FINANCIAL REGULATOR
Rialtóir Airgeadais

GUIDANCE ON

TRANSITIONAL REQUIREMENTS

FOR NON-LIFE REINSURANCE UNDERTAKINGS

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1 Introduction

The publication of Council Directive 2005/68/EC on reinsurance ("the Directive") on the 9th of December 2005, entitled all reinsurance undertakings then operating in the Irish market to be deemed authorised. As a result, the Irish Financial Services Regulatory Authority ("Financial Regulator") will introduce a regulatory regime for reinsurance in 2006. The Reinsurance Directive proposes a model of regulation based primarily on current direct Life and Non-Life insurance supervision rules (Solvency I). When the Solvency II proposals have been finalised, the reinsurance supervision regime will need to be adjusted accordingly.

The Directive introduces a mandatory licensing system, which allows reinsurance undertakings licensed in one Member State to transact business across other EU Member States and as a result proposes that collateralisation requirements currently in place in some States be abolished. Although the Directive allows Member States 24 months from date of entry in force to transpose it, Ireland proposes the early transposition of the Directive into domestic legislation, introducing a formal regulatory regime for reinsurance in 2006.

The Financial Regulator developed its proposals contained in this paper, having considered the results of a pre-consultation through the reinsurance industry's representative body. Submissions received via the Financial Regulator's pre-consultation process have been addressed in this paper or reflected through the frequently asked questions attached in Appendix 12. This short industry consultation on these amended proposals will be completed by end Q1 2006 before finally implemented in Q2 2006.

The International Association of Insurance Supervisors (IAIS) has developed a set of standards relevant to both the supervision of insurance and reinsurance undertakings. These standards are regarded as the basic standards to be applied to supervision of reinsurance.

The IAIS standard on reinsurance "Supervision of Reinsurers", issued in October 2003, elaborates on their earlier publication on the principles of supervision "Minimum requirements for supervision of reinsurers", which focuses particularly on where reinsurers differ from primary insurers, hence requiring the supervisory framework to be adapted. The standard applies to internationally active reinsurers that are pure reinsurers, or insurers whose main activity includes the issuance of reinsurance coverage, having cedents in at least one jurisdiction outside their own. The guidance set out by the Financial Regulator in this paper is also derived from this IAIS standard (available at www.iaisweb.org).

1.1 Scope

The Financial Regulator is issuing this paper to provide guidance to reinsurance undertakings, whose activities are in the non-life sector, on how the issue of transitional requirements will be dealt with in practice between individual reinsurance undertakings and the Financial Regulator. Separate papers will issue on the life, composite and finite reinsurance entities to address the unique specificities of those companies.

The Financial Regulator wishes to establish the degree of compliance within existing reinsurance undertakings to:

- Make an initial assessment of the extent to which the reinsurance undertaking meets the required standard.

In the event that the reinsurance undertaking does not meet the standard, then:

- To facilitate consultations with the Financial Regulator with a view to achieving an agreed view of what remedial action will be required; and,
- To agree with the Financial Regulator a timetable for achieving compliance.

Reinsurance undertakings are requested to confirm their compliance with the following Articles of the current draft Reinsurance Directive:

Article 32 – Establishment of technical provisions;

Article 33 – Equalisation reserves;

Article 34 – Assets covering technical provisions;

Article 36 – Available solvency margin – eligible items; and

Article 37 – Required solvency margin for non-life reinsurance activities.

The Financial Regulator acknowledges that not all notified reinsurance undertakings, now deemed authorised, will be in a position to immediately comply with all requirements set down in the Directive. Therefore, reinsurance undertakings are expected to analyse their position in respect of the Directive requirements and establish whether they are compliant and set out the position in a statement of compliance.

In the event that the required standard is not met for particular requirement(s) the Financial Regulator will require from the Board of Directors, of such a reinsurance undertaking, a general description of the compliance position setting out a timeline for full compliance ("The Full Compliance Timeline") with each of the transitional requirements, including specific milestone dates for each deliverable, to be achieved before the end of the transitional period referred to in this document (30 June 2007).

