FSA 2006/42

THE PRUDENTIAL SOURCEBOOK FOR INSURERS INSTRUMENT 2006

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);
(6) section 157(1) (Guidance);
(7) section 318(1) (Exercise of powers through Council).

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 on 31 December 2006.

Amendments to the Handbook

D. The Financial Services Authority creates the Prudential Sourcebook for Insurers (INSPRU) to form a new module within the Prudential Standards block of its Handbook of Rules and Guidance in accordance with the following provisions:

(1) the provisions of the Integrated Prudential sourcebook (PRU) and the Lloyd's sourcebook (LLD) listed in column (2) of the Table in Annex A to this instrument are redesignated in accordance with the corresponding entry in column (1) of the Table in Annex A;

(2) the provisions in (1) are restated and amended so that they read as set out in Annex B to this instrument;

(3) the Financial Services Authority makes the rules and gives the guidance designated as "New text" in column (2) of the Table in Annex A; and

(4) all the above provisions are combined so that they appear in the appropriate numerical order.

Citation

E. This instrument may be cited as the Prudential Sourcebook for Insurers Instrument 2006.

By order of the Board
25 October 2006

Annex A

Creation of INSPRU

(1) The table referred to in paragraph D of this instrument is as follows.

(2) Where a reference in the Table in this Annex A is to a chapter and section only, the whole of the section listed in column (2) is redesignated as set out in column (1). The module, chapter and section of each provision is redesignated as set out in column (1); otherwise the numbering of the paragraphs in the redesignated section remains the same, subject to the addition of those paragraphs identified in column (2) as "New text".

Table – Creation of INSPRU

INSPRU	Current designation in PRU or LLD
1.1	PRU 7.2
1.1.19AR to 1.1.19FG	New text
1.1.34AG	New text
1.1.54AG	New text
1.1.83AR	New text
1.1.84AG	New text
1.1.88AR	New text
1.1.92AR and 1.1.92BG	New text
1.1.93 R	LLD 24.3.1 R
1.1.94 R	LLD 24.3.2 R
1.1.95 R	LLD 24.3.5 R
1.1.96 R	LLD 24.3.6 R
1.2	PRU 7.3
1.2.28AG	New text
1.2.76AR	New text
1.2.92 R	LLD 24.4.1 R
1.2.93 R	LLD 24.4.2 R
1.3	PRU 7.4
1.4	PRU 7.5
1.4.49 R	LLD 24.5.1 R
1.4.50 R	LLD 24.5.2 R
1.4.51 R	LLD 24.5.3 R
1.5	PRU 7.6
1.5.13AR and 1.5.13BG	New text
1.5.58 R	LLD 24.6.1 R
1.5.59 R	LLD 24.6.2 R
1.5.60 R	LLD 24.6.3 R
1.6	New text
2.1	PRU 3.2
2.1.22AR	New text
2.1.42 R	LLD 20.3.1 R
2.1.43 R	LLD 20.3.2 R
2.1.44 G	LLD 20.3.3 G

2.1.45 R	LLD 20.3.4 R
2.1.46 R	LLD 20.3.5 R
2.1.47 R	LLD 20.3.6 R
2.1.48 R	LLD 20.3.7 R
2.1.49 R	LLD 20.3.8 R
2.2	PRU 3.3
2.2.17 R	LLD 20.4.1 R
2.2.18 G	LLD 20.4.2 G
3.1	PRU 4.2
3.1.29AG	New text
3.1.58AR	New text
3.1.61AR	New text
3.1.62 R	LLD 21.3.1 R
3.1.63 R	LLD 21.3.2 R
3.1.64 R	LLD 21.3.3 R
3.1.65 R	LLD 21.3.4 R
3.1.66 R	LLD 21.3.6 R
3.2	PRU 4.3
3.2.34 AG	New text
3.2.35 AG	New text
3.2.43 R	LLD 21.4.1 R
4.1.1 G	PRU 5.1.1 R
4.1.2 G	PRU 5.1.2 R
4.1.3 G	PRU 5.1.7 R
4.1.4 G	PRU 5.1.8 R
4.1.5 G	PRU 5.1.10 G
4.1.6 G	PRU 5.1.11 G
4.1.7 G	PRU 5.1.12 G
4.1.8 G	PRU 5.1.14 G
4.1.9 G	PRU 5.1.15 G
4.1.10 G	PRU 5.1.16 G
4.1.11 G	PRU 5.1.19 G
4.1.12 G	PRU 5.1.20 G
4.1.13 G	PRU 5.1.21 G
4.1.14 G	PRU 5.1.22 G
4.1.15 G	PRU 5.1.23 G

4.1.16 G	PRU 5.1.24 G
4.1.17 G	PRU 5.1.25 G
4.1.18 G	PRU 5.1.26 G
4.1.19 G	PRU 5.1.27 G
4.1.20 G	PRU 5.1.28 G
4.1.21 G	PRU 5.1.29 G
4.1.22 G	PRU 5.1.30 G
4.1.23 G	PRU 5.1.31 G
4.1.24 G	PRU 5.1.32 G
4.1.25 G	PRU 5.1.33 G
4.1.26 G	PRU 5.1.34 G
4.1.27 G	PRU 5.1.35 G
4.1.28 G	PRU 5.1.36 G
4.1.29 G	PRU 5.1.37 G
4.1.30 G	PRU 5.1.38 G
4.1.31 G	PRU 5.1.39 G
4.1.32 G	PRU 5.1.40 G
4.1.33 G	PRU 5.1.41 G
4.1.34 G	PRU 5.1.42 G
4.1.35 G	PRU 5.1.43 G
4.1.36 G	PRU 5.1.44 G
4.1.37 G	PRU 5.1.45 G
4.1.38 G	PRU 5.1.46 G
4.1.39 G	PRU 5.1.47 G
4.1.40 G	PRU 5.1.48 G
4.1.41 G	PRU 5.1.49 G
4.1.42 G	PRU 5.1.50 G
4.1.43 G	PRU 5.1.51 G
4.1.44 G	PRU 5.1.52 G
4.1.45 G	PRU 5.1.53 G
4.1.46 G	PRU 5.1.54 G
4.1.47 G	PRU 5.1.55 G
4.1.48 G	PRU 5.1.56 G
4.1.49 G	PRU 5.1.57 G
4.1.50 G	PRU 5.1.63 G
4.1.51 G	PRU 5.1.64 G
4.1.52 G	PRU 5.1.65 G

4.1.53 G	PRU 5.1.66 G
4.1.54 G	PRU 5.1.67 G
4.1.55 G	PRU 5.1.69 G
4.1.56 G	PRU 5.1.71 G
4.1.57 G	PRU 5.1.72 G
4.1.58 G	PRU 5.1.73 G
4.1.59 G	PRU 5.1.74 G
4.1.60 G	PRU 5.1.75 G
4.1.61 G	PRU 5.1.76 G
4.1.62 G	PRU 5.1.77 G
4.1.63 G	PRU 5.1.78 G
4.1.64 G	PRU 5.1.80 G
4.1.65 E	PRU 5.1.81 E
4.1.66 G	PRU 5.1.82 G
4.1.67 G	PRU 5.1.83 G
4.1.68 G	PRU 5.1.84 G
4.1.69 G	LLD 22.2.1 R
4.1.70 G	LLD 22.2.2 R
5.1.1 G	PRU 6.1.1 G
5.1.2 G	PRU 6.1.2 G
5.1.3 G	PRU 6.1.3 G
5.1.4 G	PRU 6.1.4 G
5.1.5 G	PRU 6.1.5 G
5.1.6 G	PRU 6.1.6 G
5.1.7 G	PRU 6.1.7 G
5.1.8 G	PRU 6.1.8 G
5.1.9 G	PRU 6.1.10 G
5.1.10 G	PRU 6.1.11 G
5.1.11 G	PRU 6.1.12 G
5.1.12 G	PRU 6.1.13 G
5.1.13 G	PRU 6.1.14 G
5.1.14 G	PRU 6.1.15 G
5.1.15 G	PRU 6.1.16 G
5.1.16 G	PRU 6.1.17 G
5.1.17 G	PRU 6.1.18 G
5.1.18 G	PRU 6.1.19 G

5.1.19 G	PRU 6.1.20 G
5.1.20 G	PRU 6.1.21 G
5.1.21 G	PRU 6.1.22 G
5.1.22 G	PRU 6.1.23 G
5.1.23 G	PRU 6.1.24 G
5.1.24 G	LLD 23.2.1 R
5.1.25 G	LLD 23.2.2 R
6.1	PRU 8.3
6.1.42AR	New text
6.1.70AR	New text
6.1.74AR	New text
7.1	PRU 2.3
7.1.57 R	LLD 19.4.1 R
7.1.58 R	LLD 19.4.2 R
7.1.59 G	LLD 19.4.5 G
7.1.60 R	LLD 19.4.6 R
7.1.61 R	LLD 19.4.7 R
7.1.62 R	LLD 19.4.8 R
7.1.63 G	LLD 19.4.9 G
7.1.64 G	LLD 19.4.11 G
7.1.65 G	LLD 19.4.12 G
7.1.66 G	LLD 19.4.13 G
7.1.67 G	LLD 19.4.14 G
7.1.68 R	LLD 19.4.15 R
7.1.69 R	LLD 19.4.16 R
7.1.70 R	LLD 19.4.17 R
7.1.71 G	LLD 19.4.18 G
7.1.72 G	LLD 19.4.19 G
7.1.73 G	LLD 19.4.21 G
7.1.74 R	LLD 19.4.23 R
7.1.75 R	LLD 19.4.24 R
7 Annex 1 G	PRU 2 Annex 3
8.1.1 R	LLD 16.2.1 R
8.1.2 R	LLD 16.3.1 R

8.1.3 G	LLD 16.3.2 G
8.1.4 R	LLD 16.3.3 R
8.1.5 G	LLD 16.3.4 G
8.1.6 G	LLD 16.3.5 G
8.1.7 G	LLD 16.3.6 G
8.1.8 G	LLD 16.4.1 G
8.2.1 R	LLD 17.2.1 R
8.2.2 R	LLD 17.3.1 R
8.2.3 R	LLD 17.4.1 R
8.2.4 R	LLD 17.4.3 R
8.2.5 R	LLD 17.4.4 R
8.2.6 R	LLD 17.4.6 R
8.2.7 G	LLD 17.4.12 G
8.2.8 R	LLD 17.4.7 R
8.2.9 R	LLD 17.4.8 R
8.2.10 G	LLD 17.4.9 G
8.2.11 R	LLD 17.4.13 R
8.2.12 R	LLD 17.4.14 R
8.2.13 R	LLD 17.4.15 R
8.2.14 G	LLD 17.5.1 G
8.2.15 G	LLD 17.5.2 G
8.2.16 R	LLD 17.5.3 R
8.2.17 R	LLD 17.6.1 R
8.2.18 R	LLD 17.6.2 R
8.2.19 R	LLD 17.7.1 R
8.2.20 R	LLD 17.7.2 R
8.2.21 R	LLD 17.7.3 R
8.2.22 R	LLD 17.7.4 R
8.2.23 R	LLD 17.8.1 R
8.2.24 R	LLD 17.8.2 R
8.2.25 R	LLD 17.8.3 R
8.2.26 R	LLD 17.8.4 R
8.2.27 G	LLD 17.8.5 G
8.2.28 R	LLD 17.8.6 R

8.2.29 G	LLD 17.8.7 G
8.3.1 R	LLD 3.1.1 R
8.3.2 G	LLD 3.1.3 G
8.3.3 D	LLD 3.1.4 D
8.3.4 D	LLD 3.1.5 D
8.3.5 G	LLD 3.2.1 G
8.3.6 G	LLD 3.2.2 G
8.3.7 D	LLD 3.2.3 D
8.4.1 R	LLD 4.1.1 R
8.4.2 G	LLD 4.1.3 G
8.4.3 R	LLD 4.2.1 R
8.4.4 G	LLD 4.2.2 G
8.4.5 G	LLD 4.2.3 G
8.4.6 G	LLD 4.2.5 G
8.4.7 G	LLD 4.2.7 G
8.5.1 R	LLD 5.1.1 R
8.5.2 G	LLD 5.1.3 G
8.5.3 R	LLD 5.2.1 R
8.5.4 R	LLD 5.2.2 R
8.6.1 R	LLD 18.4.1 R
8.6.2 R	LLD 18.4.2 R
8.6.3 R	LLD 20.2.1 R
8.6.5 R	LLD 20.2.2 R
8.6.3 R	LLD 21.2.1 R
8.6.5 R	LLD 21.2.2 R
8.6.3 R	LLD 22.2.1 R
8.6.5 R	LLD 22.2.2 R
8.6.4 R	LLD 24.2.1 R
9.1	PRU 1.8
TP 1	PRU TR 5
TP 2	PRU TR Table 10R
TP 3	New text
TP 4	New text
TP 5	New text

Annex B

Text of INSPRU

In this Annex, new text is not underlined and text that is deleted is not shown.

1.1 Capital resources requirements and technical provisions for insurance business

Application

1.1.1 R *INSPRU* 1.1 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*.

1.1.2 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.

1.1.3 R For a *non-EEA insurer* with a *branch* in the *United Kingdom* whose *insurance business* in the *United Kingdom* is not restricted to *reinsurance* (other than an *EEA-deposit insurer*, a *Swiss general insurer* or a *UK-deposit insurer*):

(1) the part of this section headed "Capital requirements for insurers" (*INSPRU* 1.1.43G to *INSPRU* 1.1.92BG) applies to its world-wide activities;

(2) the parts of this section headed:

(a) "Establishing technical provisions" (*INSPRU* 1.1.12R to *INSPRU* 1.1.19G);

(b) "Reinsurance and analogous non-reinsurance financing agreements: risk transfer principle" (*INSPRU* 1.1.19AR to *INSPRU* 1.1.19FG);

(c) "Assets of a value sufficient to cover technical provisions and other liabilities" (*INSPRU* 1.1.20R to *INSPRU* 1.1.29G);

(d) "Matching of assets and liabilities" (*INSPRU* 1.1.34R to *INSPRU* 1.1.40G); and

(e) "Premiums for new business" (*INSPRU* 1.1.41R to *INSPRU* 1.1.42G);

apply separately in respect of its world-wide activities and its activities carried on from a *branch* in the *United Kingdom*; and

(3) the part of this section headed "Localisation" (*INSPRU* 1.1.30R to *INSPRU* 1.1.33R) does not apply (see *INSPRU* 1.5 (Internal contagion risk)).

1.1.4 R For an *EEA-deposit insurer* or a *Swiss general insurer*:

(1) the parts of this section headed:

(a) "Establishing technical provisions" (*INSPRU* 1.1.12R to *INSPRU* 1.1.19G);

(b) "Reinsurance and analogous non-reinsurance financing agreements: risk transfer principle" (*INSPRU* 1.1.19AR to *INSPRU* 1.1.19FG);

(c) "Assets of a value sufficient to cover technical provisions and other liabilities" (*INSPRU* 1.1.20R to *INSPRU* 1.1.29G);

(d) "Matching of assets and liabilities" (*INSPRU* 1.1.34R to *INSPRU* 1.1.40G); and

(e) "Premiums for new business" (*INSPRU* 1.1.41R to *INSPRU* 1.1.42G);

apply in respect of the activities of the *firm* carried on from a *branch* in the *United Kingdom*; and

(2) the parts of this section headed "Capital requirements for insurers" (*INSPRU* 1.1.43G to *INSPRU* 1.1.92BG) and "Localisation" (*INSPRU* 1.1.30R to *INSPRU* 1.1.33R) do not apply.

1.1.5 R For a *UK-deposit insurer*:

(1) the part of this section headed "Capital requirements for insurers" (*INSPRU* 1.1.43G to *INSPRU* 1.1.92BG) applies to its world-wide activities;

(2) the parts of this section headed:

(a) "Establishing technical provisions" (*INSPRU* 1.1.12R to *INSPRU* 1.1.19G);

(b) "Reinsurance and analogous non-reinsurance financing agreements: risk transfer principle" (*INSPRU* 1.1.19AR to *INSPRU* 1.1.19FG);

(c) "Assets of a value sufficient to cover technical provisions and other liabilities" (*INSPRU* 1.1.20R to *INSPRU* 1.1.29G);

(d) "Matching of assets and liabilities" (*INSPRU* 1.1.34R to *INSPRU* 1.1.40G); and

(e) "Premiums for new business" (*INSPRU* 1.1.41R to *INSPRU* 1.1.42G);

apply separately in respect of its world-wide activities and its

activities carried on from *branches* in *EEA States*; and

(3) the part of this section headed "Localisation" (*INSPRU* 1.1.30R to *INSPRU* 1.1.33R) does not apply (see *INSPRU* 1.5 (Internal contagion risk)).

1.1.6 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*.

Purpose

1.1.7 G *INSPRU* 1.1 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.

1.1.8 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*.

1.1.9 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*).

1.1.10 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 *GENPRU* 2.1):

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

(2) the *long-term insurance capital requirement*.

1.1.11 G These requirements are dealt with in the part of this section headed "Capital requirements for insurers" (see *INSPRU* 1.1.43G to *INSPRU* 1.1.91R). 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 *INSPRU* 2.2.

Establishing technical provisions

1.1.12 R For *general insurance business*, a *firm* must establish adequate technical provisions:

(1) in accordance with the *rules* in *INSPRU* 1.4 for *equalisation provisions*; and

(2) otherwise, in accordance with *GENPRU* 1.3.4R.

1.1.13 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*).

1.1.14 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 *GENPRU* 2.2.107R 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*.

1.1.15 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 *INSPRU* 1.4 (*Equalisation provisions*)).

1.1.16 R For *long-term insurance business*, a *firm* must establish adequate technical provisions in respect of its *long-term insurance contracts* as follows:

(1) *mathematical reserves* in accordance with the *rules* and *guidance* in *INSPRU* 1.2 relating to such reserves, and with due regard to generally accepted actuarial practice; and

(2) for liabilities in respect of such contracts that have fallen due, in accordance with *GENPRU* 1.3.4R.

1.1.17 G *Rules* and *guidance* for calculating *mathematical reserves* are set out in *INSPRU* 1.2. *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 Board for Actuarial Standards to assist actuaries appointed to the *actuarial function* are important sources of evidence as to generally accepted actuarial practice, as

referred to in *INSPRU* 1.1.16R(1).

1.1.18 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 *INSPRU* 1.2 (*Mathematical reserves*)).

1.1.19 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 *INSPRU* 1.2).

Reinsurance and analogous non-reinsurance financing agreements: risk transfer principle

1.1.19A R (1) A *firm* may only take credit for *reinsurance* if and to the extent that there has been an effective transfer of risk from the *firm* to a third party.

(2) In *INSPRU* 1.1.19AR to *INSPRU* 1.1.19FG, references to *reinsurance* and contracts of *reinsurance* include:

(a) all contracts of *reinsurance* with an *ISPV*; and

(b) analogous non-*reinsurance* financing agreements.

1.1.19B R For the purposes of *INSPRU* 1.1.19AR(2)(b), analogous non-*reinsurance* financing agreements include contingent loans, securitisations and any other arrangements in respect of *contracts of insurance* that are analogous to contracts of *reinsurance* in terms of the risks transferred and the finance provided.

1.1.19C G There are a number of ways in which a *firm* may be able to take credit for *reinsurance* under the *rules* in *GENPRU* and *INSPRU*. Examples include:

(1) treating the *reinsurer's* share of *technical provisions* as an *admissible asset* in accordance with *GENPRU* 2 Ann 7R;

(2) reducing its solvency requirements in accordance with the deduction for *reinsurance* allowed in the calculation of the *general insurance capital requirement* or the *long-term insurance capital requirement* under *INSPRU* 1.1; and

(3) bringing into account amounts receivable under the contract when valuing cash flows for the purpose of a prospective valuation of *mathematical reserves* under *INSPRU* 1.2. In particular, a contingent loan or other analogous non-*reinsurance* financing agreement may then give rise to an addition to *capital resources* as a positive valuation difference in accordance with *GENPRU* 2.2.105R.

1.1.19D G The amount of credit taken by a *firm* for a risk transferred should be measured by applying the standard methods for determining the regulatory balance sheet set out in *INSPRU*. For example, where credit is being taken so as to reduce *technical provisions*, the amount of that credit should reflect the difference in *technical provisions* that arises from changing the assumptions used to reflect the risk transferred.

1.1.19E G For the purposes of *INSPRU* 1.1.19AR(1), the transfer of risk from the *firm* to the third party should be effective in all circumstances in which the *firm* may wish to rely upon the transfer. Examples of factors which the *firm* should take into account in assessing whether the transaction effectively transfers risk and the extent of that transfer include:

(1) whether the documentation associated with the *reinsurance* reflects the economic substance of the transaction;

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

(3) whether the transaction contains any terms or conditions the fulfilment of which is outside the direct control of the *firm*. Such terms or conditions may include those which:

(a) would allow the third party unilaterally to cancel the transaction, except for the non-payment of monies due from the *firm* to the third party under the contract; or

(b) would increase the effective cost of the transaction to the *firm* in response to an increased likelihood of the third party experiencing losses under the transaction; or

(c) would oblige the *firm* to alter the risk that had been transferred with the purpose of reducing the likelihood of the third party experiencing losses under the transaction; or

(d) would allow for the termination of the transaction due to an increased likelihood of the third party experiencing losses under the transaction; or

(e) could prevent the third party from being obliged to pay out in a timely manner any monies due under the transaction; or

(f) could allow the maturity of the transaction to be reduced;

(4) whether the transaction is legally effective and enforceable in all relevant jurisdictions.

1.1.19F G A *firm* should also take into account circumstances in which the benefit to the *firm* of the transfer of risk could be undermined. For instance, where the *firm*, with a view to reducing potential or actual losses to third parties, provides support to the transaction, including support beyond its contractual obligations (implicit support). Another example of a situation where the *firm* should consider whether it should take reduced credit for a transaction is where it has invested in the bonds issued by an *ISPV* with which it has reinsured risks.

Assets of a value sufficient to cover technical provisions and other liabilities

1.1.20 R A *firm* which is not a *composite firm* must hold *admissible assets* of a value at least equal to the amount of:

(1) the *technical provisions* that it is required to establish under *INSPRU* 1.1.12R or *INSPRU* 1.1.16R; and

(2) its other *general insurance liabilities* or *long-term insurance liabilities*;

but excluding *property-linked liabilities* and *index-linked liabilities* and the assets held to cover them under *INSPRU* 3.1.57R and *INSPRU* 3.1.58R.

1.1.21 R A *composite firm* must ensure that:

(1) it holds *admissible assets* separately identified in accordance with *INSPRU* 1.5.18R of a value at least equal to the amount of:

(a) the *technical provisions* that it is required to establish under *INSPRU* 1.1.16R; and

(b) its other *long-term insurance liabilities*;

but excluding *property-linked liabilities* and *index-linked liabilities* and the assets held to cover them under *INSPRU* 3.1.57R and *INSPRU* 3.1.58R; and

(2) it holds other *admissible assets* (other than those excluded under (1)) of a value at least equal to the amount of:

(a) the *technical provisions* that it is required to establish under *INSPRU* 1.1.12R; and

(b) its other *general insurance liabilities*.

1.1.22 G *INSPRU* 1.5 (Internal-contagion risk) sets out the *rules* and *guidance* on identifying and holding in a separate fund *long-term insurance assets*.

1.1.23 G When valuing assets for the purposes of *INSPRU* 1.1.20R and *INSPRU* 1.1.21R, a *firm* should bear in mind:

(1) that the *technical provisions* and other *long-term insurance liabilities* or *general insurance liabilities* should be covered by *admissible assets* (see

GENPRU 2 Annex 7R); and

(2) the market and *counterparty* limits set out in *INSPRU* 2.1 (Credit risk in insurance). *INSPRU* 2.1 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.

1.1.24 G *Rules* and *guidance* on the valuation of assets are set out in *GENPRU* 1.3 (Valuation), including the treatment of *shares* in, and debts due from, *related undertakings* in *GENPRU* 1.3.43R to *GENPRU* 1.3.54G. *INSPRU* 3.1 (Market risk in insurance) addresses *market risk* and sets out the matching requirements for linked assets and liabilities. *INSPRU* 3.1 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*.

1.1.25 R For the purpose of determining the value of assets available to meet *technical provisions* and other *long-term insurance liabilities* in accordance with *INSPRU* 1.1.20R, *INSPRU* 1.1.21R, *INSPRU* 1.1.27R and *INSPRU* 1.1.28R, no value is to be attributed to:

(1) debts owed by *reinsurers*; or

(2) *claims*; or

(3) tax recoveries; or

(4) claims against *compensation funds*;

to the extent already offset in the calculation of *technical provisions*.

1.1.26 G Certain debts and claims are excluded from *INSPRU* 1.1.20R, *INSPRU* 1.1.21R, *INSPRU* 1.1.27R and *INSPRU* 1.1.28R to avoid double-counting. The *rules* and *guidance* in *INSPRU* 1.2 (*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*.

1.1.27 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:

(1) the *technical provisions* in respect of all the business written in that *with-profits fund*; and

(2) its other *long-term insurance liabilities* in respect of that *with-profits fund*.

1.1.28 R In addition to complying with *INSPRU* 1.1.27R, 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.

1.1.29 G *INSPRU* 1.1.27R and *INSPRU* 1.1.28R support the funding of *policyholder* benefits by requiring *firms* to maintain *admissible assets* in *with-profits funds* to cover the *technical provisions* and other *long-term insurance liabilities* 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)

1.1.30 R (1) Subject to (2), a *UK firm* must hold *admissible assets* held pursuant to *INSPRU* 3.1.53R:

(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*.

1.1.31 G *INSPRU* 1.5 (Internal contagion risk) sets out the *rules* and *guidance* on localisation for *firms* other than *UK firms*.

1.1.32 R *INSPRU* 1.1.30R 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.

1.1.33 R For the purposes of *INSPRU* 1.1.30R:

(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

1.1.34 R (1) Subject to (4), the assets held by a *firm* to cover its *technical provisions* and other *long-term insurance liabilities* or *general insurance liabilities* (see *INSPRU* 1.1.20R and *INSPRU* 1.1.21R) 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:

(a) a *pure reinsurer*; or

(b) 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.

1.1.34A G *INSPRU* 1.1.34R is not applied to *pure reinsurers* because they are subject under *INSPRU* 3.1.61AR to the "prudent person" investment principles from the *Reinsurance Directive*.

1.1.35 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* and other *long-term insurance liabilities* or *general insurance liabilities* meet the requirements of *INSPRU* 1.1.34R(2).

1.1.36 G For the purpose of *INSPRU* 1.1.34R(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* and other *long-term insurance liabilities* or *general insurance liabilities*. 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.

1.1.37 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.

1.1.38 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.

1.1.39 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.

1.1.40 G *INSPRU* 1.1.20R 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 *technical provisions* and other *long-term insurance liabilities*. The *INSPRU* 1.1.34R(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 *INSPRU* 1.1.20R.

Premiums for new business

1.1.41 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 *INSPRU* 1.1.16R;

(b) hold *admissible assets* of a value at least equal to the amount of the *technical provisions* and other *long-term insurance liabilities* as required by *INSPRU* 1.1.20R to *INSPRU* 1.1.28R; and

(c) maintain adequate overall financial resources as required by the *overall financial adequacy rule* .

1.1.42 G For the purposes of *INSPRU* 1.1.41R, 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

1.1.43 G (1) *GENPRU* 2.1.13R requires a *firm* to maintain *capital resources* equal to or in excess of its *capital resources requirement* (*CRR*). *GENPRU* 2.1 sets out the overall framework of the *CRR*; in particular, *GENPRU* 2.1.17R requires that for a *firm* carrying on *general insurance business* the *CRR* is equal to the *minimum capital requirement* (*MCR*). *GENPRU* 2.1.18R requires that for *realistic basis life firms* the *CRR* is the higher of the *MCR* and the *ECR*. *GENPRU* 2.1.23R 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*. *GENPRU* 2.1.24R 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*. *GENPRU* 2.1.25R 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 *GENPRU* 2.1.14R, a *firm* carrying on both *general insurance business* and *long-term insurance business* must apply *GENPRU* 2.1.13R (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 *INSPRU* 1.1.44G to *INSPRU* 1.1.72R below. *INSPRU* 1.1.73G to *INSPRU* 1.1.79R 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 *INSPRU* 1.1.80G to *INSPRU* 1.1.91R below.

General insurance capital requirement

1.1.44 G In relation to the *MCR* (see *INSPRU* 1.1.43G), *GENPRU* 2.1.34R 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 *INSPRU* 1.1 as follows:

(1) the *premiums amount* in *INSPRU* 1.1.45R;

(2) the *claims amount* in *INSPRU* 1.1.47R; and

(3) the *brought forward amount* in *INSPRU* 1.1.51R.

The premiums amount

1.1.45 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 €53.1 million; multiplied by

(2) the reinsurance ratio set out in *INSPRU* 1.1.54R.

1.1.46 G *Rules* and *guidance* as to how the *gross adjusted premiums amount* is to be calculated are set out in *INSPRU* 1.1.56R to *INSPRU* 1.1.59G.

The claims amount

1.1.47 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 €37.2 million; multiplied by

(2) the reinsurance ratio set out in *INSPRU* 1.1.54R.

1.1.48 G *Rules* and *guidance* as to how the *gross adjusted claims amount* is to be calculated are set out in *INSPRU* 1.1.60R to *INSPRU* 1.1.65G.

1.1.49 G (1) Under the *Insurance Directives* the Euro amounts specified in *INSPRU* 1.1.45R(1) and *INSPRU* 1.1.47R(1) are subject to annual review. The relevant amounts will be increased 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, provided that where the percentage change since the last increase is less than 5%, no increase will take place.

(2) No provision for the index-linking of these amounts is made by the *Reinsurance Directive*. However, to ensure consistency as between *pure reinsurers*, *mixed insurers* and other *insurers*, the *FSA* intends to amend the Euro amounts specified in *INSPRU* 1.1.45R(1) and *INSPRU* 1.1.47R(1) for all such *firms* when an index-linked increase is required by the *Insurance Directives.*

1.1.50 R For the purposes of *INSPRU* 1.1.45R(1) and *INSPRU* 1.1.47R(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

1.1.51 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 *INSPRU* 1.1.12R; to

(2) the *technical provisions* (calculated net of *reinsurance*) for *claims* outstanding at the beginning of the prior *financial year*, determined in accordance with *INSPRU* 1.1.12R.

