assumed. In view of the growing uncertainty over take-up rates for projections further in the future, for guaranteed annuity option dates 20 years or more ahead at least a 95% take-up rate assumption should be made.

7.3.67 G Where there is considerable variation in the cost of the option depending on conditions at the time the option is exercised, and where that variation constitutes a material risk for the *firm*, it will generally be appropriate to use stochastic modelling. In this case prices from the asset model used in the stochastic approach should be benchmarked to relevant market asset prices before determining the value of the option. Where stochastic modelling is not undertaken, market option prices should be used to determine suitable assumptions for the valuation of the option. If no market exists for a particular option, a *firm* should take the value of the nearest equivalent benefit or right for which a market exists and document the way in which it has adjusted that valuation to reflect the original option.

7.3.68 G Where the option offers a choice between two non-discretionary financial benefits (such as between a guaranteed cash sum or a guaranteed annuity value, or between a unit value and a maturity guarantee) and where there is a wide range of possible outcomes, the *firm* should normally model such liabilities stochastically. In carrying out such modelling *firms* should take into account the likely choices to be made by *policyholders* in each scenario. *Firms* should make and retain a record of the development and application of the model.

7.3.69 G The value of a contract with an option is greater than the value of a similar contract without the option, that is, the option has value whether it is expected to be exercised or not. Although in theory a *firm* can rebalance its investments to match the expected cost of the option to the *firm* (including the time value of the option), this takes time to achieve and the market may move more quickly than the *firm* is able to respond. Also, there are likely to be transaction costs. *Firms* should take these aspects into consideration in setting up *mathematical reserves*.

7.3.70 R (1) Where a *policyholder* may opt to be paid a cash amount, or a series of cash payments, the *mathematical reserves* for the *contract of insurance* established under *PRU* 7.3.7R must be sufficient to ensure that the payment or payments could be made solely from:

(a) the assets covering those *mathematical reserves*; and

(b) the resources arising from those assets and from the contract itself.

(2) In (1) references to a cash amount or a series of cash payments include the amount or amounts likely to be paid on a voluntary discontinuance.

(3) For the purposes of (1), the *firm* must assume that:

(a) the assumptions adopted for the current valuation remain unaltered and are met; and

(b) discretionary benefits and charges will be set so as to fulfil the *firm*'s regulatory duty to treat its *customers* fairly.

(4) (1) may be applied to a group of similar contracts instead of to the individual contracts within that group.

7.3.71 R For the purposes of *PRU* 7.3.70R, a *firm* must assume that the amount of a cash payment secured by the exercise of an option is:

(1) in the case of an *accumulating with-profits policy*, the lower of:

(a) the amount which the *policyholder* would reasonably expect to be paid if the option were exercised, having regard to the representations made by the *firm* and including any expectations of a *final bonus*; and

(b) that amount, disregarding all discretionary adjustments;

(2) in the case of any other *policy*, the amount which the *policyholder* would reasonably expect to be paid if the option were exercised, having regard to the representations made by the *firm*, without taking into account any expectations regarding future distributions of profits or the granting of discretionary additions in respect of an *established surplus*.

7.3.72 G In *PRU* 7.3.71R(1)(a) *firms* must take into consideration, for example, a market value adjustment where such an adjustment has been described in representations made to *policyholders* by the *firm*. However, any discretionary adjustment, such as a market value adjustment, cannot be included in the amount calculated in *PRU* 7.3.71R(1)(b).

Persistency assumptions

7.3.73 G *PRU* 7.3.76R and *PRU* 7.3.77G apply to the valuation of the *with-profits insurance liabilities* of *realistic basis life firms*. *PRU* 7.3.74R and *PRU* 7.3.75G apply to the valuation of all other liabilities.

7.3.74 R Except as permitted by *PRU* 7.3.76R, a *firm* must not make any allowance in the calculation of the *mathematical reserves* for the voluntary discontinuance of any *contract of insurance* if the amount of the *mathematical reserves* so determined would, as a result, be reduced.

7.3.75 G The rate of voluntary discontinuance (that is, lapse, surrender or paying up) is often difficult to predict and may be volatile especially in the short term during stressful economic conditions. Depending upon the circumstances and contract terms, voluntary discontinuance may increase or decrease the *firm's* liability. In effect, *PRU* 7.3.74R requires a *firm* to assume that there will be no voluntary discontinuance if assuming voluntary discontinuance would reduce the liability. This protects against the risk that arises from volatility in the rate of voluntary discontinuance. In addition, there is the risk of assets not being realisable when needed due to the rates of discontinuance exceeding expected levels.

7.3.76 R A *realistic basis life firm* may make assumptions about voluntary discontinuance rates in the calculation of the *mathematical reserves* for its *with-profits insurance business* provided that those assumptions meet the general requirements for prudent assumptions as set out in *PRU* 7.3.10R and *PRU* 7.3.13R.

7.3.77 G The prudential margin in respect of assumptions of voluntary discontinuance should be validated both in relation to recent experience and to variations in future experience that might arise as a result of reasonably foreseeable changes in conditions. In particular, where estimates of experience are being made well into the future, the assumptions should contain margins that take into account the increased risk of adverse experience arising from changed circumstances. *Firms* should also consider the possibility of anti-selection by *policyholders* and of variations in persistency experience for different classes and cohorts of business.

Reinsurance

7.3.78 G The prospective valuation of future cash flows to determine the amount of the *mathematical reserves* includes amounts to be received or paid under contracts of *reinsurance* in respect of *long-term insurance business* (see *PRU* 7.3.28R(4)). This applies even where those cash flows cannot be identified as related to particular *long-term insurance contracts* (see *PRU* 7.3.22R(3)).

7.3.79 R A *firm* must value *reinsurance* cash flows using methods and assumptions which are at least as prudent as the methods and assumptions used to value the underlying *contracts of insurance* which have been reinsured. In particular:

(1) *reinsurance* recoveries must not be recognised unless the underlying liabilities to which they relate have also been recognised;

(2) *reinsurance* cash outflows that are unambiguously linked to the emergence as surplus of margins included in the valuation of existing *contracts of insurance* or to the exercise by a *reinsurer* of its rights under a termination clause need not be valued (see *PRU* 7.3.85R); and

(3) *reinsurance* cash inflows that are contingent on factors or conditions other than the insurance risks that are reinsured must not be valued.

7.3.80 G In valuing *reinsurance* cash flows, a *firm* should establish prudent margins for adverse deviation (see *PRU* 7.3.13R to *PRU* 7.3.19G) including margins in respect of:

(1) any uncertainty as to the amount or timing of amounts to be paid or received; and

(2) the risk of credit default by the *reinsurer*.

7.3.81 G In assessing the risk of credit default, the *firm* should take into account the *rules* and *guidance* in *PRU* 3.2 (Credit risk in insurance).

7.3.82 G It will not necessarily be appropriate to use the same assumptions in *PRU* 7.3.79R as for the underlying contracts. For example, if only a subgroup of the original contracts is reinsured, it may be appropriate to use different mortality rates.

7.3.83 G Only *reinsurance* cash inflows that are triggered unambiguously by the insurance risks of the *firm* that are reinsured may be valued. *Reinsurance* cash inflows that depend on other contingencies where the outcome does not form part of the valuation basis should not be given credit.

7.3.84 G *Firms* should assess the extent of margins in the valuation of the existing *contracts of insurance* where these provide implicit provision for the *reinsurance* cash outflows in *PRU* 7.3.79R. Where the *reinsurance* asset exceeds the estimated value of the future surplus under reinsured contracts *firms* should assess their credit risk exposure to the *reinsurer* .

7.3.85 R For the purposes of *PRU* 7.3.79R(2), the "link" must be such that a contingent liability to pay or repay the amount to the *reinsurer* could not arise except when, and to the extent that, the margins in the valuation of the existing *contracts of insurance* emerge as surplus, or the *reinsurer* exercises its rights under a termination clause as a result of fraud, misrepresentation, the non-payment of *reinsurance premiums* by the *firm* or a failure by the *firm* to obtain the agreement of the *reinsurer* to a transfer of business by the *firm*.

7.3.86 R For the purposes of *PRU* 7.3.79R(2) and *PRU* 7.3.85R, future surplus may only be offset against future *reinsurance* cash outflow in respect of surplus on *non-profit insurance contracts* and the charges or shareholder transfers arising as surplus from *with-profits insurance contracts*. Such charges and transfers may only be allowed for to the extent consistent with the regulatory duty of the *firm* to treat its *customers* fairly.

7.3.87 G For the purposes of *PRU* 7.3.85R, a contingent liability means a liability that would only arise upon the happening of a particular contingency, even where that contingency is not expected to occur. For example, if the *firm* has a *reinsurance* arrangement in force that in the event the *firm* were wound up would give rise to repayments other than out of surplus emerging, the *reinsurance* cash outflows should be valued as a liability.

7.3.88 G *PRU* 7.3.85R allows a *firm* not to value *reinsurance* cash outflows provided the contingencies in which the *reinsurance* would require repayment other than out of future surpluses are limited to termination clauses concerning fraud, misrepresentation, non-payment of *reinsurance premiums* by the *firm* or a failure by the *firm* to obtain the agreement of the *reinsurer* to a transfer of business by the *firm*.

7.3.89 G Where the *reinsurance* cash outflow is payable by a fund or sub-fund that generates such profits, charges or transfers, the *firm* need make no provision for such payments provided that repayment to the *reinsurer* is linked unambiguously (as defined in *PRU* 7.3.85R) to the emergence of future surplus. Where the profits, charges or transfers arising under a block of business are payable by a fund or sub-fund to another part of the *firm* then only where the *firm* has committed to remit such profits, charges or transfers directly to the *reinsurer* would it be acceptable for no provision for payments to the *reinsurer* to be made.

7.3.90 R In *PRU* 7.3.78G to *PRU* 7.3.89G references to *reinsurance* and contracts of *reinsurance* include analogous non-*reinsurance* financing agreements.

7.3.91 G In *PRU* 7.3.78G to *PRU* 7.3.89G references to *reinsurance* cash outflow include any provision for the reduction in *policy* liabilities recognised as covered under a contract of *reinsurance* or for the reduction of any debt to the *firm* previously created under a contract of *reinsurance*. In *PRU* 7.3.90R analogous non-*reinsurance* financing agreements include contingent loans, securitisations and any other arrangements giving rise to charges on future surplus arising.

7.4 With-profits insurance capital component

Application

7.4.1 R *PRU* 7.4 applies to a *realistic basis life firm*.

7.4.2 G A *realistic basis life firm* means a *firm* to which *PRU* 2.1.15R applies. The application of *PRU* 2.1.15R is set out in *PRU* 2.1.16R and *PRU* 2.1.17R. *PRU* 2.1.9R requires that a *firm* must maintain at all times *capital resources* equal to or in excess of its *capital resources requirement*. The *enhanced capital requirement* forms part of the *capital resources requirement* for a *realistic basis life firm*. The *with-profits insurance capital component* forms part of the *enhanced capital requirement* which a *realistic basis life firm* is required to calculate in accordance with *PRU* 2.1.34R.

Purpose

7.4.3 G This section sets out *rules* and *guidance* as to the methods and assumptions to be used in calculating the *with-profits insurance capital component*.

7.4.4 G The purpose of the *with-profits insurance capital component* is to supplement the *mathematical reserves* so as to ensure that a *firm* holds adequate financial resources for the conduct of its *with-profits insurance business*. In particular, capital in excess of the *mathematical reserves* may be needed to ensure that adequate *final bonuses* can be awarded to *policyholders*. That is, adequate in the sense that in setting bonuses payable to *policyholders* the *firm* pays due regard to the interests of its *policyholders* and treats them fairly. The *mathematical reserves* for a *realistic basis life firm* are not required to include provision for future *annual bonuses* or *final bonuses* (*PRU* 7.3.9R).

7.4.5 G The required procedures are summarised in the flowchart in *PRU* 7 Ann 1G.

Main requirements

7.4.6 R A *firm* must calculate the *with-profits insurance capital component* in accordance with *PRU* 7.4.7R.

7.4.7 R (1) The *with-profits insurance capital component* for a *firm* is the aggregate of any amounts that:

(a) result from the calculations specified in (2) and (3); and

(b) are greater than zero.

(2) Subject to (3), in relation to each *with-profits fund* within the *firm*, the *firm* must deduct B from A, where:

(a) A is the amount of the *regulatory excess capital* for that fund (see *PRU* 7.4.23R); and

(b) B is the amount of the *realistic excess capital* for that fund (see *PRU* 7.4.32R).

(3) Where a capital instrument that can be included in the *firm's capital resources* in accordance with *PRU* 2.2 has been attributed wholly or partly to a *with-profits fund* and that instrument meets the requirements of *PRU* 2.2.93R, the *firm* must add to the amount calculated under (2) for that fund the result, subject to a minimum of zero, of deducting D from C where:

(a) C is the outstanding face amount of the instrument to the extent attributed to the fund; and

(b) D is the realistic value of the instrument to the extent attributed to the fund in the single event that determines the *risk capital margin* under *PRU* 7.4.43R.

7.4.8 G Subordinated debt which is subordinated to *policyholder* interests (see *PRU* 2.2.93R) is an example of the sort of capital instrument that may give rise to a component of the *WPICC* under *PRU* 7.4.7R(3). Such instruments are treated as capital under *PRU* 2.2, subject to the requirements of *PRU* 2.2.93R. Under realistic reserving the capital instrument is valued as a realistic liability (see *PRU* 7.4.40R) and in calculating the *risk capital margin* such an instrument would be valued at its realistic value in the single event outlined in *PRU* 7.4.43R (see also *PRU* 7.4.162R). Overall, the effect of *PRU* 2.2, *PRU* 7.4.7R(3) and *PRU* 7.4.43R is to enable a *firm* that obtains subordinated debt to benefit from additional *capital resources* equal to the face amount of that debt.

7.4.9 G *SUP* 4 (Actuaries) sets out the role and responsibilities of the *actuarial function* and of the *with-profits actuary*.

(1) As part of his duties under *SUP* 4.3.13R, the *actuary* appointed by the *firm* to perform the *actuarial function* must calculate the *firm's mathematical reserves* and, in the context of the calculation of the *with-profits insurance capital component*, must also:

(a) advise the *firm's governing body* on the methods and assumptions to be used in the calculation of the *firm's with-profits insurance capital component*;

(b) perform that calculation in accordance with the methods and assumptions determined by the *firm's governing body*; and

(c) report to the *firm's governing body* on the results of that calculation.

(2) As part of his duties under *SUP* 4.3.16R, the *with-profits actuary* must advise the *firm's governing body* on the discretion exercised by the *firm*. In the context of the calculation of the *with-profits insurance capital component*, the *with-profits actuary* must also advise the *firm's governing body* as to whether the methods and assumptions (including the allowance for management actions) used for that calculation are consistent with the *firm's Principles and Practices of Financial Management* (*PPFM* - see *COB* 6.10) and with its regulatory duty to treat its *customers* fairly.

General

Definitions

7.4.10 R In this section, real estate means an interest in land, buildings or other immovable property.

7.4.11 R In this section, the long-term gilt yield is the annualised equivalent of the yield on the 15-year index for United Kingdom Government fixed-interest securities jointly compiled by the Financial Times, the Institute of Actuaries and the Faculty of Actuaries.

7.4.12 R For the purposes of this section, a *firm* has an exposure to an asset or liability where the *firm's* valuation of its assets or liabilities changes when the value of the asset or liability changes.

7.4.13 R Unless the context otherwise requires, all references (however expressed) in this section to realistic liabilities, or to liabilities which are included in the calculation of realistic liabilities, include discretionary benefits payable by the *firm* in accordance with the *firm's* regulatory duty to treat its *customers* fairly.

7.4.14 G In this section, any reference to a *firm's* regulatory duty to treat its *customers* fairly is a reference to the *firm's* duty under *Principle* 6 (Customers' interests). This states that a *firm* must pay due regard to the interests of its *customers* and treat them fairly.

7.4.15 G In this section, any reference to the *Principles and Practices of Financial Management* (*PPFM*) is a reference to the requirements in *COB* 6.10 (Principles and Practices of Financial Management) for *firms* to establish, maintain and record the principles and practices of financial management according to which the business of its *with-profits funds* is conducted.

7.4.16 G The extent to which a *firm* requires a separate *PPFM* for each of its *with-profits funds* will depend on the *firm's* circumstances and any relevant representations made by the *firm* to its with-profits *policyholders*. In this section, any reference to a *firm's PPFM* refers to the *PPFM* which relate to the *with-profits fund* or the *with-profits insurance contracts* in question.

Record keeping

7.4.17 R A *firm* must make, and retain for an appropriate period of time, a record of:

(1) the methods and assumptions used in making any calculation required for the purposes of this section (and any subsequent changes) and the reasons for their use; and

(2) any change in practice and the nature of, reasons for, and effect of, any change in approach with respect to those methods and assumptions.

7.4.18 G *PRU* 1.4.53R requires *firms* to maintain accounting and other records for a minimum of three years, or longer as appropriate. For the purposes of *PRU* 7.4.17R, a period of longer than three years will be appropriate for a *firm's long-term insurance business*. In determining an appropriate time period, a *firm* should have regard to:

(1) the detailed *guidance* on record keeping in *PRU* 1.4.51G to *PRU* 1.4.64G;

(2) the nature and term of the *firm's long-term insurance contracts*; and

(3) any additional provisions or statutory requirements applicable to the *firm* or its records.

7.4.19 R A *firm* must also identify in the record required to be kept by *PRU* 7.4.17R changes in practice, in particular changes in those items which will or may be significant in relation to the eventual *claim* values.

7.4.20 G Some of the changes identified in accordance with *PRU* 7.4.19R may have to be notified to the *firm's policyholders* in accordance with the *firm's PPFM*.

General principles for allocating aggregate amounts

7.4.21 R Where any calculation is required under this section which:

(1) is to be made in respect of any *with-profits fund* of a *firm*; and

(2) covers an amount that is otherwise calculated in relation to the *firm* as a whole;

the *firm* must make an allocation of that amount as between all of its funds (including funds which are not *with-profits funds*).

7.4.22 R In any case where:

(1) *non-profit insurance contracts* are written in any *with-profits fund* of a *firm*; and

(2) any calculation is required under this section which:

(a) is to be made in respect of the *regulatory excess capital* or *realistic excess capital* for the fund; and

(b) covers an amount that is otherwise calculated or allocated in relation to the fund as a whole;

the *firm* must make an allocation of the amount in (2)(b) as between the *with-profits insurance contracts* and *non-profit insurance contracts* written in the fund.

Calculation of regulatory excess capital

7.4.23 R A *firm* must calculate the *regulatory excess capital* for each of its *with-profits funds* by deducting B from A, where:

(1) A is the *regulatory value of assets* of the fund (see *PRU* 7.4.24R); and

(2) B is the sum of:

(a) the *regulatory value of liabilities* of the fund (see *PRU* 7.4.29R);

(b) the *long-term insurance capital requirement* in respect of the fund's *with-profits insurance contracts*; and

(c) the *resilience capital requirement* in respect of the fund's *with-profits insurance contracts*.

Regulatory value of assets

7.4.24 R (1) For the purposes of *PRU* 7.4.23R(1), the *regulatory value of assets* of a *with-profits fund* is equal to the sum of:

(a) the amount of the fund’s *long-term admissible assets*; and

(b) the amount of any *implicit items* allocated to that fund;

less an amount, representing any *non-profit insurance contracts* written in that fund, determined in accordance with (2).

(2) Where *non-profit insurance contracts* are written in a *with-profits fund*, the amount representing those contracts is the sum of:

(a) the *mathematical reserves* in respect of the *non-profit insurance contracts* written in the fund; and

(b) the following amounts, to the extent that each of them is covered by the fund’s *long-term admissible assets*:

(i) an amount in respect of the *non-profit insurance contracts* written in the fund which represents an appropriate allocation of the *firm's long-term insurance capital requirement*; and

(ii) an amount in respect of the *non-profit insurance contracts* written in the fund which represents an appropriate allocation of the *firm's resilience capital requirement*.

7.4.25 R For the purpose of determining the value of a fund's *long-term admissible assets* in accordance with *PRU* 7.4.24R(1)(a), no value is to be attributed to debts and claims other than in respect of:

(1) amounts that have already fallen due; and

(2) tax recoveries and claims against *compensation funds* to the extent not already offset in the *mathematical reserves.*

7.4.26 R In making a determination in accordance with *PRU* 7.4.24R(2), a *firm* must allocate *long-term admissible assets* of an appropriate nature and term to any *non-profit insurance contracts* written in the *with-profits fund*.

7.4.27 G In calculating the amount of a *firm's resilience capital requirement* allocated to the *non-profit insurance contracts* in the *with-profits fund*, the *firm* should calculate the amount of resilience capital that would be required if that business were in a standalone company owning the assets allocated. The *resilience capital requirement* for the *with-profits insurance business* should also be calculated as if it were a stand-alone company. An allocation of the *firm's* total *resilience capital requirement* should then be made in a manner that would produce a result materially consistent with an allocation in proportion to the amounts calculated for each part of the business as stand-alone entities.

7.4.28 G A *firm* needs to obtain an *implicit item waiver* from the *FSA* in order to bring in an amount under *PRU* 7.4.24R(1)(b). For *guidance* on applying for an *implicit item waiver* in respect of future surpluses relating to *with-profits funds* see *PRU* 2 Ann 2G. The amount of any *implicit item* allocated to a *with-profits fund* may be defined in the terms of any *waiver* granted.

Regulatory value of liabilities

7.4.29 R For the purposes of *PRU* 7.4.23R(2)(a), the *regulatory value of liabilities* of a *with-profits fund* is equal to the sum of:

(1) the *mathematical reserves,* in respect of the fund's *with-profits insurance contracts,* including the value of any provisions reflecting bonuses allocated at the *actuarial valuation date*; and

(2) the *regulatory current liabilities* of the fund (see *PRU* 7.4.30R).

7.4.30 R For the purposes of *PRU* 7.4.29R(2), the *regulatory current liabilities* of a *with-profits fund* are equal to the sum of the following amounts to the extent that they relate to that fund:

(1) accounting liabilities (including *long-term insurance liabilities* which have fallen due before the end of the *financial year*);

(2) liabilities from *deposit back arrangements*; and

(3) any provision for adverse variations (determined in accordance with *PRU* 4.3.17R).

7.4.31 G The amount of *regulatory current liabilities* for a *with-profits fund* refers to the sum of the amounts in (1) and (2) in respect of the fund:

(1) the amount of 'Total other insurance and non-insurance liabilities'; and

(2) the amount of 'Cash bonuses which had not been paid to *policyholders* prior to the end of the financial year';

as disclosed at lines 49 and 12 respectively of the appropriate Form 14 ('Long-term business liabilities and margins') for that fund as part of the Annual Returns required to be deposited with the *FSA* under *IPRU(INS)* rule 9.6(1).

Calculation of realistic excess capital

7.4.32 R A *firm* must calculate the *realistic excess capital* for each of its *with-profits funds* by deducting B from A, where:

(1) A is the *realistic value of assets* of the fund (see *PRU* 7.4.33R); and

(2) B is the sum of:

(a) the *realistic value of liabilities* of the fund (see *PRU* 7.4.40R); and

(b) the *risk capital margin* for the fund (see *PRU* 7.4.43R).

Realistic value of assets

7.4.33 R (1) For the purposes of *PRU* 7.4.32R(1), the *realistic value of assets* of a *with-profits fund* is the sum of:

(a) the amount of the fund's *regulatory value of assets* determined in accordance with *PRU* 7.4.24R, but with no value given to any *implicit item* and excluding the regulatory value of any *shares* in a *related undertaking* which carries on *long-term insurance business*;

(b) the amount of the fund's excess *admissible assets* (see *PRU* 7.4.36R);

(c) the present value of future profits (or losses) on any *non-profit insurance contracts* written in the *with-profits fund* (see *PRU* 7.4.37R);

(d) the value of any *derivative* or *quasi-derivative* held in the fund (see *PRU* 1.3.11R to *PRU* 1.3.30R) to the extent its value is not reflected in (a), (b) or (c);

(e) any amount determined under (2); and

(f) the amount of any prepayments made from the fund.

(2) Where any equity *shares* held (directly or indirectly) by a *firm* (A):

(a) are *shares* in a *related undertaking* (B) which carries on *long-term insurance business*; and

(b) have been identified by A under *PRU* 7.4.21R as *long-term insurance assets* which are held in the *with-profits fund* for which the realistic value is to be determined under (1);

the amount required under (1)(e) is the relevant proportion of the value of all B's equity *shares* as determined in (3).

(3) For the purposes of (2):

(a) the relevant proportion is the proportion of the total number of equity *shares* issued by B which are held (directly or indirectly) by A;

(b) the value of all B's equity *shares* must be taken as D deducted from C, where C is equal to the sum of:

(i) the shareholder net assets of B;

(ii) any surplus assets in the *non-profit funds* of B;

(iii) any additional amount arising from the excess of the present value of future profits (or losses) on any *non-profit insurance contracts* written by B (calculated on a basis consistent with *PRU* 7.4.37R), excluding any amount arising from business that is written in a *with-profits fund*, over any present value of future profits (or losses) used in calculating B's regulatory capital requirements and arising from business outside its *with-profits funds*; and

(iv) where B has any *with-profits funds*, the present value of projected future transfers out of those funds to shareholder funds of B;

and D is equal to the sum of:

(v) the *long-term insurance capital requirement* in respect of any *non-profit insurance contracts* written in a *non-profit fund* of B;

(vi) the amount of the *resilience capital requirement* in respect of any *non-profit insurance contracts* written in a *non-profit fund* of B;

(vii) any part of the *with-profits insurance capital component* of B, to the extent that this is not covered from the assets of the *with-profits fund* from which it arises after deducting from those assets the amount calculated under (iv); and

(viii) any assets of B that back its regulatory capital requirements and that are valued in (iii) in the calculation of the present value of future profits of *non-profit insurance business* written by B.

(4) The methods and assumptions used in the calculations under (3)(b)(iii) and (iv) must follow a consistent approach to that set out in *PRU* 7.4.37R.

7.4.34 G In *PRU* 7.4.33R(1)(d), where a *derivative* or *quasi-derivative* has a positive asset value, credit should be given within the *realistic value of assets*. If the *derivative* or *quasi-derivative* has a negative asset value it should be valued within realistic liabilities as an element of *realistic current liabilities* (see *PRU* 7.4.40R(3)).

7.4.35 G Where a *firm* identifies *shares* in a *related undertaking* which carries on *long-term insurance business* as *shares* held in one of its *with-profits funds*, *PRU* 7.4.33R(1)(e), (2) and (3) brings in a realistic valuation of the *related undertaking* equal to its net assets plus the present value of future profits, less its regulatory capital requirements (see *PRU* 7.4.33R(3)(v), (vi) and (vii)). Where the *related undertaking* has taken the present value of future profits arising from its contracts into consideration in covering its regulatory capital requirements (for example, its *risk capital margin,* under *PRU* 7.4.45R(2)(c)), *PRU* 7.4.33R(3)(b)(iii) requires a *firm* to exclude those future profits in valuing the *related undertaking*. The subtraction of the capital requirements in the calculation provides a straightforward method of allowing for the change in the *related undertaking's* value in stress conditions, as the value of the *related undertaking* is not subject to the realistic stress tests of the *risk capital margin*. In calculating the present value of future profits on *non-profit insurance business* written in the *related undertaking* under *PRU* 7.4.33R(3)(b)(iii), a *firm* may value the release of capital requirements as the business runs off (see *PRU* 7.4.38G). *PRU* 7.4.33R(3)(b)(viii) ensures that any such capital is not double-counted.