1.1.1 Reinsurance Transitional Compliance Submissions

The Financial Regulator requires all existing reinsurance undertakings to submit the following:

- A statement of compliance to be received by the Financial Regulator by close of business on 30 June 2006. This statement to confirm, or otherwise, the reinsurance undertaking's compliance vis-à-vis transitional requirements, based on financial statements for the 2005 financial year.

All submissions should be clearly titled 'Reinsurance Transitional Compliance Submission' and emailed to: **reinsurance@financialregulator.ie** **(by 30 June 2006).**

1.1.2 Full Compliance Timeline Submission

If a reinsurance undertaking submits a 'Reinsurance Transitional Compliance Submission', as referred to above, which includes non-compliance in one or a number of the required areas it will be required to submit:

- A Full Compliance Timeline to be received by the Financial Regulator by close of business on 29 September 2006. The Full Compliance Timeline will include a detailed plan as to how the undertaking intends to become compliant in the areas of non-compliance within the "Targeted Compliance Dates" (set out in 1.2 below). The Financial Regulator will discuss the plan for compliance with the reinsurance undertaking with a view to reaching an acceptable schedule of actions.

All submissions should be clearly titled 'Full Compliance Timeline Submission' and emailed to: **reinsurance@financialregulator.ie** **(by 29 September 2006).**

1.2 Targeted Compliance Dates

The minimum conditions, which the Financial Regulator will require to be met by existing Irish reinsurance undertakings over the indicated periods from inception of the Reinsurance Directive, are as follows:

- Technical provisions (31 December 2006);
- Equalisation reserves (31 December 2006);
- Assets covering technical provisions (30 June 2007); and
- Solvency requirements (30 June 2007).

2 Transitional Requirements

2.1 Technical provisions

Technical provisions to be established are as described in Directive 91/674/EC, which is transposed into Irish law in Statutory Instrument (SI) 23 of 1996, the European Communities (Insurance Undertakings: Accounts) Regulations, 1996. Extracts from SI 23 of 1996 relevant to this paper are contained in Appendix 1.

Boards of Directors may find it useful to consider the relevant descriptions of the required technical provisions, as outlined in Part I, Chapter 2 of SI 23 appended. The following relate to Section A – Notes on the balance sheet format (Appendix 1, pp.4 et seq.):

- No. 23 - Provision for unearned premiums;
- No. 24 - Other technical provisions – Note that this essentially means unexpired risk provision. It is acceptable to include this provision with the unearned premium provision, as provided for in the notes; and
- No. 26 - Provision for claims outstanding

The following provides references to the general rules applicable to these provisions and are detailed in Part II, Chapter 3 of Appendix 1 (pp.9-10):

- No. 23 – Technical provisions;
- No. 24 – Provision for unearned premium;
- No. 25 – Provision for unexpired risks;
- No. 27 – Provisions for claims outstanding – non-life insurance; and
- No. 28 – Discounting

2.1.1 Statement of Actuarial Opinion

It is intended that for the year ending 31 December 2006, a statutory return will be required from reinsurance undertakings, including a report on the adequacy of technical provisions. All provisions should cover reinsurance liabilities 'as far as can reasonably be foreseen'.

Current Financial Regulator thinking suggests it would be desirable to have an objective opinion regarding reasonableness. Furthermore, it suggests that a Statement of Actuarial Opinion (SAO) accompanying the report could provide this. The Financial Regulator is discussing this issue at present with the Society of Actuaries in Ireland, with a view to providing for SAOs.

It may be considered necessary to stage the SAO reporting requirement. For example, reinsurance undertakings exclusively writing third party business would be the first to comply, with their statutory return for the year ending 31 December 2006 requiring a SAO. Such a staged process could imply that some captives would not be expected to comply until statutory returns for the year ending 31 December 2007 are due.

Reinsurance undertakings should refer to Appendix 2 ('Guidelines for Insurance Companies: Actuarial Certification of the Technical Reserves of Non-Life Companies'). Current Financial Regulator thinking suggests that this would form the basis of what would be expected from reinsurance undertakings required to submit a SAO, while also outlining the circumstances under which an exemption may be applied for.

As is the case for non-life insurance undertakings, exemptions will only be granted for reinsurance undertakings on a year-by-year basis, and only upon request, submitted in writing to the Financial Regulator.