1.1.52 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.

1.1.53 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

1.1.54	R	The reinsurance ratio referred to in *INSPRU* 1.1.45R(2) and *INSPRU* 1.1.47R(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.
1.1.54A	G	For the treatment of amounts recoverable from *ISPVs* when calculating the reinsurance ratio, see *INSPRU* 1.1.92AR and *INSPRU* 1.1.92BG.
1.1.55	G	*Rules* and *guidance* as to how the net and gross *claims* are to be calculated are set out in *INSPRU* 1.1.66R to *INSPRU* 1.1.71R.
		Gross adjusted premiums amount used in calculating the premiums amount
1.1.56	R	For the purpose of *INSPRU* 1.1.45R, the *gross adjusted premiums amount* is the higher of the *gross written premiums* and *gross earned premiums* (as adjusted in accordance with *INSPRU* 1.1.66R) for the *financial year in question*, adjusted by: (1) except for a *pure reinsurer* which became a *firm in run-off* before 31 December 2006 and whose *Part IV permission* has not subsequently been varied to add back the *regulated activity* of *effecting 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 *INSPRU* 1.1.72R; 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*.
1.1.57	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 *INSPRU* 1.1.56R.
1.1.58	G	*General insurance business classes* 11, 12 and 13 are, respectively, the marine liability, aviation liability and general liability insurance classes.
1.1.59	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

1.1.60 R For the purpose of *INSPRU* 1.1.47R and subject to *INSPRU* 1.1.62R, the *gross adjusted claims amount* is the amount of gross *claims* incurred (as determined in accordance with *INSPRU* 1.1.66R) over the reference period (as specified in *INSPRU* 1.1.63R) and adjusted by:

(1) except for a *pure reinsurer* which became a *firm in run-off* before 31 December 2006 and whose *Part IV permission* has not subsequently been varied to add back the *regulated activity* of *effecting 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 *INSPRU* 1.1.72R; 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.

1.1.61 G A *firm* may use statistical methods in order to allocate *claims* in respect of *classes* 11, 12 and 13 for the purposes of *INSPRU* 1.1.60R.

1.1.62 R For the purposes of *INSPRU* 1.1.47R, 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.

1.1.63 R (1) Except in those cases where paragraph (2) applies, the reference period to be used in *INSPRU* 1.1.60R and *INSPRU* 1.1.62R 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.

1.1.64 G The classification of the risks referred to in *INSPRU* 1.1.63R(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.

1.1.65 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

1.1.66 R For the purposes of *INSPRU* 1.1.54R, *INSPRU* 1.1.56R, *INSPRU* 1.1.60R and *INSPRU* 1.1.62R, amounts of *premiums* and *claims* must be:

(1) determined in accordance with the *insurance accounts rules* or the Friendly Societies (Accounts and Related Provisions) Regulations 1994, as appropriate; 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*.

1.1.67 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 *INSPRU* 1.1.66R 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.

1.1.68 G *INSPRU* 1.1.66R(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*.

1.1.69 G Conversely, *INSPRU* 1.1.66R(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.

1.1.70 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.

1.1.71 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 the *insurance accounts rules* or the Friendly Societies (Accounts and Related Provisions) Regulations 1994, as appropriate.

Actuarial health insurance

1.1.72 R The conditions referred to in *INSPRU* 1.1.56R(2) and *INSPRU* 1.1.60R(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)

1.1.73 G *INSPRU* 7.1.11R 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 *INSPRU* 2.2. Details of the calculation of the *insurance-related capital requirement* are set out in *INSPRU* 1.1.76R to *INSPRU* 1.1.79R.

1.1.74 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.

1.1.75 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 *GENPRU* 1.3.4R which sets out how a *firm* must recognise and value assets and liabilities.

Calculation of the insurance-related capital requirement

1.1..76 R A *firm* must calculate its *insurance-related capital requirement* in accordance with *INSPRU* 1.1.77R.

1.1.77 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 *INSPRU* 1.1.79R 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).

1.1.78 R In *INSPRU* 1.1.77R 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.

1.1.79 R Table: Insurance-related Capital Charge Factors

Class of Business	Net Written Premium	Technical provision

	capital charge factor	capital charge factor
Reporting Group: Direct and facultative business		
Direct and facultative accident and health	5.0%	7.5%
Direct and facultative personal lines motor business	10.0%	9.0%
Direct and facultative household and domestic all risks	10.0%	10.0%
Direct and facultative personal lines financial loss	25.0%	14.0%
Direct and facultative commercial motor business	10.0%	9.0%
Direct and facultative commercial lines property	10.0%	10.0%
Direct and facultative commercial lines liability	14.0%	14.0%
Direct and facultative commercial lines financial loss	25.0%	14.0%
Direct and facultative aviation	32.0%	14.0%
Direct and facultative marine	22.0%	17.0%
Direct and facultative goods in transit	12.0%	14.0%
Direct and facultative miscellaneous	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	53.0%	12.0%

Non-proportional liability (non-motor)	14.0%	14.0%
Non-proportional financial lines	39.0%	14.0%
Non-proportional aggregate cover	53.0%	12.0%
Reporting Group: Proportional Treaty		
Proportional accident & health	12.0%	16.0%
Proportional 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 financial lines	25.0%	14.0%
Proportional aggregate cover	23.0%	12.0%
Reporting Group: Miscellaneous Reinsurance		
Miscellaneous reinsurance accepted business	39.0%	14.0%

Long-term insurance capital requirement

1.1.80 G *GENPRU* 2.1.13R requires an *insurer* to maintain *capital resources* equal to or in excess of its *capital resources requirement*. *GENPRU* 2.1.18R 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*. Except where the *base capital resources requirement* is the higher requirement, the *MCR* in respect of *long-term insurance business* is the sum of the *long-term insurance capital requirement* (*LTICR*) and the *resilience capital requirement* (see *GENPRU* 2.1.25R and *GENPRU* 2.1.26R). *GENPRU* 2.1.36R defines the *LTICR* as the sum of the *insurance death risk*, *health risk and life protection reinsurance*, *expense risk*, and *market risk capital components* (see *INSPRU* 1.1.81R to *INSPRU* 1.1.91R). *Rules* and *guidance* about the *resilience capital requirement* are set out in *INSPRU* 3.1.9G to *INSPRU* 3.1.26R.

Insurance death risk capital component

1.1.81 R The *insurance death risk capital component* is the aggregate of the amounts which represent the fractions specified by *INSPRU* 1.1.82R of the capital at risk, defined in *INSPRU* 1.1.83R, for each category of *contracts of insurance* (as specified in *INSPRU* 1.1.81AR), in respect of 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 *financial year in question* of:

(a) the aggregate capital at risk in respect of that category of contracts net of *reinsurance* cessions; to

(b) the aggregate capital at risk in respect of that category of contracts gross of *reinsurance* cessions.

1.1.81A R For the purpose of *INSPRU* 1.1.81R, the categories of *contracts of insurance* are as follows:

(1) contracts which fall in *long-term insurance business classes* I, II or IX; and

(2) contracts which fall in *long-term insurance business classes* III, VII or VIII.

1.1.82 R For the purpose of *INSPRU* 1.1.81R, 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*.

1.1.83 R For the purpose of *INSPRU* 1.1.81R, 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.

1.1.83A R *INSPRU* 1.1.81R does not apply to:

(1) a *pure reinsurer*; or

(2) a *mixed insurer*;

in respect of *life protection reinsurance business*.

1.1.84 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) which also applies to the risk of death covered in the *life protection reinsurance business* of *pure reinsurers* and *mixed insurers*. *Tontines* (*class* V) and *capital redemption* operations (*class* VI) also have separate risk components. There is no specified risk margin for other insured risks.

1.1.84A G For the treatment of amounts recoverable from *ISPVs* when calculating the *insurance death risk capital component* in accordance with *INSPRU* 1.1.81R, see *INSPRU* 1.1.92AR and *INSPRU* 1.1.92BG.

Insurance health risk and life protection reinsurance capital component

1.1.85 R The *insurance health risk and life protection reinsurance capital component* is the highest of:

(1) the *premiums amount* (determined in accordance with *INSPRU* 1.1.45R);

(2) the *claims amount* (determined in accordance with *INSPRU* 1.1.47R); and

(3) the *brought forward amount* (determined in accordance with *INSPRU* 1.1.51R);
in respect of:

(a) *contracts of insurance* falling in *long-term insurance business class* IV (see *INSPRU* 1.1.86R);

(b) risks falling in *general insurance business classes* 1 or 2 that are written as part of a *long-term insurance contract*; and

(c) in the case of a *pure reinsurer* or a *mixed insurer*, *life protection reinsurance business*.

1.1.86 R For the purposes of *INSPRU* 1.1.85R, in the case of *contracts of insurance* falling in *long-term insurance business class* IV, condition (3) as set out in *INSPRU* 1.1.72R (*Actuarial health insurance*) is modified to: "either the reserves include a provision for increasing age, or the business is conducted on a group basis.".

1.1.87 G The *insurance health risk and life protection reinsurance capital component* only applies to *permanent health* insurance (*long-term insurance business class* IV), *accident* and *sickness* insurance (*general insurance business classes* 1 and 2) and the *life protection reinsurance business* of *pure reinsurers* and *mixed insurers*.

Insurance expense risk capital component

1.1.88 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 *financial*

year in question 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 *INSPRU* 1.1.89AR).

1.1.88A R *INSPRU* 1.1.88R does not apply to:

(1) a *pure reinsurer*; or

(2) a *mixed insurer*;

in respect of:

(a) *life protection reinsurance business*; or

(b) *permanent health reinsurance business*.

Insurance market risk capital component

1.1.89 R The *insurance market risk capital component* is 3% of the "adjusted *mathematical reserves*" (as defined in *INSPRU* 1.1.89AR) for all insurance liabilities except those of a kind which:

(1) arise from *contracts of insurance* falling in *long-term insurance business classes* III, VII or VIII to the extent that the *firm* does not bear any investment risk; or

(2) arise from *contracts of insurance* falling in *long-term insurance business class* V; or

(3) for a *pure reinsurer* or a *mixed insurer*, arise from *contracts of insurance* falling within:

(a) its *life protection reinsurance business*; or

(b) its *permanent health reinsurance business*.

Adjusted mathematical reserves

1.1.89A R (1) For the purpose of *INSPRU* 1.1.88R and *INSPRU* 1.1.89R, the "adjusted *mathematical reserves*" is the aggregate of the amounts which result from the performance of the calculation in *INSPRU* 1.1.90R for each category of insurance liability specified in (2).

(2) The categories of insurance liability referred to in (1) are:

(a) for the purpose of *INSPRU* 1.1.88R, those categories described in

INSPRU 1.1.91R (1), (2), (3), (4) and (5); and

(b) for the purpose of *INSPRU* 1.1.89R, those categories described in *INSPRU* 1.191R (1), (2), (4) and (5).

1.1.90 R The calculation referred to in *INSPRU* 1.1.89AR (1) is the multiplication of the amount of the *mathematical reserves* (gross of *reinsurance* cessions) in respect of a category of insurance liability 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 *financial year in question* of:

(a) the *mathematical reserves* in respect of that category of insurance liability net of *reinsurance* cessions; to

(b) the *mathematical reserves* in respect of that category of insurance liability gross of *reinsurance* cessions.

1.1.91 R For the purpose of *INSPRU* 1.1.89AR and *INSPRU* 1.1.90R, the categories of insurance liability are as follows:

(1) liabilities of a kind which arise from *contracts of insurance* falling in *long-term insurance business classes* I, II or IX;

(2) liabilities of a kind which arise from *contracts of insurance* falling in *long-term insurance business classes* III, VII or VIII to the extent that the *firm* bears an investment risk;

(3) liabilities of a kind which arise from *contracts of insurance* falling in *long-term insurance business classes* III, VII or VIII to the extent that the *firm* bears no investment risk and where the allocation to cover *management expenses* in the *contract of insurance* has a fixed upper limit which is effective as a limit for a period exceeding 5 years from the commencement of the contract;

(4) liabilities of a kind which arise from *contracts of insurance* falling in *long-term insurance business class* IV; and

(5) liabilities of a kind which arise from *contracts of insurance* falling in *long-term insurance business class* VI.

1.1.92 G Where a *firm* has written a unit-linked contract, the *firm's* liability under the contract may consist of a unit liability, where the *firm* bears no investment risk, and other liabilities for which the firm bears an investment risk, and for which a separate reserve is held. *INSPRU* 1.1.91R(2) and (3) require a *firm* to analyse its liabilities under unit-linked contracts between those for which it bears an investment risk and those for which it does not. *INSPRU* 1.1.88R and *INSPRU* 1.1.89R taken together result in a capital requirement for any liabilities for which the *firm* bears an investment risk of 4% of "adjusted *mathematical reserves*" (1% for expense risk and 3% for market risk).

Insurance special purpose vehicles

1.1.92A R A *firm* must not treat any amounts recoverable from an *ISPV* as *reinsurance* for the purposes of the calculation of:

(1) the reinsurance ratio in accordance with *INSPRU* 1.1.54R; or

(2) the *insurance death risk capital component* in accordance with *INSPRU* 1.1.81R; or

(3) the "adjusted *mathematical reserves*" in accordance with *INSPRU* 1.1.90R.

1.1.92B G A *firm* may treat amounts recoverable from an *ISPV* as *reinsurance* for these purposes if it obtains a *waiver* of *INSPRU* 1.1.92AR under section 148 of the *Act*. The conditions that will need to be met, in addition to the statutory tests under section 148(4) of the *Act*, before the *FSA* will consider granting such a *waiver* are set out in *INSPRU* 1.6.13G to *INSPRU* 1.6.18G.

Application of INSPRU 1.1 to Lloyd's

1.1.93 R *INSPRU* 1.1 applies to the *Society* in accordance with *INSPRU* 8.1.2R.

1.1.94 R The following *rules* and *guidance* apply to *managing agents* in accordance with *INSPRU* 8.1.4R:

(1) *INSPRU* 1.1.13G to *INSPRU* 1.1.20R (except *INSPRU* 1.1.13R(1));

(2) *INSPRU* 1.1.42G to *INSPRU* 1.1.43G; and

(3) *INSPRU* 1.1.74G to *INSPRU* 1.1.80G.

1.1.95 R The *Society* must calculate the *brought forward amount* for the *members* in aggregate in accordance with *INSPRU* 1.1.51R, using the result of *GENPRU* 2.3.6R for the prior *financial year* and the aggregate of all *members' technical provisions* for the relevant periods.

1.1.96 R For the purposes of *INSPRU* 1.1.66R and further to that *rule*, in the case of Lloyd's *members*, amounts of *premiums* and *claims* must be adjusted for *approved reinsurance to close* to exclude any amount included in, or adjustment made to, *premiums* and *claims* to reflect the consideration for an *approved reinsurance to close*.

1.2 Mathematical reserves

Application

1.2.1 R *INSPRU* 1.2 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

1.2.2 G This section follows on from the overall requirement on *firms* to establish adequate *technical provisions* (see *INSPRU* 1.1.16R). The *mathematical reserves* form the main component of *technical provisions* for *long-term insurance business*. *INSPRU* 1.2 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 *INSPRU* 1.2.7R to *INSPRU* 1.2.27G.

1.2.3 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 *INSPRU* 1.2.7R).

1.2.4 G The required procedures are summarised in the flowchart in *INSPRU* 1 Annex 1G.

1.2.5 G *Firms* to which *GENPRU* 2.1.18R applies are required to calculate a *with-profits insurance capital component* (see *GENPRU* 2.1.38R). 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 *INSPRU* 1.3), 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 *INSPRU* 1.2.46R and *INSPRU* 1.2.76R) compared with those that apply to *firms* that report on a regulatory basis only (*regulatory basis only life firms*).

1.2.6 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

1.2.7 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.

1.2.8 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.

1.2.9 R Except in *INSPRU* 1.2.71R(1), *INSPRU* 1.2 does not apply to *final bonuses*. In addition, for *realistic basis life firms* only, *INSPRU* 1.2 does not apply to other discretionary benefits, including future *annual bonuses*.

Methods and assumptions

1.2.10 R In the actuarial valuation under *INSPRU* 1.2.7R, 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 *INSPRU* 1.2.11G);
(3) are consistent with the method of valuing assets (see *GENPRU* 1.3);
(4) include appropriate margins for adverse deviation of relevant factors (see *INSPRU* 1.2.12G);
(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.

1.2.11 G *INSPRU* 1.2.10R(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.

1.2.12 G The relevant factors referred to in *INSPRU* 1.2.10R(4) may include, but are not limited to, factors such as future investment returns, expenses, mortality, morbidity, options, persistency and *reinsurance* (see also *INSPRU* 1.2.13R to *INSPRU* 1.2.19G).

Margins for adverse deviation

1.2.13 R The appropriate margins for adverse deviation required by *INSPRU* 1.2.10R (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.

1.2.14 G The margins for adverse deviation are a prudential margin in respect of the risks that arise under a *long-term insurance contract*.

1.2.15 G *INSPRU* 1.2.13R sets the normal standard of prudence required for margins. *INSPRU* 1.2.16G suggests benchmarks against which a *firm* should compare the margins it has set in accordance with *INSPRU* 1.2.10R(4) and *INSPRU* 1.2.13R. *INSPRU* 1.2.17G gives *guidance* where a market risk premium is not readily obtainable.

1.2.16 G When setting the margins for adverse deviation required by *INSPRU* 1.2.10R(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.

1.2.17 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.

1.2.18 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.

1.2.19 G Further detailed *rules* and *guidance* on margins for adverse deviation are included in *INSPRU* 1.2.32G to *INSPRU* 1.2.89G. In particular, the cross-references for the different assumptions used in calculating the

mathematical reserves are as follows:
(1) expenses (*INSPRU* 1.2.50R to *INSPRU* 1.2.58G);
(2) mortality and morbidity (*INSPRU* 1.2.59R to *INSPRU* 1.2.61G);
(3) options (*INSPRU* 1.2.62R to *INSPRU* 1.2.72G);
(4) persistency (*INSPRU* 1.2.73G to *INSPRU* 1.2.77G); and
(5) *reinsurance* (*INSPRU* 1.2.77AR to *INSPRU* 1.2.89G).
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 *INSPRU* 3.1.28R to *INSPRU* 3.1.48G.

Record keeping

1.2.20 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*.

1.2.21 G *SYSC* 14.1.53 R requires *firms* to maintain accounting and other records for a minimum of three years, or longer as appropriate. For the purposes of *INSPRU* 1.2.20R, 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 *SYSC* 14.1.51G - *SYSC* 14.1.64G;
(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

1.2.22 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.

1.2.23 G *INSPRU* 1.2.22R to *INSPRU* 1.2.89G 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 *INSPRU* 1.2.22R(2) are satisfied.

Contracts not to be treated as assets

1.2.24 R (1) A *firm* must not treat a *long-term insurance contract* as an asset.

(2) (1) does not apply to a *pure reinsurer* in respect of a *contract of insurance* which does not have a guaranteed *surrender value* and falls within:

(a) its *life protection reinsurance business*; or

(b) its *permanent health reinsurance business*.

(3) Notwithstanding (2), the total *mathematical reserves* established by a *pure reinsurer* must have a minimum value of at least zero.

1.2.25 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 *Consolidated Life Directive* requires that no contract should be valued at less than its guaranteed *surrender value*. As a result, no contract with a guaranteed *surrender value* to which the *Consolidated Life Directive* applies should be treated as an asset. Although the *Reinsurance Directive* does not require this treatment of contracts with guaranteed *surrender values* to be applied to *pure reinsurers*, the *FSA's* policy is that there should be equal treatment in this respect. *Pure reinsurers* may therefore treat as an asset a contract written as part of carrying on *life protection reinsurance business* or *permanent health reinsurance business* provided that this is based on assumptions which meet the general requirements for prudent assumptions as set out in *INSPRU* 1.2.10R and *INSPRU* 1.2.13R and it is not written on terms that provide for a guaranteed *surrender value*. This does not, however, allow a *pure reinsurer* to establish total *mathematical reserves* which are negative.

Avoidance of future valuation strain

1.2.26 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.

1.2.27 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 *INSPRU* 1.2.13R). *INSPRU* 1.2.26R 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

1.2.28 R In a prospective valuation, a *firm* must:
(1) include in the cash flows to be valued the following:
(a) future *premiums* (see *INSPRU* 1.2.35G to *INSPRU* 1.2.47G);
(b) expenses, including *commissions* (see *INSPRU* 1.2.50 R to *INSPRU* 1.2.58G);
(c) benefits payable (see *INSPRU* 1.2.29R); and
(d) subject to (2), amounts to be received or paid in respect of the *long-term insurance contracts* under contracts of *reinsurance* or analogous non-*reinsurance* financing agreements (see *INSPRU* 1.2.77AR to *INSPRU* 1.2.89G); but
(2) exclude from those cash flows amounts recoverable from an *ISPV*.

1.2.28A G A *firm* may include amounts recoverable from an *ISPV* in the cash flows to be valued in a prospective valuation if it obtains a *waiver* of *INSPRU* 1.2.28R under section 148 of the *Act*. The conditions that will need to be met, in addition to the statutory tests under section 148(4) of the *Act*, before the *FSA* will consider granting such a *waiver* are set out in *INSPRU* 1.6.13G to *INSPRU* 1.6.18G.

1.2.29 R For the purpose of *INSPRU* 1.2.28R(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.

1.2.30 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 *INSPRU* 1.2.22R(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 *INSPRU* 1.2.43R below). For the purposes of *INSPRU* 1.2.28R(2), any charges included in expenses should be determined in accordance with the *firm's* regulatory duty to treat its *customers* fairly.

1.2.31 G *INSPRU* 1.2.29R(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 except in relation to *accumulating with-profits policies* (see *INSPRU* 1.2.9R). The calculations required for *accumulating with-profits policies* are set out in *INSPRU* 1.2.71R(1). For *realistic basis life firms*, except for *accumulating with-profits policies*, the *mathematical reserves* may be calculated without taking into account discretionary benefits, including both *annual bonuses* and *final bonuses*. For such *firms* full allowance for discretionary benefits is made in the calculation of the *realistic value of liabilities* (see *INSPRU* 1.3.105R(5)).

Valuation assumptions: detailed rules and guidance

1.2.32 G More detailed *rules* and *guidance* about the valuation of cash flows are set out in *INSPRU* 1.2.33R to *INSPRU* 1.2.89G.

Valuation rates of interest

1.2.33 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 *INSPRU* 3.1.28R to *INSPRU* 3.1.47R.

1.2.34 G The *rules* in *INSPRU* 3.1.28R to *INSPRU* 3.1.47R 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 *INSPRU* 3.1.28R to *INSPRU* 3.1.47R 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

1.2.35 G *INSPRU* 1.2.46R and *INSPRU* 1.2.47G apply to the valuation of *with-profits insurance liabilities* for a *realistic basis life firm*. *INSPRU* 1.2.38R to *INSPRU* 1.2.45G apply to a *regulatory basis only life firm*.

1.2.36 G For *non-profit insurance contracts* no specific method of valuation for future *premiums* is required by *INSPRU*. 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

1.2.37 R *INSPRU* 1.2.38R to *INSPRU* 1.2.43R apply to a *regulatory basis only life firm*.

1.2.38 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 *INSPRU* 1.2.43R.

1.2.39 G The valuation method for future *premiums* in *INSPRU* 1.2.38R 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.

1.2.40 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 *INSPRU* 1.2.41R in determining the *net premium* for the purpose of *INSPRU* 1.2.38R(2)(b).

1.2.41 R A *firm* must treat the change referred to in *INSPRU* 1.2.40R 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.

1.2.42 G *INSPRU* 1.2.41R 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

1.2.43 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.

1.2.44 G *INSPRU* 1.2.43R 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.

1.2.45 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

1.2.46 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 *INSPRU* 1.2.48R).

1.2.47 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 *INSPRU* 1.2.37R to *INSPRU* 1.2.45G).

Future premiums: accumulating with-profits policies

1.2.48 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*.

1.2.49 G *INSPRU* 1.2.48R 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

1.2.50 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.

1.2.51 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 *INSPRU* 1.2.43R. 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.

1.2.52 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.

1.2.53 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.

1.2.54 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.

1.2.55 R The provisions for expenses (whether implicit or explicit) required by *INSPRU* 1.2.50R 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.

1.2.56 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 *INSPRU* 1.2.13R to *INSPRU* 1.2.19G). 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.

1.2.57 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.

1.2.58 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

1.2.59 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.

1.2.60 G The rates of mortality or morbidity should contain prudent margins for adverse deviation (see *INSPRU* 1.2.13R to *INSPRU* 1.2.19G). 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.

1.2.61 G An additional provision for diseases covered by *INSPRU* 1.2.60G(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

1.2.62 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.

1.2.63 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.

1.2.64 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 *INSPRU* 1.2.74R), 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.

1.2.65 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.

1.2.66 G In accordance with *INSPRU* 1.2.7R and *INSPRU* 1.2.13R, take-up rates for guaranteed annuity options should be assessed on a prudent basis with assumptions that include margins for adverse deviation (see *INSPRU* 1.2.13R to *INSPRU* 1.2.19G) 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.

1.2.67 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.

1.2.68 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.

1.2.69 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*.

1.2.70 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 *INSPRU* 1.2.7R 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 except where the cash amount or series of cash payments is the amount or amounts likely to be paid on a voluntary discontinuance.

1.2.71 R For the purposes of *INSPRU* 1.2.70R, 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*.

1.2.72 G *INSPRU* 1.2.71R(1) applies only to *accumulating with-profits policies*; *INSPRU* 1.2.71R(2) applies to any other type of *policy*, including *non-profit insurance contracts*. In *INSPRU* 1.2.71R(1)(a) a *firm* 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, must not be included in the amount calculated in *INSPRU* 1.2.71R(1)(b).

Persistency assumptions

1.2.73 G *INSPRU* 1.2.76R and *INSPRU* 1.2.77G apply to the valuation of the *with-profits insurance liabilities* of *realistic basis life firms*. *INSPRU* 1.2.76AR and *INSPRU* 1.2.77G apply to the valuation of liabilities arising from the *life protection reinsurance business* and *permanent health reinsurance business* of *pure reinsurers*. *INSPRU* 1.2.74R and *INSPRU* 1.2.75G apply to the valuation of all other liabilities.

1.2.74 R Except as permitted by *INSPRU* 1.2.76R and *INSPRU* 1.2.76AR, 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.

1.2.75 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, *INSPRU* 1.2.74R 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.

1.2.76 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 *INSPRU* 1.2.10R and *INSPRU* 1.2.13R.

1.2.76A R A *pure reinsurer* may make assumptions about voluntary discontinuance rates in the calculation of the *mathematical reserves* in respect of *contracts of insurance* falling within:

(1) its *life protection reinsurance business*; or

(2) its *permanent health reinsurance business*;

provided that those assumptions meet the general requirements for prudent assumptions as set out in *INSPRU* 1.2.10R and *INSPRU* 1.2.13R.

1.2.77 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

1.2.77A R In *INSPRU* 1.2.78G to *INSPRU* 1.2.89G references to:
(1) *reinsurance* and contracts of *reinsurance* include analogous non-*reinsurance* financing agreements, including contingent loans, securitisations and any other arrangements in respect of *contracts of insurance* that are analogous to contracts of *reinsurance* in terms of the risks transferred and the finance provided;
(2) reinsured risks, in relation to a contract of *reinsurance* entered into by a *firm*, means that part of:
(a) the risks insured by the *firm* under *long-term insurance contracts* entered into by it; and
(b) the other risks arising directly from the *firm's long-term insurance business*;
that have been transferred to the *reinsurer* under that contract of *reinsurance*; and
(3) *reinsurance* cash outflows include any reduction in *policy* liabilities recognised as covered under a contract of *reinsurance* or any reduction of any debt to the *firm* under or in respect of a contract of *reinsurance*.

1.2.78 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 *INSPRU* 1.2.28R(4)). This applies even where those cash flows cannot be

identified as related to particular *long-term insurance contracts* (see *INSPRU* 1.2.22R(3)).

1.2.79 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 *INSPRU* 1.2.85R); and
(3) *reinsurance* cash inflows that are contingent on factors or conditions other than the reinsured risks must not be valued.

1.2.80 G In valuing *reinsurance* cash flows, a *firm* should establish prudent margins for adverse deviation (see *INSPRU* 1.2.13R to *INSPRU* 1.2.19G) 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*.

1.2.81 G In assessing the risk of credit default, the *firm* should take into account the *rules* and *guidance* in *INSPRU* 2.1 (Credit risk in insurance).

1.2.82 G It will not necessarily be appropriate to use the same assumptions in *INSPRU* 1.2.79R 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.

1.2.83 G Only *reinsurance* cash inflows that are triggered unambiguously by the reinsured risks 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.

1.2.84 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 *INSPRU* 1.2.79R. 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*.

1.2.85 R For the purposes of *INSPRU* 1.2.79R(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 in the contract of *reinsurance* as a result of:

(1) fraudulent conduct by the *firm* under or in relation to the contract of *reinsurance*; or
(2) a representation as to the existence, at or before the time the contract of *reinsurance* is entered into, of a state of affairs which is within the knowledge or control of the *firm* and which is material to the *reinsurer's* decision to enter into the contract being discovered to be false; or
(3) the non-payment of *reinsurance premiums* by the *firm*; or
(4) a transfer by the *firm* of the whole or a specified part of its business without the agreement of the *reinsurer*, except where that agreement has been unreasonably withheld.

1.2.86 R For the purposes of *INSPRU* 1.2.79R(2) and *INSPRU* 1.2.85R, 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.

1.2.87 G For the purposes of *INSPRU* 1.2.85R, 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.

1.2.88 G *INSPRU* 1.2.85R 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, material misrepresentation, non-payment of *reinsurance premiums* by the *firm* or a transfer of business by the *firm* without the agreement of the *reinsurer*, except if unreasonably withheld.

1.2.89 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 *INSPRU* 1.2.85R) 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.