7.4.36 R Excess *admissible assets* of a *with-profits fund* means *admissible assets* which exceed any of the percentage limits referred to in *PRU* 3.2.22R.

7.4.37 R A *firm* must calculate the present value of future profits (or losses) on *non-profit insurance contracts* written in the *with-profits fund* using methodology and assumptions which:

(1) are based on current estimates of future experience;

(2) involve reasonable (but not excessively prudent) adjustments to reflect risk and uncertainty;

(3) allow for a market-consistent valuation of any guarantees or options within the contracts valued;

(4) are derived from current market yields;

(5) have regard to generally accepted actuarial practice and generally accepted industry standards appropriate for *firms* carrying on *long-term insurance business*;

(6) are consistent with the allocation, made in accordance with *PRU* 7.4.22R, of any aggregate amounts as between the *with-profits insurance contracts* and the *non-profit insurance contracts* written in the fund;

(7) allow for any tax that would be payable out of the *with-profits fund* in respect of the contracts valued; and

(8) are consistent with the allocation, made in accordance with *PRU* 7.4.26R, of *long-term admissible assets* as between the *with-profits insurance contracts* and any *non-profit insurance contracts* written in the fund.

7.4.38 G In calculating the present value of future profits (or losses) for *non-profit insurance business* required by *PRU* 7.4.33R(1)(c), to the extent that the *long-term insurance capital requirement* and the *resilience capital requirement* are covered by the *with-profits fund's long-term admissible assets*, a *firm* may take into consideration any release of these items as the relevant *policies* go off the books.

7.4.39 G Annuities do not typically fall to be valued on a market-consistent basis under *PRU* 7.4.37R(3) as they are not "options and guarantees" as defined for accounting purposes. This is because they do not have "time value" in the option-pricing meaning of that term. However where, atypically, annuities do fall to be valued on a market-consistent basis under *PRU* 7.4.37R(3), the discount rate used should be appropriate to the characteristics of the liability, including its illiquidity. The appropriate interest rate, therefore, would not typically be the risk-free rate. Where illiquid assets are used to closely match similar illiquid liabilities, as could be the case in annuities business, it would be appropriate to look at the liquidity premium that is implicit in the market value of the assets as a proxy for the liquidity premium that should be included in a market consistent valuation of the liabilities. However, care should be exercised in doing this. Assets and liabilities are rarely perfectly matched and an appropriate margin needs to be included in the valuation to cover the risk of unexpected mismatch.

Realistic value of liabilities: general

7.4.40 R For the purposes of *PRU* 7.4.32R(2)(a), the *realistic value of liabilities* of a *with-profits fund* is the sum of:

(1) the *with-profits benefits reserve* of the fund;

(2) the *future policy related liabilities* of the fund; and

(3) the *realistic current liabilities* of the fund.

7.4.41 G All liabilities arising under, or in connection with, *with-profits insurance contracts* written in the fund should be included in the *realistic value of liabilities* referred to in *PRU* 7.4.40R, including those in respect of guarantees and the value of options.

7.4.42 G Detailed *rules* and *guidance* for the calculation of the three elements referred to in *PRU* 7.4.40R are contained below in this section:

(1) *PRU* 7.4.116R to *PRU* 7.4.135G refer to the *with-profits benefits reserve*;

(2) *PRU* 7.4.136G to *PRU* 7.4.189G refer to the *future policy related liabilities*; and

(3) *PRU* 7.4.190R and *PRU* 7.4.191R refer to the *realistic current liabilities*.

Risk capital margin

7.4.43 R (1) A *firm* must calculate a *risk capital margin* for each of its *with-profits funds* in accordance with (2) to (6).

(2) The *firm* must identify relevant assets (see *PRU* 7.4.45R) which, in the most adverse scenario, will have a value (see *PRU* 7.4.46R) which is equal to the *realistic value of liabilities* of the fund under that scenario.

(3) The most adverse scenario means the single event comprising that combination of the scenarios in *PRU* 7.4.44R which gives rise to the largest positive value that results from deducting B from A, where:

(a) A is the value of relevant assets which will produce the result described in (2); and

(b) B is the *realistic value of liabilities* of the fund.

(4) The *risk capital margin* for the fund is the result of deducting C from A, where C is the sum of:

(a) B; and

(b) any amount included within relevant assets under *PRU* 7.4.45R(2)(c).

(5) In calculating the value of relevant assets for the purpose of determining the most adverse scenario in (3), a *firm* must not adjust the valuation of any asset taken into consideration under *PRU* 7.4.33R(1)(e) (*related undertakings* carrying on *long-term insurance business*) or *PRU* 7.4.45R(2)(c) (present value of future profits arising from *insurance contracts* written outside the *with-profits fund*).

(6) In calculating the *realistic value of liabilities* of a fund under any scenario, a *firm* is not required to adjust the best estimate provision made under *PRU* 7.4.190R(1) in respect of a *defined benefits pension scheme* in accordance with *PRU* 7.4.191R.

7.4.44 R For the purposes of *PRU* 7.4.43R(3), the scenarios are one scenario selected from each of the following:

(1) in respect of *UK* and other assets within *PRU* 7.4.62R(1)(a):

(a) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.68R(1) (equities);

(b) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.68R(2) (real estate); and

(c) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.68R(3) (fixed interest securities);

(2) in respect of non-*UK* assets within *PRU* 7.4.62R(1)(b):

(a) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.73R(1) (equities);

(b) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.73R(2) (real estate); and

(c) the range of *market risk* scenarios identified in accordance with *PRU* 7.4.73R(3) (fixed interest securities);

(3) the range of credit risk scenarios identified in accordance with *PRU* 7.4.78R(1) (bond or debt items);

(4) the range of credit risk scenarios identified in accordance with *PRU* 7.4.78R(2) (*reinsurance* items or analogous non-*reinsurance* financing agreements);

(5) the range of credit risk scenarios identified in accordance with *PRU* 7.4.78R(3) (other items including *derivatives* and *quasi-derivatives*); and

(6) the persistency risk scenario identified in accordance with *PRU* 7.4.100R.

7.4.45 R (1) In *PRU* 7.4.43R, in relation to a *with-profits fund,* the relevant assets means a range of assets which meets the following conditions:

(a) the range is selected on a basis which is consistent with the *firm's* regulatory duty to treat its *customers* fairly;

(b) the range must include assets from within the *with-profits fund* the value of which is greater than or equal to the *realistic value of liabilities* of the fund;

(c) the range is selected in accordance with (2); and

(d) no asset of the *firm* may be allocated to the range of assets identified in respect of more than one *with-profits fund*.

(2) The range of assets must be selected from the assets specified in (a) to (c), in the order specified:

(a) assets that have a realistic value under *PRU* 7.4.33R;

(b) where a *firm* has selected all the assets within (a), any *admissible assets* that are not identified as held within the *with-profits fund*; and

(c) where a *firm* has selected all the assets within (a) and (b), any additional assets.

(3) But a *firm* must not bring any amounts into account under (2)(b) or (2)(c) in respect of any *with-profits fund* if that would result in the *firm* exceeding its overall maximum limit (determined according to whether the *firm* has only one *with-profits fund* or more than one such fund).

(4) A *firm* exceeds its overall maximum limit for amounts brought into account under (2)(b) where:

(a) in the case of a *firm* with a single *with-profits fund*, the amount the *firm* brings into account in respect of that fund;

(b) in the case of a *firm* with two or more *with-profits funds*, the aggregate of the amounts the *firm* brings into account in respect of each of those funds;

exceeds the sum of the *firm's* shareholder net assets and the surplus assets in the *firm's non-profits funds*, less any regulatory capital requirements in respect of business written outside its *with-profits funds*.

(5) A *firm* exceeds its overall maximum limit for amounts brought into account under (2)(c) where:

(a) in the case of a *firm* with a single *with-profits fund*, the amount the *firm* brings into account in respect of that fund;

(b) in the case of a *firm* with two or more *with-profits funds*, the aggregate of the amounts the *firm* brings into account in respect of each of those funds;

exceeds 50% of the present value of future profits arising from *insurance contracts* written by the *firm* outside its *with-profits fund*s.

7.4.46 R In valuing the relevant assets identified under *PRU* 7.4.43R(2), a *firm* must use the same methods of valuation as in *PRU* 7.4.33R, except that:

(1) the value of any *admissible assets* not identified as held within the *with-profits fund* (see *PRU* 7.4.45R(2)(b)) must be as determined under *PRU* 1.3; and

(2) the value of any asset which forms part of the range of assets as a result of *PRU* 7.4.45R(2)(c) must be determined on a basis consistent with that described in *PRU* 7.4.37R.

7.4.47 G The purpose of the *risk capital margin* for a *with-profits fund* is to cover adverse deviation from:

(1) the fund's *realistic value of liabilities*;

(2) the value of assets identified, in accordance with *PRU* 7.4.43R(2), to cover the amount in (1) and the fund's *risk capital margin*;

arising from the effects of *market risk*, credit risk and persistency risk. Other risks are not explicitly addressed by the *risk capital margin*.

7.4.48 G The amount of the *risk capital margin* calculated by the *firm* for a *with-profits fund* will depend on the *firm's* choice of assets held to cover the fund's *realistic value of liabilities* and the margin. *PRU* 7.4.43R requires the relevant assets to be sufficient, in the most adverse scenario, to cover the *realistic value of liabilities* in the event that scenario was to arise.

7.4.49 G *PRU* 7.4.45R(2)(c) allows *firms* to bring the economic value of *non-profit insurance business* written outside a *with-profits fund* into the assets available to cover the *risk capital margin*. To place a prudent limit on the amount of future profits taken into consideration a maximum of 50% of the present value of *non-profit insurance business* can be taken into the calculation (*PRU* 7.4.45R(5)). Where a contract is written in a *non-profit fund* but the assets arising from that contract are invested in a *with-profits fund* which is subject to charges for investment management or other services which benefit the *non-profit fund*, such charges can be taken into consideration in calculating the present value of future profits of the *non-profit insurance business*. Where a proportion of the present value of future profits on *non-profit insurance business* written outside a *with-profits fund* is brought in as an asset, no stress tests apply to this asset (see *PRU* 7.4.43R(5)) as the amount taken into consideration is limited to 50% of the total present value.

7.4.50 G A *firm* using a stochastic approach in *PRU* 7.4.169R(1) should keep recalibration in the post-stress scenarios to the minimum required to reflect any change in the underlying risk-free yields. A *firm* using the market costs of hedging approach, as in *PRU* 7.4.169R(2), may assume in estimating the market cost of hedging in the post-stress scenarios that market volatilities are unchanged.

7.4.51 G In the scenario tests set out in *PRU* 7.4.62R to *PRU* 7.4.103G, *firms* are required to test for worst case scenarios across a range of assumptions. The tests are, with the exception of the credit risk test, two-sided, requiring both increases and decreases in the assumptions. The *FSA* does not expect a *firm* to investigate every possible stress, but a *firm* should be able to demonstrate that it is reasonable to assume that it has successfully identified the single event that determines the *risk capital margin* for the *firm's* business, as required by *PRU* 7.4.43R(3).

Management actions

7.4.52 R In calculating the *risk capital margin* for a *with-profits fund*, a *firm* may reflect, in its projections of the value of assets and liabilities under the scenarios in *PRU* 7.4.44R, the *firm's* prospective management actions (see *PRU* 7.4.53R).

7.4.53 R Prospective management actions refer to the foreseeable actions that would be taken by the *firm's* management, taking into account:

(1) an appropriately realistic period of time for the management actions to take effect; and

(2) the *firm's PPFM* and its regulatory duty to treat its *customers* fairly.

7.4.54 G The management actions in *PRU* 7.4.53R may include, but are not limited to, changes in future bonus rates, reductions in *surrender values*, changes in asset dispositions (taking into account the associated selling costs) and changes in the amount of charges deducted from asset shares for *with-profits insurance contracts*.

7.4.55 G A *firm* should use reasonable assumptions in incorporating management actions into its projections of *claim*s such that the mitigating effects of the management actions are not overstated. In modelling management actions, a *firm* should ensure consistency with its *PPFM* and take into account its regulatory duty to treat its *customers* fairly.

7.4.56 G In accordance with *PRU* 7.4.17R, a *firm* should make and retain a record of the approach used, in particular the nature and effect of anticipated management actions (including, where practicable, the amount by which the actions would serve to reduce the projected values of assets and liabilities).

7.4.57 G A *firm* which deducts charges in respect of any adverse experience or cost of capital to *with-profits insurance contracts* should keep a record under *PRU* 7.4.17R of the amount of any such charges to its *customers* and of how it has ensured their fair treatment.

Policyholder actions

7.4.58 R In calculating the *risk capital margin* for a *with-profits fund*, a *firm* must reflect, in its projections of the value of assets and liabilities under the scenarios in *PRU* 7.4.44R, a realistic assessment of the actions of its *policyholders* (see *PRU* 7.4.59R).

7.4.59 R *Policyholder* actions refer to the foreseeable actions that would be taken by the *firm's policyholders*, taking into account:

(1) the experience of the *firm* in the past; and

(2) the changes that may occur in the future if options and guarantees become more valuable to *policyholders* than in the past.

7.4.60 G A *firm* should use realistic assumptions in incorporating *policyholder* actions into its projections of *claims* such that any mitigating effects of *policyholder* actions are not overstated and any exacerbating effects of *policyholder* actions are not understated. In modelling *policyholder* actions, a *firm* should ensure consistency with its *PPFM* and take into account its regulatory duty to treat its *customers* fairly in determining the options and information that would be available to *policyholders*.

7.4.61 G In calculating the persistency scenario in *PRU* 7.4.100R, a *firm* needs to make assumptions regarding the future termination rates exhibited by *policies*, at points described in particular in *PRU* 7.4.101R. Such assumptions should be realistic. However, the *firm* must have regard to the economic scenarios being projected. For example, if the value of an option became significantly greater in a future scenario than in the recent past, then the behaviour of *policyholders* in taking up the option is likely to differ in this future scenario compared with the recent past.

Market risk scenario

7.4.62 R (1) For the purposes of *PRU* 7.4.44R, the ranges of *market risk* scenarios that a *firm* must assume are:

(a) for exposures to *UK* assets and for exposures to non-*UK* assets within (2), the ranges of scenarios set out in *PRU* 7.4.68R; and

(b) for exposures to other non-*UK* assets, the ranges of scenarios set out in *PRU* 7.4.73R.

(2) The exposures to non-*UK* assets within this paragraph are:

(a) exposures which do not arise from a significant territory outside the *United Kingdom* (see *PRU* 7.4.63R); or

(b) exposures which do arise from a significant territory outside the *United Kingdom* but which represent less than 0.5% of the *realistic value of assets* of the *with-profits fund*, measured by *market value*.

7.4.63 R For the purposes of this section in relation to a *with-profits fund*, a significant territory is any country or territory in which more than 2.5% of the fund's *realistic value of assets* (by *market value*) are invested.

7.4.64 G In determining its most adverse scenario, a *firm* applying *PRU* 7.4.68R and *PRU* 7.4.73R should consider separately possible movements in *UK* and non-*UK* markets. It should not assume that market prices in different markets move in a similar way at the same time. A *firm* should also allow for the effect of the other components of the single event comprising the combination of scenarios applicable under *PRU* 7.4.43R.

7.4.65 G In relation to the *market risk* scenarios in *PRU* 7.4.68R and *PRU* 7.4.73R, the effect of *PRU* 7.4.52R and *PRU* 7.4.58R is that a *firm* may reflect management actions and must make a realistic assessment of *policyholder* actions in projecting the assets and liabilities in its calculation of the *risk capital margin* for a *with-profits fund* within the *firm*. This contrasts with the position for calculating the *resilience capital requirement* for the *firm* (see *PRU* 4.2.9G to *PRU* 4.2.26R).

7.4.66 G In *PRU* 7.4.62R to *PRU* 7.4.76G, where there is reference to exposure to assets invested in a territory this should be interpreted as follows:

(1) for equities, a stock that is listed on a stock market in that territory or, if unlisted, the stock of a *company* that is incorporated in that territory;

(2) for bonds, one that is denominated in the currency of that territory, or issued by an institution incorporated in that territory;

(3) for real estate, a property that is located in that territory; and

(4) for *derivatives, quasi-derivatives* and other instruments, one where the assets to which the instrument is exposed are assets invested in that territory.

In *PRU* 7.4.62R to *PRU* 7.4.76G, a *preference share* should be subjected to the same stress tests as an equity share.

7.4.67 G The relevant assets identified under *PRU* 7.4.43R(2) to calculate the *risk capital margin* may, in certain circumstances, include up to 50% of the present value of future profits arising from *insurance contracts* written by the *firm* outside its *with-profits funds*. *PRU* 7.4.43R(5) exempts such an asset from the *market risk* stress tests.

Market risk scenario for exposures to UK assets and certain non-UK assets

7.4.68 R The range of *market risk* scenarios referred to in *PRU* 7.4.62R(1)(a) is:

(1) a rise or fall in the *market value* of equities of up to the greater of:

(a) 10%; and

(b) 20%, less the *equity market adjustment ratio* (see *PRU* 7.4.71R);

(2) a rise or fall in real estate values of up to 12.5%; and

(3) a rise or fall in yields on all fixed interest securities of up to 17.5% of the long-term gilt yield.

7.4.69 R For the purposes of *PRU* 7.4.68R, a *firm* must:

(1) assume that yields on equities and real estate remain unchanged from those applicable at market levels before applying each scenario; and

(2) model a rise or fall in equity, real estate and fixed interest markets as if the movement occurred instantaneously.

7.4.70 G For example, where the long-term gilt yield is 6%, a change of 17.5% in that yield would amount to a change of 1.05 percentage points. For the purpose of the scenarios in *PRU* 7.4.68R(3), the *firm* would assume a fall or rise of up to 1.05 percentage points in yields on all fixed interest securities.

Equity market adjustment ratio

7.4.71 R The equity market adjustment ratio referred to in *PRU* 7.4.68R(1)(b) is:

(1) if the ratio calculated in (a) and (b) lies between 80% and 100%, the result of 100% less the ratio (expressed as a percentage) of:

(a) the current value of the FTSE Actuaries All Share Index; to

(b) the average value of the FTSE Actuaries All Share Index over the preceding 90 calendar days;

(2) 0%, if the ratio calculated in (1)(a) and (b) is more than 100%; and

(3) 20%, if the ratio calculated in (1)(a) and (b) is less than 80%.

7.4.72 R In *PRU* 7.4.71R(1)(b), the average value of the FTSE Actuaries All Share Index over any period of 90 calendar days means the arithmetic mean based on levels at the close of business on each of the days in that period on which the London Stock Exchange was open for trading.

Market risk scenario for exposures to other non-UK assets

7.4.73 R The range of *market risk* scenarios referred to in *PRU* 7.4.62R(1)(b) is:

(1) an appropriate rise or fall in the *market value* of equities listed in that territory (see *PRU* 7.4.75R), which must be at least equal to the percentage determined in *PRU* 7.4.68R(1);

(2) a rise or fall in real estate values in that territory of up to 12.5%; and

(3) a rise or fall in yields on all fixed interest securities of up to 17.5% of the nearest equivalent (in respect of the method of calculation) of the long-term gilt yield.

7.4.74 R For the purposes of *PRU* 7.4.73R, a *firm* must:

(1) assume that yields on equities and real estate remain unchanged from those applicable at market levels before applying each scenario; and

(2) model a rise or fall in equity, real estate and fixed interest markets as if the movement occurred instantaneously.

7.4.75 R For the purposes of *PRU* 7.4.73R(1), an appropriate rise or fall in the *market value* of equities to which a *firm* has exposure in a significant territory must be determined having regard to:

(1) an appropriate equity market index (or indices) for that territory; and

(2) the historical volatility of the equity market index (or indices) selected in (1).

7.4.76 G For the purpose of *PRU* 7.4.75R(1), an appropriate equity market index (or indices) for a territory should be such that:

(1) the constituents of the index (or indices) are reasonably representative of the nature of the equities to which the *firm* is exposed in that territory which are included in the relevant assets identified in accordance with *PRU* 7.4.43R(2); and

(2) the frequency of, and historical data relating to, published values of the index (or indices) are sufficient to enable an average value(s) and historical volatility of the index (or indices) to be calculated over at least the three preceding *financial years*.

Credit risk scenarios

General

7.4.77 G (1) The purpose of the credit risk scenarios in *PRU* 7.4.78R to *PRU* 7.4.99G is to show the financial effect of specified changes in the general credit risk environment on a *firm's* direct (*counterparty*) and indirect credit risk exposures. The scenarios apply in relation to corporate bonds, debt, *reinsurance* and other exposures, including *derivatives* and *quasi-derivatives*. This is thus quite separate from any reference to allowance for credit risk in *PRU* 4.2.

(2) In the case of bonds and debts, the scenarios are described in terms of an assumed credit rating dependent on the widening of credit spreads - changes in bond and debt credit spreads will have a direct impact on the value of bond and debt assets. Credit ratings are intended to give an indication of the security of the income and capital payments for a bond – the higher the credit rating, the more secure the payments. The reaction of credit spreads to developments in markets for credit risk varies by credit rating and so the scenarios to be assumed for bonds and debts depend on their ratings. The credit spreads on bonds and debt represent compensation to the investor for the risk of default and downgrade, but also for illiquidity, price volatility and the uncertainty of recovery rates relative to government bonds. Credit spreads on bonds tend to widen during an economic recession to reflect the increased expectations that corporate borrowers may default on their obligations or be subject to rating downgrades.

(3) Changes in bond and debt credit spreads will also be indicative of a change in direct *counterparty* exposure in relation to *reinsurance* and other exposures including *derivatives* and *quasi-derivatives*.

(4) In addition, changes in bond and debt credit spreads may indirectly impact on credit exposures, for example by affecting the payments anticipated under credit *derivative* instruments.

(5) A *firm* will also need to allow for the effect of other components of the single event comprising the combination of scenarios applicable under *PRU* 7.4.43R in assessing exposure to credit risk. For example, in the case of an equity put *option* and a fall in equity market values, the resulting increase in the level of exposure to the *firm's counterparty* for the *option* combined with a change in the quality of the *counterparty* should be allowed for.

7.4.78 R For the purposes of *PRU* 7.4.44R, the range of credit risk scenarios that a *firm* must assume is:

(1) changes in value resulting from an increase in credit spreads by an amount of up to the spread stress determined according to *PRU* 7.4.84R in respect of any bond or debt item;

(2) changes in value determined according to *PRU* 7.4.94R in respect of any *reinsurance* item or any analogous non-*reinsurance* financing agreement item; and

(3) changes in value determined according to *PRU* 7.4.98R for any other item (including any *derivative* or *quasi-derivative*).

7.4.79 R For the purposes of *PRU* 7.4.78R, a *firm* must make appropriate allowance for any loss mitigation techniques to the extent that they are loss mitigation techniques relied on for the purpose of *PRU* 3.2.8R in accordance with *PRU* 3.2.16R and *PRU* 3.2.18R.

7.4.80 G The change in asset or liability values to be determined in relation to a credit risk scenario for the purposes of *PRU* 7.4.43R and *PRU* 7.4.44R is the change in value which would arise on the occurrence of the relevant credit risk scenario as a result of bond, debt, *reinsurance* or other exposures whether or not there is a direct *counterparty* exposure.

7.4.81 R Where a bond or a debt item or *reinsurance* asset is currently in default, it may be ignored by a *firm* for the purpose of applying *PRU* 7.4.78R.

7.4.82 G Where a bond or a debt item or a *reinsurance* asset is currently in default and has been specifically provisioned, in accordance with relevant accounting standards, a *firm* is not required to increase the existing default provisions to reflect a worsening of recovery rates.

7.4.83 R Where the credit risk scenarios in *PRU* 7.4.78R to *PRU* 7.4.99G require a *firm* to assume a change in current credit spread, or a direct change in market value, the *firm* must not change the risk-free yields used to discount future cash flows in calculating the revised *realistic value of liabilities* and *realistic value of assets* (see *PRU* 7.4.43R(2)) resulting from those credit risk scenarios.

Spread stresses to be assumed for bonds and debt

7.4.84 R (1) In *PRU* 7.4.78R(1) the spread stress which a *firm* must assume for any bond or debt item is:

(a) for any bond or debt item issued or guaranteed by an organisation which is in accordance with *PRU* 7.4.87R a credit risk scenario exempt organisation in respect of that item, zero basis points; and

(b) for any other bond or debt item:

(i) Y if the credit rating description of that other bond or debt item determined by reference to *PRU* 7.4.89R is not " Highly speculative or very vulnerable"; and

(ii) otherwise the larger of Y and Z.

(2) For the purpose of (1)(b):

(a) Y is the product of the spread factor for that bond or debt item and the square root of S, where:

(i) the spread factor for a bond or debt item is the spread factor shown in the final column of Table *PRU* 7.4.90R, in the row of that Table corresponding to the credit rating description of the bond or debt item determined for the purpose of this *rule* by reference to *PRU* 7.4.89R; and

(ii) subject to (3), S is the current credit spread for a bond or debt item, expressed as a number of basis points, which the *firm* must determine as the current yield on that bond or debt item in excess of the current gross redemption yield on the government bond most similar to that bond or debt item in terms of currency of denomination and equivalent term; and

(b) Z is the change in credit spread expressed as a number of basis points that would result in the current market value of the bond or debt falling by 5%.

(3) Where, for the purposes of (2)(a)(ii), there is no suitable government bond, the *firm* must use its best estimate of the gross redemption yield that would apply for a notional government bond similar to the bond or debt item in terms of currency of denomination and equivalent term.

7.4.85 R For the purpose of *PRU* 7.4.84R(1)(a), a guarantee must be direct, explicit, unconditional and irrevocable.

7.4.86 G (1) As an example, a bond item has the credit rating description "exceptional or extremely strong" and currently yields 49 basis points in excess of the most similar government bond. The spread factor for that bond item is 3.00 by reference to Table *PRU* 7.4.90R. Since S is 49, the square root of S is 7 and the spread stress for that item is 3 times 7, that is, 21 basis points. The *firm* must consider the impact of an increase in spreads by up to 21 basis points for that item.

(2) As a further example, a bond item has the credit rating description "highly speculative or very vulnerable". For this bond, S is 400, being the current spread for that bond expressed as a number of basis points. The spread factor for the bond is 24.00. So the *firm* must consider the impact of an increase in spreads by up to 24.00 times 20 i.e. 480 basis points for that item. The bond is however of short duration and the reduction in market value resulting from an additional spread of 480 basis points is less than 5 per cent of its current market value. A 5 per cent reduction in its market value would result from a spread widening of 525 basis points. The *firm* must consider the impact of an increase in spreads by up to 525 basis points for that item by virtue of its credit rating description.