In the meantime, until an SAO is required, companies should calculate their figures for technical provisions on a best estimate basis. Calculations should be firstly made for gross technical provisions, with the offsetting amounts due to/from retrocessionaires shown separately, rather than merely showing net figures.

2.1.2 Provision for claims outstanding

Reinsurance undertakings should include all expected claims expenses in this provision, including claims incurred but not reported (IBNR) and claims incurred but not enough reported (IBNER).

2.1.3 Discounting

Discounting will be allowed, subject to prior approval being obtained from the Financial Regulator, in accordance with the following:

- The rate of interest used to calculate present value must not exceed the rate of investment income earned on the assets matching the provision liability over either the preceding five years or the year preceding the last balance sheet date; and,
- The assets available to support the solvency requirements are reduced by the difference between the undiscounted and the discounted provisions.

2.1.4 Gross/Net Technical Provisions, Retrocession

The Financial Regulator will expect calculations for both Gross and Net provisions. The rationale behind such an expectation is to better establish the extent of a reinsurer's exposure to its retrocessionaires. **Reinsurance undertakings will be expected to outline their retrocession strategy to the Financial Regulator as part of their transitional compliance submission**.

To assist reinsurance undertakings with this, Appendix 3 contains Guidance on the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers, which was published in May 2003. Further to the points of guidance in Appendix 3, reinsurance undertakings should consider their inward reinsurance and their retrocession as a whole programme, as this will be the basis upon which the Financial Regulator will examine the suitability of retrocession.

Reinsurance undertakings should note that collateral may only be negotiated on a commercial basis as Article 32 specifically excludes collateralisation on a 'forced' or 'automatic' system basis.

Reinsurance undertakings should note that in the event that the Financial Regulator considers that their retrocession programme is partly or wholly unsuitable, some or all of the retrocessionaires' share of technical provisions may not be considered admissible as assets covering the technical provisions.

2.2 Equalisation reserves

Article 33 of the Reinsurance Directive applies to reinsurance undertakings underwriting credit reinsurance. If the level of credit reinsurance business is not low enough to render the company exempt from the requirement to set up an equalisation reserve, it must use one of the four methods set out in Directive 73/239/EEC. For ease of reference, the four methods referred are also set out in Appendix 4.

2.3 Assets covering technical provisions

The Directive provides two options in respect of assets covering technical provisions: a quantitative rules-based approach or a qualitative prudent person approach. The Financial Regulator proposes to adopt that latter approach in respect of Irish reinsurance undertakings.

It will be for the Board of the reinsurance undertaking to demonstrate to the Financial Regulator that they are indeed adopting a prudent approach. The Financial Regulator considers Section 1 of Article 34, subsections (a) to (e) (attached in Appendix 5), are considered to be a good basis for assisting a reinsurance undertaking to decide upon its asset mix. Statutory Instrument 23 of 1996 (attached at Appendix 1), also acts as a reference point for reinsurance undertakings vis-à-vis relevant rules on valuation of assets (mainly in Part II, Chapter 2).

Other useful reference materials include the Guidance for Insurance Companies on Asset Management, issued to the insurance industry in July 2001 (attached in Appendix 6) and Guidance Paper No.9, 'Guidance Paper on Investment Risk

Management', issued in October 2004 by the International Association of Insurance Supervisors (contained in Appendix 7).

The Financial Regulator expects that reinsurance undertakings adopt the approach of considering their entire business from acceptance through to retrocession when deciding their asset (and investment) mix strategy. As part of this approach consideration must be given the claims payout patterns and the potential volatility of these patterns with a view to projecting liquidity requirements and ensuring that the assets selected provide the degree of liquidity required by this analysis.

Reinsurance undertakings should maintain an adequately diversified portfolio of assets to mitigate concentration risk, including the correlation risk that exists between investment in equities of insurance and/or reinsurance companies and the underwriting cycle; notably, the potentially negative impact of a 'soft' underwriting market on the performance of equities in this sector. The impact of such a risk is that the company not only experiences a poor technical result, but its financial statements are further affected by (realised and/or unrealised) losses in (insurance) investments.