1.2.90 R [deleted]

1.2.91 G [deleted]

Application of INSPRU 1.2 to Lloyd's

1.2.92 R *INSPRU* 1.2 applies to *managing agents* in accordance with *INSPRU* 8.1.4R.

Approved reinsurance to close

1.2.93 R In respect of business that has been subject to an *approved reinsurance to close*, *managing agents* must calculate *mathematical reserves* (before and after deduction of reinsurance cessions) for the reinsuring and not for the reinsured *member*.

1.3 With-profits insurance capital component

Application

1.3.1 R *INSPRU* 1.3 applies to a *realistic basis life firm*.

1.3.2 G A *realistic basis life firm* means a *firm* to which *GENPRU* 2.1.18R applies. The application of *GENPRU* 2.1.18R is set out in *GENPRU* 2.1.19R and *GENPRU* 2.1.20R. *GENPRU* 2.1.13R 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 *GENPRU* 2.1.38R.

Purpose

1.3.3 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*.

1.3.4 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* (*INSPRU* 1.2.9R).

1.3.5 G The required procedures are summarised in the flowchart in *INSPRU* 1 Annex 1G.

Main requirements

1.3.6 R A *firm* must calculate the *with-profits insurance capital component* in accordance with *INSPRU* 1.3.7R.

1.3.7 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 *INSPRU* 1.3 23R); and
(b) B is the amount of the *realistic excess capital* for that fund (see *INSPRU* 1.3.32R).
(3) Where a capital instrument that can be included in the *firm's capital resources* in accordance with *GENPRU* 2.2 has been attributed wholly or partly to a *with-profits fund* and that instrument meets the requirements of *GENPRU* 2.2.271R, 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 *INSPRU* 1.3.43R.

1.3.8	G	Subordinated debt which is subordinated to *policyholder* interests (see *GENPRU* 2.2.271R) is an example of the sort of capital instrument that may give rise to a component of the *WPICC* under *INSPRU* 1.3.7R(3). Such instruments are treated as capital under *GENPRU* 2.2, subject to the requirements of *GENPRU* 2.2.271R. Under realistic reserving the capital instrument is valued as a realistic liability (*INSPRU* 1.3.40R) and in calculating the *risk capital margin* such an instrument would be valued at its realistic value in the single event outlined in *INSPRU* 1.3.43R (see also *INSPRU* 1.3.162R). Overall, the effect of *GENPRU* 2.2, *INSPRU* 1.3.7R(3) and *INSPRU* 1.3.43R is to enable a *firm* that obtains subordinated debt to benefit from additional *capital resources* equal to the face amount of that debt.
1.3.9	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* 4.3.16G, 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

1.3.10	R	In this section, real estate means an interest in land, buildings or other immovable property.
1.3.11	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.
1.3.12	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.
1.3.13	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.
1.3.14	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.
1.3.15	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.

1.3.16 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

1.3.17 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.

1.3.18 G *SYSC* 14.1.53R requires *firms* to maintain accounting and other records for a minimum of three years, or longer as appropriate. For the purposes of *INSPRU* 1.3.17R, 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 *SYSC* 14.1.51G to *SYSC* 14.1.64G;
(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.

1.3.19 R A *firm* must also identify in the record required to be kept by *INSPRU* 1.3.17R changes in practice, in particular changes in those items which will or may be significant in relation to the eventual *claim* values.

1.3.20 G Some of the changes identified in accordance with *INSPRU* 1.3.19R may have to be notified to the *firm's policyholders* in accordance with the *firm's PPFM*.

General principles for allocating aggregate amounts

1.3.21 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*).

1.3.22 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

1.3.23 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 (*INSPRU* 1.3.24R); and
(2) B is the sum of:
(a) the *regulatory value of liabilities* of the fund (*INSPRU* 1.3.29R);
(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

1.3.24 R (1) For the purposes of *INSPRU* 1.3.23R(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 contract* 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*.

1.3.25 R For the purpose of determining the value of a fund's *long-term admissible assets* in accordance with *INSPRU* 1.3.24R(1)(a), no value is to be attributed to:

(1) debts owed by *reinsurers*; or
(2) *claims*; or
(3) tax recoveries; or
(4) claims against *compensation funds*;
to the extent already offset in the calculation of *technical provisions*.

1.3.26 R In making a determination in accordance with *INSPRU* 1.3.24R(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*.

1.3.27 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 stand-alone 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.

1.3.28 G A *firm* needs to obtain an *implicit item waiver* from the *FSA* in order to bring in an amount under *INSPRU* 1.3.24R(1)(b). For *guidance* on applying for an *implicit item waiver* in respect of future surpluses relating to *with-profits funds* see *GENPRU* 2 Annex 8G. 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

1.3.29 R For the purposes of *INSPRU* 1.3.23R(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 *INSPRU* 1.3.30R).

1.3.30 R For the purposes of *INSPRU* 1.3.29R(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 *INPSRU* 3.2.17R).

1.3.31 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 9.6R(1).

Calculation of realistic excess capital

1.3.32 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 *INSPRU* 1.3.33R); and
(2) B is the sum of:
(a) the *realistic value of liabilities* of the fund (see *INSPRU* 1.3.40R); and
(b) the *risk capital margin* for the fund (see *INSPRU* 1.3.43R).

Realistic value of assets

1.3.33 R (1) For the purposes of *INSPRU* 1.3.32R(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 *INSPRU* 1.3.24R, but with no value given to any *implicit items* 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 *INSPRU* 1.3.36R);

(c) the present value of future profits (or losses) on any *non-profit insurance contracts* written in the *with-profits fund* (see *INSPRU* 1.3.37R);

(d) the value of any *derivative* or *quasi-derivative* held in the fund (see *GENPRU* 1.3.41R) 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 *INSPRU* 1.3.21R 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 present value of future profits (or losses) on any *non-profit insurance contracts* written by B (calculated on a basis consistent with *INSPRU* 1.3.37R), excluding any amount arising from business that is written in a *with-profits fund*; 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, or of B's *long-term insurance capital requirement* or *resilience capital requirement* in respect of B's *with-profits insurance contracts*, that 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 *INSPRU* 1.3.37R.

1.3.34 G In *INSPRU* 1.3.33R(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 *INSPRU* 1.3.40R(3)).

1.3.35 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*, *INSPRU* 1.3.33R(1)(e), *INSPRU* 1.3.33R(2) and *INSPRU* 1.3.33R(3) bring 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 *INSPRU* 1.3.33R(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 *INSPRU* 1.3.45R(2)(c)), *INSPRU* 1.3.33R(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 *INSPRU* 1.3.33R(3)(b)(iii), a *firm* may value the release of capital requirements as the business runs off (see *INSPRU* 1.3.38G). *INSPRU* 1.3.33R(3)(b)(viii) ensures that any such capital is not double-counted.

1.3.36 R Excess *admissible assets* of a *with-profits fund* means *admissible assets* which exceed any of the percentage limits referred to in *INSPRU* 2.1.22R.

1.3.37 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, having regard to International Financial Reporting Standard 4: Insurance Contracts, as if it were being applied to determine the value under that standard for the first time;
(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 *INSPRU* 1.3.22 R, 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 *INSPRU* 1.3.26R, of *long-term admissible assets* as between the *with-profits insurance contracts* and any *non-profit insurance contracts* written in the fund.

1.3.38 G In calculating the present value of future profits (or losses) for *non-profit insurance business* required by *INSPRU* 1.3.33R(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.

1.3.39 G Annuities do not typically fall to be valued on a market-consistent basis under *INSPRU* 1.3.37R(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 *INSPRU* 1.3.37(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.

1.3.39A G In view of *INSPRU* 1.3.39G, it is likely that the discount rate to be applied to the market-consistent valuation of those annuities that fall within the scope of *INSPRU* 1.3.37 R(3) would not be significantly different from that which applies to other annuities (to which a discount rate based on the return on the matching assets less an allowance for risk which is reasonable but not

excessively prudent, in accordance with *INSPRU* 1.3.37 R(2), might be applied).

1.3.39B G In determining current market yields for the purpose of *INSPRU* 1.3.3 R (4), a *firm* is required to have regard to IFRS 4 as if it were being applied to determine the value under that standard for the first time, that is, without reference to existing practices. Paragraph 27 of the standard is likely to be of particular relevance. A *firm* should not include an allowance for future investment margins until they are earned. In particular, a *firm* should not include an allowance for capital growth in determining current market yields for equities and real estate investments.

Realistic value of liabilities: general

1.3.40 R For the purposes of *INSPRU* 1.3.32R(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.

1.3.41 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 *INSPRU* 1.3.40R, including those in respect of guarantees and the value of options.

1.3.42 G Detailed *rules* and *guidance* for the calculation of the three elements referred to in *INSPRU* 1.3.40R are contained below in this section:

(1) *INSPRU* 1.3.116R to *INSPRU* 1.3.135G refer to the *with-profits benefits reserve*;
(2) *INSPRU* 1.3.136G to *INSPRU* 1.3.189G refer to the *future policy related liabilities*; and
(3) *INSPRU* 1.3.190R and *INSPRU* 1.3.191R refer to the *realistic current liabilities*.

Risk capital margin

1.3.43 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 (*INSPRU* 1.3.45R) which, in the most adverse scenario, will have a value (*INSPRU* 1.3.46R) 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 *INSPRU* 1.3.44R 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 *INSPRU* 1.3.45R(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 *INSPRU* 1.3.33R(1)(e) (*related undertakings* carrying on *long-term insurance business*) or *INSPRU* 1.3.45R(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 *INSPRU* 1.3.190R(1) in respect of a *defined benefits pension scheme* in accordance with *INSPRU* 1.3.191R .

1.3.44 R For the purposes of *INSPRU* 1.3.43R(3), the scenarios are one scenario selected from each of the following:

(1) in respect of *UK* and other assets within *INSPRU* 1.3.62R(1)(a):
(a) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.68R(1) (equities);
(b) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.68R(2) (real estate); and
(c) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.68R(3) (fixed interest securities);
(2) in respect of non-*UK* assets within *INSPRU* 1.3.62R(1)(b):
(a) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.73R(1) (equities);
(b) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.73R(2) (real estate); and
(c) the range of *market risk* scenarios identified in accordance with *INSPRU* 1.3.73R(3) (fixed interest securities);
(3) the range of credit risk scenarios identified in accordance with *INSPRU* 1.3.78R(1) (bond or debt items);
(4) the range of credit risk scenarios identified in accordance with *INSPRU* 1.3.78R(2) (*reinsurance* items or analogous non-*reinsurance* financing agreements);
(5) the range of credit risk scenarios identified in accordance with *INSPRU* 1.3.78R(3) (other items including *derivatives* and *quasi-derivatives*); and
(6) the persistency risk scenario identified in accordance with *INSPRU* 1.3.100R.

1.3.45 R (1) In *INSPRU* 1.3.43R, 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 *INSPRU* 1.3.33R;
(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.

1.3.46 R In valuing the relevant assets identified under *INSPRU* 1.3.43R(2), a *firm* must use the same methods of valuation as in *INSPRU* 1.3.33R, except that:

(1) the value of any *admissible assets* not identified as held within the *with-profits fund* (*INSPRU* 1.3.45R(2)(b)) must be as determined under *GENPRU* 1.3; and
(2) the value of any asset which forms part of the range of assets as a result of *INSPRU* 1.3.45R(2)(c) must be determined on a basis consistent with that described in *INSPRU* 1.3.37R.

1.3.47 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 *INSPRU* 1.3.43R(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*.

1.3.48 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. *INSPRU* 1.3.43R 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.

1.3.49 G *INSPRU* 1.3.45R(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 (*INSPRU* 1.3.45R(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 *INSPRU* 1.3.43R(5)) as the amount taken into consideration is limited to 50% of the total present value.

1.3.50 G A *firm* using a stochastic approach in *INSPRU* 1.3.169R(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 *INSPRU* 1.3.169R(2), may assume in estimating the market cost of hedging in the post-stress scenarios that market volatilities are unchanged.

1.3.51 G In the scenario tests set out in *INSPRU* 1.3.62R to *INSPRU* 1.3.103G, *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 *INSPRU* 1.3.43R(3).

1.3.51A G In the scenario tests set out in *INSPRU* 1.3.62R to *INSPRU* 1.3.103G, a *firm* is required to assess the changed value of its assets and liabilities in the economic conditions of the most adverse scenario. A *firm* is required to assess the changed value of each relevant asset (as defined in *INSPRU*

1.3.45R), notwithstanding any uncertainty about the appropriate valuation basis for that asset. In valuing an asset in the most adverse scenario, a *firm* should have regard to the economic substance of the asset, rather than its legal form, and assess its value accordingly. Consider, for example, a convertible bond that is close to its conversion date and where the conversion option has value. The value of the convertible bond in the most adverse scenario is likely to be sensitive primarily to equity market scenarios and to a lesser extent to interest rate scenarios. The *firm* should value the asset according to its expected market value in the economic conditions underlying the most adverse scenario.

Management actions

1.3.52 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 *INSPRU* 1.3.44R, the *firm's* prospective management actions (*INSPRU* 1.3.53R).

1.3.53 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.

1.3.54 G The management actions in *INSPRU* 1.3.53R 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*.

1.3.55 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.

1.3.56 G In accordance with *INSPRU* 1.3.17R, 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).

1.3.57 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 *INSPRU* 1.3.17R of the amount of any such charges to its *customers* and of how it has ensured their fair treatment.

Policyholder actions

1.3.58 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 *INSPRU* 1.3.44R, a realistic assessment of the actions of its *policyholders* (see *INSPRU* 1.3.59R).

1.3.59 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.

1.3.60 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*.

1.3.61 G In calculating the persistency scenario in *INSPRU* 1.3.100R, a *firm* needs to make assumptions regarding the future termination rates exhibited by *policies*, at points described in particular in *INSPRU* 1.3.101R. 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

1.3.62 R (1) For the purposes of *INSPRU* 1.3.44R, 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 *INSPRU* 1.3.68R; and
(b) for exposures to other non-*UK* assets, the ranges of scenarios set out in *INSPRU* 1.3.73R.
(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* (*INSPRU* 1.3.63R); 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*.

1.3.63 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.

1.3.63A G *Guidance* on how a *firm* should determine where particular assets are invested is provided in *INSPRU* 3.1.13BG.

1.3.64 G In determining its most adverse scenario, a *firm* applying *INSPRU* 1.3.68R and *INSPRU* 1.3.73R 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 *INSPRU* 1.3.43R.

1.3.65 G In relation to the *market risk* scenarios in *INSPRU* 1.3.68R and *INSPRU* 1.3.73R, the effect of *INSPRU* 1.3.52R and *INSPRU* 1.3.58R 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* (*INSPRU* 3.1.9 G to *INSPRU* 3.1.26R).

1.3.66 G [deleted]

1.3.67 G The relevant assets identified under *INSPRU* 1.3.43R(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*. *INSPRU* 1.3.43R(5) exempts such an asset from the *market risk* stress tests.

Market risk scenario for exposures to UK assets and certain non-UK assets

1.3.68 R The range of *market risk* scenarios referred to in *INSPRU* 1.3.62R(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 *INSPRU* 1.3.71R);
(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.

1.3.69 R For the purposes of *INSPRU* 1.3.68R, 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.

1.3.70 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 *INSPRU* 1.3.68R(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

1.3.71 R The equity market adjustment ratio referred to in *INSPRU* 1.3.68R(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%.

1.3.72 R In *INSPRU* 1.3.71(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

1.3.73 R The range of *market risk* scenarios referred to in *INSPRU* 1.3.62R(1)(b) is:
(1) an appropriate rise or fall in the *market value* of equities listed in that territory (*INSPRU* 1.3.75G), which must be at least equal to the percentage determined in *INSPRU* 1.3.68R(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.

1.3.74 R For the purposes of *INSPRU* 1.3.73R, 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.

1.3.75 G For the purposes of *INSPRU* 1.3.73R(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).

1.3.76 G For the purpose of *INSPRU* 1.3.75G(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 *INSPRU* 1.3.43R(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

1.3.77 G (1) The purpose of the credit risk scenarios in *INSPRU* 1.3.78R to *INSPRU* 1.3.99G 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 *INSPRU* 3.1.
(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 *INSPRU* 1.3.43R 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.

1.3.78 R For the purposes of *INSPRU* 1.3.44R, 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 *INSPRU* 1.3.84R in respect of any bond or debt item;
(2) changes in value determined according to *INSPRU* 1.3.94R in respect of any *reinsurance* item or any analogous non-*reinsurance* financing agreement item; and
(3) changes in value determined according to *INSPRU* 1.3.98R for any other item (including any *derivative* or *quasi-derivative*).

1.3.79 R For the purposes of *INSPRU* 1.3.78R, 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 *INSPRU* 2.1.8R in accordance with *INSPRU* 2.1.16R and *INSPRU* 2.1.18R.

1.3.80 G The change in asset or liability values to be determined in relation to a credit risk scenario for the purposes of *INSPRU* 1.3.43R and *INSPRU* 1.3.44R 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.

1.3.81 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 *INSPRU* 1.3.78R.

1.3.82 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.

1.3.83 R Where the credit risk scenarios in *INSPRU* 1.3.78R to *INSPRU* 1.3.99G 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* (*INSPRU* 1.3.43R(2)) resulting from those credit risk scenarios.

Spread stresses to be assumed for bonds and debt

1.3.84	R	(1) In *INSPRU* 1.3.78R(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 *INSPRU* 1.3.87R 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 *INSPRU* 1.3.89R 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 *INSPRU* 1.3.90R, 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 *INSPRU* 1.3.89R; 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.
1.3.85	R	For the purpose of *INSPRU* 1.3.84R(1)(a), a guarantee must be direct, explicit, unconditional and irrevocable.
1.3.86	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 *INSPRU* 1.3.90R. 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 *INSPRU* 1.3.84R(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.

1.3.87 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 *INSPRU* 1.3.92R; and
(b) the credit rating description in the first column of Table *INSPRU* 1.3.90R 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;
(k) the European Investment Fund; and
(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.

1.3.88 G Under *INSPRU* 1.3.87R(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.

1.3.89 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 *INSPRU* 1.3.92R ("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 *INSPRU* 1.3.90R 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 *INSPRU* 1.3.90R 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.

1.3.90 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

1.3.91 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").

1.3.92 R For the purposes of *INSPRU* 1.3.87R and *INSPRU* 1.3.89R, a *firm* may, subject to (1) to (5), nominate for use credit ratings produced by one or more of the rating agencies listed in *INSPRU* 1.3.93R:

(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.

1.3.93 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

1.3.94	R	(1) The contracts of *reinsurance* or analogous non-*reinsurance* financing agreements to which *INSPRU* 1.3.78R(2) applies are those: (a) into which the *firm* has entered; (b) which represent an economic asset under the single event applicable under *INSPRU* 1.3.43R(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 *INSPRU* 1.3.78R(1). (4) For the purpose of (3), 5% should be replaced by 10% in *INSPRU* 1.3.84R(2)(b).
1.3.95	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 in respect of *contracts of insurance* that are analogous to contracts of *reinsurance* in terms of the risks transferred and the finance provided.

(2) In assessing values in accordance with *INSPRU* 1.3.94R, 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 *INSPRU* 1.3.84R. (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 *INSPRU* 1.3.92R for the nomination of financial strength ratings. Table *INSPRU* 1.3.97G 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 *INSPRU* 1.3.78R(1) are required to result in a reduction in market value for some items of 5% of their current value through the operation of *INSPRU* 1.3.84R(2)(b). For *reinsurance* contracts and analogous non-*reinsurance* financing agreements, determining the change in value by reference to *INSPRU* 1.3.94R(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. *INSPRU* 1.3.94R(4) relates to this requirement.

1.3.96 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.

1.3.97 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)

1.3.98 R For the purposes of *INSPRU* 1.3.78R(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 *INSPRU* 1.3.43R(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 *INSPRU* 1.3.78R(1) and the changes in value determined in accordance with *INSPRU* 1.3.78R(2).

1.3.99 G In applying *INSPRU* 1.3.98R, 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 (*INSPRU* 1.3.87R). *INSPRU* 1.3.77(5) is also relevant in this context.

Persistency risk scenario

1.3.100 R For the purposes of the persistency risk scenario in *INSPRU* 1.3.44R(6), a *firm* must allow for the effects of an increase or a decrease in persistency experience of its *with-profits insurance contract* 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

INSPRU 1.3.40R.

1.3.101 R The termination rates referred to in *INSPRU* 1.3.100R 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.

1.3.102 R For the purposes of *INSPRU* 1.3.100R, 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.

1.3.103 G *INSPRU* 1.3.100R to *INSPRU* 1.3.102R 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 *INSPRU* 1.3.33R) there is no requirement to stress this asset for changes in persistency assumptions.

Realistic value of liabilities: detailed provisions

1.3.104 G *INSPRU* 1.3.40R 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 *INSPRU* 1.3.105R to *INSPRU* 1.3.115G;
(2) *with-profits benefits reserve* in *INSPRU* 1.3.116R to *INSPRU* 1.3.135G;
(3) *future policy related liabilities* in *INSPRU* 1.3.136G to *INSPRU* 1.3.189G; and
(4) *realistic current liabilities* in *INSPRU* 1.3.190R and *INSPRU* 1.3.191R.

Methods and assumptions: general

1.3.105	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 (*GENPRU* 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 (*INSPRU* 1.3.53R) and *policyholder* actions (*INSPRU* 1.3.59R); (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*.
1.3.106	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 *INSPRU* 1.2.10R(4) and *INSPRU* 1.2.13R, 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.
1.3.107	G	The amount and timing of tax charges affect the amount of assets available to meet *policyholder* liabilities. *INSPRU* 1.3.105R(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.
1.3.108	G	*INSPRU* 1.3.105R(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

1.3.109 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.

1.3.110 R For the purpose of *INSPRU* 1.3.109R(1), a group of similar contracts is such that the conditions in *INSPRU* 1.3.109R(2) are satisfied.

1.3.111 G Where a *firm* has grouped individual contracts for the purpose of calculating the *mathematical reserves* for a *with-profits fund* (in accordance with *INSPRU* 1.2.22R), 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.

1.3.112 G In contrast to *INSPRU* 1.2.24R 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.

1.3.113 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 *INSPRU* 1.3.116R. In particular, the calculation of aggregate retrospective reserves (see *INSPRU* 1.3.118R) and the projection of future cash flows (see *INSPRU* 1.3.128R) based on suitable specimen *policies* is permitted.

1.3.114 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.

1.3.115 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

1.3.116 R A *firm* must calculate a with-profits benefits reserve for a with-profits fund using either:
(1) a retrospective calculation under *INSPRU* 1.3.118R (the retrospective method); or
(2) a prospective calculation under *INSPRU* 1.3.128R 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).

1.3.117 R Subject to *INSPRU* 1.3.105R(2), a *firm* may use different methods under *INSPRU* 1.3.116R for different types or generations of *with-profits insurance contracts*.

Retrospective method

1.3.118 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 *INSPRU* 1.3.109R and *INSPRU* 1.3.110R, the total retrospective reserve in respect of each group of *with-profits insurance contracts*.

1.3.119 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*.

1.3.120 G In taking account of amounts in *INSPRU* 1.3.119R(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 in respect of *contracts of insurance* that are analogous to contracts of *reinsurance* in terms of the risks transferred and the finance provided.

1.3.121 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.

1.3.122 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*.

1.3.123 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 *INSPRU* 1.3.136G to *INSPRU* 1.3.189G.

1.3.124 G An example of *INSPRU* 1.3.123R concerns future shareholder transfers. A *firm* must make adequate provision for future shareholder transfers within the *future policy related liabilities* (see *INSPRU* 1.3.165R). 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*.

1.3.125 G Another example of the application of *INSPRU* 1.3.123R relates to the reference in *INSPRU* 1.3.119R(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 *INSPRU* 1.3.137R).

1.3.126 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. *INSPRU* 1.3.119R simply sets minimum standards that all retrospective methods must meet.

1.3.127 G For the purposes of *INSPRU* 1.3.119R(2) and *INSPRU* 1.3.128R(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

1.3.128 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 (*INSPRU* 1.3.129R);
(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.

1.3.129 R For the purposes of *INSPRU* 1.3.128R(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 bonuses* at least equal to the levels required for the *firm* to fulfil its regulatory duty to treat its *customers* fairly.

1.3.130 R A *firm* must value the cash flows listed in *INSPRU* 1.3.128R 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.

1.3.131 G The prospective method sets the *with-profits benefits reserve* at the net present value of future cash flows listed in *INSPRU* 1.3.128R.

1.3.132 G In contrast to *INSPRU* 1.2.10R(4) and *INSPRU* 1.2.13R 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 *INSPRU* 1.3.130R.

1.3.133 G In valuing the future cash flows listed in *INSPRU* 1.3.128R, 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.

1.3.134 R Where a *firm* expects to pay additional benefits that are not included in the cash flows listed in *INSPRU* 1.3.128R, it must make adequate provision for these benefits in calculating the *future policy related liabilities* in accordance with the *rules* in *INSPRU* 1.3.136G to *INSPRU* 1.3.189G.

1.3.135 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

1.3.136 G *INSPRU* 1.3.137R lists the *future policy related liabilities* for a *with-profits fund* that form part of a *firm's realistic value of liabilities* in *INSPRU* 1.3.40R. Detailed *rules* and *guidance* relating to particular types of liability and asset are set out in *INSPRU* 1.3.139R to *INSPRU* 1.3.168G. 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) *INSPRU* 1.3.169R to *INSPRU* 1.3.186G refer to valuing the costs of guarantees, options and smoothing; and
(2) *INSPRU* 1.3.187R to *INSPRU* 1.3.189G refer to the treatment of surplus on guarantees, options and smoothing.

1.3.137 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 *INSPRU* 1.3.139R);
(2) planned enhancements to the *with-profits benefits reserve* (see *INSPRU* 1.3.141R);
(3) planned deductions for the costs of guarantees, options and smoothing from the *with-profits benefits reserve* (see *INSPRU* 1.3.144R);
(4) planned deductions for other costs deemed chargeable to the *with-profits benefits reserve* (see *INSPRU* 1.3.146R);
(5) future costs of contractual guarantees (other than financial options) (see *INSPRU* 1.3.148R);
(6) future costs of non-contractual commitments (see *INSPRU* 1.3.154R);
(7) future costs of financial options (see *INSPRU* 1.3.156G);
(8) future costs of smoothing (see *INSPRU* 1.3.158R);
(9) financing costs (see *INSPRU* 1.3.162R);
(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 *INSPRU* 1.3.165R).

1.3.138 G Some of the elements of the calculation set out in *INSPRU* 1.3.137R may have already been taken into consideration in the calculation of the *with-profits benefits reserve*, either under the retrospective method (see *INSPRU* 1.3.118R onwards) or the prospective method (see *INSPRU* 1.3.128R onwards). Where this is the case, the adjustments made under *INSPRU* 1.3.137R should be such that no double-counting arises.

Past miscellaneous surplus (or deficit) planned to be attributed to the with-profits benefits reserve

1.3.139 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.

1.3.140 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 *INSPRU* 1.3.119R(8).

Planned enhancements to the with-profits benefits reserve

1.3.141 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*.

1.3.142 G For the purposes of *INSPRU* 1.3.141R, 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 benefits 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*.

1.3.143 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 *INSPRU* 1.3.169R to *INSPRU* 1.3.186G.

Planned deductions for the costs of guarantees, options and smoothing from the with-profits benefits reserve

1.3.144 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.

1.3.145 G In calculating *future policy related liabilities* for a *with-profits fund*, a *firm* should take credit under *INSPRU* 1.3.137R(3) for the present value of the future "margins" available in respect of charges deducted to cover the costs of guarantees, options and smoothing. *INSPRU* 1.3.188R 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 *INSPRU* 1.3.137R(5), *INSPRU* 1.3.137R(7) or *INSPRU* 1.3.137R(8) depending on the nature of the charges made, and has no effect on the amount calculated under *INSPRU* 1.3.144R.

Planned deductions for other costs deemed chargeable to the with-profits benefits reserve

1.3.146 R Where a *firm* expects to deduct future charges (other than those valued in *INSPRU* 1.3.144R) 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.

1.3.147 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*.

1.3.148 R Future costs of contractual guarantees (other than financial options)

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*.

1.3.149 R For the purposes of *INSPRU* 1.3.148R, the future costs of guarantees cannot be negative.

1.3.150 G In carrying out projections to calculate the cost of guarantees under *INSPRU* 1.3.137R the opening liability should be set equal to the *with-profits benefit reserve* (see *INSPRU* 1.3.118R), adjusted for miscellaneous surplus or deficits (see *INSPRU* 1.3.137R(1)) and planned enhancements (see *INSPRU* 1.3.141R).

1.3.151 G In projecting forward the *with-profits benefits reserve*, adjusted as in *INSPRU* 1.3.150G, to the date of *claim* for the purposes of *INSPRU* 1.3.148R, 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 *INSPRU* 1.3.130R.

1.3.152 G *INSPRU* 1.3.169R to *INSPRU* 1.3.186G contain further *rules* and *guidance* on the valuation of guarantees, options and smoothing.

1.3.153 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

1.3.154 R A *firm* must make provision for future costs in addition to those in *INSPRU* 1.3.148R 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.

1.3.155 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

1.3.156 G Financial options include guaranteed annuity and cash option rates.

1.3.157 G *INSPRU* 1.3.169R to *INSPRU* 1.3.186G contain further *rules* and *guidance* on the valuation of options.

Future costs of smoothing

1.3.158 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 *INSPRU* 1.3.148R 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 *INSPRU* 1.3.141R;
calculated as at the date of *claim*.

1.3.159 R For the purposes of *INSPRU* 1.3.158R, smoothing costs are defined as the present value of the difference between projected *claims* and the projected *with-profits benefit reserve* after enhancements (*INSPRU* 1.3.141R), other than payouts on guarantees (*INSPRU* 1.3.148R).

1.3.160 R Subject to *INSPRU* 1.3.188R, the future costs of smoothing can be negative.

1.3.161 G *INSPRU* 1.3.169R to *INSPRU* 1.3.186G contain further *rules* and *guidance* on the valuation of the future costs of smoothing.

Financing costs

1.3.162 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* (*INSPRU* 1.3.190R and *INSPRU* 1.3.191R). The amount of the liabilities to repay financing costs must be assessed on a market-consistent basis.