(3) The calculation of the credit spread on commercial floating rate notes warrants particular consideration. Suppose, for example, that a notional floating rate note guaranteed by the *UK* government would have a market consistent price of X. This price can be estimated based on an assumed distribution of future payments under the floating rate note, and the current forward gilt curve. Suppose further that the market price of the commercial floating rate note is Y, where Y is less than X. A *firm* could calculate what parallel upward shift in the forward gilt curve would result in the notional government-backed floating rate note having a market price of Y for an unchanged assumed distribution of future payments. The size of the resulting shift could then be taken as the credit spread on the commercial floating rate note.

(4) In arriving at the estimated gross redemption yield in *PRU* 7.4.84R(3), the *firm* may have regard to any appropriate swap rates for the currency of denomination of the bond or debt item, adjusted to take appropriate account of observed differences between swap rates and the yields on government bonds.

7.4.87 R For the purposes of this section:

(1) an organisation is a credit risk scenario exempt organisation in respect of an item if the organisation is:

(a) the European Central Bank; or

(b) any central government or central bank which, in relation to that item, satisfies the conditions in (2); or

(c) a multilateral development bank which is listed in (3); or

(d) an international organisation which is listed in (4);

(2) the conditions in (1)(b) are that, for any claim against the central government or central bank denominated in the currency in which the item is denominated:

(a) a credit rating is available from at least one listed rating agency nominated in accordance with *PRU* 7.4.92R; and

(b) the credit rating description in the first column of Table *PRU* 7.4.90R corresponding to the lowest such credit rating is either "exceptionally or extremely strong" or "very strong";

(3) for the purposes of (1)(c) the listed multilateral development banks are:

(a) the International Bank for Reconstruction and Development;

(b) the International Finance Corporation;

(c) the Inter-American Development Bank;

(d) the Asian Development Bank;

(e) the African Development Bank;

(f) the Council of Europe Development Bank;

(g) the Nordic Investment Bank;

(h) the Caribbean Development Bank;

(i) the European Bank for Reconstruction and Development;

(j) the European Investment Bank; and

(k) the European Investment Fund;

(l) the Multilateral Investment Guarantee Agency;

(4) for the purposes of (1)(d) the listed international organisations are:

(a) the European Community;

(b) the International Monetary Fund; and

(c) the Bank for International Settlements.

7.4.88 G Under *PRU* 7.4.87R(2), a *firm* needs to take account of the currency in which the claim is denominated when it is considering claims on or guaranteed by a central government or central bank. It is possible, for example, that a given central bank would be a credit risk scenario exempt organisation in respect of claims on it denominated in its domestic currency, while not being a credit risk scenario exempt organisation in respect of claims on it denominated in a currency other than its domestic currency – the central government or central bank may have been assigned different credit assessments depending on the currency in which the claim on it is denominated.

7.4.89 R (1) For the purposes of this section, the credit rating description of a bond or debt item is to be determined in accordance with (2) and (3).

(2) If the item has at least one credit rating nominated in accordance with *PRU* 7.4.92R ("a rated item"), its credit rating description is:

(a) where it has only one nominated credit rating, the general description given in the first column of Table *PRU* 7.4.90R corresponding to that rating; or

(b) where it has two or more nominated credit ratings and the two highest nominated ratings fall within the same general description given in the first column of that Table, that description; or

(c) where it has two or more nominated credit ratings and the two highest nominated ratings do not fall within the same general description given in the first column of that Table, the second highest of those two descriptions.

(3) If the item is not a rated item, its credit rating description is the general description given in the first column of Table *PRU* 7.4.90R that most closely corresponds to the *firm's* own assessment of the item's credit quality.

(4) An assessment under (3) must be made by the *firm* for the purposes of the credit risk scenario having due regard to the seniority of the bond or debt and the credit quality of the bond or debt issuer.

7.4.90 R Table : Listed rating agencies, credit rating descriptions, spread factors

Credit Rating Description	Listed rating agencies				Spread Factor
	A.M. Best Company	Fitch Ratings	Moody's Investors Service	Standard & Poor's Corporation	
Exceptional or extremely strong	aaa	AAA	Aaa	AAA	3.00
Very strong	aa	AA	Aa	AA	5.25
Strong	a	A	A	A	6.75
Adequate	bbb	BBB	Baa	BBB	9.25

Speculative or less vulnerable	bb	BB	Ba	BB	15.00
Very speculative or more vulnerable	b	B	B	B	24.00
Highly speculative or very vulnerable	Below b	Below B	Below B	Below B	24.00

7.4.91 G Where listed rating agencies provide ratings by sub-category then all ratings should be allocated to the main ratings category (e.g. ratings sub-category A+ or A- would be allocated to the assigned ratings category "Strong").

7.4.92 R For the purposes of *PRU* 7.4.87R and *PRU* 7.4.89R, a *firm* may, subject to (1) to (5), nominate for use credit ratings produced by one or more of the rating agencies listed in *PRU* 7.4.93R:

(1) if the *firm* decides to nominate for use for an item the credit rating produced by one or more rating agencies, it must do so consistently for all similar items;

(2) the *firm* must use credit ratings in a continuous and consistent way over time;

(3) the *firm* must nominate for use only credit ratings that take into account both principal and interest;

(4) if the *firm* nominates for use credit ratings produced by one of the listed rating agencies then the *firm* must use solicited credit ratings produced by that listed rating agency; and

(5) the *firm* may nominate for use unsolicited credit ratings produced by one or more of the listed rating agencies except where there are reasonable grounds for believing that any unsolicited credit ratings produced by the agency are used so as to obtain inappropriate advantages in the relationship with rated parties.

7.4.93 R In this section, a listed rating agency is:

(1) A.M. Best Company; or

(2) Fitch Ratings; or

(3) Moody’s Investors Service; or

(4) Standard & Poor’s Corporation.

Credit risk scenario for reinsurance

7.4.94 R (1) The contracts of *reinsurance* or analogous non-*reinsurance* financing agreements to which *PRU* 7.4.78R(2) applies are those:

(a) into which the *firm* has entered;

(b) which represent an economic asset under the single event applicable under *PRU* 7.4.43R(3); and

(c) which are material (individually or in aggregate).

(2) For the purposes of (1), no account is to be taken of *reinsurance* or analogous non-*reinsurance* financing arrangements between *undertakings* in the same *group* where:

(a) the ceding and accepting *undertakings* are regulated by the *FSA* or a regulatory body in a *designated State or territory* for insurance (including *reinsurance*);

(b) no subsequent cessions of the ceded risk which are material (individually or in aggregate) are made to subsequent accepting *undertakings* by accepting *undertakings* (including subsequent accepting *undertakings*) other than to subsequent accepting *undertakings* which are in the same *group*; and

(c) for any subsequent cession or cessions of the ceded risk which are material (individually or in aggregate) each of the ceding and accepting *undertakings* (including subsequent accepting *undertakings*) is regulated by the *FSA* or a regulatory body in a *designated State or territory* for insurance (including *reinsurance*).

(3) The change in value which a *firm* must determine for a contract of *reinsurance* or an analogous non-*reinsurance* financing agreement is the *firm's* best estimate of the change in realistic value which would result from changes in credit risk market conditions consistent, subject to (4), with the changes in credit spreads determined in accordance with *PRU* 7.4.78R(1).

(4) For the purpose of (3), 5% should be replaced by 10% in *PRU* 7.4.84R(2)(b).

7.4.95 G (1) *Reinsurance* and analogous non-*reinsurance* financing agreements entered into by the *firm*, either with or acting as a *reinsurer,* must be included within the scope of the scenario. The combined rights and obligations under a contract of *reinsurance* or an analogous non-*reinsurance* financing agreement may represent an economic asset or liability. The value placed by the *firm* on the *reinsurance* item or non-*reinsurance* financing item should allow for a realistic assessment of the risks transferred and the risks of *counterparty* default associated with the item. In the case of analogous non-*reinsurance* financing agreements, references to terms such as "*reinsurer*", "ceding *undertakings*" and "accepting *undertakings*" include *undertakings* which by analogy are *reinsurers*, ceding or accepting *undertakings*. Analogous non-*reinsurance* financing agreements include contingent loans, securitisations and any other arrangements giving rise to charges on future surplus arising.

(2) In assessing values in accordance with *PRU* 7.4.94R, a *firm* may consider it appropriate to determine values by drawing an analogy with the approach in respect of bond and debt items set out in *PRU* 7.4.84R. (This might be the case if, in economic terms, the item being valued sufficiently resembles a bond or debt item - an alternative approach might otherwise be preferred). If the *firm* does consider it appropriate to draw an analogy, the "credit spread" assumed should be consistent with the assumed default probabilities and the values placed on the *reinsurance* asset for the purposes of determining the *realistic values of assets* and *liabilities*. A *firm* may regard it as appropriate to have regard to any financial strength ratings applicable to the *reinsurer*, but if so should apply the same principles set out in *PRU* 7.4.92R for the nomination of financial strength ratings. Table *PRU* 7.4.97G provides *guidance* as to the allocation of spread factors which a *firm* may, by analogy, deem appropriate to apply. Appropriate allowance should be made for any change in the extent of the *counterparty* exposure under the assumed scenario.

(3) The changes in credit risk spreads determined for bond and debt items in accordance with *PRU* 7.4.78R(1) are required to result in a reduction in market value for some items of 5% of their current value through the operation of *PRU* 7.4.84R(2)(b). For *reinsurance* contracts and analogous non-*reinsurance* financing agreements, determining the change in value by reference to *PRU* 7.4.94R(3) requires a *firm* to consider the possibility of *counterparty* default in changed credit risk market conditions. Where in the changed credit risk market conditions assumed to apply the *firm's* assessment of the *counterparty* risk would result in the asset being considered equivalent to "Highly speculative or very vulnerable", the reduction in value required is at least 10% of its current value. *PRU* 7.4.94R(4) relates to this requirement.

7.4.96 G A financial strength rating of a *reinsurer* refers to a current assessment of the financial security characteristics of the *reinsurer* with respect to its ability to pay *claim*s under its *reinsurance* contracts and treaties in accordance with their terms.

7.4.97 G Table: Listed rating agencies, financial strength descriptions and spread factors

Financial Strength Description	A.M. Best Company	Fitch Ratings	Moody's Investors Service	Standard & Poor's Corporation	Spread Factor
Superior, extremely strong	A++	AAA	Aaa	AAA	3.00
Superior, very strong	A+	AA	Aa	AA	5.25
Excellent or strong	A, A-	A	A	A	6.75
Good	B++,B+	BBB	Baa	BBB	9.25
Fair, marginal	B, B-	BB	Ba	BB	15.00
Marginal, weak	C++,C+	B	B	B	24.00
Unrated or very weak	Unrated or below C++,C+	Unrated or below B	Unrated or below B	Unrated or below B	24.00

Credit risk scenario for other exposures (including any derivative or quasi-derivative)

7.4.98 R For the purposes of *PRU* 7.4.78R(3), the change in value which must be determined for any other item (including any *derivative* or *quasi-derivative*) which represents an economic asset under the single event applicable under *PRU* 7.4.43R(3) is the *firm's* best estimate of the change in the realistic value of that item which would result from changes in credit risk market conditions consistent with the changes in credit spreads determined in accordance with *PRU* 7.4.78R(1) and the changes in value determined in accordance with *PRU* 7.4.78R(2).

7.4.99 G In applying *PRU* 7.4.98R, a *firm* should assess the total impact on the value of the item resulting from the assumed changed credit risk market conditions. The total change in value may result from the interaction of a number of separate influences. For example, a widening of credit spreads may imply an impact on the amount exposed to *counterparty* default as well as on the likelihood of that default. Each factor influencing the change in value needs separate consideration. It should be assumed, both for determining amounts exposed to *counterparty* default and the likelihood of such default that there will be no change in the likelihood of default in relation to an item issued by or guaranteed by an organisation which is in respect of that item a credit risk scenario exempt organisation (see *PRU* 7.4.87R). *PRU* 7.4.77G(5) is also relevant in this context.

Persistency risk scenario

7.4.100 R For the purposes of the persistency risk scenario in *PRU* 7.4.44R(6), a *firm* must allow for the effects of an increase or a decrease in persistency experience of its *with-profits insurance contracts* by adjusting the termination rates in each year of projection by 32.5% of the termination rates assumed in the calculation of the *realistic value of liabilities* in *PRU* 7.4.40R.

7.4.101 R The termination rates referred to in *PRU* 7.4.100R are the rates of termination (including the paying-up of *policies*, but excluding deaths, maturities and retirements) other than on dates specified by the *firm* where:

(1) a guaranteed amount applies as the minimum amount which will be paid on *claim*; or

(2) any payments to the *policyholder* cannot be reduced at the discretion of the *firm* by its applying a market value adjustment.

7.4.102 R For the purposes of *PRU* 7.4.100R, the increase or decrease in termination rates must be applied to the projection of terminations up to *policy* guarantee dates and between *policy* guarantee dates, but not to the assumptions as to the proportion of *policyholders* taking up the guarantees at *policy* guarantee dates.

7.4.103 G *PRU* 7.4.100R to *PRU* 7.4.102R require *firms* to apply a persistency stress test to the *realistic value of liabilities*. Where a *firm* brings the present value of *non-profit insurance business* in a *with-profits fund* into the calculation of the *realistic value of assets* (see *PRU* 7.4.33R) there is no requirement to stress this asset for changes in persistency assumptions.

Realistic value of liabilities: detailed provisions

7.4.104 G *PRU* 7.4.40R sets out the three elements comprising the *realistic value of liabilities* for a *with-profits fund*. The remainder of this section contains general *rules* and *guidance* on determining the *realistic value of liabilities* plus further detail relating to each of those elements separately, as follows:

(1) general *rules* and *guidance* in *PRU* 7.4.105R to *PRU* 7.4.115G**;**

(2) *with-profits benefits reserve* in *PRU* 7.4.116R to *PRU* 7.4.135G;

(3) *future policy related liabilities* in *PRU* 7.4.136G to *PRU* 7.4.189G; and

(4) *realistic current liabilities* in *PRU* 7.4.190R and *PRU* 7.4.191R.

Methods and assumptions: general

7.4.105 R In calculating the *realistic value of liabilities* for a *with-profits fund*, a *firm* must use methods and assumptions which:

(1) are appropriate to the business of the *firm*;

(2) are consistent from year to year without arbitrary changes (that is, changes without adequate reasons);

(3) are consistent with the method of valuing assets (see *PRU* 1.3);

(4) make full provision for tax payable out of the *with-profits fund*, based on current legislation and practice, together with any known future changes, and on a consistent basis with the other methods and assumptions used;

(5) take into account discretionary benefits which are at least equal to, and charges which are no more than, the levels required for the *firm* to fulfil its regulatory duty to treat its *customers* fairly;

(6) take into account prospective management actions (see *PRU* 7.4.53R) and *policyholder* actions (see *PRU* 7.4.59R);

(7) provide for shareholder transfers out of the *with-profits fund* as a liability of the fund;

(8) have regard to generally accepted actuarial practice; and

(9) are consistent with the *firm's PPFM*.

7.4.106 G More specific *rules* and *guidance* are set out below on some aspects of the methods and assumptions to be used in calculating the *realistic value of liabilities* for a *with-profits fund*. In contrast to the *mathematical reserves* requirements in *PRU* 7.3.10R(4) and *PRU* 7.3.13R, there is no requirement to include margins for adverse deviation of relevant factors in calculating the *realistic value of liabilities*. Assumptions need be no more prudent than is necessary to achieve a best estimate, taking into account the *firm's PPFM* and its regulatory duty to treat its *customers* fairly. Where there is no requirement for a *PPFM*, for example non-*UK* business, a *firm* should use assumptions that are consistent with the *firm's* documented approach to treating its *customers* fairly. A *firm* may judge that a margin should be included in its calculations to avoid an understatement of the *realistic value of liabilities* as a result of uncertainty, for example, either in its method or in its data.

7.4.107 G The amount and timing of tax charges affect the amount of assets available to meet *policyholder* liabilities. *PRU* 7.4.105R(4) requires *firms* to provide fully for all tax payable out of the *with-profits fund* on a basis consistent with the other assumptions and methods used in deriving the realistic balance sheet. So, for example, all projections which underlie the realistic valuation of assets or liabilities must allow for taxation. The approach adopted should not give any credit for any reduction in tax deriving from future expenses or deficits which is attributable to future new business. For assets backing capital requirements it is not necessary to take into consideration future tax charges on investment income generated by those assets. However, *firms* should consider this aspect in their capital planning.

7.4.108 G *PRU* 7.4.105R(7) requires *firms* to provide fully for shareholder transfers. Such transfers do not therefore count as capital in the *with-profits fund*. However, a *firm* may apply under section 148 of the *Act* for a *waiver* from this requirement. In exercising its discretion under section 148 of the *Act*, the *FSA* will have regard (among other factors) to whether a *firm* has put in place undertakings satisfactory to the *FSA*, including that future transfers will not be paid out of the *firm* by way of dividend.

Valuation of contracts: General

7.4.109 R (1) A *firm* must determine the amount of the *with-profits benefits reserve* or the *future policy related liabilities* for a *with-profits fund* by carrying out a separate calculation in relation to each *with-profits insurance contract* or for each group of similar contracts.

(2) Appropriate approximations or generalisations may be made where they are likely to provide the same, or a higher, result than a separate calculation for each contract.

(3) A *firm* must set up additional reserves on an aggregated basis for general risks which are not specific to individual contracts or a group of similar contacts where the *firm* considers the *realistic value of liabilities* may otherwise be understated.

7.4.110 R For the purpose of *PRU* 7.4.109R(1), a group of similar contracts is such that the conditions in *PRU* 7.4.109(2) are satisfied.

7.4.111 G Where a *firm* has grouped individual contracts for the purpose of calculating the *mathematical reserves* for a *with-profits fund* (in accordance with *PRU* 7.3.22R), the *firm* is not required to use the same grouping of contracts in calculating the *with-profits benefits reserve* or *future policy related liabilities* for that fund.

7.4.112 G In contrast to *PRU* 7.3.24R for the *mathematical reserves*, treating individual contracts as an asset is not prohibited if, and to the extent that, this treatment does not conflict with a *firm's* regulatory duty to treat its *customers* fairly.

7.4.113 G In calculating the *with-profits benefits reserve*, an overall (grouped or pooled) approach may be appropriate under either of the two methods set out in *PRU* 7.4.116R. In particular, the calculation of aggregate retrospective reserves (see *PRU* 7.4.118R) and the projection of future cash flows (see *PRU* 7.4.128R) based on suitable specimen *policies* is permitted.

7.4.114 G In calculating the *future policy related liabilities*, the grouping of *policies* for valuing the costs of guarantees, options or smoothing, and their representation by representative *policies*, is acceptable provided the *firm* can demonstrate that the grouping of *policies* does not materially misrepresent the underlying exposure and does not significantly misstate the costs. A *firm* should exercise care in grouping *policies* in order to ensure that the risk exposure is not inappropriately distorted by, for example, forming groups containing *policies* with guarantees that are "in the money" and *policies* with guarantees well "out of the money". A *firm* should also have regard to the effects of *policyholder* behaviour over time on the spread of the outstanding guarantees or options.

7.4.115 G Where a *firm* groups similar *policies* for the purpose of calculating the *with-profits benefits reserve* or the *future policy related liabilities*, the *firm* should carry out sufficient validation to be reasonably sure that the grouping of *policies* has not resulted in the loss of any significant attributes of the portfolio being valued.

With-profits benefits reserve

7.4.116 R A *firm* must calculate a *with-profits benefits reserve* for a *with-profits fund* using either:

(1) a retrospective calculation under *PRU* 7.4.118R (the retrospective method); or

(2) a prospective calculation under *PRU* 7.4.128R of all future cash flows expected to arise under, or in respect of, each of the *with-profits insurance contracts* written in that fund (the prospective method).

7.4.117 R Subject to *PRU* 7.4.105R(2), a *firm* may use different methods under *PRU* 7.4.116R for different types or generations of *with-profits insurance contracts*.

Retrospective method

7.4.118 R In the retrospective method of calculating a *with-profits benefits reserve*, a *firm* must calculate either the aggregate of the retrospective reserves in respect of each *with-profits insurance contract* or, to the extent permitted by *PRU* 7.4.109R and *PRU* 7.4.110R, the total retrospective reserve in respect of each group of *with-profits insurance contracts*.

7.4.119 R In calculating the retrospective reserve for a *with-profits insurance contract*, or the total retrospective reserve in respect of a group of *with-profits insurance contracts*, a *firm* must take account of at least the following:

(1) *premiums* received from the *policyholder*;

(2) any expenses incurred or charges made (including *commissions*);

(3) any partial benefits paid or due;

(4) any investment income on, and any increases (or decreases) in, asset values;

(5) any tax paid or payable;

(6) any amounts received (or paid) under contracts of *reinsurance* or analogous non-*reinsurance* financing agreements, where relevant to retrospective reserves;

(7) any shareholder transfers and any associated tax paid or payable; and

(8) any permanent enhancements to (or deductions from) the retrospective reserves made by the *firm*.

7.4.120 G In taking account of amounts in *PRU* 7.4.119R(6), due regard should be had to the specific details of each relevant contract of *reinsurance* or analogous non-*reinsurance* financing agreement and the relationship between the amounts received (or paid) and the value of the benefit granted (or received) under the arrangement. This should take into consideration, for example, the risk of default and differences in the *firm's* realistic assessment of the risks transferred and the contractual terms for such transfer of risk. Analogous non-*reinsurance* financing agreements include contingent loans, securitisations and any other arrangements giving rise to charges on future surplus arising.

7.4.121 G Where allowance is made for shareholder transfers, this should be in respect of the accrued bonus entitlement reflected in the retrospective reserve. This would include both *annual bonuses* already declared and accrued *final bonus*. However, shareholder transfers in respect of surplus yet to be credited to retrospective reserves should not be charged to those reserves until the corresponding surplus is credited.

7.4.122 R In calculating retrospective reserves, a *firm* must have regard to its regulatory duty to treat its *customers* fairly and must ensure that its approach is consistent with its *Principles and Practices of Financial Management*.

7.4.123 R In calculating retrospective reserves, a *firm* must ensure its treatment of past cash flows, and of any future cash flows, is consistent with those cash flows valued in its prospective calculation of the *future policy related liabilities* for that fund in accordance with the *rules* in *PRU* 7.4.136G to *PRU* 7.4.189G.

7.4.124 G An example of *PRU* 7.4.123R concerns future shareholder transfers**.** A *firm* must make adequate provision for future shareholder transfers within the *future policy related liabilities* (see *PRU* 7.4.165R). The basis of provisioning needs to be consistent with the amounts accrued within retrospective reserves and the amounts already transferred out of the *with-profits fund*.

7.4.125 G Another example of the application of *PRU* 7.4.123R relates to the reference in *PRU* 7.4.119R(8) to past permanent enhancements to (or deductions from) retrospective reserves made by *firms*. This item may include past miscellaneous surplus (or losses) which have been credited to (or debited from) retrospective reserves. Any other enhancements (or deductions) made on a temporary basis and any future surplus (or losses) that *firms* intend to credit to (or debit from) retrospective reserves should be included under the *future policy related liabilities* (see *PRU* 7.4.137R).

7.4.126 G *Firms* characteristically use a range of calculation methods to determine retrospective reserves. A *firm's* definition and calculation of retrospective reserves will depend on a number of factors. These include: the *firm's* practice; its administration and accounting systems; the extent of its historical records; and the composition of its with-profits portfolio. The *rules* and *guidance* for the retrospective method are drawn up to be sufficiently flexible to accommodate the diversity of calculation methods used by *firms*, rather than to enforce any particular method of calculation of retrospective reserves. *PRU* 7.4.119R simply sets minimum standards that all retrospective methods must meet.

7.4.127 G For the purposes of *PRU* 7.4.119R(2) and *PRU* 7.4.128R(2), the phrases 'charges made' or 'charges to be made' refer to circumstances where types of risk (such as mortality risk, longevity risk and investment risk) are met by the *firm* or *with-profits fund* in return for a charge deducted by the *firm* from the *with-profits benefits reserve*.

Prospective method

7.4.128 R In the prospective method of calculating a *with-profits benefits reserve*, a *firm* must take account of at least the following cash flows:

(1) future *premiums*;

(2) expenses to be incurred or charges to be made, including *commissions*;

(3) benefits payable (see *PRU* 7.4.129R);

(4) tax payable;

(5) any amounts to be received (or paid) under contracts of *reinsurance* or analogous non-*reinsurance* financing agreements, where relevant to *with-profits insurance contracts* being valued; and

(6) shareholder transfers**.**

7.4.129 R For the purposes of *PRU* 7.4.128R(3), benefits payable include:

(1) all guaranteed benefits, including guaranteed amounts payable on death and maturity, guaranteed *surrender values* and paid-up values;

(2) vested, declared and allotted bonuses to which *policyholders* are entitled; and

(3) future *annual* and *final bonus*es at least equal to the levels required for the *firm* to fulfil its regulatory duty to treat its *customers* fairly.

7.4.130 R A *firm* must value the cash flows listed in *PRU* 7.4.128R using best estimate assumptions of future experience, having regard to generally accepted actuarial practice and taking into account the *firm's PPFM* and its regulatory duty to treat its *customers* fairly.

7.4.131 G The prospective method sets the *with-profits benefits reserve* at the net present value of future cash flows listed in *PRU* 7.4.128R.

7.4.132 G In contrast to *PRU* 7.3.10R(4) and *PRU* 7.3.13R relating to the methods and assumptions used to value the *mathematical reserves*, there is no requirement to value future cash flows using assumptions that include margins for adverse deviation. Also there are no detailed *rules* as to the future yields on assets, discount rates, *premium* levels, expenses, tax, mortality, morbidity, persistency and *reinsurance*. A *firm* should make its own assessment as to the amount of these future cash flows including bonuses and discretionary surrender or transfer values. A *firm* should make a realistic assessment of longevity risk and asset default risk (including default risk arising under contracts of *reinsurance* or analogous non-*reinsurance* financing agreements) within the best estimate assumptions of future experience required by *PRU* 7.4.130R.

7.4.133 G In valuing the future cash flows listed in *PRU* 7.4.128R, the *firm* should use a projection term which is long enough to capture all material cash flows arising from the contract or groups of contracts being valued. If the projection term does not extend to the term of the last *policy*, the *firm* should check that the shorter projection term does not significantly affect the results.

7.4.134 R Where a *firm* expects to pay additional benefits that are not included in the cash flows listed in *PRU* 7.4.128R, it must make adequate provision for these benefits in calculating the *future policy related liabilities* in accordance with the *rules* in *PRU* 7.4.136G to *PRU* 7.4.189G.

7.4.135 G The prospective assessment of the *with-profits benefits reserve* will usually be on a deterministic basis. A *firm* will have to make further provision in the *future policy-related liabilities* for, for example, the costs of potential asset fluctuations or *policy* options.