A further area for consideration is the issue of settlement risk, which is considered to impact more on reinsurance undertakings that retrocede. In the event that a reinsurance undertaking has a significant proportion of its assets as retrocession recoverables, it needs to establish whether this asset is indeed fully 'recoverable'. The Financial Regulator expects that reinsurance undertakings hold an aged debtor analysis on all its retrocessionaire debtors. Furthermore, any debtor (not only retrocessionaires) over 90 days old will not be admitted as an asset covering technical provisions.

In the course of discussions with the sector, specific guidance has been requested in relation to the following classes of assets:

2.3.1 Funds Withheld

Funds Withheld is an allowable asset if there is a "right of off-set" clause in the reinsurance agreement, and only to the extent that the funds withheld off-set technical

provisions specific to the counterparty in the individual reinsurance agreement. Again, this is in the context of the total assets of the reinsurance undertaking being suitably diversified, liquid and secure. Therefore, having considered asset-liability matching issues, and the overall effect on the asset mix, the directors of the reinsurance undertaking must then satisfy themselves with appropriateness of the security and liquidity of such funds, with a requirement to write down the assets to reflect any concerns.

2.3.2 Inter-company transactions

2.3.2.1 Inter-company loans

Reinsurance undertakings will be subject to the same requirements as insurance companies regarding inter-company loans, namely that they are permitted from surplus assets, subject to prior approval by the Financial Regulator, and can only be used as assets covering technical provisions in certain limited circumstances.

In regard to Inter-company loans there are two important points:

- Firstly, if these loans are intended to be used as admissible assets to cover technical provisions they must be legally ring- fenced; and,
- Secondly, all inter-company loans, whether intended to cover technical provisions of not, must be approved in advance by the Financial Regulator.

With regard to the first point; if loans or participation in the group treasury operation (i.e. essentially the "sweep" of funds excess to current requirements) are intended to be used as admissible assets to cover technical provisions they must be contractually framed so that the reinsurance undertaking retains ownership of the funds and the treasury function holds the funds in trust on behalf of the reinsurance undertaking (in effect acts as a custodian). Such a contractual arrangement should also provide that, in the event of liquidation (or another insolvency trigger event), the funds are 'ring-fenced' beyond the reach of the liquidator (or other insolvency practitioner) and immediately payable in full to the reinsurance undertaking.

With regard to the second point: the approval process depends on whether the assets are intended to be used as admissible assets to cover technical provisions.

- For approval of inter-company loans intended to be used to cover technical provisions, the reinsurance undertaking will need to provide the Financial Regulator with evidence that the assets will be legally ring-fenced and that the level of the loan(s) is appropriate to the undertaking's overall asset mix and consistent with its stated asset strategy.

- For approval of inter-company loans not intended to be used to cover technical provisions, the application should contain a statement confirming that the loan is being made from free assets, and also include solvency margin calculations and extracts from the financial statements, showing both the current position, and then the (proposed) position showing the effect of the loan.

In the case of a sweeping arrangement, the Financial Regulator will approve the arrangement, and not every transaction. Reinsurance undertakings will require prior approval of changes to previously agreed arrangements.

2.3.2.2 Inter-company receivables

If balances exist between group companies the Financial Regulator requires that settlements are made on at least a quarterly basis. Either gross amounts due must be paid and received, or it is acceptable to calculate the net balance and effect settlement.

As is the case with inter-company loans, an inter-company receivable included in the debtor assets aged more than 90 days will not be admitted as an asset covering technical provisions.

The Financial Regulator requires written contractual terms to be in place between (group) companies, and requires that settlement conditions in such contracts are equivalent to those that would be acceptable in an open market scenario.

2.4 Required solvency margin for non-life reinsurance activities

Article 37 of the Directive outlines the solvency margin requirement and calculation. (See Appendix 10 for the format of the solvency requirement calculation and Appendix 11 for guidance in completion of the form as well as a worked example.)

Article 36 of the Directive outlines the items eligible to cover the required solvency margin. (See Appendix 8)

Reinsurance undertakings should bear in mind that when calculating average burden of claims, if there are less than three financial years to take into consideration (or seven if underwriting is mainly confined to credit, storm, hail, frost) then total claims over the (reduced) period is averaged over the lower number of years elapsed.