1.3.163 G In *INSPRU* 1.3.162R, 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.

1.3.164 G In *INSPRU* 1.3.162R, financing includes *reinsurance* financing arrangements and analogous non-*reinsurance* financing arrangements, such as contingent loans, securitisations and any other arrangements in respect of *contracts of insurance* that are analogous to contracts of *reinsurance* in terms of the risks transferred and the finance provided.

Other long-term insurance liabilities

1.3.165 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.

Some examples of these other *long-term insurance liabilities* are:

1.3.166 G (1) pension and other mis-selling reserves;
(2) provisions for tax; and
(3) provisions for future shareholder transfers.

1.3.167 G In determining the realistic liability for taxation *firms* should apply the general principles set out in *INSPRU* 1.3.105R and the *guidance* given in *INSPRU* 1.3.107G.

1.3.168 G *INSPRU* 1.3.105R 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

1.3.169 R For the purposes of *INSPRU* 1.3.137R(5), *INSPRU* 1.3.137R(7) and *INSPRU* 1.3.137R(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 (*INSPRU* 1.3.170R);
(2) using the market costs of hedging the guarantee or option;
(3) a series of deterministic projections with attributed probabilities.

The market-consistent asset model in *INSPRU* 1.3.169(1):

1.3.170 R (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.*

1.3.171 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.

1.3.172 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.

1.3.173 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 (*INSPRU* 1.3.185R) (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.

1.3.174 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).

1.3.175 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 *claims*, 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

1.3.176 G For the purposes of *INSPRU* 1.3.169R(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.

1.3.177 G In performing the projections of assets and liabilities under the stochastic approach in *INSPRU* 1.3.169R(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.

1.3.178 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.

1.3.179 G Where a stochastic approach is used, a *firm* should make and retain a record under *INSPRU* 1.3.17R 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).

1.3.180 G In calibrating asset models for the purposes of *INSPRU* 1.3.170R, 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 *INSPRU* 1.3.17R 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

1.3.181 R For the purposes of the deterministic approach in *INSPRU* 1.3.169R(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.

1.3.182 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.

1.3.183 G In performing the projections of assets and liabilities under the deterministic approach in *INSPRU* 1.3.169R(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.

1.3.184 G Where a series of deterministic projections is used, a *firm* should make and retain a record under *INSPRU* 1.3.17R 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

1.3.185 R In calculating the costs of any guarantees, options or smoothing, a *firm*:
(1) may reflect its prospective management actions (within the meaning of *INSPRU* 1.3.53R); and
(2) must reflect a realistic assessment of the *policyholder* actions (within the meaning of *INSPRU* 1.3.59R);
in its projections of the value of assets and liabilities.

1.3.186 G For the purposes of *INSPRU* 1.3.185 R, the related *guidance* in *INSPRU* 1.3.54 G to *INSPRU* 1.3.57 G (management actions) and in *INSPRU* 1.3.60 G (policyholder actions) applies.

Treatment of surplus on guarantees, options and smoothing

1.3.187 R *INSPRU* 1.3.188R applies to *firms* calculating the costs of guarantees, options and smoothing to be included in the *future policy-related liabilities* in accordance with *INSPRU* 1.3.137R(5), *INSPRU* 1.3.137R(7) and *INSPRU* 1.3.137R(8).

1.3.188 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 *INSPRU* 1.3.148R) or options (see *INSPRU* 1.3.156G) or smoothing (see *INSPRU* 1.3.158R) (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 *INSPRU* 1.3.144R) (as appropriate).

1.3.189 G The extent to which the amount in *INSPRU* 1.3.188R(2) exceeds the amount

in *INSPRU* 1.3.188R(1) will determine the surplus available to support actions that would be taken by the *firm's* management. The purpose of *INSPRU* 1.3.188R 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 *INSPRU* 1.3.188R is added to the liabilities under *INSPRU* 1.3.137R(5), *INSPRU* 1.3.137R(7) and *INSPRU* 1.3.137R(8), but has no impact on the adjustment for planned deductions for the costs of guarantees, options and smoothing (*INSPRU* 1.3.137R(3) and *INSPRU* 1.3.144R).

Realistic current liabilities

1.3.190	R	For the purposes of *INSPRU* 1.3.40R(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 *INSPRU* 1.3.30R); 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 *INSPRU* 1.3.36R) or on the recognition of future shareholder transfers.
1.3.191	R	For the purpose of assessing the best estimate provision to be made under *INSPRU* 1.3.190R(1) in respect of a *defined benefit occupational pension scheme*, a *firm* must use either its *defined benefit liability* or its *deficit reduction amount*, consistent with the *firm's* election under *INSPRU* 1.3.5BR(2).

1.4 Equalisation provisions

Application

1.4.1 R *INSPRU* 1.4 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*.

1.4.2 G The scope of *INSPRU* 1.4.11R to *INSPRU* 1.4.37G (non-credit equalisation provisions) is not restricted to *firms* subject to the relevant EC directives.

1.4.3 G The requirements of this section apply to a *firm* on a solo basis.

Purpose

1.4.4 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*.

1.4.5 G *Credit* or *non-credit equalisation provisions* form part of the *technical provisions* that a *firm* is required to establish under *INSPRU* 1.1.12R(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.

1.4.6 G In general terms, *INSPRU* 1.4 sets out *rules* and *guidance* as to:

(1) the circumstances in which a *firm* is required to maintain *equalisation provisions*;
(2) the methods to be used in calculating the amount of each provision;
(3) the geographical location of the business relevant to certain calculations for different types of *firm* - this is summarised in the Table in *INSPRU* 1.4.7G.

1.4.7 G

Table : Scope of *insurance business* to be included in calculations				
Type Of Firm		Credit Equalisation Provision		Non Credit Equalisation Provision
		Threshold in *INSPRU* 1.4.44R	Provision in *INSPRU* 1.4.43R	Threshold in *INSPRU* 1.4.18R(2) and provision in *INSPRU* 1.4.17R
UK insurer		World-wide	World-wide	World-wide
Pure reinsurer with head office outside *United Kingdom*		*UK*	World-wide	*UK*
Pure reinsurer with head office in *United Kingdom*		World-wide	World-wide	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*

1.4.8 G The *First Non-Life Directive* (as amended) and the *Reinsurance Directive* require 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.

1.4.9 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 *INSPRU* 7.1.11R, its *equalisation provisions* (if any) are added back to its *capital resources*.

1.4.10 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

1.4.11 R (1) *INSPRU* 1.4.11R to *INSPRU* 1.4.37G 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 *INSPRU* 1.4.12R ("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 *INSPRU* 1.4.12R.

1.4.12 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 contract 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.	

1.4.13 R For the purposes of *INSPRU* 1.4.11R to *INSPRU* 1.4.37G, a *firm* with its head office in the *United Kingdom* must take account of non-credit *insurance business* carried on by it world-wide.

1.4.14 R For the purposes of *INSPRU* 1.4.11R to *INSPRU* 1.4.37G, 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*.

1.4.15	G	The *insurers* affected by *INSPRU* 1.4.11R include pure reinsurers, UK-deposit insurers, EEA-deposit insurer, and Swiss general insurers.
1.4.16	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
1.4.17	R	In respect of each *financial year*, a *firm* must, unless *INSPRU* 1.4.18R applies: (1) calculate the amount of its *non-credit equalisation provision* as at the end of that year in accordance with *INSPRU* 1.4.20R; and (2) maintain a *non-credit equalisation provision* calculated in accordance with *INSPRU* 1.4.20R for the following *financial year*.
1.4.18	R	(1) *INSPRU* 1.4.17R 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.
1.4.19	G	For *non-EEA insurers*, the calculation of the threshold amount in *INSPRU* 1.4.18R(2) is limited by *INSPRU* 1.4.14R 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 *INSPRU* 1.4, but may do significant business outside the *United Kingdom* characterised by high-impact, low-frequency *claims*. Such a *firm* is required by *INSPRU* 1.5.41R 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 *GENPRU* 1.2.
		Calculating the amount of the provision

1.4.20 R (1) Unless *INSPRU* 1.4.22R 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 *INSPRU* 1.4.24R;
(b) the amount of the provisional transfers-in in (2)(b)(i) is to be determined in accordance with *INSPRU* 1.4.26R; and
(c) the amount of the provisional transfers-out in (2)(b)(ii) is to be determined in accordance with *INSPRU* 1.4.29R.

1.4.21 G If provisional transfers-out are in excess of provisional transfers-in, the *non-credit equalisation provision* as calculated in accordance with *INSPRU* 1.4.20R in respect of a particular *financial year* may be less than that calculated for the preceding *financial year* although, by virtue of *INSPRU* 1.4.20R(1)(a), it cannot be negative.

1.4.22 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 years* 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 *INSPRU* 1.4.18R(2): and
(b) the relevant period is the period of four *financial years* ending immediately before the beginning of the *financial year* in (1).

1.4.23 G If *INSPRU* 1.4.22R 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

1.4.24 R (1) For the purposes of the calculation required by *INSPRU* 1.4.20R, 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 *INSPRU* 1.4.25R 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*.

1.4.25 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

1.4.26 R (1) For the purposes of the calculation required by *INSPRU* 1.4.20R, 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 *INSPRU* 1.4.27R in relation to the grouping; and
(b) Y is the amount of the *net written premiums* for non-credit *insurance 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*.

1.4.27 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

1.4.28 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

1.4.29 R (1) For the purposes of the calculation required by *INSPRU* 1.4.20R, 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 *INSPRU* 1.4.24R for that *financial year*; and
(b) the abnormal loss for the grouping under *INSPRU* 1.4.30R for that *financial year*.

1.4.30 R 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 *INSPRU* 1.4.31R; 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 *INSPRU* 1.4.31R.

1.4.31 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

1.4.32 R (1) This *rule* applies to modify the application of *INSPRU* 1.4.24R and *INSPRU* 1.4.26R in any case where a *firm* has transferred to another *undertaking* 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, *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 *INSPRU* 1.4.24R or provisional transfers-in under *INSPRU* 1.4.26R.

1.4.33 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 *INSPRU* 1.4.24R is zero.

Transfers of business to the firm

1.4.34 R (1) This *rule* applies to modify the application of *INSPRU* 1.4.24R, *INSPRU* 1.4.26R and *INSPRU* 1.4.29R 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 *INSPRU* 1.4.24R (maximum provision) and *INSPRU* 1.4.26 R (provisional transfers in);
(b) included in net *premiums* (written or earned) before performing the calculation required by *INSPRU* 1.4.30R (abnormal loss); and
(c) excluded from net *claims* (paid or incurred) before performing the calculation required by *INSPRU* 1.4.30R (abnormal loss).

1.4.35 G For the purposes of *INSPRU* 1.4.34R, 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*.

1.4.36 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.

1.4.37 G *INSPRU* 1.4.32R to *INSPRU* 1.4.34R 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

1.4.38 R *INSPRU* 1.4.39R to *INSPRU* 1.4.47G apply to any *firm* which carries on the business of *effecting* or *carrying out general insurance contracts* falling

within *general insurance business class* 14 (which business is referred to in *INSPRU* 1.4 as "credit *insurance business*"), unless it is:

(1) a *non-directive insurer*; or

(2) a *pure reinsurer* which became a *firm in run-off* before 31 December 2006 and whose *Part IV permission* has not subsequently been varied to add back the *regulated activity* of *effecting contracts of insurance*.

1.4.39 R For the purposes of *INSPRU* 1.4.43R and *INSPRU* 1.4.44R, a *firm* whose head office is in the *United Kingdom* must take account of the credit *insurance business* carried on by it world-wide.

1.4.40 R (1) For the purposes of *INSPRU* 1.4.43R:

(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) any other *firm* whose head office is outside the *United Kingdom* (including a *UK-deposit insurer*) must take account of the credit *insurance business* carried on by it world-wide.

(2) For the purposes of *INSPRU* 1.4.44R:

(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 *firm* whose head office is outside the *United Kingdom* (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*.

1.4.41 G For *firms* whose head office is in the *United Kingdom* both calculations must be made in respect of world-wide business.

1.4.42 G The requirements of *INSPRU* 1.4.39R and *INSPRU* 1.4.40R are summarised in the table in *INSPRU* 1.4.7G.

Requirement to maintain credit equalisation provision

1.4.43 R In respect of each *financial year*, a *firm* must, unless *INSPRU* 1.4.44R applies:
(1) calculate the amount of its *credit equalisation provision* as at the end of that year in accordance with *INSPRU* 1.4.45R; and
(2) maintain a *credit equalisation provision* calculated in accordance with *INSPRU* 1.4.45R for the following *financial year*.

1.4.44 R *INSPRU* 1.4.43R does not apply to a *firm* 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

1.4.45 R (1) The amount of a *firm'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 *INSPRU* 1.4.46R.

1.4.46 R For the purposes of the adjustments in *INSPRU* 1.4.45R(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.

1.4.47 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

1.4.48 R For the purposes of *INSPRU* 1.4, 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.

Application of INSPRU 1.4 to Lloyd's

1.4.49 R *INSPRU* 1.4 applies to the *Society* in accordance with *INSPRU* 8.1.2R:

(1) with the modification set out in *INSPRU* 1.4.50R; and

(2) except *INSPRU* 1.4.11R to *INSPRU* 1.4.37G.

1.4.50 R The *Society* must calculate a *credit equalisation provision* for the aggregate *insurance business* of all *members*; it is not required to calculate a *credit equalisation provision* separately for the business of each *member*.

1.4.51 R The *Society* must allocate the result of *INSPRU* 1.4.50R between itself and each of the *members* on a fair and reasonable basis.

1.5 Internal-contagion risk

Application

1.5.1 R *INSPRU* 1.5 applies to an *insurer*.

1.5.2 R *INSPRU* 1.5 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 *INSPRU* 1.5.33R (payment of financial penalties) apply to *firms* which qualify for authorisation under Schedule 3 or 4 of the *Act*;
(3) *INSPRU* 1.5.33R (payment of financial penalties) does not apply to *mutuals*;
(4) *INSPRU* 1.5.41R to *INSPRU* 1.5.57R (*UK branches* of certain *non-EEA insurers*) do not apply to:
(a) *UK insurers*; or
(b) *non-EEA insurers* whose *insurance business* in the *United Kingdom* is restricted to *reinsurance*; or
(c) *EEA-deposit insurers*; or
(d) *Swiss general insurers*.

1.5.3 G The scope of application of *INSPRU* 1.5 is not restricted to *firms* that are subject to the relevant EC directives.

1.5.4 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.

1.5.5 R In the application of this section to activities carried on by a *non-EEA insurer*:

(1) *INSPRU* 1.5.13R to *INSPRU* 1.5.15G and *INSPRU* 1.5.41R 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*.

1.5.6 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.

1.5.7 G The requirements of this section apply to a *firm* on a solo basis.

Purpose

1.5.8 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 *INSPRU* 6.

1.5.9 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.

1.5.10 G This section requires *firms* other than *pure reinsurers* 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. *Pure reinsurers* must limit their activities to the business of *reinsurance* and related operations.

1.5.11 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*.

1.5.12 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

1.5.13 R (1) A *firm* other than a *pure reinsurer* 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.

1.5.13A R A *pure reinsurer* must not carry on any business other than the business of *reinsurance* and related operations.

1.5.13B G In *INSPRU* 1.5.13AR related operations include, for example, activities such as provision of statistical or actuarial advice, risk analysis or research for its clients. It may also include a *holding company* function and activities with respect to financial sector activities within the meaning of Article 2, point 8, of the *Financial Groups Directive.* But it does not allow the carrying on of, for example, unrelated banking and financial activities.

Financial limitation of non-insurance activities

1.5.14 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.

1.5.15 G For the purpose of *INSPRU* 1.5.14R 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

1.5.16 G *INSPRU* 1.5.18R, *INSPRU* 1.5.21R, *INSPRU* 1.5.30R and *INSPRU* 1.5.31R 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

1.5.17 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

1.5.18 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 *INSPRU* 1.1.20R or *INSPRU* 1.1.21R .

1.5.19 G *INSPRU* 1.1.16R requires a *firm* to establish adequate *technical provisions* for its *long-term insurance contracts*. *INSPRU* 1.1.20R requires a *firm* to hold *admissible assets* of a value at least equal to the amount of the *technical provisions* and its other *long-term insurance liabilities*. *INSPRU* 1.1.21R ensures that a *composite firm* identifies separate *admissible assets* with a value at least equal to the *technical provisions* for *long-term insurance business* and its other *long-term insurance liabilities* as well as holding other *admissible assets* of a value at least equal to the amount of its *technical provisions* for *general insurance business* and its other *general insurance liabilities*. The overall impact of these provisions in *INSPRU* 1.1, and of *INSPRU* 1.5.18R, is that any *firm* writing *long-term insurance business* must identify separately *admissible assets* of a value at least equal to the amount of its *long-term insurance business technical provisions* and its other *long-term insurance liabilities*.

1.5.20 G *INSPRU* 1.5.18R 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 *INSPRU* 1.5.21R and *INSPRU* 1.5.22R) and the transfer will take effect when it is recorded in the *firm's* accounting records (see *INSPRU* 1.5.23R). 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 *INSPRU* 1.5.27R).

1.5.21 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 *INSPRU* 1.5.27R.
(2) The items are:
(a) the assets identified under *INSPRU* 1.5.18R (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).

1.5.22 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*.

1.5.23	R	A *firm* must maintain a separate accounting record in respect of each of its *long-term insurance funds* (including any *with-profits fund*).
1.5.24	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.
1.5.25	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.
1.5.26	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.
1.5.27	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.
1.5.28	G	As a result of *INSPRU* 1.5.27R(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 *INSPRU* 1.1.20R or *INSPRU* 1.1.21R.
1.5.29	G	*INSPRU* 1.1.27R and *INSPRU* 1.1.28R provide further constraints on the transfer of assets out of a *with-profits fund*. *INSPRU* 1.1.27R requires a *firm* to have *admissible assets* in each of its *with-profits funds* to cover the *technical provisions* and other *long-term insurance liabilities* relating to all the business in that fund. *INSPRU* 1.1.28R 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

1.5.30 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.

1.5.31 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*.

1.5.32 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*. A *firm* may also lend *securities* held in a *long-term insurance fund* under a *stock lending* transaction or transfer assets as *collateral* for a *stock lending* transaction where the *firm* is the borrower, where such lending or transfer is for the benefit of the *long-term insurance business*.

Payment of financial penalties

1.5.33 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*.

1.5.34 G *INSPRU* 1.5.2R states that this provision applies to all *firms*, except *mutuals*, and includes *firms* qualifying for authorisation under Schedule 3 or 4 to the *Act*.

Requirements: property-linked funds

1.5.35 G *INSPRU* 3.1.57R 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.

1.5.36 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.

1.5.37 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

1.5.38 G The purpose of the *rules* and *guidance* set out in *INSPRU* 1.5.38G to *INSPRU* 1.5.57R 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*.

1.5.39 G By virtue of *INSPRU* 1.5.2R(4), the *rules* in *INSPRU* 1.5.41R to *INSPRU* 1.5.57R 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.

1.5.40 G (1) *INSPRU* 1.5.41R 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) *INSPRU* 1.5.42R to *INSPRU* 1.5.47R 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) *INSPRU* 1.5.48R to *INSPRU* 1.5.52R require *non-EEA direct insurers* to hold a minimum level of assets in the *United Kingdom* or *EEA*.
(4) *INSPRU* 1.5.54R requires the deposit of a minimum level of assets in the *United Kingdom*.
(5) *INSPRU* 1.5.56R and *INSPRU* 1.5.57R require *non-EEA direct insurers* to keep adequate accounting records in the *United Kingdom*.

Worldwide financial resources

1.5.41 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 *INSPRU* 1.1.20R 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 *INSPRU* 1.1.20R 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

1.5.42 R A *non-EEA direct insurer* must:
(1) calculate a *UK* or *EEA MCR* in accordance with *INSPRU* 1.5.44R to *INSPRU* 1.5.47R; and
(2) hold *admissible assets* (in addition to those required under *INSPRU* 1.1.20R) to represent its *UK* or *EEA MCR* calculated under (1).

1.5.43 R The assets held under *INSPRU* 1.5.42R(2) must be identified and valued as if the *non-EEA direct insurer* was a *firm* with its head office in the *United Kingdom*.

1.5.44 R For the purposes of *INSPRU* 1.5.42R, a *non-EEA direct insurer* (except a *UK-deposit insurer*) must calculate a *UK MCR*:

(1) for *long-term insurance business*, in accordance with *INSPRU* 1.1.81R to *INSPRU* 1.1.91R but only in relation to business carried on by the *firm* in the *United Kingdom*;
(2) for *general insurance business*, in accordance with *INSPRU* 1.1.45R to *INSPRU* 1.1.72R but only in relation to business carried on by the *firm* in the *United Kingdom*.

1.5.45 R For a *composite firm*, the *UK MCR* is the sum of the amounts arrived at under *INSPRU* 1.5.44R(1) and *INSPRU* 1.5.44R(2).

1.5.46 R For the purposes of *INSPRU* 1.5.42R, a *UK-deposit insurer* must calculate an *EEA MCR*:

(1) for *long-term insurance business*, in accordance with *INSPRU* 1.1.81R to *INSPRU* 1.1.91R 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 *INSPRU* 1.1.45R to *INSPRU* 1.1.72R but only in relation to business carried on by the *firm* in all *EEA States*, taken together.

1.5.47 R For a *composite firm*, the *EEA MCR* is the sum of the amounts arrived at under *INSPRU* 1.5.46R(1) and *INSPRU* 1.5.46R(2).

Localisation of assets

1.5.48 R A *non-EEA direct insurer* (except a *UK-deposit insurer*) must hold:

(1) *admissible assets* which are required to cover its *technical provisions* in accordance with *INSPRU* 1.1.20R(1) or *INSPRU* 1.1.21R(1)(a) and *(2)(a)*; and
(2) other *admissible assets* not required to cover *property-linked liabilities* or *index-linked liabilities* in accordance with *INSPRU* 3.1.57R or *INSPRU* 3.1.58R which represent its *UK MCR* as calculated in accordance with *INSPRU* 1.5.44R;
as follows:
(a) (where the assets cover the *technical provisions* and the *guarantee fund*) in the *United Kingdom*;
(b) (where the assets represent the amount of the *UK MCR* in excess of the *guarantee fund*) in any *EEA State*.

1.5.49 R A *UK-deposit insurer* must hold:

(1) *admissible assets* which are required to cover its technical provisions in accordance with *INSPRU* 1.1.20R(1) or *INSPRU* 1.1.21R(1)(a) and *(2)(a)*; and
(2) other *admissible assets* not required to cover *property-linked liabilities* or *index-linked liabilities* in accordance with *INSPRU* 3.1.57R or *INSPRU* 3.1.58R which represent its *EEA MCR* as calculated in accordance with *INSPRU* 1.5.46R;
as follows:
(a) (where the assets cover the *technical provisions* and the *guarantee fund*) within the *EEA* states where the *firm* carries on *insurance business*;
(b) (where the assets represent the amount of the *EEA MCR* in excess of the *guarantee fund*) in any *EEA State*.

1.5.50 R *INSPRU* 1.5.48R and *INSPRU* 1.5.49R do not apply to assets covering *technical provisions* which are debts owed by *reinsurers*.

1.5.51 G The *admissible assets* in excess of the *technical provisions* and *UK* or *EEA MCR* may be held outside the *EEA*.

1.5.52 R For the purpose of *INSPRU* 1.5.48R and *INSPRU* 1.5.49R :

(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.

1.5.53 G *INSPRU* 3.1.53R to *INSPRU* 3.1.55R (currency matching of assets and liabilities) apply to the assets held to match insurance liabilities calculated under *INSPRU* 1.1.12R or *INSPRU* 1.1.16R.

Deposit of assets as security

1.5.54 R A *non-EEA direct insurer* must keep assets of a value at least equal to one quarter of the *base capital resources requirement* on deposit in the *United Kingdom* with a *BCD credit institution*.

1.5.55 G The assets deposited as security may count towards the assets required under *INSPRU* 1.5.48R and *INSPRU* 1.5.49R. If, after the deposit is made, the value of the deposited assets falls below one quarter of the *base capital resources requirement*, the *firm* should deposit further *admissible assets* in order to comply with *INSPRU* 1.5.48R and *INSPRU* 1.5.49R. 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 *INSPRU* 1.5.48R or *INSPRU* 1.5.49R.

Branch accounting records in the United Kingdom

1.5.56 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*.

1.5.57 R The records maintained as required by *INSPRU* 1.5.56R 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 *INSPRU* 1.1.20R as available to meet those liabilities.

Application of INSPRU 1.5 to Lloyd's

1.5.58 R *INSPRU* 1.5 applies to *managing agents* and to the *Society* in accordance with:
(1) for *managing agents*, *INSPRU* 8.1.4R; and
(2) for the *Society*, *INSPRU* 8.1.2R.

1.5.59 R The *Society* and *managing agents* must take all reasonable steps to ensure that:
(1) a *corporate member* does not carry on any commercial business other than *insurance business* and activities arising directly from that business; and
(2) *individual members* do not, in their capacity as *underwriting members*, carry on any commercial business other than *insurance business* and activities arising directly from that business.

1.5.60 R A *managing agent* must not permit both *general insurance business* and *long-term insurance business* to be carried on together through any *syndicate* managed by it.

1.6 Insurance Special Purpose Vehicles

Application and Purpose

1.6.1 R (1) *INSPRU* 1.6.5R to *INSPRU* 1.6.12R apply to a *UK ISPV*.

(2) *INSPRU* 1.6.13G to *INSPRU* 1.6.18G apply to an *insurer* which has a contract of *reinsurance* with an *ISPV*.

1.6.2 G An *ISPV* is a special purpose vehicle which assumes risks from *insurance undertakings* or *reinsurance undertakings* and which fully funds its exposure to such risks through the proceeds of a debt issuance or some other financing mechanism where the repayment rights of the providers of such debt or other financing mechanism are subordinated to the *reinsurance* obligations of that vehicle. The special feature of an *ISPV*, when compared to other *reinsurers*, is that it is fully funded to meet its *reinsurance* liabilities. It is, therefore, not subject to insurance risk to the same extent as other *reinsurers*. The *Reinsurance Directive* permits *ISPVs* to be subject to different rules to those applying to other *reinsurers*.

1.6.3 G To satisfy the definition of an *ISPV* under the *Reinsurance Directive* the *ISPV* must be fully funded. The *FSA* considers that to be fully funded an *ISPV* must have actually received the proceeds of the debt issuance or other mechanism by which it is financed. The *FSA* would not, therefore, grant a *Part IV permission* to an *ISPV* where part of the financing for its *reinsurance* liabilities was on a contingent basis, for example, a standby facility or letter of credit.

1.6.4 G The purpose of *INSPRU* 1.6 is:

(1) to set out the *rules* applying to *UK ISPVs* in respect of:

(a) their assets and liabilities; and

(b) their contractual arrangements; and

(2) to set out the conditions that must be met in order for an *insurer* to claim credit for *reinsurance* with an *ISPV*.

Assets and liabilities

1.6.5 R A *UK ISPV* must ensure that at all times its assets are equal to or greater than its liabilities.

1.6.6 G In addition to liability under its contracts of *reinsurance*, an *ISPV* will incur liability for other expenses, for example, staff and accommodation costs, *claims* handling arrangements and professional advisers' fees. *INSPRU* 1.6.5R requires a *UK ISPV* to ensure that it always has sufficient assets to meet its liabilities.

1.6.7 R A *UK ISPV* must invest its assets in accordance with the requirements set

out in *INSPRU* 3.1.61AR.

1.6.8 R A *UK ISPV's* assets must be held by, or on behalf of:

(1) the *UK ISPV*; or

(2) the *insurance undertaking* or *reinsurance undertaking* which cedes to the *UK ISPV* the risks in respect of which the relevant assets are held.

Contractual arrangements

1.6.9 R A *UK ISPV* must include in each of its contracts of *reinsurance* terms which secure that its aggregate maximum liability at any time under those contracts of *reinsurance* does not exceed the amount of its assets at that time.

1.6.10 G *INSPRU* 1.6.9R requires that a *UK ISPV's* contracts of *reinsurance* should include terms that secure that its maximum *reinsurance* liability is capped at a level that is no greater than the *ISPV's* assets. In the *FSA's* view, this is a necessary condition of the *ISPV* being fully funded, as it means that the *ISPV* should not find that its assets are insufficient to meet its *reinsurance* liabilities.

1.6.11 R A *UK ISPV* must ensure that under the terms of any debt issuance or other financing arrangement used to fund its *reinsurance* liabilities the rights of the providers of that debt or other financing are fully subordinated to the claims of creditors under its contracts of *reinsurance*.

1.6.12 R A *UK ISPV* must only enter into contracts or otherwise assume obligations which are necessary for it to give effect to the *reinsurance* arrangements which represent the special purpose for which it has been established.

Reinsurance with an ISPV

1.6.13 G As a result of *GENPRU* 1.3.55R, *GENPRU* 2 Ann 7R, *INSPRU* 1.1.92AR and *INSPRU* 1.2.28R an *insurer* may not:

(1) treat amounts recoverable from an *ISPV* as:

(a) an *admissible asset*, or

(b) *reinsurance* for the purposes of calculating its *mathematical reserves*, or

(c) *reinsurance* reducing its *MCR*, or

(2) otherwise ascribe a value to such amounts,

unless it first obtains a *waiver* from the *FSA*. *INSPRU* 1.6.14G to *INSPRU* 1.6.18G set out the information which the *FSA* will expect to receive as part of the application for the *waiver*. Those paragraphs also set out the factors, in addition to the statutory tests under section 148 of the *Act*, to which the

FSA will have regard in deciding:

(i) whether to grant such a *waiver* (assuming the section 148 conditions are met); and

(ii) the amount recoverable from the *ISPV* which it will allow the *insurer* to bring into account for these purposes.

1.6.14 G Where the *ISPV* is a *UK ISPV*, the *FSA* will wish to be satisfied that the *UK ISPV* complies with *INSPRU* 1.6.5R to *INSPRU* 1.6.12R. The *FSA* may rely on information supplied in connection with its application for *authorisation*. However, if the application for a *waiver* is made some time after *authorisation* was granted, the *FSA* may request confirmation that there has been no material change to the information originally supplied.