Future policy related liabilities

Overview of liabilities

7.4.136 G *PRU* 7.4.137R lists the *future policy related liabilities* for a *with-profits fund* that form part of a *firm's realistic value of liabilities* in *PRU* 7.4.40R. Detailed *rules* and *guidance* relating to particular types of liability and asset are set out in *PRU* 7.4.139R to *PRU* 7.4.168G. These are followed by *rules* and *guidance* that deal with certain aspects of several liabilities (that is, liabilities relating to guarantees, options and smoothing):

(1) *PRU* 7.4.169R to *PRU* 7.4.186G refer to valuing the costs of guarantees, options and smoothing; and

(2) *PRU* 7.4.187R to *PRU* 7.4.189G refer to the treatment of surplus on guarantees, options and smoothing.

7.4.137 R The *future policy related liabilities* for a *with-profits fund* are equal to the sum of amounts, as they relate to that fund, in respect of (1) to (11) to the extent each is valued as a liability less the sum of amounts, as they relate to that fund, in respect of (1) to (11) to the extent each is valued as an asset:

(1) past miscellaneous surplus (or deficit) planned to be attributed to the *with-profits benefits reserve* (see *PRU* 7.4.139R);

(2) planned enhancements to the *with-profits benefits reserve* (see *PRU* 7.4.141R);

(3) planned deductions for the costs of guarantees, options and smoothing from the *with-profits benefits reserve* (see *PRU* 7.4.144R);

(4) planned deductions for other costs deemed chargeable to the *with-profits benefits reserve* (see *PRU* 7.4.146R);

(5) future costs of contractual guarantees (other than financial options) (see *PRU* 7.4.148R);

(6) future costs of non-contractual commitments (see *PRU* 7.4.154R);

(7) future costs of financial options (see *PRU* 7.4.156G);

(8) future costs of smoothing (see *PRU* 7.4.158R);

(9) financing costs (see *PRU* 7.4.162R);

(10) any other further liabilities required for the *firm* to fulfil its regulatory duty to treat its *customers* fairly; and

(11) other *long-term insurance liabilities* (see *PRU* 7.4.165R).

7.4.138 G Some of the elements of the calculation set out in *PRU* 7.4.137R may have already been taken into consideration in the calculation of the *with-profits benefits reserve*, either under the retrospective method (see *PRU* 7.4.118R onwards) or the prospective method (see *PRU* 7.4.128R onwards). Where this is the case, the adjustments made under *PRU* 7.4.137R should be such that no double-counting arises.

Past miscellaneous surplus (or deficit) planned to be attributed to the with-profits benefits reserve

7.4.139 R In calculating the *future policy related liabilities* for a *with-profits fund,* a *firm* must allow for past miscellaneous surplus (or deficit) which it intends to attribute to the *with-profits benefits reserve* for that fund but which has not yet been permanently credited to (or debited from) the *with-profits benefits reserve* for that fund.

7.4.140 G Past miscellaneous surplus (or deficit) already permanently credited to (or debited from) the *with-profits benefits reserve* will have been included in the calculation of the *with-profits benefits reserve* in accordance with *PRU* 7.4.119R(8).

Planned enhancements to the with-profits benefits reserve

7.4.141 R In calculating the *future policy related liabilities* for a *with-profits fund*, a *firm* must make provision for any future planned enhancements to the *with-profits benefits reserve* for that fund that cannot be financed out of the resources of the *with–profits benefits reserve* and future *premiums*.

7.4.142 G For the purposes of *PRU* 7.4.141R, planned enhancements to the *with-profits benefits reserve* will arise when a *firm* has a contractual obligation, or a non-contractual commitment (arising from its regulatory duty to treat *customers* fairly), to enhance *claims* on some classes of *policy* (perhaps in the form of specially enhanced future bonus rates). In such circumstances, the present value of the costs of paying out a target asset share that is more than the projected *with-profits benefit reserve* for those classes of *policy* for which this practice is applicable should be included in the amount of the *future policy related liabilities*. For example, a *firm* may have a non-contractual commitment (arising from its regulatory duty to treat *customers* fairly) to pay enhanced benefits but have discretion not to make such payments in adverse circumstances. Such planned enhancements should be provided for in the realistic balance sheet, but allowance should be made for management action in the calculation of the *risk capital margin*.

7.4.143 G The valuation of *claims* in excess of targeted asset shares in respect of guarantees, options and smoothing, including those arising under guaranteed annuity rates, should be carried out in accordance with *PRU* 7.4.169R to *PRU* 7.4.186G.

Planned deductions for the costs of guarantees, options and smoothing from the with-profits benefits reserve

7.4.144 R Where a *firm* expects to deduct future charges from the *with–profits benefits reserve* for a *with-profits fund* to cover the costs of guarantees, options or smoothing for that fund, the *firm* must take credit for these future charges in calculating the *future policy related liabilities* for that fund.

7.4.145 G In calculating *future policy related liabilities* for a *with-profits fund*, a *firm* should take credit under *PRU* 7.4.137R(3) for the present value of the future "margins" available in respect of charges deducted to cover the costs of guarantees, options and smoothing. *PRU* 7.4.188R requires *firms* that accumulate the charges made less costs incurred to provide for any surplus on the experience account as a realistic liability. Any such provision should be made under *PRU* 7.4.137R(5), (7) or (8), depending on the nature of the charges made, and has no effect on the amount calculated under *PRU* 7.4.144R.

Planned deductions for other costs deemed chargeable to the with-profits benefits reserve

7.4.146 R Where a *firm* expects to deduct future charges (other than those valued in *PRU* 7.4.144R) from the *with–profits benefits reserve* for a *with-profits fund*, the *firm* must take credit for these future charges in calculating the *future policy related liabilities* for that fund**.**

7.4.147 G A *firm* should take credit for the present value of the other future "margins" available. The circumstances where such margins may arise include:

(1) where a *firm* is targeting *claims* at less than 100% of the *with-profits benefits reserve*, the amount of such shortfall; and

(2) where a *firm* expects to deduct any future charges (other than those for guarantees, options and smoothing) from the *with-profits benefits reserve*.

Future costs of contractual guarantees (other than financial options)

7.4.148 R A *firm* must make provision for the costs of paying excess *claim* amounts for a *with-profits fund* where the *firm* expects that the amount in (1) may be greater than the amount in (2), calculated as at the date of *claim*:

(1) the value of guarantees arising under a *policy* or group of *policies* in the fund; and

(2) the fund's *with-profits benefits reserve* allocated in respect of that *policy* or group of *policies*.

7.4.149 R For the purposes of *PRU* 7.4.148R, the future costs of guarantees cannot be negative.

7.4.150 G In carrying out projections to calculate the cost of guarantees under *PRU* 7.4.137R the opening liability should be set equal to the *with-profits benefit reserve* (see *PRU* 7.4.118R), adjusted for miscellaneous surplus or deficits (see *PRU* 7.4.137R(1)) and planned enhancements (see *PRU* 7.4.141R).

7.4.151 G In projecting forward the *with-profits benefits reserve*, adjusted as in *PRU* 7.4.150G**,** to the date of *claim* for the purposes of *PRU* 7.4.148R, the *firm* should use market consistent assumptions for the expected future *premium* and investment income (including realised and unrealised gains or losses), expenses and *claims*, any charges to be deducted, tax and any other item of income or outgo. This projection should be carried out on the same basis as is described in *PRU* 7.4.130R.

7.4.152 G *PRU* 7.4.169R to *PRU* 7.4.186G contain further *rules* and *guidance* on the valuation of guarantees, options and smoothing.

7.4.153 G Some examples of contractual guarantees are:

(1) for conventional *with-profits insurance contracts*, guaranteed sums assured and bonuses on death, maturity or retirement; and

(2) for *accumulating with-profits policies*, guarantees at a point in time or guaranteed minimum bonus rates.

Future costs of non-contractual commitments

7.4.154 R A *firm* must make provision for future costs in addition to those in *PRU* 7.4.148R where the *firm* expects to pay further amounts to meet non-contractual commitments to *customers* or pay other benefits that need to be provided to fulfil a *firm's* regulatory duty to treat its *customers* fairly.

7.4.155 G Some examples of these non-contractual commitments are:

(1) statements by the *firm* regarding the ability of *policies* to cover defined amounts, such as the repayment of a mortgage;

(2) statements by the *firm* regarding regular withdrawals from a *policy* being without penalty;

(3) guaranteed annuity and cash option rates being provided beyond the strict interpretation of the *policy*; and

(4) the costs of any promises to *customers* or other benefits that need to be provided to fulfil a *firm's* regulatory duty to treat its *customers* fairly.

Future costs of financial options

7.4.156 G Financial options include guaranteed annuity and cash option rates.

7.4.157 G *PRU* 7.4.169R to *PRU* 7.4.186G contain further *rules* and *guidance* on the valuation of options.

Future costs of smoothing

7.4.158 R A *firm* must make provision for future smoothing costs of a *with-profits fund* where the *firm* expects that the *claims* paid on a *policy* or group of *policies* in the fund will vary from the greater of:

(1) the value of guarantees determined in *PRU* 7.4.148R in respect of that *policy* or group of *policies*; and

(2) the fund's *with-profits benefits reserve* allocated in respect of that *policy* or group of *policies,* which must be enhanced as described in *PRU* 7.4.141R;

calculated as at the date of *claim*.

7.4.159 R For the purposes of *PRU* 7.4.158R, smoothing costs are defined as the present value of the difference between projected *claims* and the projected *with-profits benefit reserve* after enhancements (see *PRU* 7.4.141R), other than payouts on guarantees (see *PRU* 7.4.148R).

7.4.160 R Subject to *PRU* 7.4.188R, the future costs of smoothing can be negative.

7.4.161 G *PRU* 7.4.169R to *PRU* 7.4.186G contain further *rules* and *guidance* on the valuation of the future costs of smoothing.

Financing costs

7.4.162 R A *firm* must provide for future liabilities to repay financing costs of a *with-profits fund* where the *firm* expects to have to meet such liabilities and to the extent that these liabilities are not already provided for by amounts included in the fund's *realistic current liabilities* (see *PRU* 7.4.190R and *PRU* 7.4.191R). The amount of the liabilities to repay financing costs must be assessed on a market-consistent basis.

7.4.163 G In *PRU* 7.4.162R, financing costs refer to the future costs incurred by way of capital, interest and fees payable to the provider. A *firm* should make a realistic assessment of the requirement to repay such financing in its expected future circumstances (which may be worse than currently). Having taken account of its particular circumstances:

(1) where a *firm* has no liability to repay such financing, it should not include such repayment as a liability;

(2) where a *firm* has a reduced liability to repay such financing, it should include a reduced repayment as a liability.

7.4.164 G In *PRU* 7.4.162R, financing includes *reinsurance* financing arrangements and analogous non-*reinsurance* financing arrangements, such as contingent loans, securitisations and any other arrangements giving rise to charges on future surplus arising.

Other long-term insurance liabilities

7.4.165 R A *firm* must provide for any other *long-term insurance liabilities* arising from or in connection with *with-profits insurance contracts* in a *with-profits fund*, to the extent that adequate provision has not been made in the *with-profits benefits reserve* or in any other part of the *future policy related liabilities* for that fund.

7.4.166 G Some examples of these other *long-term insurance liabilities* are:

(1) pension and other mis-selling reserves;

(2) provisions for tax; and

(3) provisions for future shareholder transfers.

7.4.167 G In determining the realistic liability for taxation *firms* should apply the general principles set out in *PRU* 7.4.105R and the *guidance* given in *PRU* 7.4.107G.

7.4.168 G *PRU* 7.4.105R requires *firms* to provide for shareholder transfers out of the *with-profits fund* as a liability of the fund. The provision should be consistent with the methods and assumptions used in valuing the other realistic liabilities. So, for example, where the *with-profits benefits reserve* includes amounts that would be paid to *policyholders* through future bonuses, provision should also be made for future shareholder transfers associated with those bonuses.

Valuing the costs of guarantees, options and smoothing

7.4.169 R For the purposes of *PRU* 7.4.137R(5), (7) and (8), a *firm* must calculate the costs of any guarantees, options and smoothing using one or more of the following three methods:

(1) a stochastic approach using a market-consistent asset model (see *PRU* 7.4.170R);

(2) using the market costs of hedging the guarantee or option;

(3) a series of deterministic projections with attributed probabilities.

7.4.170 R The market-consistent asset model in *PRU* 7.4.169R(1):

(1) means a model that delivers prices for assets and liabilities that can be directly verified from the market; and

(2) must be calibrated to deliver market-consistent prices for those assets that reflect the nature and term of the *with-profits insurance liabilities* of the *with-profits fund*.

7.4.171 G Deterministic approaches will not usually capture the time value of the option generated by a guarantee. In order to calculate this value properly, *firms* are expected either to use market option values where these are readily available or to undertake a stochastic approach using a market-consistent asset model.

7.4.172 G The *FSA* considers stochastic modelling to be preferable for material groups or classes of *with-profits insurance contracts* unless it can be shown that more simplistic or alternative methods are both appropriate and sufficiently robust.

7.4.173 G Where the guarantee or option is relatively simple in nature, is capable of being hedged, and has a value unlikely to be affected by management actions (see *PRU* 7.4.185R) (for example, a guaranteed annuity rate option) then the cost of the guarantee or option would be the market cost of hedging the guarantee. Where that is generally the case but, in respect of a minor part of a portfolio, no market exists for hedging the option generated by the guarantee, a *firm* should take the value of the nearest equivalent benefit or right for which a market exists and record how it has adjusted the valuation to reflect the original option. Where the market value of the hedge is used *firms* should also make provisions for the credit risk arising from the hedge, both that arising from exposure to a *counterparty* and that arising from credit risk in the underlying instrument. The extent to which the guarantee or option is capable of being hedged depends on a *firm's* assumptions regarding future investment mix, persistency, annuitant mortality and take-up rates. While the *FSA* recognises that the hedge may not be perfectly matched to the underlying guarantee or option, a *firm* should ensure that hedge is reasonably well matched having regard to the sensitivity of the guarantee or option to the *firm's* choice of key assumptions.

7.4.174 G Where a *firm* has large cohorts of guarantees and uses stochastic or deterministic approaches, a *firm* should have regard to whether the cost of the guarantees determined under those approaches bears a reasonable relationship to the market cost of hedging those guarantees (where it exists).

7.4.175 G In determining the costs of smoothing, a *firm* should consider:

(1) the consistency of its assumptions (including the exercise of management discretion over bonus rates); and

(2) where targeted payouts currently exceed retrospective reserves in respect of those *claim*s, the assumptions used in reducing the excess, if applicable,

having regard to the *firm's PPFM* and its regulatory duty to treat its *customers* fairly.

Stochastic approach

7.4.176 G For the purposes of *PRU* 7.4.169R(1), a stochastic approach would consist of an appropriate market-consistent asset model for projections of asset prices and yields (such as equity prices, fixed interest yields and property yields), together with a dynamic model incorporating the corresponding value of liabilities and the impact of any foreseeable actions to be taken by management. Under the stochastic approach, the cost of the guarantee, option or smoothing would be equal to the average of these stochastic projections.

7.4.177 G In performing the projections of assets and liabilities under the stochastic approach in *PRU* 7.4.169R(1), a *firm* should have regard to the aspects in (1) and (2).

(1) The projection term should be long enough to capture all material cash flows arising from the contract or groups of contracts being valued. If the projection term does not extend to the term of the last *policy*, the *firm* should check that the shorter projection term does not significantly affect the results.

(2) The number of projections should be sufficient to ensure a reasonable degree of convergence in the results, including the determination of the result of the *risk capital margin*. The *firm* should test the sensitivity of the results to the number of projections.

7.4.178 G The *FSA* considers a holistic approach to stochastic modelling to be preferable so as to value all items of costs together rather than using separate methods for different items of the *realistic value of liabilities*. This approach requires the projection of all material cash flows arising under the contract or group of contracts for each stochastic projection, rather than only those arising from the guarantee or option within the contract. The advantages of this approach are that it ensures greater consistency in the valuation of different components of the contract and explicitly takes into account the underlying hedges or risk mitigation between components of the contract or group of contracts being valued. Where a *firm* can use a stochastic approach to value simultaneously all components of the contract or group of contracts, the *firm* should adopt this approach where practical and feasible.

7.4.179 G Where a stochastic approach is used, a *firm* should make and retain a record under *PRU* 7.4.17R of the nature of the asset model and of the assumptions used (including the volatility of asset values and any assumed correlations between asset classes or between asset classes and economic indicators, such as inflation).

7.4.180 G In calibrating asset models for the purposes of *PRU* 7.4.170R, a *firm* should have regard to the aspects in (1), (2) and (3).

(1) Few (if any) asset models can replicate all the observable *market values* for a wide range of asset classes. A *firm* should calibrate its asset models to reflect the nature and term of the fund's liabilities giving rise to significant guarantee and option costs.

(2) A *firm* will need to apply judgement to determine suitable estimates of those parameters which cannot be implied from observable market prices (for example, long-term volatility). A *firm* should make and retain a record under *PRU* 7.4.17R of the choice of parameters and the reasons for their use.

(3) A *firm* should calibrate the model to the current risk-free yield curve. Risk-free yields should be determined after allowing for credit and all other risks arising. *Firms* may have regard to any guidance from the actuarial profession on the calculation of the risk-free yield but should not assume a higher yield than suggested by any such guidance.

Deterministic approach

7.4.181 R For the purposes of the deterministic approach in *PRU* 7.4.169R(3), a *firm* must calculate a series of deterministic projections of the values of assets and corresponding liabilities, where each deterministic projection corresponds to a possible economic scenario or outcome.

7.4.182 G A *firm* should determine a range of scenarios or outcomes appropriate to both valuing the costs of the guarantee, option or smoothing and the underlying asset mix, together with the associated probability of occurrence. These probabilities of occurrence should be weighted towards adverse scenarios to reflect market pricing for risk. The costs of the guarantee, option or smoothing should be equal to the expected cost based on a series of deterministic projections of the values of assets and corresponding liabilities. In using a series of deterministic projections, a *firm* should consider whether its approach provides a suitably robust estimate of the costs of the guarantee, option or smoothing.

7.4.183 G In performing the projections of assets and liabilities under the deterministic approach in *PRU* 7.4.169R(3), a *firm* should have regard to the aspects in (1) and (2).

(1) The projection term should be long enough to capture all material cash flows arising from the contract or group of contracts being valued. If the projection term does not extend to the term of the last contract, the *firm* should check that the shorter projection term does not significantly affect the results.

(2) The series of deterministic projections should be numerous enough to capture a wide range of possible outcomes and take into account the probability of each outcome's likelihood. The costs will be understated if only relatively benign or limited economic scenarios are considered.

7.4.184 G Where a series of deterministic projections is used, a *firm* should make and retain a record under *PRU* 7.4.17R of the range of projections and how the probabilities attributed to each projection or outcome were determined (including the period of reference for any relevant data on past experience).

Management and policyholder actions

7.4.185 R In calculating the costs of any guarantees, options or smoothing, a *firm*:

(1) may reflect its prospective management actions (within the meaning of *PRU* 7.4.53R); and

(2) must reflect a realistic assessment of the *policyholder* actions (within the meaning of *PRU* 7.4.59R);

in its projections of the value of assets and liabilities.

7.4.186 G For the purposes of *PRU* 7.4.185R, the related *guidance* in *PRU* 7.4.54G to *PRU* 7.4.57G (management actions) and in *PRU* 7.4.60G (policyholder actions) applies.

Treatment of surplus on guarantees, options and smoothing

7.4.187 R *PRU* 7.4.188R applies to *firms* calculating the costs of guarantees, options and smoothing to be included in the *future policy-related liabilities* in accordance with *PRU* 7.4.137R(5), (7) and (8).

7.4.188 R Where a *firm* accumulates past experience and deducts or is otherwise able to take credit for charges for guarantees or options or smoothing, the future costs of guarantees or options or smoothing (as appropriate) must not be less than the greater of:

(1) the prospective calculation of the future cost of guarantees (see *PRU* 7.4.148R) or options (see *PRU* 7.4.156G) or smoothing (see *PRU* 7.4.158R) (as appropriate); and

(2) the sum of:

(a) the accumulated charges (after deduction of past costs) for guarantees or options or smoothing (as appropriate); and

(b) the prospective calculation of the future charges deducted for guarantees or options or smoothing (see *PRU* 7.4.144R) (as appropriate).

7.4.189 G The extent to which the amount in *PRU* 7.4.188R(2) exceeds the amount in *PRU* 7.4.188R(1) will determine the surplus available to support actions that would be taken by the *firm's* management. The purpose of *PRU* 7.4.188R is to ensure that any resulting surplus at the valuation date arising from the accumulation of charges less costs remains available to support foreseeable actions that would be taken by the *firm's* management. Any additional liability arising from *PRU* 7.4.188R is added to the liabilities under *PRU* 7.4.137R(5), (7) and (8) but has no impact on the adjustment for planned deductions for the costs of guarantees, options and smoothing (see *PRU* 7.4.137R(3) and *PRU* 7.4.144R).

Realistic current liabilities

7.4.190 R For the purposes of *PRU* 7.4.40R(3), the *realistic current liabilities* of a *with-profits fund* are equal to the sum of the following amounts:

(1) the *firm's* best estimate provision for those liabilities for which prudent provision is made in *regulatory current liabilities* (see *PRU* 7.4.30R); and

(2) to the extent that amounts have not been provided in (1), any tax and any other costs arising either in respect of excess *admissible assets* (within the meaning of *PRU* 7.4.36R) or on the recognition of future shareholder transfers.

7.4.191 R In assessing the best estimate provision to be made under *PRU* 7.4.190R(1) in respect of a *defined benefits pension scheme*, the *firm* must use the same amount as results from the application of *PRU* 1.3.5R.

7.5 Equalisation provisions

Application

7.5.1 R *PRU* 7.5 applies to an *insurer* carrying on *general insurance business* unless it is:

(1) a *non-directive friendly society;* or

(2) an *incoming EEA firm;* or

(3) an *incoming Treaty firm.*

7.5.2 G The scope of *PRU* 7.5.11R to *PRU* 7.5.37G (non-credit equalisation provisions) is not restricted to *firms* subject to the relevant EC directives. It applies, for example, to *pure reinsurers.*

7.5.3 G The requirements of this section apply to a *firm* on a solo basis.

Purpose

7.5.4 G This section sets out *rules* and *guidance* on the calculation of the amount of the *equalisation provisions* that are required to be maintained by *firms* that carry on non-credit *insurance business* or credit *insurance business*.

7.5.5 G *Credit* or *non-credit equalisation provisions* form part of the *technical provisions* that a *firm* is required to establish under *PRU* 7.2.12R(1). They help to smooth fluctuations in loss ratios in future years for business where *claims* in any future year may be subject to significant deviation from recent or average *claims* experience, or where trends in experience may be subject to change. Such volatile *claims* experience might arise in the case, for example, of insurance against losses caused by major catastrophes such as hurricanes or earthquakes.

7.5.6 G In general terms, *PRU* 7.5 sets out *rules* and *guidance* as to:

(a) the circumstances in which a *firm* is required to maintain *equalisation provisions*;

(b) the methods to be used in calculating the amount of each provision;

(c) the geographical location of the business relevant to certain calculations for different types of *firm* – this is summarised in the Table in *PRU* 7.5.7G.

7.5.7 G

Table : Scope of *insurance business* to be included in calculations				
Type Of Firm		Credit Equalisation Provision		Non Credit Equalisation Provision
		Threshold in *PRU* 7.5.44R	Provision in *PRU* 7.5.43R	Threshold in *PRU* 7.5.18R(2) and provision in *PRU* 7.5.17R
UK insurer		World-wide	World-wide	World-wide
Pure reinsurer with head office outside *United Kingdom*		*PRU* 7.5.39R to *PRU* 7.5.47G do not apply		*UK*
Pure reinsurer with head office in *United Kingdom*		*PRU* 7.5.39R to *PRU* 7.5.47G do not apply		World-wide
Non-EEA direct insurers	*EEA-deposit insurer*	*UK*	*UK*	*UK*
	Swiss general insurer	*UK*	*UK*	*UK*
	UK-deposit insurer	All *EEA*	World-wide	*UK*
	All other *non-EEA direct insurers*	*UK*	World-wide	*UK*

7.5.8 G The *First Non-Life Directive* (as amended) requires the calculation of *credit equalisation provisions*. *Non-credit equalisation provisions* are a domestic *United Kingdom* requirement. For insurance regulatory purposes under EC Directives, *credit equalisation provisions* are classified as liabilities.

7.5.9 G However, *firms* are permitted to include *equalisation provisions* within their financial resources when demonstrating compliance with non-Directive capital requirements. Hence *equalisation provisions* are deducted from the available *capital resources* of a *firm* for the purpose of meeting its *minimum capital requirement* for *general insurance business*; but, in the calculation of a *firm*'s *enhanced capital requirement* for *general insurance business* under *PRU* 2.3.11R, its *equalisation provisions* (if any) are added back to its *capital resources.*

7.5.10 G Under International Accounting Standards (IAS), which will apply to the financial statements of some *insurers* from 2005, there will be no requirement to treat *equalisation provisions* as liabilities in *insurers*' published financial statements. However, they will continue to be treated as liabilities for the purposes of demonstrating compliance with Directive capital requirements.

Non-credit equalisation provision

Firms carrying on non-credit insurance business

7.5.11 R (1) *PRU* 7.5.11R to *PRU* 7.5.37G apply to any *firm*, other than an *assessable mutual*, which carries on the business of *effecting* or *carrying out general insurance contracts* falling within any description in column 2 in Table *PRU* 7.5.12R ("non-credit *insurance business"*).

(2) A *firm* falling within (1) must classify all of its non-credit *insurance business* into separate *insurance business groupings*, as specified in Table *PRU* 7.5.12R.

7.5.12 R Table : Groupings of non-credit *insurance business*

Insurance Business Grouping		General Insurance Contracts
A		*Contracts of insurance* which fall within *general insurance business classes* 4, 8 or 9, other than:
	(a)	*contracts of insurance* under *non-proportional reinsurance treaties*; and
	(b)	*contracts of insurance* against *nuclear risks.*
B		*Contracts of insurance* which fall within *general insurance business class* 16(a) , other than:
	(a)	*contracts of insurance* under *non-proportional reinsurance treaties*; and
	(b)	*contracts of insurance* against *nuclear risks.*

C		*Contracts of insurance* which fall within *general insurance business classes* 5, 6, 11 or 12, other than:
	(a)	*contracts of insurance* against *nuclear risks*; and
	(b)	*reinsurance* contracts corresponding to contracts in (a).
D		*Contracts of insurance* against *nuclear risks.*
E		*Contracts of insurance* under *non-proportional reinsurance treaties* and which fall within *general insurance business classes* 4, 8, 9 or 16(a) other than *contracts of insurance* against *nuclear risks.*

7.5.13 R For the purposes of *PRU* 7.5.11R to *PRU* 7.5.37G, a *firm* with its head office in the *United Kingdom* must take account of non-credit *insurance business* carried on by it world-wide.

7.5.14 R For the purposes of *PRU* 7.5.11R to *PRU* 7.5.37G, a *firm* with its head office outside the *United Kingdom* need only take account of non-credit *insurance business* carried on by it from a *branch* in the *United Kingdom*.

7.5.15 G The *insurers* affected by *PRU* 7.5.11R include *pure reinsurers*, *UK–deposit insurers*, *EEA–deposit insurers*, and *Swiss general insurers*.