Note the Directive requires that premiums attributable to liability classes 11, 12, 13 (aircraft, ships, general) are increased by 50% for solvency margin calculations. Where some liability reinsurance programmes (including risks under classes 11,12 & 13) are 'multi-line' and difficult to separate out into varying component (original) liability classes, the 50% uplift will apply to the entirety of the programme.

As with insurance solvency margin calculations, there is a reduction factor, according to the ratio of (average) net claims to gross claims, subject to a maximum reduction of 50%. The Financial Regulator will require sight of the reinsurance undertaking's retrocession programme in order to establish its quality. Should the Financial Regulator deem the retrocession programme to be partially or wholly unsuitable, it may reduce or remove the reduction factor applicable.

2.4.1 Required Solvency Margin

After calculating the premium and claims results for solvency margin, the reinsurance undertaking is required by the Financial Regulator to deem the greater of the two results as the amount used in determining solvency margin. This amount, or the minimum guarantee fund of EUR 3 million (EUR 1 million for a captive reinsurance

undertaking, in accordance with the Directive definition (see also below)), whichever is greater, shall be the required solvency margin.

2.4.2 Definition of Captive Reinsurance Undertaking

Article 2 of the Directive includes the definition of a captive reinsurance undertaking as:

> *A reinsurance undertaking owned either:*
> *–by a financial undertaking other than an insurance undertaking or a reinsurance undertaking or a group of insurance or reinsurance undertakings to which Directive 98/78/EC applies,*
>
> *–or by a non-financial undertaking, the purpose of which is to provide reinsurance cover exclusively to the risks of the undertaking or undertakings to which it belongs or of an undertaking or undertakings of the group of which the captive reinsurance undertaking makes part.*

Directive 98/78/EC is the Insurance Groups Directive, so a company **cannot be defined** as a captive reinsurance undertaking if it is owned by a group to which this directive applies.

If any reinsured risks fall outside those of the undertaking(s) or group to which it belongs, not only can the company **not be defined** as a captive reinsurance undertaking (as it is reinsuring third parties), but also the reinsurance undertaking must employ a **natural person** as General Manager (cannot be managed solely by a captive management company), and refine its corporate structure accordingly.

There are some 'captive' reinsurance undertakings in the Irish market, which are owned by a captive insurance undertaking. **Note that under the Directive this type of reinsurance undertaking cannot now be defined as a captive reinsurance undertaking, as it is owned by an insurance undertaking. They will not therefore be in a position to avail of the reduced minimum guarantee fund nor will they be exempted from the requirement to employ a General Manager.**

However, reinsurance undertakings owned directly by their 'industrial parent' (covering group risks only) as a sister company to an insurance company may qualify

as a captive reinsurance undertaking, and may therefore avail of (captive) conditions applying.

2.4.3 Solvency Notification Requirements

2.4.3.1 Insufficient Solvency during Transitional Period

As outlined at the beginning of this paper, the intention of the Financial Regulator is to establish at an early stage which reinsurance undertakings have not met required regulatory standards, such as having insufficient solvency margin cover, in order to discuss plans to rectify the situation in a timely fashion, and to enable reinsurance undertakings to suitably plan towards regulatory compliance.

If a reinsurance undertaking has below 100% of solvency margin cover it must state this in its “Reinsurance Transitional Compliance Submission” (due 30 June 2006). It must then submit a “Full Compliance Timeline**”** (due 29 September 2006) detailing how it intends to come into compliance within the transitional period. If deemed suitable by the Financial Regulator the reinsurance undertaking will be able to carry on reinsurance business without having required solvency margin cover during the transition period.

If any reinsurance undertaking as part of its “Reinsurance Transitional Compliance Submission” (due 30 June 2006) confirm that it has sufficient solvency but subsequently falls below 100% of cover, it will be required to notify the Financial Regulatory **immediately** and submit a “Full Compliance Timeline” **within 14 days** detailing how it intends to come into compliance within the transitional period. If deemed suitable by the Financial Regulator the reinsurance undertaking will be able to carry on reinsurance business without having required solvency margin cover during the transition period.