1.6.15 G Where the *ISPV* is not a *UK ISPV*, the *FSA* will expect to receive confirmation that the *ISPV* has received an official authorisation in accordance with article 46 of the *Reinsurance Directive* in the *EEA State* in which it has been established. In addition, it will need details of the debt issuance or other financing mechanism by which the *ISPV's reinsurance* liabilities are funded. The *FSA* will also expect to receive information about the *ISPV's* key management and control functions, including details of the *ISPV's* auditors and arrangements for *claims* handling, and any material *outsourcing* agreements. The *FSA* will also need information about the structure of any *group* of which the *ISPV* is a member.

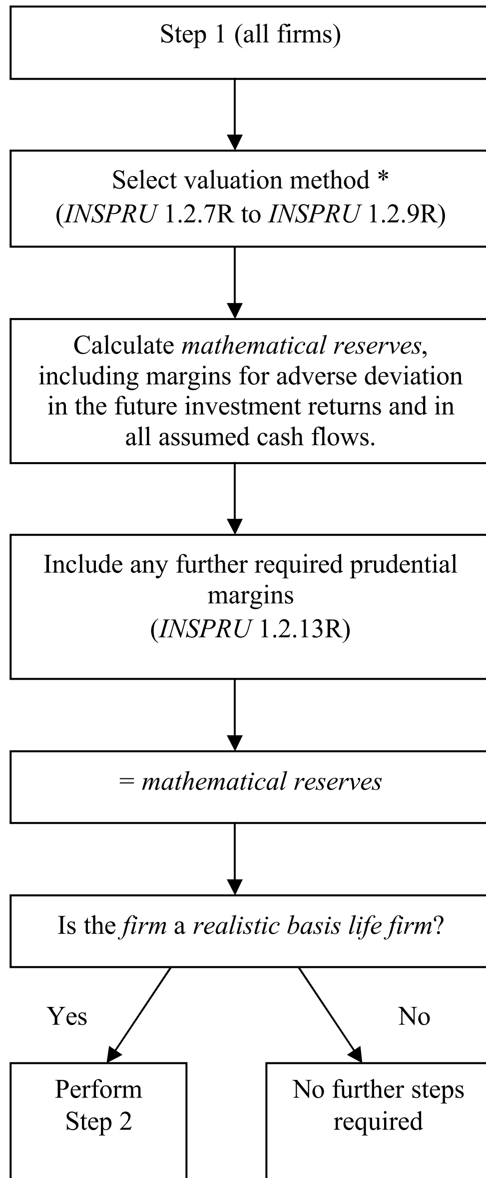
1.6.16 G No credit may be taken for a contract of *reinsurance* with an *ISPV* unless the contract meets the risk transfer principle set out in *INSPRU* 1.1.19AR. The *FSA* will require evidence that the contract of *reinsurance* and the extent of the credit that the *firm* proposes to take for it satisfy the risk transfer principle.

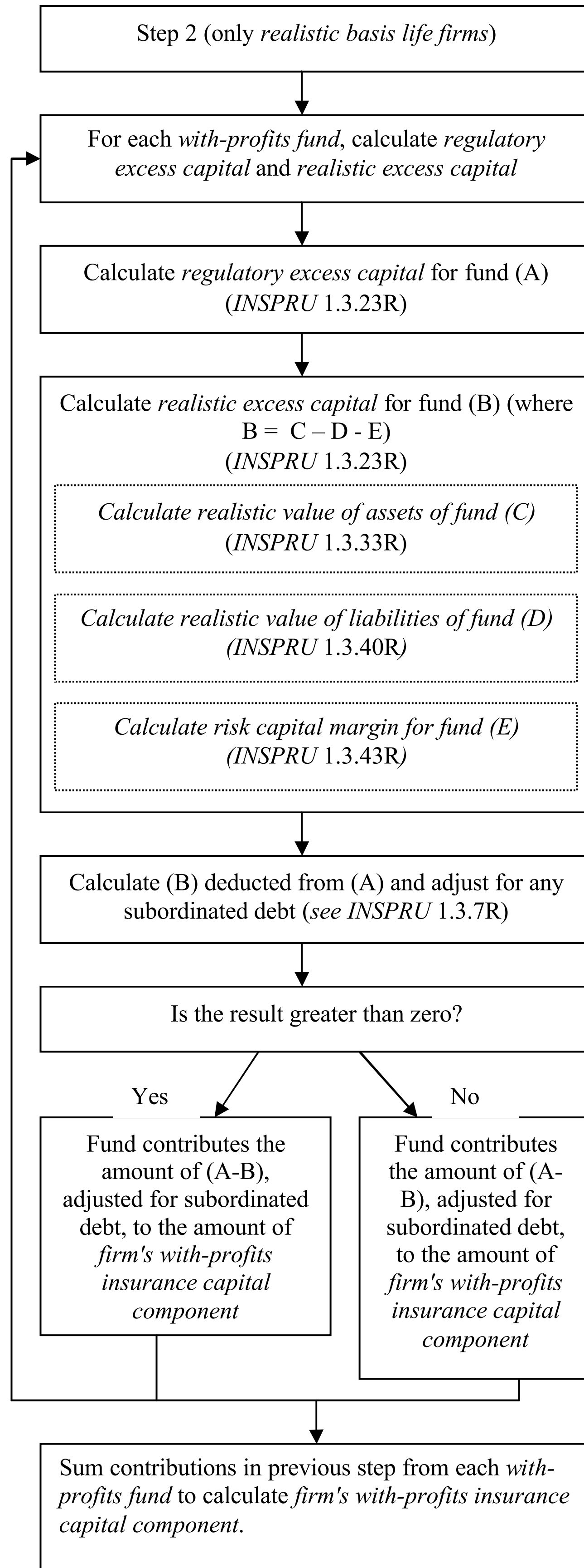
1.6.17 G The *FSA* will require information about the impact of the *ISPV* arrangement on the ceding *firm's* individual capital assessment carried out in accordance with *INSPRU* 7.1. This should include evidence that all residual risks associated with the arrangement (including credit, market, liquidity and operational risks) are reflected in that assessment.

1.6.18 G The *FSA* will also expect to receive an analysis of the potential for risk to revert to the *firm* or any of its *associates* under realistic adverse scenarios or for liabilities to arise in respect of the risks transferred for which no provision has been made.

Annex 1G

INSPRU 1.2 (Mathematical reserves) and INSPRU 1.3 (With-profits insurance capital component)





* For conventional *with-profits insurance business*, where a *firm* is a *regulatory basis only firm* (see *INSPRU* 1.2.5G), the *net premium* method of valuation has to be used (*INSPRU* 1.2.37*R* to *INSPRU* 1.2.45G)

2.1 Credit risk in insurance

Application

2.1.1 R *INSPRU* 2.1 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*.

2.1.2 R All of *INSPRU* 2.1, except *INSPRU* 2.1.20R and *INSPRU* 2.1.23R to *INSPRU* 2.1.32G, 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*.

2.1.3 G The scope of application of *INSPRU* 2.1 is not restricted to *firms* that are subject to relevant EC directives.

2.1.4 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

2.1.5 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 *SYSC* 15.1.4G.

2.1.6 G The requirements in this section address both current and contingent exposure to credit risk. *PRIN* and *SYSC* 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.

2.1.7 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 *INSPRU* because they are closely linked to the *counterparty* limits set out in this section.

Overall limitation of credit risk

2.1.8 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.

2.1.9 R (1) For the purposes of *INSPRU* 2.1, *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 *INSPRU* 2.1, 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 the *capital resources table* 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 *INSPRU* 2.1.35R 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 *INSPRU* 2.1.22R(3).

2.1.10 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.

2.1.11 G In assessing the adequacy of diversification required by *INSPRU* 2.1.8R, 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.

2.1.12 G A *firm* should consider how the spreading of credit risk will impact on overall *counterparty* quality.

2.1.13 G In assessing its exposure to a *counterparty* for the purpose of *INSPRU* 2.1.8R, 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.

2.1.14 G In assessing the loss that might result from the default of a *counterparty* for the purposes of *INSPRU* 2.1.8R, 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*.

2.1.15 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*.

2.1.16 R For the purposes of *INSPRU* 2.1.8R and of determining *counterparty* exposure and asset exposure in accordance with *INSPRU* 2.1.9R and *reinsurance* exposure in accordance with *INSPRU* 2.1.25R, 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.

2.1.17 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*.

2.1.18 R For the purposes of *INSPRU* 2.1.8R and of determining *counterparty* exposure and asset exposure in accordance with *INSPRU* 2.1.9R and *reinsurance* exposure in accordance with *INSPRU* 2.1.25R, a *firm* must not rely upon preferential access to assets unless it has taken into account appropriate professional advice as to its effectiveness.

2.1.19 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

2.1.20 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*.

2.1.21 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

2.1.22 R (1) A *firm* must calculate the amount of the deduction from total capital required by stage L in the *capital resources table* 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 *INSPRU*, whenever:

(a) a *rule* in *INSPRU* 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 *GENPRU* 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 exposures which are greater than 5% arising from applying a 10% limit does not exceed 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* and other variable yield participations, 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 the *capital resources table*); and

(c) such amount as the *firm* may select not exceeding, in the case of a *firm* which is not a *participating insurance undertaking*, the amount of the *firm's* total capital after deductions as calculated at stage M of the *capital resources table* or, in the case of a *firm* which is a *participating insurance undertaking*, the amount calculated in accordance with (5A) or, in either case, 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.

(5A) For the purpose of (4)(c), a *firm* which is a *participating insurance undertaking* must calculate the amount of the *firm's group capital resources* less the difference between:

(a) the *firm's group capital resources requirement*; and

(b) the *firm's capital resources requirement*.

(5B) In (3)(b)(i) short term *deposit* means a *deposit* which may be withdrawn at the discretion of the lender without penalty or loss of accrued interest by giving notice of withdrawal of one month or less.

(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.

2.1.22A R *INSPRU* 2.1.22R does not apply to a *pure reinsurer*.

Large exposure calculation for reinsurance exposures

2.1.23 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*; or

(2) if (1) does not apply, that it has exceeded this limit.

2.1.24 R Upon notification under *INSPRU* 2.1.23R, 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.

2.1.25 R (1) For the purposes of *INSPRU* 2.1, 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 the *capital resources table* 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 *INSPRU* 2.1.35R 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 *INSPRU* 2.1.22R(3).

2.1.26 R A *firm* must, in determining its *reinsurance* exposures for the purposes of *INSPRU* 2.1, 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*.

2.1.27 G *INSPRU* 2.1.8R provides that, taking into account relevant risks, a *firm* must restrict to prudent levels, and adequately diversify, its exposure to *counterparties*.

2.1.28 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 *INSPRU* 2.1.8R.

2.1.29 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 *INSPRU* 2.1.28E.

2.1.30 R Upon notification under *INSPRU* 2.1.29 R, a *firm* must explain to the *FSA* how, despite the excess *reinsurance* concentration, the credit risk is being safely managed.

2.1.31 G For the purposes of *INSPRU* 2.1.24R and *INSPRU* 2.1.30R, 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.

2.1.32 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

2.1.33 R In *INSPRU* 2.1.20R and *INSPRU* 2.1.22R, references to a *counterparty* exposure or an asset exposure do not include such an exposure arising from:

(1) [deleted]

(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, *INSPRU* 2.1.20R and *INSPRU* 2.1.22R 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 *collective investment scheme* falling within the *UCITS Directive*.

2.1.34 R In *INSPRU* 2.1.22 R 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*.

2.1.35 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* (except where that *collateral* is a letter of credit - see *INSPRU* 2.1.36R and *INSPRU* 2.1.37R); 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 *INSPRU* 2.1.9R(5) or, in the case of a *reinsurance* exposure, *INSPRU* 2.1.25R(3).

2.1.36 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 *INSPRU* 2.1.20R, *INSPRU* 2.1.22R and *INSPRU* 2.1.23R, 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*.

2.1.37 R For the purposes of *INSPRU* 2.1.36R, references to an exposure being guaranteed include an exposure secured by a letter of credit, but to fall

within *INSPRU* 2.1.36 R the guarantee or letter of credit must be direct, explicit, unconditional and irrevocable.

2.1.38 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 *INSPRU* 2.1.20R and *INSPRU* 2.1.22R.

2.1.39 R For the purposes of *INSPRU* 2.1.20R and *INSPRU* 2.1.22R, 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

2.1.40 R For the purposes of *INSPRU* 2.1, 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 *INSPRU* 2.1.41R, over the other or they are both controlled by the same third party; or

(2) there is no relationship of control as defined in *INSPRU* 2.1.41R 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.

2.1.41 R For the purposes of *INSPRU* 2.1.40R, 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*.

Application of INSPRU 2.1 to Lloyd's

2.1.42 R Subject to *INSPRU* 2.1.43R, *INSPRU* 2.1 applies to *managing agents* and to the *Society* in accordance with:
(1) for *managing agents*, *INSPRU* 8.1.4R; and
(2) for the *Society*, *INSPRU* 8.1.2R.

2.1.43 R *INSPRU* 2.1.23R to *INSPRU* 2.1.32G (Large exposure calculation for reinsurance exposures) do not apply to the *Society*.

Overall limitation of credit risk

2.1.44 G For Lloyd's, *counterparty* exposure is:
(1) for *managing agents*, the amount by which the net assets managed by or under the direction of a *managing agent* in respect of a *syndicate* together with any relevant *balancing amount* would decrease if the *counterparty* were to default;
(2) for the *Society*, the amount by which its net assets (which include those

of its subsidiary undertakings) would decrease if the *counterparty* were to default; and

(3) for the *Society*'s management of each *member's funds at Lloyd's*, the amount by which the *member's* net assets would decrease if the *counterparty* were to default.

Large exposures

2.1.45 R For the purposes of *INSPRU* 2.1.20R (Large exposure limits: counterparty exposure and asset exposure), the *Society* may determine the exposure to any letters of credit, guarantees or *members'* life assurance policies as an exposure of the *members* in aggregate.

2.1.46 R For the purposes of *INSPRU* 2.1.22R (Large exposure limits: market risk and counterparty limits), the *Society* must calculate the amount of and deduct from *capital resources*:

(1) an exposure (expressed as a percentage of the relevant *member's capital resources* held as *funds at Lloyd's*), other than to the assets identified in *INSPRU* 2.1.46R(2)(a) to *INSPRU* 2.1.46R(2)(c), of a *member's capital resources* held as *funds at Lloyd's* to a *counterparty*, in excess of the limits in *INSPRU* 2.1.22R;

(2) an exposure in excess of 20% (expressed as a percentage of the aggregate of *capital resources* held as *funds at Lloyd's*) of the aggregate of *capital resources* held as *funds at Lloyd's* to a single issuer of:

(a) letters of credit;

(b) guarantees; or

(c) *members*' life assurance policies;

(3) an exposure of its own to a *counterparty*, in excess of the limits in *INSPRU* 2.1.22R, expressed as a percentage of the *Society*'s own assets.

2.1.47 R For the purposes of *INSPRU* 2.1.22R (Large exposure limits: market risk and *counterparty* limits), *managing agents* must calculate the amount of and deduct from *capital resources* an exposure (expressed as a percentage of the *admissible assets* held in respect of the relevant *syndicate*) of *admissible assets* held in respect of a *syndicate* to a *counterparty* in excess of the limits in *INSPRU* 2.1.22R.

2.1.48 R If the exposures of *capital resources* held as *funds at Lloyd's* for *members* in the aggregate do not exceed the limits in *INSPRU* 2.1.22R(3)(c), then, for each *individual member*, that limit may be replaced by 10%.

Exposures excluded from the large exposure limits

2.1.49 R For *managing agents*, in *INSPRU* 2.1.33R and *INSPRU* 2.1.35R, references to an exposure do not include exposure arising from *balancing amounts*.

2.2 Asset-related Capital Requirement

Application

2.2.1 R *INSPRU* 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*.

2.2.2 G The scope of application of *INSPRU* 2.2 is not restricted to *firms* that are subject to the relevant EC directives.

2.2.3 R *INSPRU* 2.2 applies to a *firm* only in relation to its *general insurance business*.

2.2.4 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.

2.2.5 G The requirements in *INSPRU* 2.2 apply to a *firm* on a solo basis.

Purpose

2.2.6 G *GENPRU* 2.1.13R requires that a *firm* must maintain at all times *capital resources* equal to or in excess of its *capital resources requirement*. *GENPRU* 2.1.17R provides that for a *firm* carrying on *general insurance business* the *firm's capital resources requirement* is the *minimum capital requirement*.

2.2.7 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 *INSPRU* 1.1.

2.2.8 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.

2.2.9 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 *GENPRU* 1.3 which sets out how a *firm* must recognise and value assets and liabilities.

Calculation of asset-related capital requirement

2.2.10 R A *firm* must calculate its *asset-related capital requirement* in accordance with *INSPRU* 2.2.11R.

2.2.11 R (1) The value of each of the *firm's* assets of a kind listed in the table in *INSPRU* 2.2.16R 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 *INSPRU* 2.1.22R.

(4) Where a *firm* has entered into a *derivative*, then for the purposes of applying the appropriate capital charge factor as set out in *INSPRU* 2.2.16R, 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).

2.2.12 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 *INSPRU* 2.2.16R in relation to the asset associated with the *derivative*.

2.2.13 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.

2.2.14 R (1) The asset-related capital charge factor for money market funds set out in the Table *INSPRU* 2.2.16R must be applied to exposures to funds that meet the definition in (2).

(2) In *INSPRU* 2.2 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).

2.2.15 R In *INSPRU* 2.2.16R an insurance dependant means a *regulated related undertaking* which is an *insurance undertaking* or an *insurance holding company*.

2.2.16 R 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%

Application of INSPRU 2.2 to Lloyd's

2.2.17 R *INSPRU* 2.2 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R

2.2.18 R This chapter applies to the *Society* for each *member*, including the capital charge relating to *central assets*, to the extent that those assets are held to support a particular *member*.

3.1 Market risk in insurance

3.1.1 R *INSPRU* 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 *INSPRU* 3.1 applies to *pure reinsurers*, with the exception of *INSPRU* 3.1.53R, *INSPRU* 3.1.57R and *INSPRU* 3.1.58R.

3.1.3 R (1) *INSPRU* 3.1 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*, *INSPRU* 3.1 applies separately to each type of business.

Purpose

3.1.4 G This section sets out *rules* and *guidance* relating to *market risk*. Under *INSPRU* 1.1.20R and *INSPRU* 1.1.21R, a *firm* is required to hold *admissible assets* of a value sufficient to cover its *technical provisions* and its other *long-term insurance* or *general insurance liabilities*. In addition, *INSPRU* 1.1.34R 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.

3.1.5 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*.

3.1.6 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 *INSPRU* 2.1.22R cover *market risk* as well as *counterparty* risk.

3.1.7 G *INSPRU* 3.1 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 *INSPRU* 3.1.9G to *INSPRU* 3.1.26R.

(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 technical provisions* and other *long-term insurance liabilities*. *INSPRU* 1.2 contains *rules* and *guidance* as to the methods and assumptions to be used in calculating the *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*. *INSPRU* 3.1.28R to *INSPRU* 3.1.48G 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*. *INSPRU* 3.1.49G to *INSPRU* 3.1.56G 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 *INSPRU* 3.1.27G.

(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. *INSPRU* 3.1.57R and *INSPRU* 3.1.58R set out these cover requirements.

(6) The *Reinsurance Directive* applies to *pure reinsurers* "prudent person" investment principles in relation to the investment of their assets. *INSPRU* 3.1.61AR sets out these principles.

Definitions

3.1.8 R For the purposes of *INSPRU* 3.1:

(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 *INSPRU* 3.1.57R and *INSPRU* 3.1.58R), are invested;

(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; and

(4) the member states of the European Union which have adopted the Euro as the official currency may be treated as a single territory.

Resilience capital requirement (applicable to long-term insurance business only)

3.1.9 G The *resilience capital requirement* forms part of the calculation of the *capital resources requirement* for all *firms* carrying on *long-term insurance business*. *GENPRU* 2.1.18R to *GENPRU* 2.1.23R 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 *GENPRU* 2.1.25R(2)and *GENPRU* 2.1.38R(2)).

3.1.10 R (1) A *firm* that carries on *long-term insurance business* must calculate a *resilience capital requirement* in accordance with (2) to (5).

(2) The *firm* must identify relevant assets (see *INSPRU* 3.1.10AR) 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 relevant assets invested in the *United Kingdom*, the *market risk* scenario set out in *INSPRU* 3.1.16R;

(b) subject to (c) and to *INSPRU* 3.1.26R, for those relevant assets invested outside of the *United Kingdom*, the *market risk* scenario set out in *INSPRU* 3.1.23R; and

(c) where the relevant 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 *INSPRU* 3.1.16R.

(4) The *resilience capital requirement* is the result of deducting B from A, where:

(a) A is the value of the relevant 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 *GENPRU* 1.3.4R in respect of a *defined benefits pension scheme*.

3.1.10A R In *INSPRU* 3.1.10R relevant assets means a range of assets which must be selected by the *firm* from the assets specified in (1) and (2) in the order specified:

(1) its *long-term insurance assets*; and

(2) only where the *firm* has selected all the assets within (1), its shareholder assets, other than assets of an amount and kind required:

(a) to cover its liabilities arising outside its *long-term insurance funds*; or

(b) to meet any regulatory capital requirements in respect of business

written outside its *long-term insurance funds*.

3.1.11 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*.

3.1.12 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.

3.1.13 G As part of the assessment of the financial resources a *firm* needs to hold to comply with the *overall financial adequacy rule*, the *general stress and scenario testing rule* 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 the *overall Pillar 2 rule*. 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 *INSPRU* 3.1.16R to *INSPRU* 3.1.26R 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.

3.1.13A G In the *market risk* scenarios set out in *INSPRU* 3.1.16R to *INSPRU* 3.1.26R, a *firm* is required to assess the changed value of its assets and liabilities in the economic conditions of the scenarios set out in *INSPRU* 3.1.16R and *INSPRU* 3.1.23R. A *firm* is required to assess the changed value of each relevant asset (as defined in *INSPRU* 3.1.10AR), notwithstanding any uncertainty about the appropriate valuation basis for that asset. In valuing an asset in the specified scenarios, a *firm* should have regard to the economic substance of the asset, rather than its legal form, and assess its value accordingly. Consider, for example, a convertible bond that is close to its conversion date and where the conversion option has value. The value of the convertible bond in the specified scenarios is likely to be sensitive primarily to equity market scenarios and to a lesser extent to interest rate scenarios. The *firm* should value the asset according to its expected market value in the

economic conditions underlying the specified scenarios.

3.1.13B G In determining where particular assets are invested for the purpose of determining which *market risk* scenario should be applied to those assets, or whether a country or territory in which a *firm* has invested part of its *long-term insurance assets* is a significant territory, a *firm* should generally treat:

(1) a *security* dealt in on a *regulated market* as invested in any country or territory in which a *regulated market* on which the *security* is dealt is situated;

(2) a *security* which is not dealt in on a *regulated market* as invested in the country or territory in which the *issuer* has its head office;

(3) an asset consisting of a claim against a debtor as invested in any country or territory where it can be enforced by legal action;

(4) real estate as invested in the country or territory in which the land, buildings or other immovable property is situated;

(5) a tangible asset as invested in the country or territory where it is situated; and

(6) a *derivative* or *quasi-derivative* as invested in the country or territory in which the assets to which the *firm* is exposed by reason of having entered into the *derivative* or *quasi-derivative* are situated.

Where, however, the nature of a *firm's* investment is such that the economic risks to which it is principally exposed are risks relating to assets invested in, or the currency of, a different country or territory to that in which are invested the assets directly invested in by the *firm*, then the *firm* should consider whether it would be more reasonable to treat the assets as invested in that other country or territory. For example, if a *firm* has invested in the *securities* of a *collective investment scheme* which are dealt in on a *regulated market* in country A, but the scheme principally invests in real estate situated in country B, the *firm* should consider whether its principal exposure is in fact to the country in which the underlying assets are situated (that is, country B). Another example might be where a *firm* has invested in a bond or other fixed interest *security* that is denominated in the currency of a country or territory other than that in which the *security* would be treated as invested under (1) or (2) above. The *firm* may wish to consider whether that bond or fixed interest *security* should be treated as invested in the country or territory of the currency of denomination.

3.1.14 G The *resilience capital requirement* requires *firms* to assume different adverse *market risk* scenarios for equities, real estate and fixed interest securities (see *INSPRU* 3.1.16R and *INSPRU* 3.1.23R) to those required by *INSPRU* 1.3.68R (UK and certain other assets) and *INSPRU* 1.3.73R (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*.

3.1.15 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 *INSPRU* 3.1.41R 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 *INSPRU* 1.2.26R (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

3.1.16 R In *INSPRU* 3.1.10R(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 *INSPRU* 3.1.19R);

(2) a fall in real estate values of 20% less the *real estate market adjustment ratio* for an appropriate real estate index (see *INSPRU* 3.1.21R);

(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.

3.1.17 R For the purposes of *INSPRU* 3.1.16R(1) and *INSPRU* 3.1.16R(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 *INSPRU* 3.1.36R to *INSPRU* 3.1.38R); and

(2) model a fall in equity and real estate markets as if the fall occurred instantaneously.

3.1.18 G An example of *INSPRU* 3.1.16R(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 *INSPRU* 3.1.16R(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

3.1.19 R The equity market adjustment ratio referred to in *INSPRU* 3.1.16R(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%.

3.1.20 R In *INSPRU* 3.1.19R, 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

3.1.21 R The real estate market adjustment ratio for a real estate index referred to in *INSPRU* 3.1.16R(2) and *INSPRU* 3.1.23R(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%.

3.1.22 G For the purpose of calculating the *real estate market adjustment ratio* in *INSPRU* 3.1.21R, 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 *INSPRU* 3.1.10R; 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

3.1.23 R In *INSPRU* 3.1.10R(3)(b), subject to *INSPRU* 3.1.26R, 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 *INSPRU* 3.1.16R;

(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 *INSPRU* 3.1.21R); 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.

3.1.24 R For the purposes of *INSPRU* 3.1.23R(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).

3.1.25 G For the purpose of *INSPRU* 3.1.24R(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 *INSPRU* 3.1.10R; 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*.

3.1.26 R Where the assets of a *firm* invested in a significant territory of a kind referred to in *INSPRU* 3.1.23R(1), *INSPRU* 3.1.23R(2) or *INSPRU* 3.1.23R(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 *INSPRU* 3.1.16R instead of the *market risk* scenario set out in *INSPRU* 3.1.23R.

Interest rates: general insurance liabilities

3.1.27 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*, except where benefits resulting from a *claim* must be paid in the form of an annuity, in which case the rules require calculation by recognised actuarial methods. In the case of *claims* not payable in the form of an annuity, the *insurance accounts rules* 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

3.1.28 R The rates of interest required by *INSPRU* 1.2.33R to be used by a *firm* for the calculation of the present value of a *long-term insurance liability* must not exceed 97.5% of the risk-adjusted yield (see *INSPRU* 3.1.30R to *INSPRU* 3.1.48G) 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 *INSPRU* 3.1.45R to *INSPRU* 3.1.48G); and

(3) the investment of future *premium* receipts (see *INSPRU* 3.1.45R to *INSPRU* 3.1.48G).

3.1.29 R For the purposes of *INSPRU* 3.1.28R, 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.

3.1.29A G *INSPRU* 3.1.28R applies only to *long-term insurance contracts* that are treated as liabilities. Where a *firm* treats a *long-term insurance contract* as an asset (see *INSPRU* 1.2.24R), in calculating the present value of future net cash flows under that contract, it must include margins for adverse variation in accordance with *INSPRU* 1.2.13R. These margins should include margins for *market risk* and, where relevant, credit risk. For those margins to be sufficiently prudent as required by *INSPRU* 1.2.13R, the rate of interest used may need to be higher than that which would apply under *INSPRU* 3.1.28R.

Risk-adjusted yield

3.1.30 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 *INSPRU* 3.1.33R);

(3) valuing the asset (together with any offsetting transaction) in accordance with *GENPRU* 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.

3.1.31 G Examples of calculating a combined yield for the purposes of *INSPRU* 3.1.30R(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*.

3.1.32 G The requirements in relation to offsetting transactions are set out in *INSPRU* 3.2. The options and other rights referred to in *INSPRU* 3.1.30R(4) include those exercisable by the *firm* as well as those exercisable by other parties.

3.1.33 R For the purpose of *INSPRU* 3.1.30R(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.

3.1.34 R The risk-adjusted yield is either:

(1) (for equities and real estate) a running yield (see *INSPRU* 3.1.36R to *INSPRU* 3.1.38R, *INSPRU* 3.1.41R and *INSPRU* 3.1.44R); or

(2) (for all other assets) the internal rate of return (see *INSPRU* 3.1.39R, *INSPRU* 3.1.41R and *INSPRU* 3.1.44R).

3.1.35 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

3.1.36 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

3.1.37 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.

3.1.38 R For the purposes of *INSPRU* 3.1.37R:

(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

3.1.39 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.

3.1.40 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

3.1.41 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.

3.1.42 G An allowance for credit risk should be made for all securities except risk-free securities.

3.1.43 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.

3.1.44 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

3.1.45 R Except as provided in *INSPRU* 3.1.46R:

(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).

3.1.46 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.

3.1.47 R The risk-adjusted yield assumed for the investment or reinvestment of non-sterling sums must be at least as prudent as in *INSPRU* 3.1.45R and *INSPRU* 3.1.46R.

3.1.48 G The purpose of *INSPRU* 3.1.45R to *INSPRU* 3.1.47R 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

3.1.49 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

3.1.50 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.

3.1.51 G The requirements in relation to cover and offsetting transactions are set out in *INSPRU* 3.2.

Currency matching of assets and liabilities

3.1.52 G *INSPRU* 1.1.34R 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 *INSPRU* 3.1.53R.

3.1.53 R (1) Subject to *INSPRU* 3.1.54R, a *firm* must hold *admissible assets* in each currency of an amount equal to at least 80% of the amount of its liabilities in that currency arising under or in connection with *contracts of insurance* (but excluding, for a *firm* that carries on *general insurance business*, any *equalisation provision*), except where the amount of those assets does not exceed 7% of the assets in other currencies.

(2) In (1) references to an asset in a currency are to an asset which is expressed in or capable of being realised (without exchange risk) in that currency, and an asset is capable of being so realised if it is reasonably capable of being realised in that currency without risk that changes in exchange rates would reduce the cover for liabilities in that currency.