7.5.16 G For *insurers* (including *pure reinsurers*) with a head office in the *United Kingdom*, the calculations must be made in respect of world-wide business.

Requirement to maintain non-credit equalisation provision

7.5.17 R In respect of each *financial year,* a *firm* must, unless *PRU* 7.5.18R applies:

(1) calculate the amount of its *non-credit equalisation provision* as at the end of that year in accordance with *PRU* 7.5.20R; and

(2) maintain a *non-credit equalisation provision* calculated in accordance with *PRU* 7.5.20R for the following *financial year*.

7.5.18 R (1) *PRU* 7.5.17R does not apply to any *firm* in respect of any *financial year* if, as at the end of that year:

(a) no *non-credit equalisation provision* has been brought forward from the preceding *financial year;* and

(b) the amount of the *annualised net written premiums* for all the non-credit *insurance business* carried on by it in the *financial year* is less than the threshold amount.

(2) The threshold amount in respect of any *financial year* is the higher of:

(a) 1,500,000 Euro; and

(b) 4% of *net written premiums* in that *financial year* in respect of all its *general insurance business*, if this amount is less than 2,500,000 Euro.

7.5.19 G For *non-EEA insurers*, the calculation of the threshold amount in *PRU* 7.5.18R (2) is limited by *PRU* 7.5.14R to the business of the *firm* carried on in the *United Kingdom*. Such a *firm* may do little *UK* non-credit *insurance business*, and so would not be required to set up a *non-credit equalisation provision* under *PRU* 7.5, but may do significant business outside the *United Kingdom* characterised by high-impact, low-frequency *claims*. Such a *firm* is required by *PRU* 7.6.41R to hold adequate world-wide financial resources to avoid internal-contagion strain on the *branch* in the *United Kingdom*. In determining the adequacy of its financial resources, the *firm* should undertake stress and scenario testing of its underwriting and other risks as set out in *PRU* 1.2.

Calculating the amount of the provision

7.5.20 R (1) Unless *PRU* 7.5.22R applies, the amount of a *firm's non-credit equalisation provision* as at the end of a *financial year* is the higher of:

(a) zero; and

(b) whichever is the lower of:

(i) the aggregate of the amounts of the maximum provision for each *insurance business grouping* as at the end of that *financial year*; and

(ii) the sum of A and B.

(2) For the purposes of (1)(b)(ii):

(a) A is the amount of the *non-credit equalisation provision*, if any, brought forward from the *financial year* immediately preceding that in respect of which the calculation is being performed; and

(b) B is:

(i) the aggregate of the amounts of the provisional transfers-in for each *insurance business grouping*; minus

(ii) the aggregate of the amounts of the provisional transfers-out for each *insurance business grouping*.

(3) For any *insurance business grouping*:

(a) the amount of the maximum provision in (1)(b)(i) is to be determined in accordance with *PRU* 7.5.24R;

(b) the amount of the provisional transfers-in in (2)(b)(i) is to be determined in accordance with *PRU* 7.5.26R; and

(c) the amount of the provisional transfers-out in (2)(b)(ii) is to be determined in accordance with *PRU* 7.5.29R.

7.5.21 G If provisional transfers-out are in excess of provisional transfers-in, the *non-credit equalisation provision* as calculated in accordance with *PRU* 7.5.20R in respect of a particular *financial year* may be less than that calculated for the preceding *financial year* although, by virtue of *PRU* 7.5.20R(1)(a), it cannot be negative.

7.5.22 R (1) The amount of a *firm's non-credit equalisation provision* as at the end of a *financial year* is zero if:

(a) as at the end of that year, the *firm* meets either of the conditions specified in (2) and (3); and

(b) the *annualised net written premiums* for all the non-credit *insurance business* carried on by the *firm* in that year are less than the threshold amount.

(2) The first condition is that the *firm* carried on non-credit *insurance business* in the first *financial year* of the relevant period and, for each of any two or more *financial year*s of that period, the *annualised net written premiums* for business of that description were less than the threshold amount.

(3) The second condition is that the *firm* did not carry on non-credit *insurance business* in the first *financial year* of the relevant period and the average of the *annualised net written premiums* for business of that description carried on by the *firm* in each *financial year* of the relevant period was less than the threshold amount.

(4) For the purposes of this *rule*:

(a) the threshold amount is the amount determined in accordance with *PRU* 7.5.18R(2): and

(b) the relevant period is the period of four *financial years* ending immediately before the beginning of the *financial year* in (1).

7.5.23 G If *PRU* 7.5.22R applies, a *firm* may need to make sufficient transfers from its *non-credit equalisation provision* to bring the *non-credit equalisation provision* for that *financial year* to zero.

The calculation: the maximum provision

7.5.24 R (1) For the purposes of the calculation required by *PRU* 7.5.20R, the amount of the maximum provision for any *insurance business grouping* is to be determined in accordance with (2) to (5).

(2) Unless (4) applies, the amount of the maximum provision for the grouping, as at the end of a *financial year,* is the amount determined by multiplying X and Y.

(3) For the purposes of (2):

(a) X is the percentage specified in Table *PRU* 7.5.25R in relation to the grouping; and

(b) Y is the average of the amount of the *annualised net written premiums* for non-credit *insurance business* in the grouping carried on by the *firm* in each *financial year* of the relevant period.

(4) Where Y is a negative amount, the maximum provision for that *insurance business grouping* is zero.

(5) For the purposes of (3)(b), the relevant period is the five-year period comprising:

(a) the *financial year* in (2); and

(b) the previous four *financial years.*

7.5.25 R Table : Calculation of maximum provision for any *insurance business* grouping

Insurance Business Grouping	Percentage of average annualised net written premiums
A	20
B	20
C	40
D	600
E	75

The calculation: provisional transfers-in

7.5.26 R (1) For the purposes of the calculation required by *PRU* 7.5.20R, the amount of the provisional transfers-in for any *insurance business grouping* is to be determined in accordance with (2).

(2) The amount of the provisional transfers-in for the grouping, as at the end of a *financial year,* is the amount determined by multiplying X and Y.

(3) For the purposes of (2):

(a) X is the percentage specified in Table *PRU* 7.5.27R in relation to the grouping; and

(b) Y is the amount of the *net written premiums* for non-credit i*nsurance business* in the grouping that was carried on by the *firm* in the *financial year* in (2), including adjustments in respect of previous *financial years.*

7.5.27 R Table : Provisional transfers-in for any *insurance business grouping*

Insurance Business Grouping	Percentage of net written premiums
A	3
B	3
C	6
D	75
E	11

7.5.28 G Since each *insurance business grouping* should be assessed individually, negative *net written premiums* in relation to any *insurance business grouping* should be transferred in to the *non-credit equalisation provision*.

The calculation: provisional transfers-out

7.5.29 R (1) For the purposes of the calculation required by *PRU* 7.5.20R, the amount of the provisional transfers-out for any *insurance business grouping* is to be determined in accordance with (2).

(2) The amount of the provisional transfers-out for the grouping, as at the end of a *financial year,* is the lower of:

(a) the amount of the maximum provision for the grouping under *PRU* 7.5.24R for that *financial year*; and

(b) the abnormal loss for the grouping under *PRU* 7.5.30R for that *financial year*.

7.5.30 R For each *insurance business grouping*, the abnormal loss as at the end of a *financial year* in relation to which an *equalisation provision* is calculated is:

(1) (for business within the *insurance business grouping* accounted for on an accident year basis) the amount, if any, by which the amount of net *claims* incurred exceeds the greater of:

(a) zero; and

(b) the percentage of *net earned premiums* in that *financial year* specified in the Table in *PRU* 7.5.31R; or

(2) (for business within the *insurance business grouping* accounted for on an underwriting year basis) the amount, if any, by which the amount of net *claims* paid (plus adjustment for change in net *technical provisions*, other than any change in provisions for *claims* handling expenses or equalisation) exceeds the greater of:

(a) zero; and

(b) the percentage of *net written premiums* in that *financial year* specified in the Table in *PRU* 7.5.31R.

7.5.31 R Table : Abnormal loss for any insurance business grouping

Insurance business grouping	Percentage of net written premiums
A	72.5
B	72.5
C	95
D	25
E	100

Adjustments to calculations

Transfers of business from the firm

7.5.32 R (1) This *rule* applies to modify the application of *PRU* 7.5.24R and *PRU* 7.5.26R in any case where a *firm* has transferred to another *undertaking* any rights and obligations under *general insurance contract*s falling within any *insurance business grouping*.

(2) As at the end of the *financial year* in which the transfer takes place, *net written premiums* in respect of the transferred contracts in any grouping must be deducted from total *net written premiums* for that grouping before calculating the maximum provision under *PRU* 7.5.24R or provisional transfers-in under *PRU* 7.5.26R.

7.5.33 R If all the rights and obligations of a *firm* in relation to non-credit *insurance business* in any *insurance business grouping* have been transferred, the maximum provision for the grouping under *PRU* 7.5.24R is zero.

Transfers of business to the firm

7.5.34 R (1) This *rule* applies to modify the application of *PRU* 7.5.24R, *PRU* 7.5.26R and *PRU* 7.5.29R in any case where another *undertaking* has transferred to a *firm* any rights and obligations under *general insurance contracts* falling within any *insurance business grouping*.

(2) As at the end of the *financial year* in which the transfer takes place a sum equal to that part of the consideration for the transfer that relates to business in an *insurance business grouping* must be:

(a) excluded from net *premiums* (written or earned) before performing the calculations required by *PRU* 7.5.24R (maximum provision) and *PRU* 7.5.26R (provisional transfers in);

(b) included in net *premiums* (written or earned) before performing the calculation required by *PRU* 7.5.30R (abnormal loss); and

(c) excluded from net *claims* (paid or incurred) before performing the calculation required by *PRU* 7.5.30R (abnormal loss).

7.5.35 G For the purposes of *PRU* 7.5.34R, the consideration payable should be apportioned between *insurance business groupings* according to the groupings within which the *general insurance contracts* which are the subject of the acquisition fall. In appropriate cases, apportionment may reflect the split of liabilities acquired, including *unearned premium*.

7.5.36 G Where business is accounted for on an accounting year basis, in any year following the transfer, *net earned premiums* must include an appropriate amount in respect of the transfer.

7.5.37 G *PRU* 7.5.32R to *PRU* 7.5.34R apply to transfers by way of transfer under Part VII of the *Act* and by novation.

Credit Equalisation Provisions

Firms carrying on credit insurance business

7.5.38 R *PRU* 7.5.39R to *PRU* 7.5.47G apply to:

(1) any *UK insurer;* and

(2) any *non-EEA direct insurer;*

which carries on the business of *effecting* or *carrying out general insurance contracts* falling within *general insurance business class 14* (which business, excluding contracts of *reinsurance*, is referred to in *PRU* 7.5 as "credit *insurance business*").

7.5.39 R For the purposes of *PRU* 7.5.43R, a *UK insurer* must take account of the credit *insurance business* carried on by it world-wide.

7.5.40 R (1) For the purposes of *PRU* 7.5.43R:

(a) a *Swiss general insurer* or an *EEA-deposit insurer* must take account of the credit *insurance business* carried on by it in the *United Kingdom;* and

(b) a *UK-deposit insurer* must take account of the credit *insurance business* carried on by it world-wide.

(2) For the purposes of *PRU* 7.5.44R:

(a) a *UK-deposit insurer* need only take account of the credit *insurance business* carried on by it in all *EEA States,* taken together; and

(b) any other description of *non-EEA direct insurer* (including an *EEA-deposit insurer* and a *Swiss general insurer*) need only take account of the credit *insurance business* carried on by it in the *United Kingdom*.

7.5.41 G For *UK insurers* the calculations must be made in respect of world-wide business

7.5.42 G The requirements of *PRU* 7.5.39R and *PRU* 7.5.40R are summarised in the table in *PRU* 7.5.7G.

Requirement to maintain credit equalisation provision

7.5.43 R In respect of each *financial year*, a *UK insurer* or a *non-EEA direct insurer* must, unless *PRU* 7.5.44R applies:

(1) calculate the amount of its *credit equalisation provision* as at the end of that year in accordance with *PRU* 7.5.45R; and

(2) maintain a *credit equalisation provision* calculated in accordance with *PRU* 7.5.45R for the following *financial year.*

7.5.44 R *PRU* 7.5.43R does not apply to any *UK insurer* or a *non-EEA direct insurer* in respect of any *financial year* if, as at the end of that year, the *annualised net written premiums* for its credit *insurance business* are less than 4% of annualised *net written premiums* in that *financial year* in respect of all its *general insurance business*, if this amount is less than 2,500,000 Euro.

Calculating the amount of the provision

7.5.45 R (1) The amount of a *UK insurer's,* or a *non-EEA direct insurer's, credit equalisation provision* as at the end of a *financial year* ("*financial year* A") is the higher of:

(a) zero; and

(b) whichever is the lower of:

(i) 150% of the highest amount of *net written premiums* for credit *insurance business* carried on by the *firm* in *financial year* A or in any of the previous four *financial years*; and

(ii) the amount of the *credit equalisation provision* brought forward from the preceding *financial year*, after making either of the adjustments in (2).

(2) The adjustments are:

(a) the deduction of the amount of any technical deficit arising in *financial year* A*;* or

(b) the addition of the lower of:

(i) 75% of the amount of any technical surplus arising in *financial year* A; and

(ii) 12% of the amount of the *net written premiums* for credit *insurance business* carried on by the *firm* in *financial year* A.

(3) For the purposes of (2) the amount of technical deficit or technical surplus is to be determined in accordance with *PRU* 7.5.46R.

7.5.46 R For the purposes of the adjustments in *PRU* 7.5.45R(2), technical surplus (or technical deficit) in respect of credit *insurance business* is the amount by which the aggregate of *net earned premiums* and other technical income exceeds (or falls short of) the sum of net *claims* incurred, *claims* management costs and any technical charges.

7.5.47 G The calculation of technical surplus or technical deficit should be made before tax and before any transfer to or from the *credit equalisation provision*. Investment income should not be included in these calculations.

Euro conversion

7.5.48 R For the purposes of *PRU* 7.5, the exchange rate from the Euro to the pound sterling for each year beginning on 31 December is the rate applicable on the last day of the preceding October for which the exchange rates for the currencies of all the European Union member states were published in the Official Journal of the European Union.

7.6 Internal-contagion risk

Application

7.6.1 R *PRU* 7.6 applies to an *insurer*.

7.6.2 R *PRU* 7.6 does not apply, to the extent stated, to any *insurer* in (1) to (4):

(1) none of the provisions apply to *non-directive friendly societies*;

(2) none of the provisions, apart from *PRU* 7.6.33R (payment of financial penalties) apply to *firms* which qualify for authorisation under Schedule 3 or 4 of the *Act*;

(3) *PRU* 7.6.33R (payment of financial penalties) does not apply to *mutuals*;

(4) *PRU* 7.6.41R to *PRU* 7.6.57R (*UK branches* of certain *non-EEA insurers)* do not apply to:

(a) *UK insurers*; or

(b) *non-EEA insurers* which are *pure reinsurers*; or

(c) *EEA-deposit insurers*; or

(d) *Swiss general insurers*.

7.6.3 G The scope of application of *PRU* 7.6 is not restricted to *firm*s that are subject to the relevant EC directives. It applies, for example, to *pure reinsurers*.

7.6.4 R In its application to a *firm* with its head office in the *United Kingdom*, this section applies to the whole of the *firm's* business carried on world-wide.

7.6.5 R In the application of this section to activities carried on by a *non-EEA insurer*:

(1) *PRU* 7.6.13R to *PRU* 7.6.15G and *PRU* 7.6.41R apply in relation to the whole of its business carried on world-wide;

(2) all other provisions of this section apply only in relation to:

(a) in the case of any *UK-deposit insurer*, activities carried on from *branches* in any *EEA State*; and

(b) in any other case, activities carried on from a *branch* in the *United Kingdom*.

7.6.6 G The adequacy of a *firm*'s financial resources needs to be assessed in relation to all the activities of the *firm* and the risks to which they give rise.

7.6.7 G The requirements of this section apply to a *firm* on a solo basis.

Purpose

7.6.8 G This section sets out requirements for a *firm* relating to 'internal-contagion risk'. This is the risk that losses or liabilities from one activity might deplete or divert financial resources held to meet liabilities from another activity. It arises where the two activities are carried on within the same *firm*. It may also arise from the combination of activities within the same *group*, but this aspect of internal-contagion risk falls outside the scope of this section. Requirements relevant to *group* contagion risk are set out in *PRU* 8.

7.6.9 G Internal-contagion risk includes in particular the risk that arises where a *firm* carries on:

(1) both insurance and non-insurance activities; or

(2) two or more different types of insurance activity; or

(3) insurance activities from offices or *branches* located in both the *United Kingdom* and overseas.

7.6.10 G This section requires *firms* to limit non-insurance activities to those that directly arise from their *insurance business*, e.g. investing assets, employing insurance staff etc. It also requires that an adequate provision be established for non-insurance liabilities.

7.6.11 G This section also sets out requirements for the separation of different types of insurance activity. However, in most circumstances the combination of different types of insurance activity within the same *firm* is a source of strength. Adequate pooling and diversification of insurance risk is fundamental to sound business practice. The requirements, therefore, only apply in two specific cases where without adequate protection the combination might operate to the detriment of *policyholders*. They apply where a *firm* carries on both:

(1) *general insurance business* and *long-term insurance business*;

(2) linked and non-linked *insurance business*.

7.6.12 G Finally, the section sets out requirements to protect *policyholders* of *branches* of non-*EEA firm*s where these are supervised by the *FSA*. These apply only to a *non-EEA firm* that has established a *branch* in the *United Kingdom*.

Requirements: non-insurance activities

Restriction of business to insurance

7.6.13 R (1) A *firm* must not carry on any commercial business other than *insurance business* and activities directly arising from that business.

(2) (1) does not prevent a *friendly society* which was on 15 March 1979 carrying on *long-term insurance business* from continuing to carry on savings business.

Financial limitation of non-insurance activities

7.6.14 R A *firm* must limit, manage and control its non-insurance activities so that there is no significant risk arising from those activities that it may be unable to meet its liabilities as they fall due.

7.6.15 G For the purpose of *PRU* 7.6.14R a *firm* should consider how the financial impact of non-insurance activities might diverge from expectations. However, it need only take into account unexpected variations in amount and timing in so far as they are reasonably possible and may take into account effective mitigating factors.

Requirements: long-term insurance business

7.6.16 G *PRU* 7.6.18R, *PRU* 7.6.21R, *PRU* 7.6.30R and *PRU* 7.6.31R require a *firm* to identify the assets attributable to the receipts of the *long-term insurance business*, called *long-term insurance assets*, and only to apply those assets for the purpose of that business. This has the effect of prohibiting a *composite firm* from using *long-term insurance assets* to meet *general insurance liabilities.* It also keeps *long-term insurance assets* separate from shareholder funds.

Permissions not to include both types of insurance

7.6.17 G Under section 31 of the *Act*, a *firm* may not carry on a *regulated activity* unless it has *permission* to do so (or is exempt in relation to the particular activity). Both *general insurance business* and *long-term insurance business* are *regulated activities* and *permission* will extend to the *effecting* or *carrying out* of one or more particular *classes* of *contracts of insurance*. A *firm's permission* can be varied so as to add other *classes.* It is *FSA* policy, in compliance with EC directives on insurance, not to grant or vary *permission* if that would allow a *firm* to engage in both *general insurance business* and *long-term insurance business*. This does not apply where a *firm's permission* is restricted to *reinsurance*. It also does not apply where a *firm's permission* extends to *effecting* or *carrying out life and annuity contracts of insurance.* This will automatically include *permission* to *effect* or *carry out accident contracts of insurance* or *sickness contracts of insurance* on an ancillary or supplementary basis (see article 2(1) of the *Consolidated Life Directive*).

Separately identify and maintain long term insurance assets

7.6.18 R A *firm* carrying on *long-term insurance business* must identify the assets relating to its *long-term insurance business* which it is required to hold by virtue of *PRU* 7.2.20R and *PRU* 7.2.21R.

7.6.19 G *PRU* 7.2.16R requires a *firm* to establish adequate *technical provisions* for its *long-term insurance contracts*. *PRU* 7.2.20R requires a *firm* to hold *admissible assets* of a value at least equal to the amount of the *technical provisions*. *PRU*

7.2.21R ensures that a *composite firm* identifies separate *long-term insurance assets* with a value at least equal to the *technical provisions* for *long-term insurance business* as well as holding other assets of a value at least equal to the amount of its *technical provisions* for *general insurance business*. The overall impact of these provisions in *PRU* 7.2, and of *PRU* 7.6.18R, is that any *firm* writing *long-term insurance business* must identify separately its *long-term insurance assets* and ensure that their value is at least equal to the amount of its *long-term insurance business technical provisions*.

7.6.20 G *PRU* 7.6.18R does not prohibit a *firm* from identifying other assets as being available to meet the liabilities of its *long-term insurance business*. It may transfer such other assets to a *long-term insurance fund* (see *PRU* 7.6.21R and *PRU* 7.6.22R) and the transfer will take effect when it is recorded in the *firm's* accounting records (see *PRU* 7.6.23R). After the transfer takes effect, a *firm* may not transfer the assets out of a *long-term insurance fund* except where they represent an *established surplus* (see *PRU* 7.6.27R).

7.6.21 R (1) A *firm's* long-term insurance assets are the items in (2), adjusted to take account of:

(a) outgo in respect of the *firm's long-term insurance business*; and

(b) any transfers made in accordance with *PRU* 7.6.27R.

(2) The items are:

(a) the assets identified under *PRU* 7.6.18R (including assets into which those assets have been converted);

(b) any other assets identified by the *firm* as being available to cover its *long-term insurance liabilities*;

(c) *premiums* and other receivables in respect of *long-term insurance contracts*;

(d) other receipts of the *long-term insurance business*; and

(e) all income and capital receipts in respect of the items in (2).

7.6.22 R (1) Unless (2) applies, all the *long-term insurance assets* of the *firm* constitute its long-term insurance fund.

(2) Where a *firm* identifies particular *long-term insurance assets* in connection with different parts of its *long-term insurance business*, the assets identified in relation to each such part constitute separate long-term insurance funds of the *firm*.

7.6.23 R A *firm* must maintain a separate accounting record in respect of each of its *long-term insurance funds* (including any *with-profits fund*).

7.6.24 G *Firms* must ensure that *long-term insurance assets* are separately identified and allocated to a *long-term insurance fund* at all times. Assets in external accounts, for example at banks, custodians, or brokers should be segregated in the *firm's* books and records into separate accounts for *long-term insurance business* and *general insurance business*. Where a *firm* has more than one *long-term insurance fund*, a separate accounting record must be maintained for each fund. Accounting records should clearly document the allocation.

7.6.25 G Where the surplus arising from business is shared between *policyholders* and shareholders in different ways for different blocks of business, it may be necessary to maintain a separate fund to ensure that *policyholders* are, and will be, treated fairly. For example, if a proprietary company writes some business on a with-profits basis, this should be written in a *with-profits fund* separate from any business where the surplus arising from that business is wholly owned by shareholders.

7.6.26 G Where a *firm* merges separate funds for different types of business, it will need to ensure that the merger will not result in *policyholders* being treated unfairly. When considering merging the funds, the *firm* should consider the impact on its *PPFM* (see *COB* 6.10) and on its obligations to notify the *FSA* (see *SUP* 15.3). In particular, a *firm* would need to consider how any *inherited estate* would be managed and how the fund would be run in future, such that *policyholders* are treated fairly.

7.6.27 R A *firm* may not transfer assets out of a *long-term insurance fund* unless:

(1) the assets represent an *established surplus*; and

(2) no more than three months have passed since the determination of that surplus.

7.6.28 G As a result of *PRU* 7.6.27R(2), an *actuarial investigation* undertaken to determine an *established surplus* remains in-date for three months from the date as at which the determination of the surplus was made. However, even where the investigation is still in-date, the *firm* should not make the transfer unless there is sufficient surplus at the time of the transfer to allow it to be made without breach of *PRU* 7.2.20R or *PRU* 7.2.21R.

7.6.29 G *PRU* 7.2.27R and *PRU* 7.2.28R provide further constraints on the transfer of assets out of a *with-profits fund*. *PRU* 7.2.27R requires a *firm* to have *admissible assets* in each of its *with-profits funds* to cover the *technical provisions* relating to all the business in that fund. *PRU* 7.2.28R requires a *realistic basis life firm* to ensure that the *realistic value of assets* for each of its *with-profits funds* is at least equal to the *realistic value of liabilities* of that fund.

Exclusive use of long-term insurance assets

7.6.30 R (1) A *firm* must apply a *long-term insurance asset* only for the purposes of its *long-term insurance business*.

(2) For the purpose of (1), applying an asset includes coming under any obligation (even if only contingently) to apply that asset.

7.6.31 R A *firm* must not agree to, or allow, any mortgage or charge on its *long-term insurance assets* other than in respect of a *long-term insurance liability*.

7.6.32 G The purposes of the *long-term insurance business* include the payment of *claims*, expenses and liabilities arising from that business, the acquisition of lawful access to fixed assets to be used in that business and the investment of assets. The payment of liabilities may include repaying a loan but only where that loan was incurred for the purpose of the *long-term insurance business*. The purchase or investment of assets may include an exchange at fair *market value* of assets (including *money*) between the *long-term insurance fund* and other assets of the *firm*.

Payment of financial penalties

7.6.33 R If the *FSA* imposes a financial penalty on a *long-term insurer,* the *firm* must not pay that financial penalty from a *long-term insurance fund*.

7.6.34 G *PRU* 7.6.2R states that this provision applies to all *firm*s, except *mutuals*, and includes *firm*s qualifying for authorisation under Schedule 3 or 4 to the *Act*.

Requirements: property-linked funds

7.6.35 G *PRU* 4.2.57R requires a *firm* to cover, as closely as possible, its *property-linked liabilities* by the property to which those liabilities are linked. In order to comply with this *rule*, a *firm* should identify the assets it holds to cover *property-linked liabilities* and should not apply those assets (as long as they are needed to cover the *property-linked liabilities*) for any purpose other than to meet those liabilities.

7.6.36 R A *firm* must select, allocate and manage the assets to which its *property-linked liabilities* are linked taking into account:

(1) the *firm*'s contractual obligations to holders of property-linked *policies*; and

(2) its regulatory duty to treat *customers* fairly, including in the way it makes discretionary decisions as to how it selects, allocates and manages assets.

7.6.37 G *Property-linked liabilities* may be linked either to specified assets (with no contractual discretion given to the *firm* as to the choice of assets) or to assets of a specified kind where the selection of the actual assets is left to the *firm*.

Requirements: UK branches of certain non-EEA firms

7.6.38 G The purpose of the *rules* and *guidanc*e set out in *PRU* 7.6.38G to *PRU* 7.6.57R is to protect against the risk that the financial resources required in respect of the activities of the *United Kingdom* (or *EEA*) *branch*(es) might be depleted by the other activities of the *non-EEA direct insurer.*

7.6.39 G By virtue of *PRU* 7.6.2R(4), the *rules* in *PRU* 7.6.41R to *PRU* 7.6.57R apply to *non-EEA direct insurers* except for *Swiss general insurers* and *EEA-deposit insurers*. Responsibility for determining the adequacy of the world-wide financial resources of *Swiss general insurers* or *EEA-deposit insurers* rests exclusively with the Swiss authorities or the authorities in the *EEA state* (other than the *United Kingdom*) in which the deposit was made.