2.4.3.2 Insufficient Solvency - Post Transitional Period

Once the provisions of the Directive are implemented (i.e. after the expiration of the transitional period), reinsurance undertakings will be required to notify the Financial

Regulator immediately if their surplus assets fall below 100% of required solvency margin.
The reason for this arises from the requirements of the Directive. Should the reinsurance undertaking hold below 100% of the required solvency margin cover it must immediately notify the Financial Regulator, which:

- Will instruct the reinsurance undertaking to cease writing new business;
- Will inform the authorities of all other Member States;
- Will require that a plan for the restoration of a sound financial situation be submitted for its approval; and,
- May restrict or prohibit the free disposal of assets of the reinsurance undertaking.

Current thinking in the Financial Regulator is that reinsurance undertakings will only be required to maintain a 100% solvency margin. However, it would be wise for reinsurance undertakings to maintain capital cover at more than 100% solvency to avoid unintentionally triggering the above procedures. It is for the Boards of Directors to establish a level of capitalisation above the required solvency that they believe is sufficient in the circumstances.

If a reinsurance undertaking's assets fall below 150% of solvency margin cover, they will be required to notify the Financial Regulator immediately. The ramifications of a fall below 100% will be discussed with the undertaking and in future the undertaking will be required to report its solvency status to the Financial Regulator on a more frequent basis.

Where it becomes clear that a reinsurance undertaking's situation is unlikely to improve in the foreseeable future to a compliant level, then the Financial Regulator will discuss options for an exit strategy with the reinsurance undertaking, so as to facilitate an orderly run-off of the reinsurance undertaking.

3 APPENDICES

Appendix 1: Extracts from: S.I. No. 23/1996: European Communities (Insurance Undertakings: Accounts) Regulations, 1996

Appendix 1a: Extract from: Companies Act, 1963

Appendix 2: Guidelines For Insurance Companies: Actuarial Certification Of The Technical Reserves Of Non-Life Companies

Appendix 3: Guidelines On The Reinsurance Cover Of Primary Insurers And The Security Of Their Reinsurers

Appendix 4: Extract from: Annex to Directive 73/239/EEC

Appendix 5: Extract from: EU Reinsurance Directive 2005/68/EC
- Article 34(1)

Appendix 6: Guidelines for Insurance Companies on Asset Management

Appendix 7: International Association Of Insurance Supervisors' Guidance Paper (No.9, October 2004) on Investment Risk Management

Appendix 8: Extract from: EU Reinsurance Directive 2005/68/EC
– Article 36

Appendix 9: Financial Regulator's Interpretation of EU Reinsurance Directive 2005/68/EC - Article 34(1(c))

Appendix 10: Reinsurance Form 14 Template

Appendix 11: Reinsurance Form 14 Guidance

Appendix 12: Frequently Asked Questions

<u>Appendix 1</u>

Extracts from:

S.I. No. 23/1996: EUROPEAN COMMUNITIES (INSURANCE UNDERTAKINGS: ACCOUNTS) REGULATIONS, 1996

Accounting Principles

7. Subject to Regulation 8, the amounts to be included in the accounts of an undertaking in respect of the items shown shall be determined in accordance with the following principles:

(a) the undertaking shall be presumed to be carrying on business as a going concern,

(b) accounting policies shall be applied consistently from one financial year to the next,

(c) subject to the provisions of the Schedule, the amount of any item in the accounts shall be determined on a prudent basis and in particular—

(i) only profits which have arisen by the balance sheet date shall be included in the profit and loss account, and
(ii) all liabilities and losses which have arisen or are likely to arise in respect of the financial year to which the accounts relate, or a previous financial year, shall be taken into account, including those liabilities and losses which only become apparent between the balance sheet date and the date on which the accounts are signed in pursuance of section 156 of the Principal Act (Companies Act, 1963 – See Appendix 1a),

Departure from Accounting Principles

8. If it appears to the directors of an undertaking that there are special reasons for departing from any of the principles specified in Regulation 7, they may so depart, but particulars of the departure, the reasons for it and its effect on the balance sheet and profit and loss account of the undertaking shall be stated in a note to the accounts, for the financial year concerned, of the undertaking.