3.1.54 R *INSPRU* 3.1.53R does not apply to:

(1) a *pure reinsurer*; or

(2) assets held to cover *index-linked liabilities* or *property-linked liabilities*.

3.1.55 R For the purpose of *INSPRU* 3.1.53R, 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.

3.1.56 G The reasonable grounds in *INSPRU* 3.1.55R(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

3.1.57 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).

3.1.58 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).

3.1.58A R *INSPRU* 3.1.57R and *INSPRU* 3.1.58R do not apply to a *pure reinsurer*.

3.1.59 G For the purposes of *INSPRU* 3.1.57R and *INSPRU* 3.1.58R, a *firm* is not permitted to hold different assets and to cover the mismatch by holding excess assets.

3.1.60 G If a *firm* has incurred a *policy* liability which cannot be exactly matched by appropriate assets (for example the Limited Price Index (LPI)), 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 an RPI bond or a fixed interest investment matching cash flows increasing at 5% per annum compound.

3.1.61 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 *INSPRU* 2.1.

Pure reinsurers

3.1.61A R A *pure reinsurer* must invest its assets in accordance with the following requirements:

(1) the assets must take account of the type of business carried out by the *firm*, in particular the nature, amount and duration of expected *claims* payments, in such a way as to secure the sufficiency, liquidity, security, quality, profitability and matching of its investments;

(2) the *firm* must ensure that the assets are diversified and adequately spread and allow the *firm* to respond adequately to changing economic circumstances, in particular developments in the financial markets and real estate markets or major catastrophic events; the *firm* must assess the impact of irregular market circumstances on its assets and must diversify the assets in such a way as to reduce such impact;

(3) investment in assets which are not admitted to trading on a *regulated market* must be kept to prudent levels;

(4) investment in *derivatives* and *quasi-derivatives* must contribute to a reduction of investment risks or facilitate efficient portfolio management and such investments must be valued on a prudent basis, taking into account the underlying assets, and included in the valuation of the *firm's* assets. The *firm* must avoid excessive risk exposure to a single *counterparty* and to other *derivative* or *quasi-derivative* operations;

(5) the assets must be properly diversified in such a way as to avoid:

(a) excessive reliance on any one particular asset, *issuer* or *group* of *undertakings*; and

(b) accumulations of risk in the portfolio as a whole.

Investments in assets issued by the same *issuer* or by *issuers* belonging to the same *group* must not expose the *firm* to excessive risk concentration; and

(6) (5) does not apply to investment in government bonds.

Application of INSPRU 3.1 to Lloyd's

3.1.62 R *INSPRU* 3.1 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents INSPRU* 8.1.4R, subject to *INSPRU* 3.1.65R below; and

(2) for the *Society*, *INSPRU* 8.1.2R.

Resilience capital requirement (applicable to long-term business only)

3.1.63 R *Managing agents* must calculate the amount of the *resilience capital requirement* for the *long-term insurance business* carried on through the *syndicates* they manage.

3.1.64 R The *Society* must determine the *resilience capital requirement* for the *insurance business* of each *member* under *INSPRU* 3.1.10R as the *member's* proportionate share of the *resilience capital requirement* calculated by the *managing agent* for the *long-term insurance business* carried on through the syndicate.

Currency risk: matching of assets and liabilities

3.1.65 R For the purposes of *INSPRU* 3.1.53R, a *managing agent* must ensure that:

(1) *syndicate* liabilities are covered by matching *syndicate assets* as required by INSPRU 3.2.53R; or that

(2) it immediately notifies to the *Society* the nature and extent of any *syndicate* liabilities not covered by matching assets under (1).

3.1.66 R On receipt of a notification by a *managing agent* under *INSPRU* 3.1.65(2), the *Society* must ensure that the liabilities in respect of the *insurance business* of the members in aggregate are covered with matching assets complying with *INSPRU* 3.1.53R.

3.2 Derivatives in insurance

Application

3.2.1 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*; or

(4) a *pure reinsurer*.

3.2.2 G The scope of application of *INSPRU* 3.2 is not restricted to *firms* that are subject to the relevant EC directives.

3.2.3 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

3.2.4 G *GENPRU* 2.2.17R requires a *firm* to calculate its *capital resources* for the purpose of *GENPRU* in accordance with the *capital resources table*, subject to the limits in *GENPRU* 2.2.32R to *GENPRU* 2.2.41R. The *capital resources table* and *GENPRU* 2.2.251R 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 *GENPRU* 2 Annex 7R. *GENPRU* 2 Annex 7R 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. *INSPRU* 3.2.5R to *INSPRU* 3.2.35R set out the criteria for *derivatives* and *quasi-derivatives*. *INSPRU* 3.2.36R to *INSPRU* 3.2.41R set out the criteria for *stock lending transactions*.

Derivatives and quasi-derivatives

3.2.5 R For the purpose of *GENPRU* 2 Annex 7R (Admissible assets in insurance), a *derivative* or *quasi-derivative* is approved if:

(1) it is held for the purpose of efficient portfolio management (*INSPRU* 3.2.6R to *INSPRU* 3.2.7R) or reduction of investment risk (*INSPRU* 3.2.8R to *INSPRU* 3.2.13G);

(2) it is covered (*INSPRU* 3.2.14R to *INSPRU* 3.2.33G); 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 (*INSPRU* 3.2.34R to *INSPRU* 3.2.35R).

Efficient portfolio management

3.2.6 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 *INSPRU* 3.2.7R; 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

3.2.7 R The generation of additional capital or income falls within *INSPRU* 3.2.6R(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

3.2.8 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

3.2.9 R For the purposes of *INSPRU* 3.2.8R, 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.

3.2.10 G *INSPRU* 3.2.8R 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.

3.2.11 G *Firms* are reminded that *INSPRU* 2.1 (Credit risk in insurance) sets out the different types of loss mitigation techniques.

Investment risk

3.2.12 R For the purposes of *INSPRU* 3.2.8R, 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 *INSPRU* 1.1.20R; or

(b) of appropriate safety, yield and marketability as required by *INSPRU* 1.1.34R(1)(a); or

(c) of an appropriate currency match as required by *INSPRU* 3.1.53R;

(2) (where they are held to cover *index-linked liabilities*) might not be appropriate cover for those liabilities as required by *INSPRU* 3.1.58R; 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 *INSPRU* 1.5.36R and appropriate cover for those liabilities as required by *INSPRU* 3.1.57R.

3.2.13 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

3.2.14 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.

3.2.15 R An obligation to transfer assets or pay monetary amounts (see *INSPRU* 3.2.14R) must be covered:

(1) by assets, a liability or a provision (see *INSPRU* 3.2.16R to *INSPRU* 3.2.24R); or

(2) by an offsetting transaction (see *INSPRU* 3.2.25R to *INSPRU* 3.2.27R).

3.2.16 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.

3.2.17 R An obligation to pay a monetary amount (whether or not falling in *INSPRU* 3.2.16R) 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 *GENPRU* 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.

3.2.18 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.

3.2.19 G Where a *firm* partially covers a *derivative* (or other contract falling within *INSPRU* 3.2.14R(1) and *INSPRU* 3.2.14R(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 *INSPRU* 3.2.17R(1)) is an *approved*

derivative, provided it also meets the requirements in *INSPRU* 3.2.5R(1) and *INSPRU* 3.2.5R(3); the uncovered portion is not an *approved derivative*.

3.2.20 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.

3.2.21 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.

3.2.22 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*.

3.2.23 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.

3.2.24 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

3.2.25 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.

3.2.26 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.

3.2.27 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

3.2.28 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 *INSPRU* 3.2.36R; 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.

3.2.29 R Assets that have been borrowed by the *firm* are not available for cover except as allowed by *INSPRU* 3.2.30R.

3.2.30 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.

3.2.31 G *INSPRU* 3.2.30R 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

3.2.32 G Examples of cover by assets for the purposes of *INSPRU* 3.2.16R:

(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 *INSPRU* 3.2.16R(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.

3.2.33 G Examples of cover by offsetting transactions for the purpose of *INSPRU* 3.2.25R 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.

Off-market transactions

3.2.34 R For the purpose of *INSPRU* 3.2.5R(3)(b), a *derivative* or *quasi-derivative* is on approved terms only if the *firm* reasonably believes that it could, in all reasonably foreseeable circumstances and under normal market conditions, readily enter into a further transaction with the *counterparty* or a third party to close out the *derivative* or *quasi-derivative* at a price not less than the value attributed to it by the *firm*, taking into account any valuation adjustments or reserves established by the *firm* under *GENPRU* 1.3.29R to *GENPRU* 1.3.34R.

3.2.34 A G In considering whether the first transaction could be readily closed out in all reasonably foreseeable circumstances under normal market conditions, the *firm* should satisfy itself that it cannot reasonably foresee any circumstances in which it would need to close out all or part of the contract at a few days' notice, and would not be able to do so.

3.2.35 R For the purpose of *INSPRU* 3.2.5R(3)(b), a *derivative* or *quasi-derivative* is capable of valuation only if the *firm*:

(1) is able to value it with reasonable accuracy on a reliable basis in compliance with *GENPRU* 1.3.41R; and

(2) reasonably believes that it will be able to do so throughout the life of the transaction.

3.2.35 A G The purpose of *INSPRU* 3.2.34R and *INSPRU* 3.2.35R is to ensure the appropriate application of *GENPRU* 1.3 to *derivatives* and *quasi-derivatives* effected or issued off-market with an *approved counterparty*.

Stock lending

3.2.36 R (1) For the purposes of *GENPRU* 2 Annex 7R (Admissible assets in insurance), a *stock lending* transaction is approved if:

(a) the assets lent are *admissible assets*;

(b), the *counterparty* is an *authorised person*, an *approved counterparty*, a *person* registered as a broker-dealer with the Securities and Exchange Commission of the United States of America or a bank, or a branch of a bank, supervised, and authorised to deal in investments as principal, with respect to *OTC derivatives* by at least one of the following federal banking supervisory authorities of the United States of America:

(i) the Office of the Comptroller of the Currency;

(ii) the Federal Deposit Insurance Corporation;

(iii) the Board of Governors of the Federal Reserve System; and

(iv) the Office of Thrift Supervision; and

(c) adequate and sufficiently immediate *collateral* (*INSPRU* 3.2.38R to *INSPRU* 3.2.41R) is obtained to secure the obligation of the *counterparty*.

(2) *INSPRU* 3.2.36R(1)(c) does not apply to a *stock lending* transaction made through Euroclear Bank SA/NV's Securities Lending and Borrowing Programme.

3.2.37 G *INSPRU* 3.2.36R 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

3.2.38 R For the purposes of *INSPRU* 3.2.36R(1)(c), *collateral* is adequate only if it:

(1) is transferred to the *firm* or its agent or, in the case of a letter of credit, meets the conditions described in *INSPRU* 3.2.38AR;

(2) is, at the time of the transfer or, in the case of a letter of credit, at the time of issue, at least equal in value to the value of the securities transferred, or consideration provided, by the *firm*; and

(3) is of adequate quality.

3.2.38 A R The conditions referred to in *INSPRU* 3.2.38R(1) are that the letter of credit is:

(1) direct, explicit, unconditional and irrevocable; and

(2) issued by an *undertaking* which is:

(a) not a *related undertaking* of the *counterparty*; and

(b) either an *approved credit institution* or a bank, or a branch of a bank, whether chartered by the federal government of the United States of America or a US state, that is supervised and examined by at least one of the following US federal banking supervisory authorities:

(i) the Office of the Comptroller of the Currency;

(ii) the Federal Deposit Insurance Corporation;

(iii) the Board of Governors of the Federal Reserve System; and

(iv) the Office of Thrift Supervision.

3.2.39 G For the purposes of assessing adequate quality in *INSPRU* 3.2.38R(3), reference should be made to the criteria for credit risk loss mitigation set out in *INSPRU* 2.1.16R. The valuation rules in *GENPRU* 1.3 apply for the purpose of determining the value of both *collateral* received, and the *securities* transferred, by the *firm*. In addition, where *collateral* takes the form of assets transferred, under the *rules* in *GENPRU* any such asset that is not an *admissible asset* (see *GENPRU* 2 Ann 7R) does not have a value.

3.2.40 R For the purposes of *INSPRU* 3.2.36R(1)(c), *collateral* is sufficiently

immediate only if:

(1) it is transferred or, in the case of a letter of credit, issued before, or at the same time as, the transfer of the *securities* by the *firm*; or

(2) it will be transferred or, in the case of a letter of credit, issued, at latest, by the close of business on the day of the transfer.

3.2.41 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* where the validity of the *collateral* or the *firm's* interest in the *collateral* is about to expire or has expired if sufficient *collateral* will again be transferred or issued at the latest by the close of business on the day of expiry.

3.2.42 G References in *INSPRU* 3.2.40R(2) and *INSPRU* 3.2.41R to the close of business on the day of the transfer or the day of expiry are to close of business on that day in all time regions.

Application of INSPRU 3.2 to Lloyd's

3.2.43 R *INSPRU* 3.2 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R.

4.1 Liquidity risk management

Application

4.1.1 R *INSPRU* 4.1 applies to an *insurer* unless *INSPRU* 4.1.4R applies.

4.1.2 R All of *INSPRU* 4.1, except *INSPRU* 4.1.16G, 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*.

4.1.3 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.

4.1.4 R This section does not apply to:

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

(2) an *incoming EEA firm*; or

(3) an *incoming Treaty firm*.

Purpose

4.1.5 G The purpose of this section is to amplify parts of *INSPRU* in their application to *liquidity risk* and, in so doing, to suggest minimum standards for management of that risk. The main relevant part, *SYSC* 14 (Prudential risk management and associated systems and controls), itself amplifies *Principle* 3 (Management and control) and *SYSC* (Senior management arrangements, Systems and Controls).

4.1.6 G Appropriate 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.

4.1.7 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 *SYSC* 17 (Insurance risk systems and controls).

4.1.8 G This section addresses the need 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

4.1.9 G High level requirements for prudential systems and controls including for *liquidity risk* are set out in *SYSC* 14 (Prudential risk management and associated systems and controls). In particular:

(1) *SYSC* 14.1.18R 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) *SYSC* 14.1.19R(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.

4.1.10 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 *INSPRU* 4.1.12G to *INSPRU* 4.1.14G), including:

(a) the role of marketable, or otherwise realisable, assets (see *INSPRU* 4.1.21G); and

(b) its strategy for mitigating *liquidity risk* on the liability side (see *INSPRU* 4.1.26G);

(2) its method for measuring *liquidity risk* (see *INSPRU* 4.1.44G)

Managing liquidity risk

4.1.11 G This section amplifies the general requirements in SYSC 14 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

4.1.12 G *SYSC* 14.1.11G 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.

4.1.13 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 *INSPRU* 4.1.15G to *INSPRU* 4.1.17G);

(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.

4.1.14 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 *INSPRU* 4.1.15G to *INSPRU* 4.1.17G). 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 *INSPRU* 4.1.53G to *INSPRU* 4.1.55G) 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 *INSPRU* 4.1.56G to *INSPRU* 4.1.68G (Controlling liquidity risk)).

Liquidity risk policy

4.1.15 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.

4.1.16 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.

4.1.17 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 *INSPRU* 4.1.26G);

(4) the role of marketable, or otherwise realisable, assets (see *INSPRU* 4.1.21G);

(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

4.1.18 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.

4.1.19 G The *overall financial adequacy rule* 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

4.1.20 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.

4.1.21 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 *INSPRU* 4.1.28G).

4.1.22 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

4.1.23 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 *INSPRU* 4.1.18G) 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.

4.1.24 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.

4.1.25 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 *SYSC* 11 (Liquidity risk management systems and controls) at *SYSC* 11.1.18G, *SYSC* 11.1.20G, *SYSC* 11.1.21E and *SYSC* 11.1.22G.

Adjusting for the behavioural characteristics of assets

4.1.26 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.

4.1.27 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 *SYSC* 11 (Liquidity risk management systems and controls) at *SYSC* 11.1.18G, *SYSC* 11.1.20G, *SYSC* 11.1.21E, *SYSC* 11.1.22G , *SYSC* 11.1.23G and *SYSC* 11.1.24E).

Inflows from off balance sheet items

4.1.28 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 *SYSC* 11.1.22G and *SYSC* 11.1.24E).

Liability liquidity

4.1.29 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.

4.1.30 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.

4.1.31 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 *INSPRU* 4.1.18G) 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 *SYSC* 11 (Liquidity risk management systems and controls) at *SYSC* 11.1.18G, *SYSC* 11.1.20G, *SYSC* 11.1.21E, *SYSC* 11.1.22G , *SYSC* 11.1.23G and *SYSC* 11.1.24E).

4.1.32 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

4.1.33 G In order to meet the requirement to maintain sufficient liquid financial resources (see *INSPRU* 4.1.16G), 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.

4.1.34 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

4.1.35 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.

4.1.36 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.

4.1.37 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

4.1.38 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*.

4.1.39 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 *SYSC* 11.1.22G);

(3) its plans for meeting its funding requirements (including their timing);

(4) strategies for obtaining substantial amounts of liquidity at short notice (see also *SYSC* 11.1.24E); and

(5) operational issues associated with the rollover of short-dated securities, particularly commercial paper.

4.1.40 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.

4.1.41 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

4.1.42 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.

4.1.43 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

4.1.44 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.

4.1.45 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.

4.1.46 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

4.1.47 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.

4.1.48 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.

4.1.49 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*.

Monitoring liquidity risk

4.1.50 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.

4.1.51 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.

4.1.52 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

4.1.53 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.

4.1.54 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*.

4.1.55 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.

Controlling liquidity risk

4.1.56 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.

4.1.57 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.

4.1.58 G When revisions or enhancements to *internal controls* are warranted, a *firm* should implement them in a timely manner.

4.1.59 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.

4.1.60 G In addition to the regular review and evaluation described in *INSPRU* 4.1.59G, 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

4.1.61 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.

4.1.62 G *SYSC* 14.1.18R 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.

4.1.63 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 *SYSC* 14.1.18R 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 *SYSC* 14.1.18R.

4.1.64 G A *firm* should periodically review and, where appropriate, adjust its limits when conditions or risk tolerances change.

4.1.65 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

4.1.66 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.

4.1.67 G Market access should be assessed under a variety of normal and stressed conditions.

4.1.68 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.

Application of INSPRU 4.1 to Lloyd's

4.1.69 G *INSPRU* 4.1 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R

4.1.70 G In accordance with *INSPRU* 8.6.2R, the *rules* and *guidance* in *INSPRU* 4.1 relating to the establishment and maintenance of a business plan do not apply to the *Society*.

5.1 Operational Risk Management

Application

5.1.1 G *INSPRU* 5.1 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*.

5.1.2 G *INSPRU* 5.1 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

5.1.3 G This section provides *guidance* on how to interpret *SYSC* 14.1.18R and *SYSC* 14.1.19R(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 management of risks concerning any of the *firm's* operations, whether caused by internal or external matters. However, it does not cover management of credit, market, liquidity and insurance risk. Examples of operational risk exposures that this section is 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.

5.1.4 G Operational risk concerns the *FSA* in a *prudential context* because inappropriate 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.

5.1.5 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.

5.1.6 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 *SYSC* 14, which contains the *FSA's* general policy on prudential systems and controls. *SYSC* 14 contains some *rules* and *guidance* on which this section offers additional *guidance*.

5.1.7 G *Guidance* on the application of this section to a *firm* that is a member of a *group* is provided in *SYSC* 12 (Group Risk Systems and Controls).

5.1.8 G Appropriate 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.

Operational risk policy

5.1.9 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.

5.1.10 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 *SYSC* 14.1.19R(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 *INSPRU* 5.1.12G) 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.

5.1.11 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).

5.1.12 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.

5.1.13 G The term risk assessment can be used to represent both the qualitative and quantitative evaluation or measurement of operational exposures.

Risk identification

5.1.14 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.

5.1.15 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.

5.1.16 G The *FSA's* interpretation of the term operational exposure is provided in *SYSC* 3A.5.1G(2).

Risk assessment

5.1.17 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.

5.1.18 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.

5.1.19 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.

5.1.20 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

5.1.21 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

5.1.22 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

5.1.23 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 *SYSC* 14.1.51G to *SYSC* 14.1.64G (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.

Application of INSPRU 5.1 to Lloyd's

5.1.24 G *INSPRU* 5.1 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R

5.1.25 G In accordance with *INSPRU* 8.5.2R, the *rules* and *guidance* in *INSPRU* 5.1 relating to the establishment and maintenance of a business plan do not apply to the *Society*.

6.1 Group Risk: Insurance Groups

Application

6.1.1 R *INSPRU* 6.1 applies to an *insurer* that is either:

(1) a *participating insurance undertaking*; or

(2) a member of an *insurance group* which is not a *participating insurance undertaking* and which is not:

(a) a *non-EEA insurer*; or

(b) a *friendly society*.

6.1.2 R *INSPRU* 6.1 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*.

6.1.3 G *INSPRU* 6.1 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*.

6.1.4 G For the purposes of *INSPRU* 6.1, an *insurer* includes a *friendly society* (other than a *non-directive friendly society*) and a *non-EEA insurer*.

Purpose

6.1.5 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* and the *Reinsurance 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*. The *Reinsurance Directive* (by amending the *Insurance Directives* and the *Insurance Groups Directive*) introduces supplementary supervision for *firms* that are *reinsurance undertakings* in an *insurance group*.

6.1.6 G *INSPRU* 6.1 sets out the *sectoral rules* for *insurers* for:

(1) *firms* that are *participating insurance undertakings* carrying out an adjusted solo calculation as contemplated by *GENPRU* 2.1.13R(2);

(2) *insurance groups*; and

(3) *insurance conglomerates*.

6.1.6A	G	In accordance with the definition, an *insurance holding company* ceases to be an *insurance holding company* if: (1) it is a *mixed financial holding company*; and (2) notice has been given in accordance with Article 4(2) of the *Financial Groups Directive* that the *financial conglomerate* of which it is a *mixed financial holding company* is a *financial conglomerate*; otherwise it remains an *insurance holding company* for the purposes of this chapter.
6.1.7	G	For a *firm* that is a *participating insurance undertaking*, the *rules* in *INSPRU* 6.1 out the minimum capital adequacy requirements for the *firm* itself. A *firm* that satisfies the test in *INSPRU* 6.1.9R in relation to its *group capital resources* is deemed by *GENPRU* 2.1.13R(2) to be in compliance with the capital adequacy requirement set out in *GENPRU* 2.1.13R(1).
		Requirement to calculate GCR and GCRR
6.1.8	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 *INSPRU* 6.1.17R.
		Requirement to maintain group capital
6.1.9	R	Where a *firm* is the *undertaking* referred to in *INSPRU* 6.1.17R(1)(c) or *INSPRU* 6.1.17R(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*.
6.1.10	R	A *firm* that is both: (1) a *composite firm*; and (2) an *undertaking* referred to in *INSPRU* 6.1.17R(1)(c) or *INSPRU* 6.1.17R(2); must comply with *INSPRU* 6.1.9R separately in respect of its *long-term insurance business* and its *general insurance business*.
6.1.11	R	For the purposes of *INSPRU* 6.1.10R, 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.*
6.1.12	G	*INSPRU* 1.5 sets out the detailed requirements for the separation of *long-term* and *general insurance business*.
6.1.13	G	In order to comply with *INSPRU* 6.1.10R, 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.*

6.1.14 G Surplus *group capital resources* in the *long-term insurance business* cannot be used towards meeting the requirements of the *general insurance business* (see *INSPRU* 6.1.41R) 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*.

6.1.15 R (1) Subject to *INSPRU* 6.1.27R, 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 *INSPRU* 6.1.17R (excluding those referred to in *INSPRU* 6.1.9R) are equal to or exceed that *undertaking's group capital resources requirement*.

(2) (1) does not apply to a *pure reinsurer* which became a *firm in run-off* before 10 December 2007 and whose *Part IV permission* has not subsequently been varied to add back the *regulated activity* of *effecting contracts of insurance*.

6.1.16 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. *INSPRU* 6.1 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 under the *overall financial adequacy rule,* the *overall Pillar 2 rule* and *GENPRU* 1.2.39R, 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 *INSPRU* 6.1.9R and *INSPRU* 6.1.15R.

Scope - undertakings whose group capital is to be calculated and maintained

6.1.17 R The *undertakings* referred to in *INSPRU* 6.1.8R, *INSPRU* 6.1.9R, *INSPRU* 6.1.10R and *INSPRU* 6.1.15R 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 *non-EEA insurer*; or

(b) a *friendly society*.

6.1.18 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 negligible interest.

6.1.19 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 *INSPRU* 6.1.18G, 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 *INSPRU* 6.1.8R.

6.1.20 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*.

6.1.21 G If more than one member of the *insurance group* is to be excluded in the circumstances described in *INSPRU* 6.1.18G (2)(b), they may only be excluded if, considered together, they are of negligible interest in the context of the *insurance group*.

6.1.22 G When giving a *waiver* in the circumstances described in *INSPRU* 6.1.18G, 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 *INSPRU* 6.1.18G.

Optional alternative method of calculation for firms subject to supplementary supervision by another EEA competent authority

6.1.23 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 *INSPRU* 6.1.8R in relation to the *ultimate EEA insurance parent undertaking* in accordance with the requirements of supplementary supervision in that *EEA State*.

6.1.24 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

6.1.25 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 *INSPRU* 6.1.26R) 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*.

6.1.26 R A *firm* may elect to use the calculation method referred to in *INSPRU* 6.1.25R(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.

6.1.27 R *INSPRU* 6.1.15R 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

6.1.28 R Subject to *INSPRU* 6.1.30R and *INSPRU* 6.1.31R, when calculating *group capital resources* and the *group capital resources requirement* of an *undertaking* in *INSPRU* 6.1.17R, 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*.

6.1.29 R In *INSPRU* 6.1.28R, 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 8.3.17 R; 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*.

6.1.30 R Where the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.74R (3) (if any), the full amount of the calculation items of that *regulated related undertaking* less the amount in *INSPRU* 6.1.74R (3) must be taken into account in the calculation of *group capital resources* and the *group capital resources requirement*.

6.1.31 R Except where *INSPRU* 6.1.30R applies, if the *individual capital resources requirement* of a *regulated related undertaking* that is a *subsidiary undertaking* of the undertaking in *INSPRU* 6.1.17R 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*.

6.1.32 R For the purposes of *INSPRU* 6.1.10R, where a *composite firm* that is an *undertaking* in *INSPRU* 6.1.17R (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*;

(3) the relevant proportion of the calculation items calculated in accordance with *INSPRU* 6.1.29R, subject to *INSPRU* 6.1.30R and *INSPRU* 6.1.31R, 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

6.1.33 R Subject to *INSPRU* 6.1.23R and *INSPRU* 6.1.25R, a *firm* must calculate the *group capital resources requirement* of an *undertaking* in *INSPRU* 6.1.17R 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*.

6.1.34 R For the purposes of *INSPRU* 6.1, an *individual capital resources requirement* is:

(1) in respect of any *insurer*:

(a) its *capital resources requirement* calculated in accordance with *GENPRU* 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 *INSPRU* 6.1.33R;

(2) in respect of an *EEA insurer* (other than an *EEA pure reinsurer*), the equivalent of the *capital resources requirement* as calculated in accordance with the applicable requirements in its *Home State*;

(3) in respect of an *EEA pure reinsurer*, the equivalent of the *capital*

resources requirement as calculated in accordance with the applicable requirements in its *Home State*;

(4) in respect of an *insurance undertaking* that is not within (1), (2) or (3) and whose head office is in a *designated State or territory*, either:

(a) its *proxy capital resources requirement*; or

(b) the solo capital resources requirement that applies to it under the *sectoral rules* for the *insurance sector* of the *designated State or territory*;

(5) in respect of an *insurance undertaking* within (4) which is not subject to a solo capital resources requirement under the *sectoral rules* for the *insurance sector* of that *designated State or territory*, its *proxy capital resources requirement*;

(6) in respect of an *insurance undertaking* that is not within (1) to (5), its *proxy capital resources requirement*;

(7) in respect of an *insurance holding company*, zero;

(8) [intentionally blank]

(9) in respect of a *regulated entity* (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 being in the *investment services sector*;

(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 *EEA ISPV*, the solo capital resources requirement that applies to the *ISPV* under the *sectoral rules* for the *insurance sector* of the *Member State* of the *competent authority* that authorised the *ISPV*.

6.1.34A G For the purposes of *INSPRU* 6.1.34R(4)(b), where the solo capital resources requirement under the *sectoral rules* for the *insurance sector* in a *designated State or territory* is ascertained by reference to the trigger for regulatory intervention, the *FSA* considers that the solo capital resources requirement of the *insurance undertaking* in such a *designated State or territory* will generally correspond to the highest point at which any regulatory or corrective action is triggered or which is at least comparable to the *capital resources requirement* which would apply if the *insurance undertaking* were an *insurer*.

6.1.35 G [intentionally blank]

Calculation of GCR

6.1.36 R For the purposes of *INSPRU* 6.1.8R and subject to *INSPRU* 6.1.23R and *INSPRU* 6.1.25R, a *firm* must calculate the group capital resources of an *undertaking* in *INSPRU* 6.1.17R in accordance with the table in *INSPRU* 6.1.43R, subject to the limits in *INSPRU* 6.1.45R.

6.1.37 R For the purposes of *INSPRU* 6.1, the following expressions when used in relation to either an *undertaking* in *INSPRU* 6.1.17R or a *regulated related undertaking* which is not subject to the *capital resources table*, are to be construed as if that *undertaking* were required to calculate its capital resources in accordance with the *capital resources table*, 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.*

6.1.38 R For the purposes of *INSPRU* 6.1.37R, the *sectoral rules* applicable to:

(1) an *insurance holding company* whose main business is to acquire and hold participations in *subsidiary undertakings* which are either exclusively or mainly *reinsurance undertakings* are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as a *pure reinsurer*;

(2) an *insurance holding company* not within (1) are the *sectoral rules* that would apply to it if, in connection with its activities, it were treated as an *insurer*;

(3) 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

(4) subject to *INSPRU* 6.1.39R, 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*.

6.1.39 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*.