7.6.40 G (1) *PRU* 7.6.41R requires a *non-EEA direct insurer* to hold adequate world-wide resources to meet the needs of the world-wide business without the need to rely on *UK* or *EEA branch* assets other than to meet *branch* liabilities.

(2) *PRU* 7.6.42R to *PRU* 7.6.47R require *non-EEA direct insurers* to calculate a local *MCR* and to hold assets representing that requirement in the *EEA* or the *United Kingdom*.

(3) *PRU* 7.6.48R to *PRU* 7.6.52R require *non-EEA direct insurers* to hold a minimum level of assets in the *United Kingdom* or *EEA*.

(4) *PRU* 7.6.54R requires the deposit of a minimum level of assets in the *United Kingdom*.

(5) *PRU* 7.6.56R and *PRU* 7.6.57R require *non-EEA direct insurers* to keep adequate accounting records in the *United Kingdom*.

Worldwide financial resources

7.6.41 R (1) A *non-EEA direct insurer* must maintain adequate worldwide financial resources, to ensure that there is no significant risk that its liabilities cannot be met as they fall due.

(2) For the purpose of (1):

(a) a *UK-deposit insurer* must not rely upon the assets held under *PRU* 7.2.20R as available to meet liabilities other than those arising from the activities of its *branches* in *EEA States*;

(b) other *non-EEA direct insurers* to whom (1) applies must not rely upon the assets held under *PRU* 7.2.20R as available to meet liabilities other than those arising from the activities of any *UK branch*.

UK or EEA MCR to be covered by admissible assets

7.6.42 R A *non-EEA direct insurer* must:

(1) calculate a *UK* or *EEA MCR* in accordance with *PRU* 7.6.44R to *PRU* 7.6.47R; and

(2) hold *admissible assets* (in addition to those required under *PRU* 7.2.20R)

to represent its *UK* or *EEA MCR* calculated under (1).

7.6.43 R The assets held under *PRU* 7.6.42R(2) must be identified and valued as if the *non-EEA direct insurer* was a *firm* with its head office in the *United Kingdom*.

7.6.44 R For the purposes of *PRU* 7.6.42R, a *non-EEA direct insurer* (except a *UK-deposit insurer*) must calculate a *UK MCR*:

(1) for *long-term insurance business,* in accordance with *PRU* 7.2.81R to *PRU* 7.2.91R but only in relation to business carried on by the *firm* in the *United Kingdom*;

(2) for *general insurance business,* in accordance with *PRU* 7.2.45R to *PRU* 7.2.72R but only in relation to business carried on by the *firm* in the *United Kingdom.*

7.6.45 R For a *composite firm*, the *UK MCR* is the sum of the amounts arrived at under *PRU* 7.6.44R(1) and (2).

7.6.46 R For the purposes of *PRU* 7.6.42R, a *UK-deposit insurer* must calculate an *EEA MCR*:

(1) for *long-term insurance business,* in accordance with *PRU* 7.2.81R to *PRU* 7.2.91R but only in relation to business carried on by the *firm* in all *EEA* States, taken together;

(2) for *general insurance business,* in accordance with *PRU* 7.2.45R to *PRU* 7.2.72R but only in relation to business carried on by the *firm* in all *EEA* States, taken together.

7.6.47 R For a *composite firm*, the *EEA MCR* is the sum of the amounts arrived at under *PRU* 7.6.46R(1) and (2).

Localisation of assets

7.6.48 R A *non-EEA direct insurer* (except a *UK-deposit insurer*) must hold *admissible assets*, which are required to cover its *technical provisions* in accordance with *PRU* 7.2.20R and to represent its *UK MCR* in accordance with *PRU* 7.6.44R:

(1) (where the assets cover the *technical provisions* and the *guarantee fund*) in the *United Kingdom*;

(2) (where the assets represent the amount of the *UK MCR* in excess of the *guarantee fund*) in any *EEA State*.

7.6.49 R A *UK-deposit insurer* must hold *admissible assets,* which are required to cover its *technical provisions* in accordance with *PRU* 7.2.20R and to represent its *EEA MCR* in accordance with *PRU* 7.6.46R:

(1) (where the assets cover the *technical provisions* and the *guarantee fund*) within the *EEA* states where the *firm* carries on *insurance business*;

(2) (where the assets represent the amount of the *EEA MCR* in excess of the *guarantee fund*) in any *EEA State*.

7.6.50 R *PRU* 7.6.48R and *PRU* 7.6.49R do not apply to assets covering *technical provisions* which are debts owed by *reinsurers*.

7.6.51 G The *admissible assets* in excess of the *technical provisions* and *UK* or *EEA MCR* may be held outside the *EEA*.

7.6.52 R For the purpose of *PRU* 7.6.48R and *PRU* 7.6.49R:

(1) a tangible asset is to be treated as held in the country or territory where it is situated;

(2) an *admissible asset* consisting of a *claim* against a debtor is to be regarded as held in any country or territory where it can be enforced by legal action;

(3) a *listed security* is to be treated as held in any country or territory where there is a *regulated market* in which the security is dealt; and

(4) a *security* which is not a *listed security* is to be treated as held in the country or territory in which the *issuer* has its head office.

7.6.53 G *PRU* 4.2.53R to *PRU* 4.2.55R (currency matching of assets and liabilities) apply to the assets held to match insurance liabilities calculated under *PRU* 7.2.12R or *PRU* 7.2.16R.

Deposit of assets as security

7.6.54 R A *non-EEA direct insurer* must keep assets of a value at least equal to one half of the *base capital resources requirement* on deposit in the *United Kingdom* with a *BCD credit institution*.

7.6.55 G The assets deposited as security may count towards the assets required under *PRU* 7.6.48R and *PRU* 7.6.49R. If, after the deposit is made, the value of the deposited assets falls below one half of the *base capital resources requirement*, the *firm* should deposit further *admissible assets* in order to comply with *PRU* 7.6.48R and *PRU* 7.6.49R. Deposited assets may be exchanged for other *admissible assets* and excess assets may be withdrawn, provided that the exchange or deposit does not cause a breach of *PRU* 7.6.48R or *PRU* 7.6.49R.

Branch accounting records in the United Kingdom

7.6.56 R A *non-EEA direct insurer* must maintain at a place of business in the *United Kingdom* adequate records relating to:

(1) the activities carried on from its *United Kingdom branch*; and

(2) if it is an *EEA-deposit insurer*, the activities carried on from the *branches* in other *EEA States*.

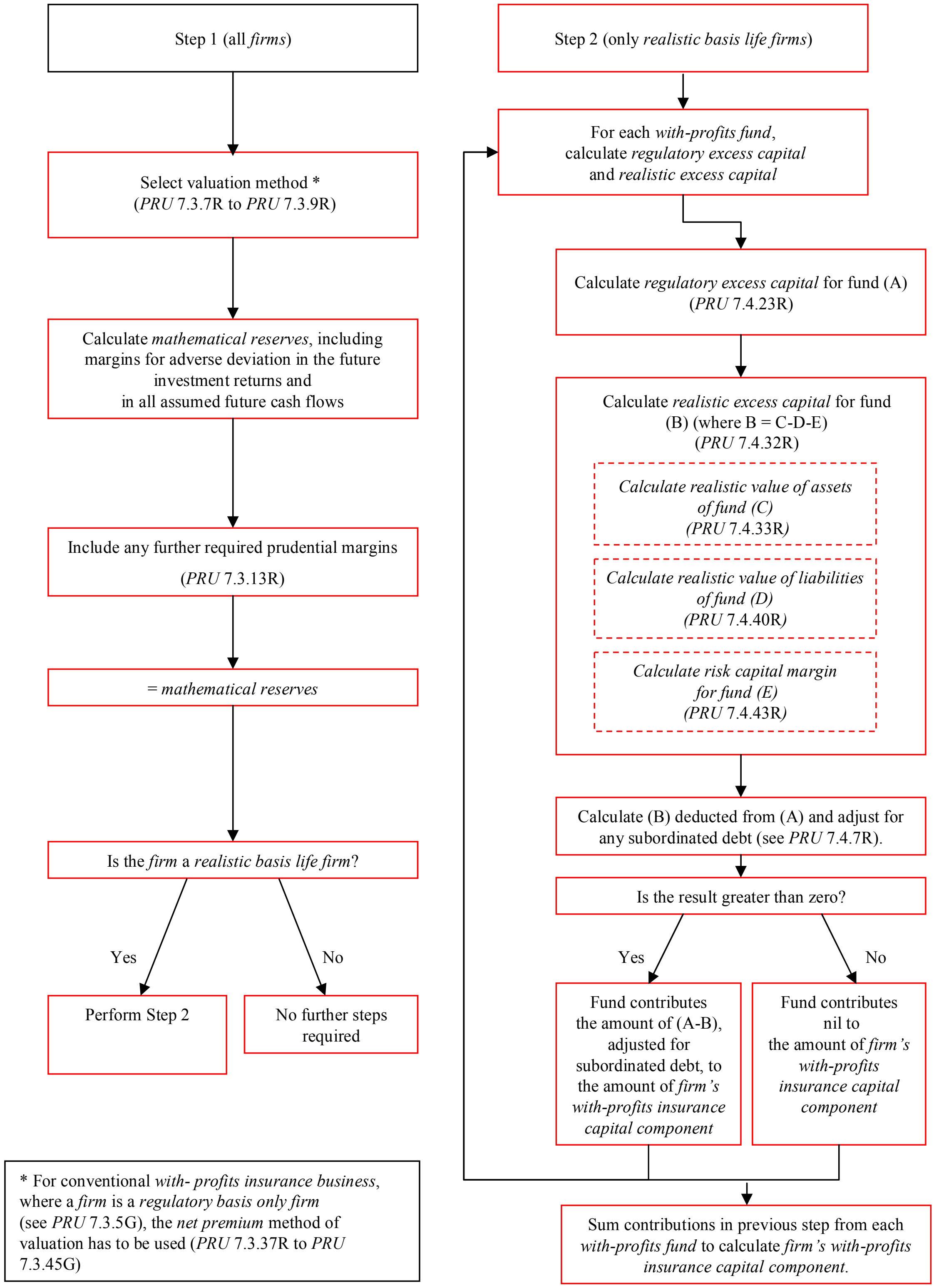
7.6.57 R The records maintained as required by *PRU* 7.6.56R must include a record of:

(1) the income, expenditure and liabilities arising from activities of the *branch* or *branches*; and

(2) the assets identified under *PRU* 7.2.20R as available to meet those liabilities.

Annex 1G

PRU 7.3 (Mathematical reserves) and PRU 7.4 (With-profits insurance capital component)



Annex J

PRU 8.3

In this Annex, all the text is new and is not underlined.

8.3 Group Risk: Insurance Groups

Application

8.3.1 R *PRU* 8.3 applies to an *insurer* that is:

(1) a *participating insurance undertaking*; or

(2) a member of an *insurance group* (which is not a *participating insurance undertaking*).

8.3.2 R *PRU* 8.3 does not apply to:

(1) a *non-directive friendly society*; or

(2) a *Swiss general insurer*; or

(3) an *EEA-deposit insurer*; or

(4) an *incoming EEA firm*; or

(5) an *incoming Treaty firm*.

8.3.3 G *PRU* 8.3 applies to a *firm*:

(1) on a solo basis, as an adjusted solo calculation, where that *firm* is a *participating insurance undertaking*; and

(2) on a group basis where that *firm* is a member of an *insurance group*.

8.3.4 G For the purposes of *PRU* 8.3, an *insurer* includes a *pure reinsurer*, a *friendly society* (other than a *non-directive friendly society*) and a *non-EEA insurer*.

Purpose

8.3.5 G The purpose of this section is to implement the *Insurance Groups Directive* on supplementary supervision of *firms* in an *insurance group,* as amended by the *Financial Groups Directive*. The *Financial Groups Directive* (by amending the *Insurance Directives* and the *Insurance Groups Directive*) introduces specific requirements for the treatment of *related undertakings* of an *insurance parent undertaking* or a *participating insurance undertaking* that are *credit institutions, investment firms* or *financial institutions*.

8.3.6 G *PRU* 8.3 sets out the *sectoral rules* for *insurers* for:

(1) *firms* that are *participating insurance undertakings* carrying out an adjusted solo calculation as contemplated by *PRU* 2.1.9R(2);

(2) *insurance groups*; and

(3) *insurance conglomerates*.

8.3.7 G For a *firm* that is a *participating insurance undertaking*, the *rules* in *PRU* 8.3 set out the minimum capital adequacy requirements for the *firm* itself. A *firm* that satisfies the test in *PRU* 8.3.9R in relation to its *group capital resources* is deemed by *PRU* 2.1.9R(2) to be in compliance with the capital adequacy requirement set out in *PRU* 2.1.9R(1).

Requirement to calculate GCR and GCRR

8.3.8 R A *firm* must on a regular basis calculate the *group capital resources* (*GCR*) and *group capital resources requirement* (*GCRR*) of each *undertaking* referred to in *PRU* 8.3.17R.

Requirement to maintain group capital

8.3.9 R Where a *firm* is the *undertaking* referred to in *PRU* 8.3.17R(1)(c) or *PRU* 8.3.17R(2), it must maintain at all times *tier one capital resources* and *tier two capital resources* of such an amount that its *group capital resources* are equal to or exceed its *group capital resources requirement*.

8.3.10 R A *firm* that is both:

(1) a *composite firm*; and

(2) an *undertaking* referred to in *PRU* 8.3.17R(1)(c) or *PRU* 8.3.17R(2);

must comply with *PRU* 8.3.9R separately in respect of its *long-term insurance business* and its *general insurance business*.

8.3.11 R For the purposes of *PRU* 8.3.10R, a *firm* must include in the calculation of the *group capital resources* and *group capital resources requirement* of its *long-term insurance business* the *regulated related undertakings* and *ancillary services undertakings* that are *long-term insurance assets.*

8.3.12 G *PRU* 7.6 sets out the detailed requirements for the separation of *long-term* and *general insurance business*.

8.3.13 G In order to comply with *PRU* 8.3.10R, a *composite firm* will need to:

(1) establish the *group capital resources requirement* of its *general insurance business* and its *long-term insurance business* separately; and

(2) allocate its *group capital resources* between its *general insurance business* and its *long-term insurance business* so that:

(a) the *group capital resources* allocated to its *general insurance business* are equal to or in excess of the *group capital resources requirement* of its *general insurance business*; and

(b) the *group capital resources* allocated to its *long-term insurance business* are equal to or in excess of the *group capital resources requirement* of its *long-term insurance business.*

8.3.14 G Surplus *group capital resources* in the *long-term insurance business* cannot be used towards meeting the requirements of the *general insurance business* (see *PRU* 8.3.41R) but surplus *group capital resources* in the *general insurance business* may be used towards meeting the amount of the *group capital resources requirement* that relates to the *long-term insurance business*.

8.3.15 R Subject to *PRU* 8.3.27R, a *firm* must ensure that at all times its *capital resources* are of such an amount that the *group capital resources* of each *undertaking* referred to in *PRU* 8.3.17R (excluding those referred to in *PRU* 8.3.9R) are equal to or exceed that *undertaking's group capital resources requirement*.

8.3.16 G *Principle* 4 requires a *firm* to maintain adequate financial resources, taking into account any activity of other members of the *group* of which the *firm* is a member. *PRU* 8.3 sets out provisions that deal specifically with the way the activities of other members of the *group* should be taken into account. This results in the *firm* being required to hold sufficient capital resources so that the *group capital resources* are at least equal to the *group capital resources requirement*. However, the adequacy of the *group capital resources* needs to be assessed both by the *firm* and the *FSA*. *Firms* are required to carry out an assessment of the adequacy of their financial resources (*PRU* 1.2.26R) and the *FSA* will review this and may provide individual guidance on the amount and quality of *capital resources* the *FSA* considers adequate. As part of such reviews, the *FSA* may also form a view on the appropriateness of the *group capital resources requirement* and *group capital resources*. Where necessary, the *FSA* may also give individual *guidance* on the *capital resources* a *firm* should hold in order to comply with *Principle* 4 expressed by reference to *PRU* 8.3.9R and *PRU* 8.3.15R.

Scope – undertakings whose group capital is to be calculated and maintained

8.3.17 R The *undertakings* referred to in *PRU* 8.3.8R, *PRU* 8.3.9R, *PRU* 8.3.10R and *PRU* 8.3.15R are:

(1) for any *firm* that is not within (2), each of the following:

(a) its *ultimate insurance parent undertaking*;

(b) its *ultimate EEA insurance parent undertaking* (if different);

and

(c) the *firm* itself, if it is a *participating insurance undertaking*; and

(2) the *firm* itself, where the *firm* is a *participating insurance undertaking* and is:

(a) a *pure reinsurer*; or

(b) a *non-EEA insurer*; or

(c) a *friendly society*.

8.3.18 G Article 3(3) of the *Insurance Groups Directive* allows an *undertaking* to be excluded from supplementary supervision if:

(1) its head office is in a non-*EEA State* where there are legal impediments to the transfer of the necessary information; or

(2) in the opinion of the *competent authority* responsible for exercising supplementary supervision, having regard to the objectives of supplementary supervision:

(a) its inclusion would be inappropriate or misleading; or

(b) it is of neglible interest.

8.3.19 G If an application is made for a *waiver*, it is the policy of the *FSA* to consider the effect, in the circumstances described in *PRU* 8.3.18G, of granting a *waiver* allowing the exclusion of a *related undertaking* from the calculation of *group capital resources* and the *group capital resources requirement* required by *PRU* 8.3.8R.

8.3.20 G Examples of *related undertakings* which may be excluded from supplementary supervision by Article 3(3) of the *Insurance Groups Directive* include *insurance holding companies* in the *insurance group* that are not the *ultimate insurance parent undertaking* or, if different, the *ultimate EEA insurance parent undertaking* of a *firm*.

8.3.21 G If more than one member of the *insurance group* is to be excluded in the circumstances described in *PRU* 8.3.18G(2)(b), they may only be excluded if, considered together, they are of negligible interest in the context of the *insurance group*.

8.3.22 G When giving a *waiver* in the circumstances described in *PRU* 8.3.18G, the *FSA* may impose a condition requiring the *firm* to provide information about any member of the *insurance group* excluded pursuant to a *waiver* granted in the circumstances described in *PRU* 8.3.18G.

Optional alternative method of calculation for firms subject to supplementary supervision by another EEA competent authority

8.3.23 R If the *competent authority* in an *EEA State* other than the *United Kingdom* has agreed to be the *competent authority* responsible for exercising supplementary supervision of an *insurance group* of which a *firm* is a member under Article 4(2) of the *Insurance Groups Directive,* the *firm* may prepare the calculations required under *PRU* 8.3.8R in relation to the *ultimate EEA insurance parent undertaking* in accordance with the requirements of supplementary supervision in that *EEA State*.

8.3.24 G The *FSA* will notify the *firm* if it has reached agreement with the *competent authority* in an *EEA State* other than the *United Kingdom* in accordance with Article 4(2) of the *Insurance Groups Directive*.

Non-EEA ultimate insurance parent undertakings

8.3.25 R Where the *ultimate insurance parent undertaking* of a *firm* has its head office in a non-*EEA State*, the *firm* may:

(1) calculate the *group capital resources* and the *group capital resources requirement* of its *ultimate insurance parent undertaking* in accordance with accounting practice applicable for the purposes of the regulation of *insurance undertakings* in the state or territory of the head office of the *ultimate insurance parent undertaking* adapted as necessary to apply the general principles set out in Annex I (1) paragraphs B, C and D of the *Insurance Groups Directive*; and

(2) elect (see *PRU* 8.3.26R) to carry out the calculation referred to in (1) in accordance with the accounting consolidation method set out in Annex I (3) of the *Insurance Groups Directive*.

8.3.26 R A *firm* may elect to use the calculation method referred to in *PRU* 8.3.25R (2) if it has made the election by written notice to the *FSA* in a way that complies with the requirements for written notice in *SUP* 15.7.

8.3.27 R *PRU* 8.3.15R does not apply in respect of the *group capital resources* of a *firm's ultimate insurance parent undertaking* if that *ultimate insurance parent undertaking* has its head office in a non-*EEA State*.

Proportional holdings

8.3.28 R Subject to *PRU* 8.3.30R and *PRU* 8.3.31R, when calculating *group capital resources* and the *group capital resources requirement* of an *undertaking* in *PRU* 8.3.17R, a *firm* must take only the relevant proportion of the following items ("calculation items") into account:

(1) the *solo capital resources* of a *regulated related undertaking*;

(2) the assets of a *regulated related undertaking* which are required to be deducted as part of the calculation of *group capital resources*; and

(3) the *individual capital resources requirement* of a *regulated related*

undertaking.

8.3.29 R In *PRU* 8.3.28R, the relevant proportion is either:

(1) the proportion of the total number of issued *shares* in the *regulated related undertaking* held, directly or indirectly, by the *undertaking* in *PRU* 8.3.17R; or

(2) where a *consolidation Article 12(1) relationship* exists between *related undertakings* within the *insurance group*, such proportion as the *FSA* determines in accordance with Article 28(5) of the *Financial Groups Directive* and Regulation 15 of the *Financial Groups Directive Regulations*.

8.3.30 R Where the *undertaking* in *PRU* 8.3.17R is a *firm*, if the *individual capital resources requirement* of a *regulated related undertaking* that is a *subsidiary undertaking* and not an *insurer* exceeds the *solo capital resources* of that *undertaking* less the amount calculated in *PRU* 8.3.74R(3) (if any), the full amount of the calculation items of that *regulated related undertaking* less the amount in *PRU* 8.3.74R(3) must be taken into account in the calculation of *group capital resources* and the *group capital resources requirement*.

8.3.31 R Except where *PRU* 8.3.30R applies, if the *individual capital resources requirement* of a *regulated related undertaking* that is a *subsidiary undertaking* of the undertaking in *PRU* 8.3.17R exceeds its *solo capital resources*, the full amount of the calculation items of that *regulated related undertaking* must be taken into account in the calculation of *group capital resources* and the *group capital resources requirement*.

8.3.32 R For the purposes of *PRU* 8.3.10R, where a *composite firm* that is an *undertaking* in *PRU* 8.3.17R(1)(c) or (2):

(1) holds directly or indirectly *shares* in a *regulated related undertaking*; and

(2) the *shares* in (1) are held partly by its *long-term insurance business* and partly by its *general insurance business*;

the relevant proportion of the calculation items calculated in accordance with *PRU* 8.3.29R, subject to *PRU* 8.3.30R and *PRU* 8.3.31R, must be allocated between the *long-term* and *general insurance business* in proportion to their respective holdings, directly or indirectly, in the *shares* in that *regulated related undertaking*.

Calculation of the GCRR

8.3.33 R Subject to *PRU* 8.3.23R and *PRU* 8.3.25R, a *firm* must calculate the *group capital resources requirement* of an *undertaking* in *PRU* 8.3.17R as the sum of the *individual capital resources requirement* of that *undertaking* and the *individual capital resources requirement* of each of its *regulated related* *undertakings*.

8.3.34 R For the purposes of *PRU* 8.3, an *individual capital resources requirement* is:

(1) in respect of an *insurer* that is not within (2):

(a) its *capital resources requirement* calculated in accordance with *PRU* 2.1; less

(b) where the *capital resources requirements* of both the *insurer* and its *insurance parent undertaking* that is an *insurer* include *with-profits insurance capital components*, any element of double-counting that may arise from the aggregation of the *individual capital resources requirements* for the purposes of *PRU* 8.3.33R;

(2) in respect of an *insurer* that is either a *pure reinsurer* or whose main business otherwise consists of *reinsurance*, and whose head office is in the *United Kingdom*, the *capital resources requirement* that would apply to the *firm* in accordance with *PRU* 2.1 if its *insurance business* was not restricted to *reinsurance*;

(3) in respect of an *insurance undertaking* that is not within (1) or (2) and whose main business is *reinsurance* and whose head office is in a *designated State or territory*, either:

(a) the *proxy capital resources requirement* that would apply to it if, in connection with its *reinsurance* activities, the *permissions* on the basis of which that *proxy capital resources requirement* is calculated were *permissions* to carry on *insurance business* that is not restricted to *reinsurance*; or

(b) the *solo capital resources requirement* that would apply to it if, in connection with its *reinsurance* activities, the *insurance undertaking* were a *regulated insurance entity* whose *insurance business* is not restricted to *reinsurance* for the purposes of calculating the *solo capital resources requirement* in accordance with the relevant *sectoral rules* of the *designated State or territory*;

(4) in respect of an *insurance undertaking* that is not within (1) to (3) and whose main business is *reinsurance*, the *proxy capital resources requirement* that would apply to it if, in connection with its *reinsurance* activities, the *permissions* on the basis of which that *proxy capital resources requirement* is calculated were *permissions* to carry on *insurance business* that is not restricted to *reinsurance*;

(5) in respect of an *EEA insurer*, the equivalent of the *capital resources requirement* as calculated in accordance with the applicable requirements in its *Home State*;

(6) in respect of an *insurance undertaking* that is not within (1) to (5) and whose head office is in a *designated State or territory*, either:

(a) the *solo capital resources requirement* applicable to it in that *designated State or territory*; or

(b) its *proxy capital resources requirement*;

(7) in respect of an *insurance undertaking* that is not within (1) to (6), its *proxy capital resources requirement*;

(8) in respect of a *regulated entity* with its head office in the *EEA* (excluding an *insurance undertaking*), its *solo capital resources requirement* calculated in accordance with the *sectoral rules* for the *financial sector* applicable to it in the *EEA State* in which it has its head office;

(9) in respect of a *regulated entity* not within (8) (excluding an *insurance undertaking*), its *solo capital resources requirement*;

(10) in respect of an *asset management company*, the *solo capital resources requirement* that would apply to it if, in connection with its activities, it were treated as an *investment firm* for the purposes of calculating the *solo capital resources requirement*;

(11) in respect of a *financial institution* that is not a *regulated entity* (including a *financial holding company*), the *solo capital resources requirement* that would apply to it if, in connection with its activities, it were treated as being within the *banking sector*; and

(12) in respect of an *insurance holding company*, zero.

8.3.35 G The *Insurance Groups Directive* defines reinsurers in terms of the 'main business' they carry on. Under the directive, the individual capital resources requirements for reinsurers (including those whose head office is in the *United Kingdom*) are to be calculated on the basis of requirements analogous to those applicable to direct insurers (that is, *insurers* carrying on insurance business that is not restricted to *reinsurance*). Although *insurers* that are *pure reinsurers* are already subject to *PRU*, there are a number of respects in which the capital regime that applies to them differs from that applicable to *insurers* who are direct insurers. The effect of *PRU* 8.3.34R(2) to (4) is to calculate the *individual capital resources requirement* for all reinsurers as if they were carrying on direct insurance. This applies to:

(1) *pure reinsurers* whose head office is in the *United Kingdom*;

(2) *insurers* whose head office is in the *United Kingdom* and whose main business is *reinsurance* (because an *insurer* that is not a *pure reinsurer* with their business restricted to *reinsurance* may nevertheless in principle still have *reinsurance* as its main business);

(3) reinsurers whose head office is in another *EEA State*;

(4) reinsurers whose head office is in a *designated State or territory* (other than an *EEA State*); and

(5) reinsurers whose head office is outside the *EEA*.

Calculation of GCR

8.3.36 R For the purposes of *PRU* 8.3.8R and subject to *PRU* 8.3.23R and *PRU* 8.3.25R, a *firm* must calculate the group capital resources of an *undertaking* in *PRU* 8.3.17R in accordance with the table in *PRU* 8.3.43R, subject to the limits in *PRU* 8.3.45R.

8.3.37 R For the purposes of *PRU* 8.3, the following expressions when used in relation to either an *undertaking* in *PRU* 8.3.17R or a *regulated related undertaking* which is not subject to *PRU* 2.2.14R, are to be construed as if that *undertaking* were required to calculate its capital resources in accordance with *PRU* 2.2.14R, but with such adjustments being made to secure that the *undertaking's* calculation of its *solo capital resources* complies with the relevant *sectoral rules* applicable to it:

(1) *tier one capital resources*;

(2) *tier two capital resources*;

(3) *upper tier two capital resources*;

(4) *lower tier two capital resources*;

(5) *innovative tier one capital resources*; and

(6) *core tier one capital*.

8.3.38 R For the purposes of *PRU* 8.3.37R, the *sectoral rules* applicable to:

(1) an *insurance holding company* are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as an *insurer*;

(2) an *asset management company* are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as an *investment firm*; and

(3) subject to *PRU* 8.3.39R, a *financial institution*, that is not a *regulated entity*, are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as being within the *banking sector*.

8.3.39 R Where a *financial institution*, that is not a *regulated entity*, has invested in *tier one capital* or *tier two capital* issued by a *parent undertaking* that is:

(1) an *insurance holding company*; or

(2) an *insurer*;

the *sectoral rules* that apply to that *financial institution* are the *sectoral rules* for the *insurance sector*.

8.3.40 R For the purposes of *PRU* 8.3.36R, the *capital resources* of a *financial institution* within *PRU* 8.3.39R that can be included in the calculations in *PRU* 8.3.48R(2), *PRU* 8.3.50R(2), *PRU* 8.3.53R(2), *PRU* 8.3.55R(2) and *PRU* 8.3.57R(2) are:

(1) the issued *tier one capital* or *tier two capital* of that *financial institution* held, directly or indirectly, by its *parent undertaking* referred to in *PRU* 8.3.39R; and

(2) the lower of:

(a) the *tier one capital* or *tier two capital* issued by the *parent undertaking* referred to in *PRU* 8.3.39R pursuant to the investment by the *financial institution*; and

(b) the *tier one capital* or *tier two capital* issued by the *financial institution* to raise funds for its investment in the *capital resources* of the *parent undertaking* referred to in (a).

8.3.41 R (1) In calculating *group capital resources*, a *firm* must exclude the restricted assets of a *regulated related undertaking* except insofar as those assets are available to meet the *individual capital resources requirement* of that *regulated related undertaking*.

(2) In (1), "restricted assets" means assets of a *regulated related undertaking* which are subject to a legal restriction or other requirement having the effect that those assets cannot be transferred or otherwise made available to another *regulated related undertaking* for the purposes of meeting its *individual capital resources requirement* without causing a breach of that legal restriction or requirement.

8.3.42 G For the purposes of *PRU* 8.3.41R, in respect of an *insurance undertaking* that is a member of an *insurance group*, the assets of a *long-term insurance fund* are restricted assets within the meaning of *PRU* 8.3.41R. Any excess of assets over liabilities in the *long-term insurance business* may only be included in the calculation of the *group capital resources* up to the amount of the *capital resources requirement* related to that *long-term insurance business*.

8.3.43 R Table: Group capital resources

	Stage	Related text
Total group tier one capital		

	A	*PRU* 8.3.48R
Total group tier two capital	B	*PRU* 8.3.50R
Group capital resources before deductions	C=(A+B)	
Total deductions of inadmissible assets	D	*PRU* 8.3.59R
Total deductions under the requirement deduction method from group capital resources	E	*PRU* 8.3.62R
Total deductions of ineligible surplus capital*	F	*PRU* 8.3.65R
Deduction of assets in excess of market risk and counterparty exposure limits*	G	*PRU* 8.3.70R
Group capital resources	H=(C-(D+E+F*+G*))	
* = section (F) of the table (the deductions for ineligible surplus capital) and section (G) of the table (assets in excess of market risk and counterparty exposure limits) only apply and are required to be calculated for the purposes of the adjusted solo calculation of an *undertaking* in *PRU* 8.3.17R that is a *participating insurance undertaking*.		

Calculation of GCR – Limits on the use of different forms of capital

8.3.44 G As the various components of capital differ in the degree of protection that they offer the *insurance group*, restrictions are placed on the extent to which certain types of capital are eligible for inclusion in the *group capital resources* of the *undertaking* in *PRU* 8.3.17R. These restrictions are set out in *PRU* 8.3.45R.

8.3.45 R (1) For the purposes of *PRU* 8.3.9R, *PRU* 8.3.10R and *PRU* 8.3.15R, a *firm* must ensure that at all times its *tier one capital resources* and *tier two capital resources* are of such an amount that the *group capital resources* of the *undertaking* in *PRU* 8.3.17R comply with the following limits:

(a) $(P – Q) \geq ½ (R – S)$;

(b) $(P - Q + T - W) \geq \frac{3}{4} (R - S)$;

(c) $V \geq \frac{1}{2} P$;

(d) $Q \leq 15\%$ of P;

(e) $T \leq P$; and

(f) $W \leq \frac{1}{2} P$

(2) For the purposes of *PRU* 8.3.9R and *PRU* 8.3.10R, a *firm* must ensure that at all times its *tier one capital resources* and *tier two capital resources* are of such an amount that its *group capital resources* comply with the following limit:

$$(P - Q + T) \geq \tfrac{1}{3}X + (R - S - U - X).$$

(3) For the purposes of (1) and (2):

(a) P is the *total group tier one capital* of the *undertaking* in *PRU* 8.3.17R;

(b) Q is the sum of the *innovative tier one capital resources* calculated in accordance with *PRU* 8.3.53R;

(c) R is the *group capital resources requirement* of the *undertaking* in *PRU* 8.3.17R;

(d) S is the sum of all the *with-profits insurance capital components* of an *undertaking* in *PRU* 8.3.17R that is an *insurer* and each of its *regulated related undertakings* that is an *insurer*;

(e) T is the *total group tier two capital* of the *undertaking* in *PRU* 8.3.17R;

(f) U is the sum of all the *resilience capital requirements* of an *undertaking* in *PRU* 8.3.17R that is an *insurer* and each of its *regulated related undertakings* that is an *insurer*;

(g) V is the sum of all the *core tier one capital* calculated in accordance with *PRU* 8.3.55R;

(h) W is the sum of the *lower tier two capital resources* calculated in accordance with *PRU* 8.3.57R; and

(i) X is the *MCR* of the *firm* less its *resilience capital requirement*, if any.

8.3.46 G The amount of any capital item excluded from *group capital resources* under *PRU* 8.3.45R(1)(d) may form part of *total group tier two capital* calculated in accordance with *PRU* 8.3.50R subject to the limits in *PRU*

8.3.45R(1)(e) and (f).

8.3.47 R For the purposes of *PRU* 8.3.10R, a *firm* must ensure that the *tier one capital resources* and *tier two capital resources* of each of its *long-term insurance business* and its *general insurance business* are of such an amount that the *group capital resources* of each its *long-term insurance business* and its *general insurance business* comply with the limits in *PRU* 8.3.45R separately for each type of business.

Calculation of GCR – Total group tier one capital

8.3.48 R For the purposes of *PRU* 8.3.43R, the *total group tier one capital* of an *undertaking* in *PRU* 8.3.17R is the sum of:

(1) the *tier one capital resources* of the *undertaking* in *PRU* 8.3.17R; and

(2) subject to *PRU* 8.3.40R, the *tier one capital resources* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *PRU* 8.3.49R.

8.3.49 R The deduction referred to in *PRU* 8.3.48R is the sum of:

(1) the book value of the investment by the *undertaking* in *PRU* 8.3.17R in the *tier one capital resources* of each of its *related undertakings* that is a *regulated related undertaking*; and

(2) the book value of the investments by *related undertakings* of the *undertaking* in *PRU* 8.3.17R in the *tier one capital resources* of the *undertaking* in *PRU* 8.3.17R and each of its *related undertakings* that is a *regulated related undertaking.*

Calculation of GCR – Total group tier two capital

8.3.50 R For the purposes of *PRU* 8.3.43R, the *total group tier two capital* of an *undertaking* in *PRU* 8.3.17R is the sum of:

(1) the *upper tier two capital resources* and the *lower tier two capital resources* of that *undertaking*; and

(2) subject to *PRU* 8.3.40R, the *upper tier two capital resources* and the *lower tier two capital resources* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *PRU* 8.3.51R.

8.3.51 R The deduction referred to in *PRU* 8.3.50R is the sum of:

(1) the book value of the investments by the *undertaking* in *PRU* 8.3.17R in the *upper tier two capital resources* and the *lower tier two capital resources* of each of its *related undertakings* that is a *regulated related undertaking*; and

(2) the book value of the investments by *related undertakings* of the *undertaking* in *PRU* 8.3.17R in the *upper tier two capital resources* and the *lower tier two capital resources* of the *undertaking* in *PRU* 8.3.17R and each of its *related undertakings* that is a *regulated related undertaking*.

8.3.52 G For the purposes of *PRU* 8.3.50R(2), the limits in *PRU* 2.2.23R apply to the *upper tier two capital resources* and the *lower tier two capital resources* of any *regulated related undertaking* that is an *insurer*. Similar limits may apply to other *regulated related undertakings* under the relevant *sectoral rules*.

Calculation of GCR – Innovative tier one capital resources, lower tier two capital resources and core tier one capital

8.3.53 R For the purposes of *PRU* 8.3.45R(3)(b), the *innovative tier one capital resources* is the sum of:

(1) the *innovative tier one capital resources* of the *undertaking* in *PRU* 8.3.17R; and

(2) subject to *PRU* 8.3.40R, the *innovative tier one capital resources* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *PRU* 8.3.54R.

8.3.54 R The deduction referred to in *PRU* 8.3.53R is the sum of:

(1) the book value of the investments by the *undertaking* in *PRU* 8.3.17R in the *innovative tier one capital resources* of each of its *related undertakings* that is a *regulated related undertaking*; and

(2) the book value of the investments by *related undertakings* of the *undertaking* in *PRU* 8.3.17R in the *innovative tier one capital resources* of the *undertaking* in *PRU* 8.3.17R and each of its *related undertakings* that is a *regulated related undertaking*.

8.3.55 R For the purposes of *PRU* 8.3.45R(3)(g), the *core tier one capital* is the sum of:

(1) the *core tier one capital* of the *undertaking* of *PRU* 8.3.17R; and

(2) subject to *PRU* 8.3.40R, the *core tier one capital* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *PRU* 8.3.56R.

8.3.56 R The deduction referred to in *PRU* 8.3.55R is the sum of:

(1) the book value of the investments by the *undertaking* in *PRU* 8.3.17R in the *core tier one capital* of each of its *related undertakings* that is a *regulated related undertaking*; and

(2) the book value of the investments by *related undertakings* of the

undertaking in *PRU* 8.3.17R in the *core tier one capital* of the *undertaking* in *PRU* 8.3.17R and each of its *related undertakings* that is a *regulated related undertaking*.

8.3.57 R For the purposes of *PRU* 8.3.45R(3)(h), the *lower tier two capital resources* is the sum of:

(1) the *lower tier two capital resources* of the *undertaking* in *PRU* 8.3.17R; and

(2) subject to *PRU* 8.3.40R, the *lower tier two capital resources* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *PRU* 8.3.58R.

8.3.58 R The deduction referred to in *PRU* 8.3.57R is the sum of:

(1) the book value of the investments by the *undertaking* in *PRU* 8.3.17R in the *lower tier two capital resources* of each of its *related undertakings* that is a *regulated related undertaking*; and

(2) the book value of the investments by *related undertakings* of the *undertaking* in *PRU* 8.3.17R in the *lower tier two capital resources* of the *undertaking* in *PRU* 8.3.17R and each of its *related undertakings* that is a *regulated related undertaking*.

Calculation of GCR – Inadmissible assets

8.3.59 R For the purpose of *PRU* 8.3.43R, a *firm* must deduct from the group capital resources before deduction (calculated at stage C in the table in *PRU* 8.3.43R) of the *undertaking* in *PRU* 8.3.17R, the value of all assets of the *undertaking* in *PRU* 8.3.17R and each of its *regulated related undertakings* that are not admissible assets as set out in *PRU* 8.3.60R.

8.3.60 R For the purposes of *PRU* 8.3.59R, an asset is not an admissible asset if:

(1) in respect of a *regulated related undertaking* or *undertaking* in *PRU* 8.3.17R that is an *insurer,* it is not an *admissible asset* as listed in *PRU* 2 Ann 1R;

(2) in respect of a *regulated related undertaking* or *undertaking* in *PRU* 8.3.17R that is not an *insurer*, it is an asset of the *undertaking* that is not admissible for the purpose of calculating that *undertaking's solo capital resources* in accordance with the *sectoral rules* applicable to it.

8.3.61 R For the purposes of *PRU* 8.3.60R(2), the *sectoral rules* applicable to:

(1) an *asset management company* are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as an *investment firm*; and

(2) a *financial institution* that is not a *regulated entity* are the *sectoral*

rules that would apply to it if, in connection with its activities, it were treated as being within the *banking sector*.

Calculation of GCR – Deductions under requirement deduction method from group capital resources

8.3.62 R For the purposes of *PRU* 8.3.43R, a *firm* must deduct from the group capital resources before deduction (calculated at stage C in the table in *PRU* 8.3.43R) of an *undertaking* in *PRU* 8.3.17R, the sum of the value of the direct or indirect investments by the *undertaking* in *PRU* 8.3.17R in each of its *related undertakings* which is an *ancillary services undertaking*, calculated in accordance with *PRU* 8.3.63R.

8.3.63 R The value of an investment in an *undertaking* referred to in *PRU* 8.3.62R is the higher of the book value of the direct or indirect investment by the *undertaking* in *PRU* 8.3.17R and the notional capital resources requirement of that *undertaking*.

8.3.64 R For the purposes of *PRU* 8.3.63R, the notional capital resources requirement is:

(1) for an *ancillary insurance services undertaking*, zero;

(2) for any other *ancillary services undertaking*, the *capital resources requirement* that would apply to that *undertaking*, if it were a *regulated related undertaking*, in accordance with the *sectoral rules* applicable to a *regulated related undertaking* whose activities are closest in nature and scope to the activities of that *undertaking*.

Calculation of GCR – Deductions of ineligible surplus capital

8.3.65 R Where the *undertaking* in *PRU* 8.3.17R is a *participating insurance undertaking*, the *firm* must, for the purposes of *PRU* 8.3.43R, deduct from its group capital resources before deduction (calculated at stage C in the table in *PRU* 8.3.43R) the sum of the ineligible surplus capital of each of its *regulated related undertakings* that is an *insurance undertaking,* calculated in accordance with *PRU* 8.3.67R.

8.3.66 G The purpose of *PRU* 8.3.65R is to ensure that, where the *undertaking* in *PRU* 8.3.17R is a *firm*, *group capital resources* are not overstated by the inclusion of capital that, although surplus to the requirements of the relevant *regulated related undertaking* that is an *insurance undertaking*, cannot practically be transferred to support requirements arising elsewhere in the group. Therefore, ineligible surplus capital in a *regulated related undertaking* that is an *insurance undertaking* is deducted in arriving at *group capital resources*. Surplus capital in such a *regulated related undertaking* is regarded as transferable only to the extent that:

(1) it can be transferred without the *regulated related undertaking* breaching its own limits on the use of different forms of capital;

(2) it does not contain assets that are restricted within the meaning of

PRU 8.3.41R; and

(3) in the case of a *regulated related undertaking* that has a *long-term insurance business*, it does not contain any assets allocated to the *capital resources* of that *undertaking* for the purposes of the *capital resources* of its *long-term insurance business* meeting the *capital resources requirement* of its *long-term insurance business*.

8.3.67 R (1) For the purposes of *PRU* 8.3.65R, the ineligible surplus capital of a *regulated related undertaking* that is an *insurance undertaking* is calculated by deducting B from A where:

(a) A is the *regulatory surplus value* of that *insurance undertaking* less any restricted assets of the *insurance undertaking* that have been excluded under *PRU* 8.3.41R; and

(b) B is the transferable capital of that *undertaking*.

(2) If A minus B is negative, the ineligible surplus capital is zero.

8.3.68 R For the purposes of *PRU* 8.3.67R(1)(b), the transferable capital is calculated by deducting the sum of the following from the *tier one capital resources* of the *regulated related undertaking* that is an *insurance undertaking*:

(1) any restricted assets of that *insurance undertaking* that have been excluded under *PRU* 8.3.41R;

(2) any *tier one capital resources* of that *insurance undertaking* that have been allocated towards meeting the *individual capital resources requirement* of its *long-term insurance business*; and

(3) the higher of:

(a) 50% of the *individual capital resources requirement* of the *general insurance business* of that *insurance undertaking*; and

(b) the *individual capital resources requirement* of the *general insurance business* of that *insurance undertaking* less the difference between E and F where:

(i) E is its *tier two capital resources*; and

(ii) F is the amount of its *tier two capital resources* that have been allocated towards meeting the *individual capital resources requirement* of its *long-term insurance business*.

8.3.69 G Examples of transferable and ineligible surplus capital:

Example 1

Share capital	**Audited reserves**	**FFA**	**Tier two**	**Requirement**
30	20	0	40	50

(i) Under *PRU* 8.3.68R, transferable capital = *tier one capital resources* of 50, less the sum of:

(1) restricted assets excluded under *PRU* 8.3.41R = (none);

(2) *tier one capital resources* allocated to the *long-term insurance business* = (none); and

(3) higher of (50% of 50 = 25 and 50 – 40 = 10) = (25)

= (50 – 25) = 25

(ii) Under *PRU* 8.3.67R, ineligible surplus capital = *regulatory surplus value* (40) less restricted assets excluded under *PRU* 8.3.41R (0) less transferable capital (25) = 15.

Example 2

Share capital	**Audited reserves**	**FFA** (of which 5 is restricted)	**Tier two**	**Requirement** (of which 5 relates to the *long-term insurance business*)
30	20	10	40	50

(i) Under *PRU* 8.3.68R, transferable capital = *tier one capital resources* of 60, less the sum of:

(1) restricted assets excluded under *PRU* 8.3.41R = (5);

(2) *tier one capital resources* allocated to the *long-term insurance business* = (5); and

(3) the higher of (50% of 45 = 22.5; and 45 – 40 = 5) = (22.5)

= 60 – 32.5 = 27.5

(ii) Under *PRU* 8.3.67R, ineligible surplus capital = *regulatory surplus value* (50) – restricted assets excluded under *PRU* 8.3.41R of (5) – transferable capital (27.5) = 17.5.

Example 3

Share capital	**Audited reserves**	**FFA** (of which 0 is restricted)	**Tier two** (40, of which 5 is excluded at the solo level – see below)	**Requirement** (of which 25 relates to the *long-term insurance business*)
20	10	20	35	50

The requirement relating to the *long-term insurance business* is met by the FFA of 20 and *tier two capital resources* of 5. Of the remaining *tier two capital resources* of 35, 5 is excluded at the solo level because the *tier one capital resources* allocated to the *general insurance business* are 30.

(i) Under *PRU* 8.3.68R, transferable capital = *tier one capital resources* of 50, less the sum of:

(1) restricted assets excluded under *PRU* 8.3.41R = (none);

(2) *tier one capital resources* allocated to the *long-term insurance business* = (20); and

(3) the higher of (50% of 25 = 12.5; and 25 – (35 - 5) = -5) = (12.5)

= 50 – 32.5 = 17.5.

(ii) Under *PRU* 8.3.67R, ineligible surplus capital = *regulatory surplus value* (35) – restricted assets excluded under *PRU* 8.3.41R of (0) – transferable capital (17.5) = 17.5.

Calculation of GCR – Assets in excess of market risk and counterparty exposure limits

8.3.70 R Where the *undertaking* in *PRU* 8.3.17R is a *participating insurance undertaking*, the *firm* must deduct from its group capital resources before deduction (calculated at stage C in the table in *PRU* 8.3.43R) the assets in excess of *market risk* and *counterparty* exposure limits calculated in accordance with *PRU* 8.3.74R.

8.3.71 G For the purposes of *PRU* 8.3.43R, where the *undertaking* in *PRU* 8.3.17R is a *participating insurance undertaking*, the investments referred to in *PRU*

8.3.48R and *PRU* 8.3.50R are not subject to the *market risk* and *counterparty* exposure limits.

8.3.72 R The *firm* (A) must, subject to *PRU* 8.3.73R, include in the calculation in *PRU* 8.3.74R each *related undertaking* (B) that is:

(1) a *regulated related undertaking* that is a *subsidiary undertaking*; or

(2) a *related undertaking* where the *firm* has elected to value the *shares* held in that *undertaking* by the *firm* in accordance with *PRU* 1.3.35R for the purposes of calculating the *tier one capital resources* of the *firm*.

8.3.73 R The *related undertakings* in *PRU* 8.3.72R need only be included in the calculation in *PRU* 8.3.74R if:

(1) where B is a *regulated related undertaking,* the *solo capital resources* of that *undertaking* exceed its *individual capital resources requirement*; or

(2) where B is an *undertaking* in *PRU* 8.3.72R(2), its assets that fall within one or more of the categories in *PRU* 2 Ann 1R exceed its accounting liabilities.

8.3.74 R A’s assets in excess of the *market risk* and *counterparty* exposure limits are calculated as follows:

(1) Subject to (2), a *firm* must apply the *market risk* and *counterparty* exposure limits in *PRU* 3.2.22R(3) to:

(a) where B is an *insurer,* the *admissible assets* of B;

(b) where B is a *regulated related undertaking* that is not an *insurer*, the assets of that *undertaking* less those assets identified in *PRU* 8.3.60R(2) as not being admissible assets.

(2) The *market risk* and *counterparty* exposure limits do not need to be applied to an *undertaking* in *PRU* 8.3.72R(2).

(3) Where the assets of B in *PRU* 8.3.74R(1) exceed the limits in *PRU* 3.2.22R(3), the assets of B in excess of the limits must be deducted by the *firm* from B's *solo capital resources* for the purposes of *PRU* 8.3.30R.

(4) After the application of (1) and (2), the surplus assets of B are aggregated with the *admissible assets* of A, where the surplus assets of B are:

(a) where B is a *firm*, the *admissible assets* of B that represent the amount by which the *capital resources* of B exceed its *capital resources requirement*, subject to *PRU* 8.3.77R, and limited to the amount of transferable capital calculated in accordance with *PRU* 8.3.68R;

(b) where B is a *regulated related undertaking* that is not a *firm*, the assets of the *undertaking* in *PRU* 8.3.74R(1)(b) that represent the amount by which the *solo capital resources* of B exceed its *individual capital resources requirement* and, where B is an *insurance undertaking* that is not a *firm,* limited to the amount of transferable capital calculated in accordance with *PRU* 8.3.68R; and

(c) where B is an *undertaking* in *PRU* 8.3.72R(2), the assets of the *undertaking* which represent those assets that fall within one or more of the categories in *PRU* 2 Ann 1R which exceed its accounting liabilities.

(5) The *market risk* and *counterparty* exposure limits are then applied to the aggregate of A's *admissible assets* and the surplus assets in *PRU* 8.3.74R(4).

8.3.75 R The *firm* (A) must then deduct the amount by which the *admissible assets* aggregated in accordance with *PRU* 8.3.74R(5) exceed the *market risk* and *counterparty* exposure limits from A's group capital resources before deduction (calculated at stage C in the table in *PRU* 8.3.43R) in accordance with *PRU* 8.3.70R.

8.3.76 R In relation to any of its *regulated related undertakings* that is not an *insurer*, A may modify the calculation in *PRU* 8.3.74R by:

(1) omitting the calculation in *PRU* 8.3.74R(1) and (3); and

(2) aggregating all of the assets of B identified in *PRU* 8.3.74R(1)(b) as admissible assets with the *admissible assets* of A in *PRU* 8.3.74R (4).

8.3.77 R The *admissible assets* of either A or B that are part of a *long-term insurance fund* of A or B are excluded for the purposes of the calculation in *PRU* 8.3.74R except insofar as those assets are available to meet the liabilities and *capital resources requirement* of that *long-term insurance fund*.

8.3.78 R If B is itself either a *participating insurance undertaking* or an *insurance parent undertaking*, the *admissible assets* of B for the purposes of *PRU* 8.3.74R(1) must be calculated as in *PRU* 8.3.75R but as if B were A.

Annex K

Other amendments to the Integrated Prudential sourcebook

In this Annex, underlining indicates new text and striking through indicates deleted text. Where existing text will be replaced by new text, this is indicated and the new text is not underlined. Where new text is being inserted at the end of existing text, this is indicated and the additional text is not underlined. Where an entire section of text is being deleted, the place where the change will be made is indicated and the text is not struck through or reproduced.

Transitional provisions

…

Transitional provisions 3 and 4 are deleted.