6.1.40 R For the purposes of *INSPRU* 6.1.36R, the capital resources of a *financial institution* within *INSPRU* 6.1.39R that can be included in the calculations in *INSPRU* 6.1.48R(2), *INSPRU* 6.1.50R(2), *INSPRU* 6.1.53R(2), *INSPRU* 6.1.55R(2) and *INSPRU* 6.1.57R(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 *INSPRU* 6.1.39R; and

(2) the lower of:

(a) the *tier one capital* or *tier two capital* issued by the *parent undertaking* referred to in *INSPRU* 6.1.39R 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).

6.1.41 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.

6.1.42 G For the purposes of *INSPRU* 6.1.41R, 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 *INSPRU* 6.1.41R. 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*.

6.1.42A R For the purposes of calculating *group capital resources*, a *firm* must exclude the book value of any investment by a *related undertaking* of the *undertaking* in *INSPRU* 6.1.17R in shares of, or loans to, an *undertaking* that is not a *related undertaking*, where that *undertaking* has invested in the *capital resources* of a *regulated related undertaking* of the *undertaking* in *INSPRU* 6.1.17R.

6.1.43 R Table: Group capital resources

	Stage	Related text
Total group tier one capital	A	*INSPRU* 6.1.48R
Total group tier two capital	B	*INSPRU* 6.1.50R
Group capital resources before deductions	C=(A+B)	
Total deductions of inadmissible assets	D	*INSPRU* 6.1.59R
Total deductions under the requirement deduction method from group capital resources	E	*INSPRU* 6.1.62R

Total deductions of ineligible surplus capital*	F	*INSPRU* 6.1.65R
Deduction of assets in excess of market risk and counterparty exposure limits*	G	*INSPRU* 6.1.70R
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 *INSPRU* 6.1.17R that is a *participating insurance undertaking*.		

Calculation of GCR - Limits on the use of different forms of capital

6.1.44 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 *INSPRU* 6.1.17R. These restrictions are set out in *INSPRU* 6.1.45R.

6.1.45 R (1) For the purposes of *INSPRU* 6.1.9R, *INSPRU* 6.1.10R and *INSPRU* 6.1.15R, 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 *INSPRU* 6.1.17R comply with the following limits:

(a) $(P - Q) \geq \frac{1}{2} (R - S)$;

(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 *INSPRU* 6.1.9R and *INSPRU* 6.1.10R, 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, subject to (4)

$(P - Q + T) \geq 1/3\ X + (R - S - U - X)$.

(3) For the purposes of (1) and (2):

(a) P is the *total group tier one capital* of the *undertaking* in *INSPRU* 6.1.17R;

(b) Q is the sum of the *innovative tier one capital resources* calculated in accordance with *INSPRU* 6.1.53R;

(c) R is the *group capital resources requirement* of the *undertaking* in *INSPRU* 6.1.17R;

(d) S is the sum of all the *with-profits insurance capital components* of an *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R;

(f) U is the sum of all the *resilience capital requirements* of an *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.55R;

(h) W is the sum of the *lower tier two capital resources* calculated in accordance with *INSPRU* 6.1.57R; and

(i) X is the *MCR* of the *firm* less its *resilience capital requirement*, if any.

(4) For the purposes of (2):

(a) *INSPRU* 6.1.45R (1)(a) does not apply;

(b) the *innovative tier one capital* of the *firm* or its *regulated related undertakings* that meets the conditions for it to be *upper tier two capital* may be included as *upper tier two capital* for the purpose of the calculation in *INSPRU* 6.1.50R; and

(c) the *firm* must exclude from the calculation of (P - Q + T) in (2) the higher of:

(i) any amount by which the *total group tier two capital* exceeds the *group capital resources* of the *firm* less any *innovative tier one capital* excluded by (b); and

(ii) any amount by which the sum of *lower tier two capital resources* calculated in accordance with *INSPRU* 6.1.57R exceeds one third of the *group capital resources* of the *firm* less any *innovative tier one capital* excluded by (b).[2]

6.1.46 G The amount of any capital item excluded from *group capital resources* under *INSPRU* 6.1.45R (1)(d) may form part of *total group tier two capital* calculated in accordance with *INSPRU* 6.1.50R subject to the limits in *INSPRU* 6.1.45R (1)(e) and (f).

6.1.47 R For the purposes of *INSPRU* 6.1.10R, 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 *INSPRU* 6.1.45R separately for each type of business.

Calculation of GCR - Total group tier one capital

6.1.48 R For the purposes of *INSPRU* 6.1.43R, the *total group tier one capital* of an

undertaking in *INSPRU* 6.1.17R is the sum of:

(1) the *tier one capital resources* of the *undertaking* in *INSPRU* 6.1.17R; and

(2) subject to *INSPRU* 6.1.40R, the *tier one capital resources* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *INSPRU* 6.1.49R.

6.1.49 R The deduction referred to in *INSPRU* 6.1.48R is the sum of:

(1) the book value of the investment by the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R in the *tier one capital resources* of the *undertaking* in *INSPRU* 6.1.17R and each of its *related undertakings* that is a *regulated related undertaking.*

Calculation of GCR - Total group tier two capital

6.1.50 R For the purposes of *INSPRU* 6.1.43R, the *total group tier two capital* of an *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.40R, 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 *INSPRU* 6.1.51R.

6.1.51 R The deduction referred to in *INSPRU* 6.1.50R is the sum of:

(1) the book value of the investments by the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R in the *upper tier two capital resources* and the *lower tier two capital resources* of the *undertaking* in *INSPRU* 6.1.17R and each of its *related undertakings* that is a *regulated related undertaking*.

6.1.52 G For the purposes of *INSPRU* 6.1.50R(2), the limits in *GENPRU* 2.2.37R 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

6.1.53 R For the purposes of *INSPRU* 6.1.45R(3)(b), the *innovative tier one capital resources* is the sum of:

(1) the *innovative tier one capital resources* of the *undertaking* in *INSPRU*

6.1.17R; and

(2) subject to *INSPRU* 6.1.40R, 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 *INSPRU* 6.1.54R.

6.1.54 R The deduction referred to in *INSPRU* 6.1.53R is the sum of:

(1) the book value of the investments by the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R in the *innovative tier one capital resources* of the *undertaking* in *INSPRU* 6.1.17R and each of its *related undertakings* that is a *regulated related undertaking*.

6.1.55 R For the purposes of *INSPRU* 6.1.45R(3)(g), the *core tier one capital* is the sum of:

(1) the *core tier one capital* of the *undertaking* of *INSPRU* 6.1.17R; and

(2) subject to *INSPRU* 6.1.40R, the *core tier one capital* of each of the *related undertakings* of that *undertaking* that is a *regulated related undertaking* after the deduction in *INSPRU* 6.1.56R.

6.1.56 R The deduction referred to in *INSPRU* 6.1.55R is the sum of:

(1) the book value of the investments by the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R in the *core tier one capital* of the *undertaking* in *INSPRU* 6.1.17R and each of its *related undertakings* that is a *regulated related undertaking*.

6.1.57 R For the purposes of *INSPRU* 6.1.45R(3)(h), the *lower tier two capital resources* is the sum of:

(1) the *lower tier two capital resources* of the *undertaking* in *INSPRU* 6.1.17R; and

(2) subject to *INSPRU* 6.1.40R, 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 *INSPRU* 6.1.58R.

6.1.58 R The deduction referred to in *INSPRU* 6.1.57R is the sum of:

(1) the book value of the investments by the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.17R in the *lower tier two capital resources* of the *undertaking* in *INSPRU* 6.1.17R and each of its *related undertakings* that is a *regulated related undertaking*.

Calculation of GCR - Inadmissible assets

6.1.59 R For the purpose of *INSPRU* 6.1.43R, a *firm* must deduct from the group capital resources before deduction (calculated at stage C in the table in *INSPRU* 6.1.43R) of the *undertaking* in *INSPRU* 6.1.17R, the value of all assets of the *undertaking* in *INSPRU* 6.1.17R and each of its *regulated related undertakings* that are not admissible assets as set out in *INSPRU* 6.1.60R.

6.1.60 R For the purposes of *INSPRU* 6.1.59R, an asset is not an admissible asset if:

(1) in respect of a *regulated related undertaking* or *undertaking* in *INSPRU* 6.1.17R that is an *insurer* (other than a *pure reinsurer*), it is not an *admissible asset* as listed in *GENPRU* 2 Annex 7R;

(2) in respect of a *regulated related undertaking* or *undertaking* in *INSPRU* 6.1.17R that is a *pure reinsurer*, the holding of the asset is inconsistent with compliance by that *undertaking* with *INSPRU* 3.1.61AR; or

(3) in respect of a *regulated related undertaking* or *undertaking* in *INSPRU* 6.1.17R 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.

6.1.61 R For the purposes of *INSPRU* 6.1.60R(3), 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

6.1.62 R For the purposes of *INSPRU* 6.1.43R, a *firm* must deduct from the group capital resources before deduction (calculated at stage C in the table in *INSPRU* 6.1.43R) of an *undertaking* in *INSPRU* 6.1.17R, the sum of the value of the direct or indirect investments by the *undertaking* in *INSPRU* 6.1.17R in each of its *related undertakings* which is an *ancillary services undertaking*, calculated in accordance with *INSPRU* 6.1.63R.

6.1.63 R The value of an investment in an *undertaking* referred to in *INSPRU* 6.1.62R is the higher of the book value of the direct or indirect investment by the *undertaking* in *INSPRU* 6.1.17R and the notional capital resources requirement of that *undertaking*.

6.1.64 R For the purposes of *INSPRU* 6.1.63R, 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

6.1.65 R Where the *undertaking* in *INSPRU* 6.1.17R is a *participating insurance undertaking*, the *firm* must, for the purposes of *INSPRU* 6.1.43R, deduct from its group capital resources before deduction (calculated at stage C in the table in *INSPRU* 6.1.43R) the sum of the ineligible surplus capital of each of its *regulated related undertakings* that is an *insurance undertaking,* calculated in accordance with *INSPRU* 6.1.67R.

6.1.66 G The purpose of *INSPRU* 6.1.65R is to ensure that, where the *undertaking* in *INSPRU* 6.1.17R 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 *INSPRU* 6.1.41R; 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*.

6.1.67 R (1) For the purposes of *INSPRU* 6.1.65R, 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 *INSPRU* 6.1.41R; and

(b) B is the transferable capital of that *undertaking*.

(2) If A minus B is negative, the ineligible surplus capital is zero.

6.1.68 R For the purposes of *INSPRU* 6.1.67R(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 *INSPRU* 6.1.41R;

(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*.

Examples of transferable and ineligible surplus capital:

6.1.69 G Example 1

Share capital	**Audited reserves**	**FFA**	**Tier two**	**Requirement**
30	20	0	40	50

(i) Under *INSPRU* 6.1.68R, transferable capital = *tier one capital resources* of 50, less the sum of:

(1) restricted assets excluded under *INSPRU* 6.1.41R = (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

(2) Under *INSPRU* 6.1.67R, ineligible surplus capital = *regulatory surplus value* (40) less restricted assets excluded under *INSPRU* 6.1.41R (0) less transferable capital (25) = 15.

Example 2

Share capital	**Audited reserves**	**FFA** (of which 5 is restricted)	**Tier two**	**Requirement** (of which 4 relates to the *long-term insurance business*)
30	20	10	40	50

(i) Under *INSPRU* 6.1.68R, transferable capital = *tier one capital resources* of 60, less the sum of:

(1) restricted assets excluded under *INSPRU* 6.1.41R = (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 *INSPRU* 6.1.67R, ineligible surplus capital = *regulatory surplus value* (50) - restricted assets excluded under *INSPRU* 6.1.41R 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 *INSPRU* 6.1.68R, transferable capital = *tier one capital resources* of 50, less the sum of:

(1) restricted assets excluded under *INSPRU* 6.1.41R = (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 *INSPRU* 6.1.67R, ineligible surplus capital = *regulatory surplus value* (35) - restricted assets excluded under *INSPRU* 6.1.41R of (0) - transferable capital (17.5) = 17.5.

Calculation of GCR - Assets in excess of market risk and counterparty exposure limits

6.1.70 R Subject to *INSPRU* 6.1.70AR, where the *undertaking* in *INSPRU* 6.1.17R is a *participating insurance undertaking*, the *firm* must deduct from its group capital resources before deduction (calculated at stage C in the table in *INSPRU* 6.1.43R) the assets in excess of *market risk* and *counterparty* exposure limits calculated in accordance with *INSPRU* 6.1.74R.

6.1.70A R Where the *undertaking* in *INSPRU* 6.1.17R is a *pure reinsurer* that is a *participating insurance undertaking*, the *firm* must calculate assets in

accordance with *INSPRU* 6.1.74AR and deduct from its group capital resources before deduction (calculated at stage C in the table in *INSPRU* 6.1.43R) those assets the holding of which is inconsistent with compliance by that *undertaking* with *INSPRU* 3.1.61AR.

6.1.71 G For the purposes of *INSPRU* 6.1.43R, where the *undertaking* in *INSPRU* 6.1.17R is a *participating insurance undertaking*, the investments referred to in *INSPRU* 6.1.48R and *INSPRU* 6.1.50R are not subject to the *market risk* and *counterparty* exposure limits.

6.1.72 R The *firm* (A) must, subject to *INSPRU* 6.1.73R, include in the calculation in *INSPRU* 6.1.74R or, where A is a *pure reinsurer*, *INSPRU* 6.1.74AR 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 *GENPRU* 1.3.47R for the purposes of calculating the *tier one capital resources* of the *firm*.

6.1.73 R The *related undertakings* in *INSPRU* 6.1.72R need only be included in the calculation in *INSPRU* 6.1.74R or *INSPRU* 6.1.74AR 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 *INSPRU* 6.1.72R (2), its assets that fall within one or more of the categories in *GENPRU* 2 Annex 7R exceed its accounting liabilities.

6.1.74 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 *INSPRU* 2.1.22R(3) to:

(a) where B is an *insurer,* the *admissible assets* of B;

(b) where B is a *pure reinsurer*, the assets of that *undertaking* less those assets identified in *INSPRU* 6.1.60R(2) as not being admissible; and

(c) where B is a *regulated related undertaking* that is not an *insurer*, the assets of that *undertaking* less those assets identified in *INSPRU* 6.1.60R(3) as not being admissible assets.

(2) The *market risk* and *counterparty* exposure limits do not need to be applied to an *undertaking* in *INSPRU* 6.1.72R(2).

(3) Where the assets of B in *INSPRU* 6.1.74R(1) exceed the limits in *INSPRU* 2.1.22R(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 *INSPRU* 6.1.30R.

(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* (other than a *pure reinsurer*), the *admissible assets* of B that represent the amount by which the *capital resources* of B exceed its

capital resources requirement, subject to *INSPRU* 6.1.77R, and limited to the amount of transferable capital calculated in accordance with *INSPRU* 6.1.68R;

(b) where B is a *regulated related undertaking* that is not in (a), the assets of the *undertaking* in *INSPRU* 6.1.74R(1)(b) or (c) 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 in (a), limited to the amount of transferable capital calculated in accordance with *INSPRU* 6.1.68R; and

(c) where B is an *undertaking* in *INSPRU* 6.1.72R(2), the assets of the *undertaking* which represent those assets that fall within one or more of the categories in *GENPRU* 2 Annex 7R 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 *INSPRU* 6.1.74R(4).

6.1.74A R A must apply *INSPRU* 3.1.61AR to the aggregate of:

(1) the assets of A, less any assets already identified in *INSPRU* 6.1.60R(2) as not being admissible; and

(2) the surplus assets of B calculated in accordance with *INSPRU* 6.1.74R(1) to (4) as if that *rule* applied to B.

6.1.75 R (1) Subject to (2), A must then deduct the amount by which the *admissible assets* aggregated in accordance with *INSPRU* 6.1.74R(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 *INSPRU* 6.1.43R) in accordance with *INSPRU* 6.1.70R.

(2) Where A is a *pure reinsurer*, A must then deduct the amount of any assets identified by *INSPRU* 6.1.74AR as not complying with *INSPRU* 3.1.61AR in accordance with *INSPRU* 6.1.70AR.

6.1.76 R In relation to any of its *regulated related undertakings* that is not an *insurer*, A may modify the calculation in *INSPRU* 6.1.74R by:

(1) omitting the calculation in *INSPRU* 6.1.74R (1) and (3); and

(2) aggregating all of the assets of B identified in *INSPRU* 6.1.74R(1)(b) as admissible assets with the *admissible assets* of A in *INSPRU* 6.1.74R (4).

6.1.77 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 *INSPRU* 6.1.74R and *INSPRU* 6.1.74AR except insofar as those assets are available to meet the liabilities and *capital resources requirement* of that *long-term insurance fund*.

6.1.78 R If B is itself either a *participating insurance undertaking* or an *insurance parent undertaking*, the *admissible assets* of B for the purposes of *INSPRU*

6.1.74R (1) must be calculated as in *INSPRU* 6.1.75R but as if B were A.

7.1 Individual Capital Assessment

Application

7.1.1 R *INSPRU* 7.1 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*.

Purpose

7.1.2 G Principle 4 requires a *firm* to maintain adequate financial resources. *GENPRU* 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 *INSPRU* 7.1, 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. *GENPRU* 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 *GENPRU* 1.2.60R, 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*.

7.1.3 G This section (*INSPRU* 7.1) sets out *guidance* on how *firms* should assess the adequacy of their *capital resources*, both to comply with the *rules* in *GENPRU* 1.2 and to enable the *FSA* better to assess whether the minimum *capital resources requirements* in *GENPRU* 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 *GENPRU* 2.1.18R). The *ECR* for such *firms* requires the calculation of a *with-profits insurance capital component* (see *INSPRU* 1.3) 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.

7.1.4 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 *GENPRU* 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

7.1.5 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.

7.1.6 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.

7.1.7 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.

7.1.8 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.

7.1.9 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*.

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

7.1.11 R A *firm* to which *INSPRU* 7.1.10R 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*.

7.1.12 G Details of the calculation of the *asset-related capital requirement* are set out in *INSPRU* 2.2.10R to *INSPRU* 2.2.16R. Details of the calculation of the *insurance-related capital requirement* are set out in *INSPRU* 1.1.76R to *INSPRU* 1.1.79R.

7.1.13 G Where the *FSA* considers that a *firm* will not comply with the *overall financial adequacy rule* by holding the *capital resources* required by *GENPRU* 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*.

7.1.14 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.

7.1.15 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).

7.1.16 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 the *overall financial adequacy rule*. SUP 7 provides further information about the *FSA's* powers under section 45.

7.1.17 G Where a *firm* or the *FSA* considers that the *capital resources requirements* of *GENPRU* 2.1 require the holding of more capital than is needed for the *firm* to comply with the *overall financial adequacy rule* then the *firm* may apply to the *FSA* for a *waiver* of the requirements in *GENPRU* 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 *GENPRU* 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

7.1.18 G The *overall stress and scenario testing rule* requires a *firm* to carry out stress tests and scenario analyses for each of the sources of risk identified in accordance with the *overall pillar 2 rule*. Using each of the risk categories set out in the *overall pillar 2 rule*, *INSPRU* 7.1.19G to *INSPRU* 7.1.34G set out the factors that a *firm* should consider. *INSPRU* 7 Annex 1G G 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

7.1.19 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.

7.1.20 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*.

7.1.21 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

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

7.1.23 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.

7.1.24 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

7.1.25 G In accordance with the *overall pillar 2 rule* a *firm* should consider the major sources of risk, including *liquidity risks*, and assess its response should each risk materialise.

7.1.26 G *INSPRU* 4.1 (liquidity risk management) contains evidential provisions and *guidance* on how *firms* should meet the *overall financial adequacy rule* for liquidity purposes.

(1) *INSPRU* 5.1.58E states that a scenario analysis in relation to *liquidity risk* required under the *general stress and scenario testing rule* 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) *INSPRU* 4.1.70E 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 the *general stress and scenario testing rule*, it would still have sufficient liquid financial resources to meet liabilities as they fall due.

7.1.27 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.

7.1.28 G 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

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

7.1.30 G A *firm* may wish to refer to *SYSC* 3A and *INSPRU* 5.1 when carrying out its operational risk assessment.

7.1.31 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.

7.1.32 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

7.1.33 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.

7.1.34 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

7.1.35 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.

7.1.36 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*.

7.1.37 G *Firms* may find it helpful for their own assessment process if they also consider divergences from the assumptions described in *INSPRU* 7.1.36G 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.

7.1.38 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*.

7.1.39 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.

7.1.40 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.

7.1.41 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.

7.1.42 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*.

7.1.43 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.

7.1.44 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.

7.1.45 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.

7.1.46 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.

7.1.47 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 *SYSC* 14 (Prudential risk management and associated systems and controls);

(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.

7.1.48 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

7.1.49 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 the *overall pillar 2 rule* 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.

7.1.50 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 *GENPRU* 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.

7.1.51 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

7.1.52 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.

7.1.53 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.

7.1.54 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.

7.1.55 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.

7.1.56 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.

Application of INSPRU 7.1 to Lloyd's

7.1.57 R Subject to *INSPRU* 7.1.58R, *INSPRU* 7.1 applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R

7.1.58 R *Managing agents* must carry out assessments of capital adequacy for each *syndicate* they manage by reference to all *open syndicate years* taken together.

Assessment of adequacy of capital resources for *syndicate*s and *member*s

7.1.59 G Responsibility for:

(1) managing the risks associated with the *insurance business*; and

(2) holding the *capital resources* that support those risks;

is divided between *managing agents* and the *Society*. To clarify the respective responsibilities of *managing agents* and the *Society* for ensuring the adequacy of financial resources, the FSA distinguishes between the *managing agents*' responsibility to carry out capital adequacy assessments of the *capital resources* held at *syndicate* level for each *syndicate* that they manage, and the *Society*'s responsibility to carry out an assessment for each *member*.

7.1.60 R In carrying out capital adequacy assessments in respect of the *insurance business* carried on through each *syndicate* (the *syndicate ICA*), *managing agents* must consider the risks, controls and the financial resources relevant to each *syndicate*.

7.1.61 R When carrying out the *syndicate ICA*, *managing agents* must not take into account risks to which a *member* may be exposed or controls from which a *member* may benefit:

(1) because that *member* carries on *insurance business* through another *syndicate* or more than one *syndicate year* (whether or not managed by the same *managing agent*); or

(2) because that *member's* financial resources include *funds at Lloyd's* or *central assets*.

7.1.62 R The *Society* must have regard to *syndicate ICA*s in arriving at its own capital assessment for each *member*.

7.1.63 G In assessing the adequacy of the *capital resources* supporting the *insurance business* of each *member*, the *Society* should consider the risks, controls and financial resources relevant to the totality of the *member*'s *insurance business*, including:

(1) the adequacy of *syndicate ICA*s;

(2) the *member*'s share of *syndicate ICA*s;

(3) adjustments in respect of risks and controls relating to *funds at Lloyd's*, *central assets* and the interaction of risks underwritten by the *member* through different *syndicate*s and in respect of different *syndicate years*; and

(4) the ongoing validity of any relevant assumptions it makes.

7.1.64 G In taking account of a *syndicate ICA* under *INSPRU* 7.1.62R:

(1) if the *Society* considers a *syndicate ICA* to be adequate, it should use the *managing agent*'s risk and capital assessments in carrying out its individual capital assessment in relation to any *member* of that *syndicate* , or it should be able to justify why it will not; and

(2) if the *Society* considers a *syndicate ICA* to be less than adequate, the *Society* should increase the *syndicate ICA* so that it is adequate for the purpose of carrying out its individual capital assessment in relation to the *member*s of that *syndicate*.

7.1.65 G The assessment of capital adequacy for a *member* will rarely equal the proportionate share of a *syndicate ICA* (or sum of those shares, where the *member* participates on more than one *syndicate*) as attributed to that *member*, because, in determining the capital assessments for each *member*, the *Society* may make adjustments to take account of:

(1) risks and controls associated with *funds at Lloyd's* and *central assets*, which can increase the *member*'s individual capital assessment;

(2) diversification effects, including as a result of *member*s' participations on more than one *syndicate year*, which can reduce the *member*'s individual capital assessment; and

(3) its own assessment of *syndicate* risks, which can be higher than the *managing agent*'s and so increase the *member*'s individual capital assessment.

The balancing amount

7.1.66 G *Capital resources* to meet each *syndicate ICA* could be:

(1) held within a *syndicate* and managed by the *managing agent*; or

(2) held and managed by the *Society*; or

(3) not needed in full, because of effects such as diversification that the *Society* takes into account.

7.1.67 G The *balancing amount* is a function of the relationship between the *syndicate ICA* and the amount of assets held within the *syndicate*. As illustrations:

(1) if the *syndicate* holds no *capital resources* (but its liabilities are fully covered by relevant assets), the *balancing amount* equals the *syndicate ICA* (as there are no *capital resources* at *syndicate* level, all the *capital resources* must be held as *funds at Lloyd's* or *central assets*);

(2) if *capital resources* held at *syndicate* level are negative (i.e. if relevant assets do not fully cover liabilities for the *syndicate*), the *balancing amount* should be higher than the *syndicate ICA* by an amount corresponding to the negative *capital resources* held by *managing agents* on behalf of the *syndicate*; and

(3) conversely, if a *syndicate* holds positive *capital resources* for the *syndicate*, the *balancing amount* should be lower than the *syndicate ICA* by a corresponding amount.

7.1.68 R *Managing agents* must periodically notify the *Society* of the *syndicate ICA* and the *balancing amount* in respect of each *syndicate*.

7.1.69 R For the purpose of assessing the adequacy of *capital resources* held as *funds at Lloyd's* and *central assets*, the *Society* must have regard to *balancing amounts* notified to it by *managing agents*.

7.1.70 R After notification of a *balancing amount* by a *managing agent*, the *Society* must:

(1) confirm to the *managing agent* that *capital resources* held as *funds at Lloyd's* and *central assets* are adequate to support the *balancing amount*; or

(2) notify the *managing agent* that it cannot give that confirmation.

7.1.71 G *Managing agents* should submit *syndicate ICAs* and notify *balancing amounts* to the *Society* as part of the annual capital-setting process at Lloyd's. The submission of the *syndicate ICA* and notification of the *balancing amount* should be made in good time for the *Society* to review them and place appropriate reliance on them when it determines the capital assessments for each *member*.

7.1.72 G When communicating the *syndicate ICA* and *balancing amount* for each *syndicate* to the *Society*, *managing agents* should agree with the *Society* an allocation of the *syndicate ICA* between *syndicate years*. The purpose of the allocation is to ensure that there is an appropriate matching of assets to risk and liabilities and an equitable treatment between the *members* reflecting the

provision of capital in each *syndicate year*.

Monitoring of capital resources

7.1.73 G For the purposes of complying with their obligations under *INSPRU*, *managing agents* may assume that any *balancing amount* confirmed by the *Society* under *INSPRU* 7.1.70R is supported by *capital resources* held as *funds at Lloyd's* and *central assets*.

7.1.74 R If a *managing agent* has, at any time, a significant doubt about the adequacy of a *syndicate ICA* or *balancing amount* with respect to *syndicate* risks and controls, it must notify the *Society* immediately.

7.1.75 R If the *Society* has, at any time, a significant doubt about the adequacy of any *member*'s capital resources held by it in support of any *balancing amount*, it must notify the relevant *managing agent* immediately.

	Annex 1G
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 the *general stress and scenario testing rule*. 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 *INSPRU* 7.1. 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

<table>
<tr><td></td><td>age of debt.</td></tr>
<tr><td colspan="2">The firm considers that capital of between £X and £Y would cover credit risk to counterparties.</td></tr>
<tr><td></td><td>Off-balance sheet transactions</td></tr>
<tr><td>A29</td><td>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.</td></tr>
<tr><td colspan="2">The firm considers that no additional capital is necessary.</td></tr>
<tr><td></td><td>Market risk</td></tr>
<tr><td>A30</td><td>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.</td></tr>
<tr><td>A31</td><td>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.</td></tr>
<tr><td>A32</td><td>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.</td></tr>
<tr><td>A33</td><td>In developing the scenario the firm estimates the effect of a X% increase in interest rates on bond values.</td></tr>
<tr><td>A34</td><td>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.</td></tr>
<tr><td>A35</td><td>Counterparty risk might be allowed for by assuming one or several major corporate bond holding defaults.</td></tr>
<tr><td>A36</td><td>For all investments, the stability of trading revenues should be examined to determine the volatility of investment.</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td></td><td>Liquidity risk</td></tr>
</table>

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.

8.1 General provisions applying INSPRU and GENPRU to Lloyd's

Application

8.1.1 R *INSPRU* 8.1 applies to:

(1) the *Society*;

(2) *managing agents.*

8.1.2 R If a provision in *INSPRU* or *GENPRU* applies to the *Society* "in accordance with" this *rule*, the *Society* must:

(1) manage each *member's funds at Lloyd's*;

(2) manage its *central assets*; and

(3) supervise the *insurance business* carried on by each *member* at Lloyd's;

so as to achieve in relation to those assets and that *insurance business* the same effect as the relevant *INSPRU* or *GENPRU* provision would have (that is, conforming with the requirements of any *rule* and taking appropriate account of any applicable *guidance*,) when applied to a *firm* or to the *insurance business* of a *firm*.

8.1.3 G The *Society* is subject to *INSPRU* and *GENPRU rules* in respect of the *insurance business* of each Lloyd's *member*. These include *rules* in respect of:

(1) the calculation of the *capital resources requirements* for each *member*;

(2) the financial resources it manages on behalf of *member*s; and

(3) the *Society*'s own financial resources.

8.1.4 R If a provision in *INSPRU* or *GENPRU* applies to a *managing agents* "in accordance with" this *rule*, the *managing agent* must, in relation to each *syndicate* managed by it and for each *syndicate* year, manage:

(1) the *syndicate assets*; and

(2) the *insurance business* carried on by the *member*s of the *syndicate* through that *syndicate*;

so as to achieve in relation to those assets and that *insurance business* the same effect as the relevant *INSPRU* or *GENPRU* provision would have (that is, conforming with the requirements of any *rule* and taking appropriate account of any applicable *guidance*,) when applied to a *firm* or to the *insurance business* of a *firm*.