3 [deleted]

4 [deleted]

Insert new transitional provisions as follows:

(1)	**(2)** **Material to which the transitional provision applies**	**(3)**	**(4)** **Transitional provision**	**(5)** **Transitional provision: dates in force**	**(6)** **Handbook provision: coming into force**
5	*Rules* in *PRU* listed in the Table at *PRU* TR Table 10R	R	(1) A *rule* listed in column (2) is disapplied, or is modified in its application, to a *firm*: (a) in order to produce the same effect, including any conditions, as a *waiver* had on the corresponding *rule* in *IPRU(INS)*; (b) for the same period as the *waiver* would have lasted, if shorter than the period in column (5); provided the conditions set out in (2) are satisfied. (2) The conditions referred to in (1) are:	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004

			(a) the *rule* is shown in the Table at *PRU* TR Table 10R as corresponding with the *rule* in *IPRU(INS)* in relation to which the *waiver* was granted to the *firm*; (b) the *waiver* was current as respects the *firm* immediately before the date specified in column (6); and (c) there is no specific transitional *rule* relating to the *waiver*. (3) (1) does not have effect if, and to the extent that, it would be inconsistent with any community obligation of the *United Kingdom*.		
6	*Rules* in *PRU* not listed in the Table at *PRU* TR Table 10R	R	(1) A *rule* listed in column (2) is disapplied, or is modified in its application, to a *firm*: (a) in order to produce the same effect, including any conditions, as a *waiver* had on a *rule* in *IPRU(INS)* or *IPRU(FSOC)*, or a written concession had on a pre-*commencement* provision listed in *PRU* TR 7 R; (b) for the same period as the *waiver* or written concession would have lasted, if shorter than the period in column (5); provided the conditions set out in (2) are satisfied. (2) The conditions referred to in (1) are: (a) the *rule* in *PRU* is substantially similar to the *rule* in *IPRU(INS), IPRU(FSOC)*, or the pre-*commencement* provision, as the case may be,	From 31 December 2004 until 30 June 2005	31 December 2004

			with which the *waiver* or written concession was concerned; (b) the *waiver* or written concession was current as respects the *firm* immediately before the date specified in column (6); (c) there is no specific transitional *rule* relating to the *waiver* or written concession; and (d) in the case of a written concession, it has not been superseded by a *waiver* from the *FSA*. (3) (1) does not have effect if, and to the extent that, it would be inconsistent with any community obligation of the *United Kingdom*.		
7	As *PRU* TR 6R	R	The pre-*commencement* provisions referred to in these transitional provisions are those contained in: (1) the Insurance Companies Act 1982 and relevant secondary legislation; (2) the Friendly Societies Act 1992 and relevant secondary legislation.	As *PRU* TR 6R	As *PRU* TR 6R
8	As *PRU* TR 5R to *PRU* TR 7R	R	A *firm* which has the benefit of a *waiver* to which *PRU* TR 5R applies, or a *waiver* or written concession to which *PRU* TR 6R applies, must: (1) notify the *FSA* immediately if it becomes aware of any matter which is material to the relevance or appropriateness of the *waiver* or written	As *PRU* TR 5R or *PRU* TR 6R	As *PRU* TR 6R

			concession; (2) maintain a written record of the *rule* in *PRU* to which it considers the *waiver* or written concession applies; and (3) make the record available to the *FSA* on request.		
9	*PRU* TR 5R to *PRU* TR 25R	R	In these transitional provisions: (1) "substantially similar" means substantially similar in purpose and effect; (2) "written concession" means a waiver, exemption, concession, modification, consent, approval, determination or similar exercise of discretion which: (a) disapplied, or tended to reduce the burden of complying with, a pre-*commencement* provision (with or without conditions); and (b) was evidenced in writing.	As *PRU* TR 5R or *PRU* TR 6R	31 December 2004

PRU TR Table 10 R

This Table belongs to *PRU* TR 5R to *PRU* TR 9R

Rules in PRU	Corresponding rules in IPRU(INS)
1.3.35R	4.2 (3)
2.1.9R	2.9 (3)
2.1.21R	2.9
2.1.22R	2.9
2.1.30R	2.4 (6)
2.2.80R	2.10 (7)
2.2.81R	2.10 (7)
2.2.86R	4.14

	4.5 (7)
3.2.22R	4.14 (1)
4.2.34R	5.11
4.2.39R	5.11
	5.11 (4)
	5.11 (5)
	5.11 (9)
	5.11 (11)
4.2.58R	2.3 (2)
7.2.51R	2.4 (6)
7.2.56R	2.4 (1)
7.2.66R	Appendix 2.1 2.4(1)(b)
	Appendix 2.2 2.4(1)(b)
	5.9 (1)
7.3.40R	5.9 (2)
7.3.41R	5.9 (2)
7.3.43R	5.10
7.3.74R	5.16
8.3.17R(1)(a)-(b)	10.1
	10.2
	10.2 (1)
	10.2 (2)
	10.2 (3)
8.3.23R	10.2
	10.2 (1)
	10.2 (2)
	10.2 (3)

(1)	(2) Material to which the transitional provision applies	(3)	(4) Transitional provision	(5) Transitional provision: dates in force	(6) Handbook provision: coming into force
11	*PRU* 1.2 *PRU* 5.1	R	If a *firm*, as at 31 December 2004, has the benefit of a *waiver* of: (1) *SUP* 16.7.10R; or (2) *SUP* 16.7.12R; under which the *firm* does not have to supply adequate information on mismatch liquidity, the provisions referred to in column (2) do not apply.	From 31 December 2004 until the date the *waiver* referred to in column (4) ceases to have effect.	31 December 2004
12	*PRU* 1.3.5R *PRU* 7.4.191R	R	(1) This *rule* applies to a *firm* which for the period specified in column (5) is required by *PRU* 1.3.5R to measure the surplus or deficit in a *defined benefits pension scheme*, for the purposes of *PRU*, in accordance with FRS 17 (Retirement Benefits). (2) A *firm* must derecognise any measure of actuarial gains in respect of a *defined benefits pension scheme.* (3) A *firm* may deduct from its liabilities the difference between the measure of actuarial losses in respect of a *defined benefits pension scheme* which would result from the application of *PRU* 1.3.5R and the *firm*'s best estimate of the level of additional funding that it will provide for that *defined benefits pension scheme* over the next five years, as determined in conjunction with the scheme's *actuaries* or trustees (or both) as appropriate.	From 31 December 2004 to 30 December 2005	31 December 2004
13	*PRU* 1.3.14R	R	A *firm* will be treated as complying with the *rule* listed in column (2) if it marks to	From 31 December 2004 to 30 December	31 December 2004

			market by reference to market value as determined in accordance with generally accepted accounting concepts, bases and policies or other generally accepted methods appropriate to *insurers*.	2006	
14	*PRU* 1.3.31R *PRU* 2.2.90R	R	(1) A *firm* may elect to apply *PRU* 1.3.11R to *shares* in a *regulated related undertaking* that is not an *insurance undertaking* or an *insurance holding company*. (2) A *firm* may apply *PRU* 1.3.11R if it has made the election referred to in sub-paragraph (1) by written notice to the *FSA* in a way which complies with the requirements for written notice in *SUP* 15.7. (3) Where a *firm* has made the election referred to in (1): (a) *PRU* 2.2.90R is disapplied in respect of the *shares* in that *regulated related undertaking*; and (b) the *shares* in that *regulated related undertaking* must be valued in accordance with (4). (4) Subject to (5), the *shares* in the *regulated related undertaking* within (3) must be valued in accordance with *PRU* 1.3.11R. (5) For the purposes of valuing the *shares* in a *regulated related undertaking* within (4), the value of those *shares* determined in accordance with *PRU* 1.3.11R must be reduced: (a) by an approximate amount, to the extent that the value of those *shares* in the *regulated*	From 31 December 2004 until the first day of the *firm*'s *financial year* beginning in 2005	31 December 2004

			related undertaking cannot effectively be realised to meet the *capital resources requirement* of the *firm*; and (b) by an approximate amount, to exclude value attributable to goodwill generated from the business of the *regulated related undertaking* with other members of the *insurance group.*		
15	As *PRU* TR 14R	G	(1) The application of *PRU* 1.3.31R to a *regulated related undertaking* which is not an *insurance undertaking* or an *insurance holding company* implements the amendments to the *First Non-Life Directive*, the *First Life Directive* and the *Insurance Groups Directive* in Articles 22(2), 23(2) and 28(6) of the *Financial Groups Directive*. (2) *PRU* TR 14R allows the requirement to treat a *regulated related undertaking* which is not an *insurance undertaking* or an *insurance holding company* in accordance with *PRU* 1.3.31R to be postponed until the effective date of the *Financial Groups Directive.* (3) In the interim, a *firm* may elect either to apply *PRU* 1.3.11R or to value *shares* in a *regulated related undertaking* which is not an *insurance undertaking* or an *insurance holding company* in accordance with *PRU* 1.3.31R. The intention is to allow *firm*s to continue to account for the value of *shares* held in these *regulated related undertakings* as they would formerly have done under *IPRU(INS)* for the purposes of calculating the	As *PRU* TR 14R	As *PRU* TR 14R

			capital resources of a *firm*.		
16	*PRU* 2.2.93R (3) *PRU* 2.2.101R (3) *PRU* 2.2.101R (4) *PRU* 2.2.102R *PRU* 2.2.103R *PRU* 2.2.105R	R	(1) This paragraph applies to a *firm* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10 or 5.2, or a written concession in relation to a pre-*commencement* provision listed in *PRU* TR 7R, in either case allowing the *firm* to exclude from the calculation of its liabilities obligations under a particular capital instrument issued by the *firm*. (2) Subject to (3) and to compliance with the conditions set out in (4), a *firm* will be treated as complying with a *rule* listed in column (2) in relation to the capital instrument to which the *waiver* or written concession referred to in (1) related so long as the *firm* is not obliged to pay any interest under the terms of the capital instrument in circumstances where the *firm* does not have *capital resources* equal to or in excess of its required margin of solvency under the *Insurance Directives*. (3) (2) ceases to apply to a *firm*: (a) once the *firm* has redeemed the capital instrument; or (b) on or after any date upon which the *firm* has the option to redeem the capital instrument and may prudently do so. (4) The conditions referred to in (2) are: (a) the *firm* must notify the *FSA* immediately if it becomes aware of any matter which is material	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004

			to the relevance or appropriateness of the *waiver* or written concession; (b) the *firm* must maintain a written record of the *rule* in *PRU* to which it considers the *waiver* or written concession applies; and (c) the *firm* must make the record available to the *FSA* on request.		
17	*PRU* 2.2.93R (2)	R	(1) This paragraph applies to a *firm* carrying on *with-profits insurance business* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10 or 5.2 or a written concession in relation to a pre-*commencement* provision listed in *PRU* TR 7R in either case allowing the *firm* to exclude from the calculation of its liabilities obligations under a particular capital instrument issued by the *firm*. (2) Subject to compliance with the conditions set out in (3), *PRU* 2.2.93R (2) does not apply in relation to the capital instrument to which the *waiver* or written concession referred to in (1) related provided that capital instrument was issued by the *firm* on or before 30 December 2004. (3) The conditions referred to in (2) are: (a) the *firm* must notify the *FSA* immediately if it becomes aware of any matter which is material to the relevance or appropriateness of the *waiver* or written concession;	From 31 December 2004 until 30 December 2005	31 December 2004

			(b) the *firm* must maintain a written record of the *rule* in *PRU* to which it considers the *waiver* or written concession applies; and (c) the *firm* must make the record available to the *FSA* on request.		
18	*PRU* 2.2.108R (5) *PRU* 2.2.108R (7)	R	(1) This *rule* applies to a *firm* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10 or 5.2, or a written concession in relation to a pre-*commencement* provision listed in *PRU* TR 7R, in either case allowing the *firm* to exclude from the calculation of its liabilities obligations under a particular capital instrument issued by the *firm*. (2) Subject to compliance with the conditions set out in (3), a *firm* will be treated as complying with a *rule* listed in column (2) in relation to the capital instrument to which the *waiver* or written concession referred to in (1) related. (3) The conditions referred to in (2) are: (a) the *firm* must notify the *FSA* immediately if it becomes aware of any matter which is material to the relevance or appropriateness of the *waiver* or written concession; (b) the *firm* must maintain a written record of the *rule* in *PRU* to which it considers the *waiver* or written concession applies; and (c) the *firm* must make the	From 31 December 2004 until 30 June 2005	31 December 2004

			record available to the *FSA* on request.		
19	*PRU* 2.2.108R (6) *PRU* 2.2.108R (10) *PRU* 2.2.108R (11) *PRU* 2.2.111R	R	(1) This paragraph applies to a *firm* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10 or 5.2, or a written concession in relation to a pre-*commencement* provision listed in *PRU* TR 7R, in either case allowing the *firm* to exclude from the calculation of its liabilities obligations under a particular capital instrument issued by the *firm*. (2) Subject to compliance with the conditions set out in (3), a *firm* will be treated as complying with a *rule* listed in column (2) in relation to the capital instrument to which the *waiver* or written concession referred to in (1) related. (3) The conditions referred to in (2) are: (a) the *firm* must notify the *FSA* immediately if it becomes aware of any matter which is material to the relevance or appropriateness of the *waiver* or written concession; (b) the *firm* must maintain a written record of the *rule* in *PRU* to which it considers the *waiver* or written concession applies; and (c) the *firm* must make the record available to the *FSA* on request.	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004
20	*PRU* 2.2.12R *PRU* 2.2.14R (Table)	R	(1) This *rule* applies to a *firm* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004

			(4). (2) For the period specified in column (5) or the same period as the *waiver* would have lasted if shorter, subject to (3) and to compliance with the conditions set out in (4), for the purposes of calculating its *capital resources* a *firm* may include the value of claims against its members by way of calls for supplementary contributions as *core tier one capital* to the same extent as it was permitted by the *waiver* to include the value of those claims in the calculation of its margin of solvency. (3) (2) does not apply for the purposes of *PRU* 2.2.18R or *SUP* Appendix 2.4. (4) The conditions referred to in (2) are: (a) the limits specified in the *waiver* on the extent to which the *firm's* claim against its members by way of call for supplementary contributions may be brought into account apply as if the reference (if any) in the *waiver* to the *firm*'s required margin of solvency referred to its *general insurance capital requirement* and the reference (if any) in the *waiver* to the firm's margin of solvency referred to its *capital resources*; and (b) the *firm* must comply with any further conditions imposed by the *waiver*.		
21	*PRU* 2.2.12R *PRU* 2.2.14R (Table)	R	(1) This *rule* applies to a *firm* which immediately before the date specified in column (6) had the benefit of a *waiver* in relation to *IPRU(INS)* rule 2.10	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004

			(5) or *IPRU(FSOC)* rule 4.7 (3). (2) For the period specified in column (5) or the same period as the *waiver* would have lasted if shorter, subject to (3) and to compliance with the conditions set out in (4), for the purpose of calculating its *capital resources* a *firm* may include the value of *implicit items* at Stage B of the calculation in *PRU* 2.2.14R Table to the same extent to which it was permitted by the *waiver* to include the value of those *implicit items* in the calculation of its margin of solvency. (3) (2) does not apply for the purposes of *PRU* 2.2.17R. (4) The conditions referred to in (2) are: (a) the limits specified in the *waiver* on the extent to which the value of *implicit items* may be brought into account apply as if the reference (if any) in the *waiver* to the *firm's* required margin of solvency referred to its *minimum capital requirement* and the reference (if any) in the *waiver* to the *firm's* margin of solvency referred to its *capital resources*; and (b) the *firm* must comply with any further conditions imposed by the *waiver*.		
22	*PRU* 2.1.21R *PRU* 2.1.30R *PRU* 2.2.18R *PRU* 3.2.22R *PRU* 7.2.51R *PRU* 7.2.85R	R	In relation to any *financial year* starting on or before 30 December 2004, a *firm*'s *general insurance capital requirement* or a *firm*'s *insurance health risk capital component* is its margin of solvency calculated in	From 31 December 2004 until the relevant *rule* is revoked	31 December 2004

			accordance with: (1) *IPRU(INS)* rule 2.4 (excluding 2.4(1)(a)) and Appendices 2.1 and 2.2, or *IPRU(INS)* rule 2.4 (excluding 2.4(1)(a)) and Appendices 2.1 and 2.2 (as applied by rule 2.7 to *long-term insurance business* of *class* IV); or (2) *IPRU(FSOC)* rule 4.2 (excluding 4.2(1)(a)) and Appendix 2 Parts I and II, or *IPRU(FSOC)* rules 4.2 (excluding 4.2(1)(a)) and Appendix 2 Parts I and II, (as applied by paragraph 3 of Appendix I to *long-term insurance business* of *class* IV); as the case may be, as those *rules* had effect immediately prior to the date in column (6).		
23	*PRU* 4.3.5R (3) (b) *PRU* 4.3.34R *PRU* 4.3.35R	R	(1) *PRU* 4.3.5R(3)(b) has effect as if the words "and is capable of valuation" and "to 4.3.35R" were omitted. (2) *PRU* 4.3.34R has effect as if it read "For the purpose of *PRU* 4.3.5R(3)(b), a transaction is on approved terms only if the *firm* reasonably believes that it may be readily closed out". (3) *PRU* 4.3.35R does not apply.	From 31 December 2004 until 30 December 2005	31 December 2004
24	*PRU* 7.5.20R *PRU* 7.5.45R	R	In relation to any *financial year* starting on or before 30 December 2004: (1) a *firm*'s *non-credit equalisation provision* is its equalisation reserve in respect of Part II business carried on by the *firm* calculated in accordance with *IPRU(INS)* rules 6.4 to 6.10 and Appendix 6.1 as those rules had effect	From 31 December 2004 until the relevant *rule* is revoked.	31 December 2004

			immediately prior to the date in column (6); and (2) a *firm*'s *credit equalisation provision* is its equalisation reserve in respect of credit insurance business carried on by the *firm* calculated in accordance with *IPRU(INS)* rules 6.11 to 6.12 and Appendix 6.2 as those rules had effect immediately prior to the date in column (6).		
25	*PRU* 8.3.8R *PRU* 8.3.9R *PRU* 8.3.10R *PRU* 8.3.15R	R	(1) For the purpose of the calculation of the *group capital resources* and *group capital resources requirement* of an *undertaking* referred to in *PRU* 8.3.17R, a *firm* may elect not to take a *regulated related undertaking*, which is not an *insurance undertaking* or an *insurance holding company,* into account in accordance with *PRU* 8.3.33R and *PRU* 8.3.36R. (2) A *firm* may elect not to take a *regulated related undertaking*, which is not an *insurance undertaking* or an *insurance holding company* into account as referred to in (1), if it has made the election by written notice to the *FSA* in a way that complies with the requirements for written notice in *SUP* 15.7 (3) A *firm* that has made an election referred to in (2) must value that *regulated related undertaking* in accordance with (4) for the purpose of the calculation of the *group capital resources* and *group capital resources requirement* of an *undertaking* referred to in *PRU* 8.3.17R. (4) Subject to (5), a *regulated related undertaking* within (3)	From 31 December 2004 until the first day of the *firm*'s financial year beginning in 2005	31 December 2004

			must, for the purposes of the calculations referred to in (1), be valued in accordance with *PRU* 1.3.11R. (5) For the purposes of valuing a *regulated related undertaking* within (3), the value of that *regulated related undertaking* determined in accordance with *PRU* 1.3.11R, must be reduced: (a) by an approximate amount, to the extent that the value of the *regulated related undertaking* cannot effectively be realised to meet the group *capital resources requirement* of an *undertaking* in *PRU* 8.3.17R; and (b) by an approximate amount, to the extent needed to exclude value attributable to goodwill generated from the business of the *regulated related undertaking* with other members of the *insurance group*.		
26	As *PRU* TR 25R	G	(1) The inclusion of a *regulated related undertaking* which is not an *insurance undertaking* or an *insurance holding company* in the scope of application of *PRU* 8.3.33R and *PRU* 8.3.36R implements the amendments to the *First Non-Life Directive*, the *First Life Directive* and the *Insurance Groups Directive* in Articles 22(2), 23(2) and 28(6) of the *Financial Groups Directive.* (2) *PRU* TR 25R allows the requirement to include a *regulated related undertaking* which is not an *insurance undertaking* or an *insurance holding company* in the calculations required by *PRU*	As *PRU* TR 25R	As *PRU* TR 25R

			8.3 to be postponed until the effective date of the *Financial Groups Directive*. (3) In the interim, a *firm* may apply *PRU* 8.3, or elect to use the general valuation rules for *related undertakings* which do not fall within the scope of *PRU* 8.3, as set out in *PRU* 1.3.11R, subject to the adjustments required by *PRU* TR 25R(5). The intention is to allow *firms* to continue to take the *regulated related undertakings* referred to in *PRU* TR 25R(1) and any other *related undertaking* not referred to in *PRU* 8.3 into account as they would formerly have done for the purposes of calculating the *group capital resources* of an *undertaking* in *PRU* 8.3.17R.		

…

PRU 8 Ann 1R

5 Table: Paragraph 4.2: Application of sectoral consolidation rules

….	
Insurance Conglomerate	~~Whichever of *IPRU(INS)* or *IPRU(FSOC)* would apply if those *rules* were~~ *PRU* 8.3 amended in accordance with Part 5.
….	

…

8 Table

A mixed financial holding company	4.6	… (1) … (2) an *insurance holding company* (if the *rules* in ~~*IPRU(INS)*~~ *PRU* 8.3 are applied).

…

10 Table: PART 6: Definitions used in this Annex

	6.6	… (1) … (2) … (3) (for the *insurance sector*) the *sectoral rules* of the ~~states or territories in the definition of designated states or territories in chapter 11 of *IPRU(INS)* (Definitions),~~ *designated States or territories* ~~but~~ excluding *EEA States*.

...

The Integrated Prudential Sourcebook
Schedule 1
Record keeping requirements

The existing text in Schedule 1 is deleted in its entirety and replaced by the following:

G

1 The aim of the *guidance* in the following table is to give the reader a quick overall view of the relevant record keeping requirements.

2 It is not a complete statement of those requirements and should not be relied on as if it were.

3 Table

Handbook reference	Subject of Record	Contents of record	When record must be made	Retention period
PRU 1.2.37R *PRU* 1.2.38R	*Firm's* assessment of the adequacy of its financial resources	(1) The major sources of risk identified in accordance with *PRU* 1.2.31R (2) How the *firm* intends to deal with those risks (3) Details of the stress tests and scenario analyses carried out and the resulting financial resources estimated to be required in accordance with *PRU* 1.2.35R	Not specified	At least 3 years
PRU 1.4.53R	Prudential risk management and systems and controls	Accounting and other records that are sufficient to enable the *firm* to demonstrate to the *FSA*: (1) that the *firm* is financially sound and has appropriate systems and	Not specified	3 years, or longer as appropriate

		controls; (2) the *firm's* financial position and exposure to risk (to a reasonable degree of accuracy); (3) the *firm's* compliance with the *rules* in *PRU*		
PRU 7.3.20R	*Mathematical reserves*	(1) The methods and assumptions used in establishing the *firm's mathematical reserves*, including the margins for adverse deviation, and the reasons for their use (2) The nature of, reasons for, and effect of, any change in approach, including the amount by which the change in approach increases or decreases its *mathematical reserves*	Not specified	An appropriate period
PRU 7.4.17R *PRU* 7.4.19R	Calculation of *with-profits insurance capital component*	(1) The methods and assumptions used in making any calculation required for the purposes of *PRU* 7.4 (and any subsequent changes) and the reasons for their use (2) Any change	Not specified	An appropriate period

		in practice (in particular changes in those items which will or may be significant in relation to the eventual *claim* values) and the nature of, reasons for, and effect of, any change in approach with respect to those methods and assumptions		
PRU 7.6.23R	*Long-term insurance funds*	A separate accounting record in respect of each of a *firm's long-term insurance funds*	Not specified	Not specified
PRU 7.6.56R *PRU* 7.6.57R	*Branch* accounting records in the *United Kingdom*	A record of the activities carried on from a *non-EEA direct insurer's United Kingdom branch* and, if it is an *EEA-deposit insurer*, from its *branches* in other *EEA States* including a record of: (1) the income, expenditure and liabilities arising from activities of the *branch* or *branches* (2) the assets identified under *PRU* 7.2.20R as available to meet those liabilities	Not specified	Not specified

The Integrated Prudential Sourcebook
Schedule 2
Notification requirements

The existing text in Schedule 2 is deleted in its entirety and replaced by the following:

G

1 The aim of the *guidance* in the following table is to give the reader a quick overall view of the relevant notification requirements.

2 It is not a complete statement of those requirements and should not be relied on as if it were.

3 Table

Handbook reference	Matter to be notified	Contents of notification	Trigger event	Time allowed
PRU 2.1.38R	Breach or expected breach of *PRU* 2.1.9R	Fact of breach or expectation of breach	Breach or expectation of breach	Immediately
PRU 2.2.71R	Intention to include any perpetual non-cumulative *preference shares* or *innovative tier one instruments* in the *firm's tier one capital resources* for the purposes of *PRU* 2.2	Fact of intention	Intention to include	At least one month before the *firm* first includes the relevant items in its *tier one capital resources*
PRU 2.2.72R	Intention to redeem a *tier one instrument* that a *firm* has included in its *tier one capital resources* for the purpose of *PRU* 2.2	Fact of intention	Intention to redeem	At least one month before the intended redemption
PRU 2.2.116R	Proposed amendment to the terms of the debt and the documents referred to in *PRU*	Details of the proposed amendment and confirmation that the legal opinions referred to in	Proposal to amend	At least one month before the amendment is due to take effect

	2.2.108R(8)	*PRU* 2.2.108R(11) and, if applicable, *PRU* 2.2.105R and *PRU* 2.2.111R, continue in full force and effect in relation to the terms of the debt and the documents notwithstanding any proposed amendment		
PRU 2.2.117R	Intention to repay a *tier two instrument* (unless the *firm* intends to repay an instrument on its contractual repayment date)	Fact of intention and details of how the *firm* will meet its *capital resources requirement* after such repayment	Intention to repay	At least six months before the date of the proposed repayment
PRU 3.2.23R	That a *reinsurance* exposure to a *reinsurer* or group of closely related *reinsurers* is reasonably likely to exceed, or has exceeded, 100% of the *firm's capital resources* excluding *capital resources* held to cover *property-linked liabilities*	Fact that the limit is reasonably likely to be, or has been, exceeded Note: upon notification under *PRU* 3.2.23R the *firm* must: (1) demonstrate that prudent provision has been made for the *reinsurance* exposure in excess of the 100% limit, or explain why in the opinion of the *firm* no provision is required, and (2) explain how	(1) A reasonable likelihood that the limit will be exceeded, or (2) if (1) does not apply, the limit being exceeded	As soon as the *firm* first becomes aware of the matter required to be notified

		the *reinsurance* exposure is being safely managed (see *PRU* 3.2.24R)		
PRU 3.2.29R	That the *firm* has exceeded, or anticipates exceeding, the limit expressed in *PRU* 3.2.28E (in each *financial year* a *firm* should restrict the *gross earned premiums* which it pays to a *reinsurer* or group of closely related *reinsurers* to the higher of (a) 20% of the *firm's* projected *gross earned premiums* for that *financial year* and (b) £4 million)	Fact that the limit has been exceeded, or that the *firm* anticipates exceeding the limit Note: upon notification under *PRU* 3.2.29R the *firm* must explain to the *FSA* how, despite the excess *reinsurance* concentration, the credit risk is being safely managed (see *PRU* 3.2.30R)	The limit being exceeded, or an anticipation that the limit will be exceeded	Immediately

The Integrated Prudential Sourcebook
Schedule 3
Fees and other required payments

The existing text in Schedule 3 is deleted in its entirety and replaced by the following:

G

1 There are no requirements for fees or other payments in *PRU*.

The Integrated Prudential Sourcebook
Schedule 4
Powers exercised

The existing text in Schedule 4 is deleted in its entirety and replaced by the following:

G

1 The following powers and related provisions in the *Act* have been exercised by the *FSA* to make the *rules* in *PRU*:

(1) section 138 (General rule-making power);

(2) section 141 (Insurance business rules);

(3) section 149 (Evidential provisions);

(4) section 150(2) (Actions for damages); and

(5) section 156 (General supplementary powers).

2 The following power in the *Act* has been exercised by the *FSA* to give the *guidance* in *PRU*:

Section 157(1) (Guidance).

...

The Integrated Prudential Sourcebook
Schedule 6
Rules that can be waived

The existing text in Schedule 6 is deleted in its entirety and replaced by the following:

G

1 The *rules* in *PRU* can be waived by the *FSA* under section 148 of the *Act* (Modification or waiver of rules), except for *PRU* 1.8.1R (actions for damages).