8.1.5 G *Syndicate membership* may change from year to year or it may remain constant. *Managing agents* are required to apply *INSPRU* and *GENPRU* to the *insurance business* carried on through each *syndicate* for each *syndicate*

year. This should ensure that *INSPRU* and *GENPRU* are applied to Lloyd's in a way that is consistent with the provision of capital to support the *insurance business* underwritten.

8.1.6 G Where common systems and controls or processes are appropriate for all the *insurance business* carried on through more than one *syndicate* year, a single response may be adequate for all *syndicate* years. However, in some cases it will be important to consider the business of each open *syndicate* year separately, particularly for quantitative *rules*. For example, it is important that *managing agents* separately assess the financial resources (including capital) that are required and are available to support the *insurance business* carried on through each *syndicate* year, where the *syndicate member*ship changes from year to year. This is because each *member*'s assets are only available to support its own business, so the assets supporting one year of account may not be available to support another. For example, if a *managing agent* were to assess the financial requirements of two or more *syndicate* years together where the capital structure had changed, there would be a risk that the *managing agent* might take account of diversification effects that were not reflected in the capital supporting the *insurance business*.

8.1.7 G There is no requirement on *managing agents* to carry out separate individual capital assessments for *syndicate*s for each *syndicate* year. *Managing agents* are required to carry out individual capital assessments for each *syndicate* as if that *syndicate* were a *firm*; this would normally be on the basis of a going concern but, just as in a *firm*, account needs to be taken of any restrictions on the availability of assets (e.g. deposits with cedants), and some account needs to be taken of changes in the capital participation in the *syndicate*. The *Society* is responsible for the individual capital assessment for each *member*, which must take into account the assessments made by *managing agents* of any *syndicate*s on which the *member* participates. *INSPRU* 7.1 contains *rules* and guidance on the assessment of capital adequacy for *firms* and *INSPRU* 7.1.57R to *INSPRU* 7.1.70R provide for the application of *INSPRU* 7.1 to the *Society* and *managing agents*.

8.1.8 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.

8.1.9 G Key *INSPRU* and *GENPRU* requirements for Lloyd's

Key *INSPRU* and *GENPRU* requirements	*INSPRU*	*GENPRU*
Risk management, systems and controls		

The *Society* to establish and maintain systems and controls to address risks affecting the Lloyd's market	*INSPRU* 8.2	
The *Society* to manage prudential, credit, market, liquidity and operational risks affecting *funds at Lloyd's* and *central assets*	*INSPRU* 4.1, *INSPRU* 5.1, *INSPRU* 8.2 & *INSPRU* 8.5	
Managing agents to establish and maintain systems and controls for the management of prudential, credit, market, liquidity, operational, and insurance risks affecting each *syndicate*	*INSPRU* 4.1, *INSPRU* 5.1, *INSPRU* 8.2 & *INSPRU* 8.5	
Adequacy of financial resources		
The *Society* to ensure that *members'* financial resources are adequate		*GENPRU* 1.2 & *GENPRU* 1.5
Members taken together to maintain adequate financial resources in respect of the *insurance business* conducted at Lloyd's		*GENPRU* 1.5
Managing agents to ensure that financial resources are adequate for each *syndicate*		*GENPRU* 1.2 & *GENPRU* 1.5
Valuation		
The *Society* and *managing agents* to apply generally accepted accounting principles to valuing assets, liabilities, equity and income statement items for the purposes of the *rules* and *guidance* in *GENPRU*, *INSPRU* and *IPRU (INS)* unless the contrary is expressly stated	*INSPRU* 3.1 & *INSPRU* 3.2	*GENPRU* 1.3 & *GENPRU* 1.5

Capital resources requirements		
The *Society* to calculate the *MCR* in respect of the *general insurance business* of each *member*		GENPRU 2.1 & *GENPRU* 2.3
The *Society* to calculate the *CRR* (higher of *MCR* and *ECR*) in respect of the *long-term insurance business* of each *member*		GENPRU 2.1 & *GENPRU* 2.3
Capital resources		
The *Society* and *managing agents* to calculate *capital resources* in accordance with the *rules* and *guidance* in *GENPRU*		GENPRU 2.2 & *GENPRU* 2.3
Adequacy of capital resources		
Managing agents to assess the adequacy of *capital resources* held at *syndicate* level in respect of *insurance business* carried on through each *syndicate* (annual ICA for each *syndicate*)	*INSPRU* 7.1	
The *Society* to assess the adequacy of *capital resources* available to support each *member's insurance business* (ICA for each *member*), both at *syndicate* level (taking account of *syndicate ICAs*), and as *funds at Lloyd's*	*INSPRU* 7.1	

8.2 Special provisions for Lloyd's

Management of insurance business

8.2.1 R Neither the *Society* nor *managing agents* may permit a *member* to carry on any *insurance business* except as a participant on one or more *syndicates*.

Obligations under INSPRU and GENPRU

8.2.2 R The *Society* must ensure that all participants in the Lloyd's market are made aware of their obligations under *INSPRU* and *GENPRU*.

Management of risk

8.2.3 R The *Society* must establish and maintain systems and controls to enable it appropriately to address the risks to which the Lloyd's market is exposed.

8.2.4 R The systems and controls in *INSPRU* 8.2.3 must include systems and controls to enable the *Society* to ensure that any assumptions made in calculating a *member's capital resources* or in determining the individual capital assessment for each *member* are regularly reviewed and that appropriate action is taken if any assumption is no longer valid.

8.2.5 R The *Society* must take all reasonable steps, including establishing and maintaining adequate systems and controls to enable it:

(1) to manage the risks to which *funds at Lloyd's* and *central assets* are exposed; and

(2) to ensure that *funds at Lloyd's* and *central assets* are adequate to support all *balancing amounts.*

8.2.6 R A *managing agent* must establish and maintain adequate systems and controls to manage the risks to which the *insurance business* carried on through each *syndicate* it manages is exposed.

8.2.7 G In complying with *INSPRU* 8.2.6R, *managing agents* should have particular regard to:

(1) transactions which may give rise to a conflict of interest, such as those to which the *counterparties* are:

(a) other members of the *managing agent's* own *group*;

(b) any *members* of any *syndicates* managed by the *managing agent*; or

(c) any entity that is part of a *group* to which one or more *members* of any *syndicates* managed by the *managing agent* belong; and

(2) transactions involving:

(a) the provision of capital;

(b) the provision of *reinsurance*; or

(c) the provision of other services.

8.2.8 R In complying with *INSPRU* 8.2.6R a *managing agent* need not take account of risks associated with assets that are not *syndicate assets*.

8.2.9 R The *Society* must take reasonable steps to ensure that systems and controls established and maintained by *managing agents* are adequate to ensure that risks to which the *insurance business* carried on through each *syndicate* is exposed do not have a detrimental effect on *funds at Lloyd's* or *central assets*.

8.2.10 G *Managing agents* and the *Society* each hold and manage some of the financial resources held to support the *insurance business* carried on through *syndicates*. In particular:

(1) the *Society* holds and manages *funds at Lloyd's* and *central assets* which must be held to support *balancing amounts*. The *Society* is required to manage the risks that affect *funds at Lloyd's* and *central assets* directly, once the effects of any aggregation and diversification have been taken into account;

(2) *managing agents* hold and manage some of the financial resources in respect of the *insurance business* carried on through each *syndicate* that they manage. *Managing agents* are required to manage all risks affecting a *syndicate* except for the risk that *funds at Lloyd's* and *central assets* are not available to support the *balancing amount*.

8.2.11 R The *Society* must establish and maintain effective arrangements to monitor and manage risk arising from:

(1) conflicts of interest (including in relation to (2) to (4));

(2) inter-*syndicate* transactions, including *reinsurance to close* and *approved reinsurance to close*;

(3) related party transactions; and

(4) transactions between *member*s and itself.

8.2.12 R The arrangements in *INSPRU* 8.2.11R must enable the *Society* to identify any significant overstatement of financial resources resulting from any transaction falling within *INSPRU* 8.2.11R(2) to *INSPRU* 8.2.11R(4), including as a result of:

(1) any differences in the amounts recorded as due or payable by each party to any such transaction; or

(2) any actual or likely disputes between the parties to any such transaction.

8.2.13 R If the *Society* identifies a significant overstatement of the kind referred to in *INSPRU* 8.2.12R, it must ensure that an appropriate adjustment is made, including if appropriate by a deduction from or reduction in the value attributed to:

(1) the *capital resources* of any *member* concerned; or

(2) the *Society*'s *capital resources*.

Approved reinsurance to close

8.2.14 G As defined in the *Glossary*, "approved reinsurance to close" excludes:

(1) *reinsurance* between parties other than *members*; and

(2) balance transfers between *syndicate years* of *syndicates* having only one *member*, which have no effect on the overall liabilities of that *member*.

8.2.15 G The "approved" status of an *approved reinsurance to close* does not alter the legal status or effect of the original *contract of insurance*, or the liability of a reinsured *member* to the *policyholder* under or in respect of the original *contract of insurance*.

8.2.16 R Notwithstanding that the liability of a reinsured *member* to a *policyholder* is unaffected by an *approved reinsurance to close* as described in *INSPRU* 8.2.15G, for the purposes of *INSPRU* and *GENPRU* only:

(1) a *contract of insurance* reinsured under an *approved reinsurance to close* must be treated as if the reinsuring *member* and not the reinsured *member* had effected the original *contract of insurance*; and

(2) any payment received by a *member* as consideration for or in connection with an *approved reinsurance to close* must be treated as a *Lloyd's member's contribution* and not as *premium* or as a reinsurance recovery.

Provision of information by managing agents

8.2.17 R A *managing agent* must, as soon as possible, give the *Society* any information the *managing agent* has concerning material risks to *funds at Lloyd's* or *central assets*.

8.2.18 R A *managing agent* need not comply with *INSPRU* 8.2.17R if the *managing agent* knows that the *Society* already has the relevant information.

Insurance receivables to be carried to trust funds

8.2.19 R The *Society* must take all reasonable steps to ensure that each *member*:

(1) executes the appropriate *Lloyd's trust deeds*; and

(2) carries to the appropriate *Lloyd's trust fund* all amounts received or receivable by the *member*, or on its behalf, in respect of any *insurance business* carried on by it.

8.2.20 R The *Society* must carry all amounts it receives on behalf of any *member* in respect of that *member*'s *insurance business* to the appropriate *Lloyd's trust fund.*

8.2.21 R A *managing agent* must carry all amounts it receives on behalf of any

member in respect of that *member*'s *insurance business* to the appropriate *Lloyd's trust fund.*

8.2.22 R In complying with *INSPRU* 8.2.19R to *INSPRU* 8.2.21R, the *Society* and *managing agents* must take all reasonable steps to ensure that amounts received or receivable by a *member* in respect of *general insurance business* and *long-term insurance business* are carried to separate *Lloyd's trust funds*.

Amendments to byelaws, trust deeds and standard form letters of credit and guarantees

8.2.23 R The *Society* must, as soon as it is practical to do so, notify the *FSA* of its intention to approve the form of any new *Lloyd's trust deed*.

8.2.24 R The *Society* must, as soon as it is practical to do so, notify the *FSA* of its intention to make any amendment which may alter the meaning or effect of any *byelaw*, including:

(1) any *Lloyd's trust deed*;

(2) any standard form letter of credit prescribed by the *Society* from time to time; or

(3) any standard form guarantee agreement prescribed by the *Society* from time to time.

8.2.25 R The *Society* must provide the *FSA* with full details of:

(1) the form of any new *Lloyd's trust deed* it intends to approve, as described in *INSPRU* 8.2.23R and

(2) any amendments falling within *INSPRU* 8.2.24R.

8.2.26 R The *Society* must consult interested parties in relation to any new *Lloyd's trust deed* and in relation to any amendment falling within *INSPRU* 8.2.24R.

8.2.27 G Except in urgent cases, the *Society* should consult in relation to any new *Lloyd's trust deed* or amendments before the new deed or amendments take effect.

8.2.28 R The information provided to the *FSA* by the *Society* under *INSPRU* 8.2.25R must include:

(1) a statement of the purpose of any proposed amendment or new *Lloyd's trust deed* and the expected impact, if any, on *policyholders*, *managing agent*s, *members*, and potential *members*; and

(2) a description of the consultation undertaken under *INSPRU* 8.2.26R including a summary of any significant responses to that consultation.

8.2.29 G The *FSA* would normally expect to receive the information required under *INSPRU* 8.2.25R and *INSPRU* 8.2.28R not less than three months in advance of the proposed change.

8.3 The Central Fund

Application

8.3.1 R This chapter applies to the *Society*.

Purpose

8.3.2 G The *rules* and *guidance* in this chapter are intended to promote confidence in the market at Lloyd's, and to protect certain *consumers* of services provided by the *Society* in carrying on, or in connection with or for the purposes of, its *regulated activities*. They do this by:

(1) giving guidance to the *Society* about the protection that the *Central Fund* should provide for policyholders; and

(2) enabling the *FSA* to keep under review the protection the *Central Fund* provides for policyholders.

Enabling Provision

8.3.3 D The directions in this chapter are given under section 318 of the *Act* (Exercise of powers through Council) for the purpose of achieving the objective specified, as required by section 318(2) of the *Act*.

8.3.4 D The directions given in this chapter are given in relation to the exercise of the powers by the *Society* in respect of the *Central Fund* and are given with a view to achieving the objective of ensuring that the *Society* in making payments or in providing any other financial assistance from the *Central Fund* does so on a basis which takes no account of amounts of compensation which policyholders may receive under the provisions of the *compensation scheme* in respect of *protected claims* against *members*.

8.3.5 G The *Society* should seek to ensure that the *Central Fund* provides protection for policyholders so as to minimise the need for Lloyd's policyholders to have recourse to the *compensation scheme*.

8.3.6 G The *Society* should seek, and take appropriate account of, the *FSA's* views on all proposed changes in its arrangements relating to the *Central Fund*.

8.3.7 D The *Society* must, in the exercise of its powers to make payments from the *Central Fund* or to provide other forms of financial assistance from the *Central Fund*, ensure that in calculating and determining the amount of any such payment or the amount of any other financial assistance, it takes no account of the amounts of compensation which policyholders may receive under the provisions of the compensation scheme in respect of protected claims against *members*.

8.4 Capacity Transfer Market

Application

8.4.1 R This chapter applies to the *Society*.

Purpose

8.4.2 G The *rules* and *guidance* in this chapter are intended to promote confidence in the market at Lloyd's, and to protect certain *consumers* of services provided by the *Society* in carrying on, or in connection with or for the purposes of, its *regulated activities*. They do this by ensuring that the *Society* appropriately and effectively regulates the *capacity transfer market* so that it operates in a fair and transparent manner.

Requirement to make byelaws governing conduct in the capacity transfer market

8.4.3 R The *Society* must make appropriate *byelaws* governing conduct in the *capacity transfer market*.

8.4.4 G The *byelaws* referred to in *INSPRU* 8.4.3R should:

(1) ensure that adequate and effective arrangements are in place to enable *members* and *persons* applying to be admitted as *members* to enter into transactions to transfer *syndicate* capacity and settle these transactions in a timely manner;

(2) give clear and comprehensive guidance about the dissemination of information that is, or may be, relevant to the price of *syndicate* capacity and the transparency of the *capacity transfer market*; and

(3) prohibit unfair and abusive practices (including market manipulation), the misuse of information not generally available, and the dissemination of false or misleading information.

8.4.5 G The *Society* should have adequate and effective arrangements to:

(1) record and monitor transactions in the *capacity transfer market*, and maintain adequate audit trails; and

(2) suspend or annul transactions where appropriate.

8.4.6 G The *Society* should regularly review the *byelaws* referred to in *INSPRU* 8.4.3R, taking account of the standards of conduct required in other *UK* financial markets.

8.4.7 G The *Society* should consult *members* and *underwriting agents* before it finalises material changes in the *byelaws* referred to in *INSPRU* 8.4.3R, and should have timely and effective arrangements for notifying them of changes in these *byelaws*.

8.5 Former underwriting members

Application

8.5.1 R This chapter applies to the *Society*.

8.5.2 G The *rules* and *guidance* in this chapter are intended to promote confidence in the market at Lloyd's and to protect certain *consumers* of services provided by the *Society* in carrying on or in connection with or for the purposes of its *regulated activities* by:

(1) protecting policyholders against the risk that *former underwriting members* may not be able to meet any liabilities to carry out *contracts of insurance* that they underwrote at Lloyd's; and

(2) enabling the *FSA* to impose requirements under section 320(3) of the *Act* (Former underwriting members) if it considers this appropriate to protect policyholders.

Requirements relating to former underwriting members

8.5.3 R The *Society* must draw sections 320 to 322 of the *Act* (Former underwriting members, Requirements imposed under section 320, Rules applicable to former underwriting members) to the attention of any *person* ceasing to be an *underwriting member* on or after *commencement*.

8.5.4 R The *Society* must require any *person*, other than a *body corporate*, ceasing to be an *underwriting member* on or after *commencement* to:

(1) notify the *Society* of any change in his address within one month of the change;

(2) in the case of a natural person, to make arrangements for the *Society* to be notified in the event of his death.

8.6 Prudential risk management and associated systems and controls

Application of SYSC 14

8.6.1 R Subject to *INSPRU* 8.6.2R, *SYSC* 14 (Prudential risk management and associated systems and controls) applies to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R.

8.6.2 R The requirement in *SYSC* 14.1.18R to take reasonable steps to ensure the establishment and maintenance of a business plan does not apply to the *Society*.

Application of SYSC 11, 15 and 16

8.6.3 R Subject to *INSPRU* 8.6.5R, *SYSC* 11 (Liquidity risk management systems and controls), *SYSC* 15 (Credit risk management systems and controls) and *SYSC* 16 (Market risk management systems and controls) apply to *managing agents* and to the *Society* in accordance with:

(1) for *managing agents*, *INSPRU* 8.1.4R; and

(2) for the *Society*, *INSPRU* 8.1.2R

Application of SYSC 17

8.6.4 R Subject to *INSPRU* 8.6.5R, *SYSC* 17 (Insurance risk systems and controls) applies to *managing agents* in accordance with *INSPRU* 8.1.4R.

8.6.5 R In accordance with *INSPRU* 8.6.2 R, the *rules* and *guidance* in *SYSC* 11, *SYSC* 15, *SYSC* 16 and *SYSC* 17 relating to the establishment and maintenance of a business plan do not apply to the *Society*.

9.1 Actions for damages

9.1.1	R	A contravention of the *rules* in *INSPRU* does not give rise to a right of action by a *private person* under section 150 of the *Act* (and each of those *rules* is specified under section 150(2) of the *Act* as a provision giving rise to no such right of action).

INSPRU TP

Transitional provisions

1 IPRU waivers

Application

1.1 R *INSPRU* TP 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*.

Version of IPRU to be used

1.2 R Any reference in *INSPRU* TP to *IPRU (INS)* is to the version in force on 30 December 2004.

Duration of transitional

1.3 R *INSPRU* TP 1 applies until the relevant *rule* is revoked.

Continuing effect of waivers

1.4 R A *rule* in *INSPRU* listed in the Table at *INSPRU* TP Table 2 is disapplied, or is modified in its application, to a *firm*:

(1) in order to produce the same effect, including any conditions, as a *waiver* had on the corresponding *rule* in *IPRU (INS);*

(2) for the same period as the *waiver* would have lasted, if shorter than the period in *INSPRU* TP 1.3;

provided the conditions set out in *INSPRU* TP 1.5 are satisfied.

1.5 R The conditions referred to in *INSPRU* TP 1.4 are:

(1) the *rule* is shown in the Table at *INSPRU* TP Table 2 as corresponding with the *rule* in *IPRU (INS)* in relation to which the *waiver* was granted to the *firm*;

(2) the *waiver* was current as respects the *firm* immediately before 31 December 2004; and

(3) there is no specific transitional *rule* relating to the *waiver*.

1.6 R *INSPRU* TP 1.4 does not have effect if, and to the extent that, it would be inconsistent with any community obligation of the *United Kingdom*.

1.7 R A *firm* which has the benefit of a *waiver* to which *INSPRU* TP 1.4 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*;

(2) maintain a written record of the *rule* in *INSPRU* to which it considers the *waiver* applies; and

(3) make the record available to the *FSA* on request.

INSPRU TP Table 2

Rules in INSPRU	Corresponding rules in IPRU (INS)
2.1.22	4.14(1)
3.1.34	5.11
3.1.39	5.11 5.11(4) 5.11(5) 5.11(9) 5.11(11)
3.1.58	2.3(2)
1.1.51	2.4(6)
1.1.56	2.4(1)
1.1.66	Appendix 2.1 2.4(1)(b) Appendix 2.2 2.4(1)(b) 5.9(1)
1.2.40	5.9(2)
1.2.41	5.9(2)
1.2.43	5.10
1.2.74	5.16
6.1.17	10.1 10.2 10.2(1) 10.2(2) 10.2(3)
6.1.23	10.2 10.2(1) 10.2(2) 10.2(3)

3 PRU waivers

Application

3.1 R *INSPRU* TP 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*.

Version of PRU to be used

3.2 R A reference in *INSPRU* TP 3 to *PRU* is to the version in force on 30 December 2006.

Duration of transitional

3.3 R *INSPRU* TP 3 applies until the relevant *INSPRU rule* is revoked.

Continuing effect of waivers

3.4 R A *rule* in *INSPRU* is disapplied, or is modified in its application, to a *firm*:

(1) in order to produce the same effect, including any conditions, as a *waiver* had on the *rule* in *PRU*;

(2) for the same period as the *waiver* would have lasted, if shorter than the period in *INSPRU* TP 3.3;

provided the conditions set out in *INSPRU* TP 3.5 are satisfied.

3.5 R The conditions referred to in *INSPRU* TP 3.4 are:

(1) the *rule* in *PRU* in relation to which the *waiver* was granted to the *firm* was redesignated as the relevant *rule* in *INSPRU* by the Prudential Sourcebook for Insurers Instrument 2006;

(2) the *waiver* was current as respects the *firm* immediately before 31 December 2006; and

(3) there is no specific transitional *rule* relating to the *waiver*.

3.6 R *INSPRU* TP 3.4 does not have effect if, and to the extent that, it would be inconsistent with any community obligation of the *United Kingdom*.

3.7 R A *firm* which has the benefit of a *waiver* to which *INSPRU* TP 3.4 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*;

(2) maintain a written record of the *rule* in *INSPRU* to which it considers the *waiver* applies; and

(3) make the record available to the *FSA* on request.

4 EEA pure reinsurers

Application

4.1 R *INSPRU* TP 4 applies to a *pure reinsurer*:

(1) whose head office is in an *EEA State* other than the *United Kingdom*; and

(2) which is not an *incoming Treaty firm*.

Duration of transitional

4.2 R *INSPRU* TP 4 has effect in relation to a *firm* until 10 December 2008 or, if earlier, the date on which it becomes:

(1) an *incoming EEA firm* by reason of having exercised its right to carry on the *regulated activity* of *effecting* or *carrying out contracts of insurance* in the *United Kingdom* in accordance with Schedule 3 to the *Act* (EEA Passport Rights); or

(2) an *incoming Treaty firm* by reason of having exercised its right to carry on the *regulated activity* of *effecting* or *carrying out contracts of insurance* in the *United Kingdom* in accordance with Schedule 4 to the *Act* (Treaty Rights).

50% premiums and claims uplift for classes 11, 12 and 13; credit equalisation provision

4.3 R The following *rules* or paragraphs of a *rule* do not apply to a *firm*:

(1) *INSPRU* 1.1.56R(1);

(2) *INSPRU* 1.1.60R(1); and

(3) *INSPRU* 1.4.39R to *INSPRU* 1.4.46R.

5 Pure reinsurance groups

Application

5.1 R *INSPRU* TP 5 applies to a *pure reinsurer* whose *ultimate EEA insurance parent undertaking* is the *parent undertaking* of a *group* comprised solely of *reinsurance undertakings*.

Duration of transitional

5.2 R *INSPRU* TP 5 applies until 10 December 2007.

Group capital resources requirement

5.3 R A *firm* need not comply with *INSPRU* 6.1.15R.

Insurance Prudential sourcebook (*INSPRU*)

Schedule 1
Record keeping requirements

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
INSPRU 1.2.20R	*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
INSPRU 1.3.17R, *INSPRU* 1.3.19R	Calculation of *with-profits insurance capital component*	(1) The methods and assumptions used in making any calculation required for the purposes of *INSPRU* 1.3 (and any subsequent changes) and the reasons for their use (2) Any change in practice (in particular	Not specified	An appropriate period

Handbook reference	Subject of Record	Contents of Record	When record must be made	Retention Period
		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		
INSPRU 1.5.23R	*Long-term insurance funds*	A separate accounting record in respect of each of a *firm's long-term insurance funds*	Not specified	Not specified
INSPRU 1.5.56R, *INSPRU* 1.5.57R	*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 *INSPRU* 1.1.20R as available to meet those liabilities	Not specified	Not specified

Insurance Prudential sourcebook (*INSPRU*)

Schedule 2
Notification and reporting requirements

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
INSPRU 2.1.23R	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 *INSPRU* 2.1.23R 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 if the *firm* no provision is required, and (2) explain how the *reinsurance* exposure is being safely managed (see *INSPRU* 2.1.24R)	(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
INSPRU 2.1.29R	That the *firm* has exceeded, or anticipates exceeding, the	Fact that the limit has been	The limit being	Immediately

Handbook reference	Matter to be notified	Contents of notification	Trigger event	Time allowed
	limit expressed in *INSPRU* 2.1.28E (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)	exceeded, or that the *firm* anticipates exceeding the limit Note: upon notification under *INSPRU* 2.1.29R the *firm* must explain to the *FSA* how, despite the excess *reinsurance* concentration, the credit risk is being safely managed (see *INSPRU* 2.1.30R)	exceeded, or an anticipation that the limit will be exceeded	
INSPRU 3.1.65R	*Syndicate* liabilities not covered by matching *syndicate assets* as required by *INSPRU* 3.1.53R	Nature and extent of *syndicate* liabilities not covered by matching *syndicate assets* as required by *INSPRU* 3.1.53R	*Syndicate* liabilities are no longer covered by matching *syndicate assets* as required by *INSPRU* 3.1.53R	Immediately
INSPRU 7.1.68R	*Syndicate ICA* and *balancing amount* in respect of each *syndicate*	*Syndicate ICA* and *balancing amount* in respect of each *syndicate*	Notification should be made periodically	As part of the annual capital-setting process, in good time for the *Society* to review and place appropriate reliance on them when determining capital assessments for each

Handbook reference	Matter to be notified	Contents of notification	Trigger event	Time allowed
				member
INSPRU 7.1.74R	Significant doubt about the adequacy of a *syndicate ICA* or *balancing amount* with respect to *syndicate* risks and controls	Revised *syndicate ICA* and *balancing amount*	The *managing agent* considers that *syndicate ICA* and *balancing amount* communicated in the capital setting process are no longer adequate in the light of the risks to which the *syndicate* business is exposed	Immediately
INSPRU 8.2.17R	Information the *managing agent* has concerning material risks to *funds at Lloyd's* or *central assets*	All information concerning relevant risk	Receipt of information	As soon as possible
INSPRU 8.2.23R	Intention to approve the form of any new *Lloyd's trust deed*	Fact of intention	Intention to approve	As soon as practical
INSPRU 8.2.24R	Intention to make any amendment which may alter the meaning or effect of any *byelaw* (including *Lloyd's trust deeds,* standard form letters of credit and guarantees)	Fact of intention	Intention to amend	As soon as practical
INSPRU 8.2.25R	Full details of form of new *Lloyd's trust deed* or amendments to *byelaw* (including *Lloyd's trust deeds,* standard form letters of credit and guarantees)	(1) Statement of purpose of amendment or new form and expected impact, if any, on *policyholders*, *managing agent*s, *members* and potential *members*, and	Not specified	Normally not less than three months in advance of proposed change

Handbook reference	Matter to be notified	Contents of notification	Trigger event	Time allowed
		(2) Description of the consultation undertaken and summary of significant responses to consultation		

Schedule 3
Fees and other requirement payments

G

There are no requirements for fees or other payments in *INSPRU*.

Insurance Prudential sourcebook (*INSPRU*)

Schedule 4
Powers exercised

G

1 The following powers and related provisions in the *Act* have been exercised by the *FSA* to make the rules in *INSPRU*:

(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 318(1) (Exercise of powers through Council)

2 The following power in the *Act* has been exercised by the *FSA* to give *guidance* in *INSPRU*:

(1) section 157(1) (Guidance).

Insurance Prudential sourcebook (*INSPRU*)

Schedule 5
Rights of action for damages

G

1. The table below sets out the *rules* in *INSPRU* contravention of which by an *authorised person* may be actionable under section 150 of the *Act* (Actions for damages) by a *person* who suffers loss as a result of the contravention.

2. If a "Yes" appears in the column headed "For *private person*", the *rule* may be actionable by a *private person* under section 150 (or, in certain circumstances, his fiduciary or representative; see article 6(2) and (3)(c) of the Financial Services and Markets Act 2000 (Rights of Action) Regulations 2001 (SI 2001/2256)). A "Yes" in the column headed "Removed" indicates that the *FSA* has removed the right of action under section 150(2) of the *Act*. If so, a reference to the *rule* in which it is removed is also given.

3. The column headed "For other *person*" indicates whether the *rule* may be actionable by a *person* other than a *private person* (or his fiduciary or representative) under article 6(2) and (3) of those Regulations. If so, an indication of the type of *person* by whom the *rule* may be actionable is given.

Chapter/ Appendix	Section/ Annex	Right of action under section 150		
		For *private person*	Removed	For other *person*
All *rules* in *INSPRU*		No	Yes (*INSPRU* 9.1.1R)	No

Prudential sourcebook for insurers, the Society of Lloyd's and managing agents (*INSPRU*)

Schedule 6
Rules that can be waived

G

The rules in *INSPRU* can be waived by the *FSA* under section 148 of the *Act* (Modification or waiver of rules), except for *INSPRU* 9.1.1R (Actions for damages). However, if the *rules* incorporate requirements laid down in European directives, it will not be possible for the *FSA* to grant a *waiver* that would be incompatible with the *United Kingdom's* responsibilities under those directives. It therefore follows that if a *rule* in *INSPRU* contains provisions which derive partly from a directive, and partly not, the *FSA* will be able to consider a *waiver* of the latter requirements only, unless the directive provisions are optional rather than mandatory.