PART I, CHAPTER 2

THE REQUIRED FORMATS FOR ACCOUNTS

SECTION A

THE BALANCE SHEET

FORMAT

ASSETS

A. Called-up share capital not paid (1)

B. Intangible assets (2)

1. Goodwill (3)

C. Investments

I. Land and buildings (4)

II. Investments in group undertakings and participating interests:

1. Shares in group undertakings
2. Debt securities issued by, and loans to, group undertakings
3. Participating interests
4. Debt securities issued by, and loans to, undertakings in which the undertaking has a participating interest

III. Other financial investments:

1. Shares and other variable-yield securities and units in unit trusts
2. Debt securities and other fixed income securities (5)
3. Participation in investment pools (6)
4. Loans secured by mortgages (7)
5. Other loans (7)
6. Deposits with credit institutions (8)
7. Other (9)

IV. Deposits with ceding undertakings (10)

D. Investments for the benefit of life assurance policyholders who bear the investment risk (11)

Da. Reinsurers' share of technical provisions (12)

1. Provision for unearned premiums

2. Life assurance provision

3. Claims outstanding

4. Provision for bonuses and rebates (unless shown under (2))

5. Other technical provisions

6. Technical provisions for life-assurance policies where the investment risk is borne by the policyholders

E. Debtors (13)

I. Debtors arising out of direct insurance operations

1. Policyholders
2. Intermediaries

II. Debtors arising out of reinsurance operations

III. Other debtors

IV. Called-up share capital not paid (1)

F. Other assets

I. Tangible assets and stocks

1. Plant and machinery
2. Fixtures, fittings, tools and equipment
3. Payments on account (other than deposits paid on land and buildings) and assets (other than buildings) in course of construction.
4. Raw materials and consumables
5. Work in progress
6. Finished goods and goods for resale

II. Cash at bank and in hand

III. Own shares (14)

IV. Other (15)

G. Prepayments and accrued income

I. Accrued interest and rent (16)

II. Deferred acquisition costs (17)

III. Other prepayments and accrued income

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A. Capital and reserves

I. Called-up share capital or equivalent funds(18)

II. Share premium account

III. Revaluation reserve

IV. Reserves (19)

1. The capital redemption reserve fund
2. Reserves for own shares
3. Reserves provided for by the articles of association
4. Other reserves

V. Profit or loss brought forward

VI. Profit or loss for the financial year

B. Subordinated liabilities (20)

Ba. Fund for future appropriations (21)

C. Technical provisions (22)

1. Provisions for unearned premiums: (23)
2. Life assurance provision: (23) (25) (29)
   (a) gross amount
   (b) reinsurance amount(-)(12)
3. Claims outstanding: (26)
   (a) gross amount
   (b) reinsurance amount(-)(12)
4. Provision for bonuses and rebates: (27)
   (a) gross amount
   (b) reinsurance amount(-)(12)
5. Equalisation provision (28)
6. Other technical provisions: (24)
   (a) gross amount
   (b) reinsurance amount(-)(12)

D. Technical provisions for life assurance policies where the investment risk is borne by the policyholders (29)

(a) gross amount

(b) reinsurance amount(-)(12)

E. Provisions for other risks and charges

1. Provisions for pensions and similar obligations
2. Provisions for taxation
3. Other provisions

F. Deposits received from reinsurers (30)

G. Creditors

I. Creditors arising out of direct insurance operations
II. Creditors arising out of reinsurance operations
III. Debenture loans
IV. Amounts owed to credit institutions
V. Other creditors including tax and social welfare

H. Accruals and deferred income

22) *Technical provisions*

(Liabilities item C) Regulation 7(c)(ii) shall apply to the technical provisions, subject to Note (12) and Notes

(23) to (28).

(12) *Reinsurance amounts*

(Assets item Da)

(Liabilities items C.1(b), 2(b), 3(b), 4(b) and 6(b) and D(b)) The reinsurance amounts may be shown either under Assets item Da or under Liabilities items C.1(b), 2(b), 3(b), 4(b) and 6(b) and D(b).

The reinsurance amounts shall comprise the actual or estimated amounts which, under contractual reinsurance arrangements, are deducted from the gross amounts of technical provisions. Where reinsurance amounts are shown as assets under item Da, they shall be sub-divided as shown. Notwithstanding paragraph 3 of this Part, these items shall not be combined. The disclosure of reinsurance amounts shall be in the same form from one accounting year to the next. If the directors decide that a change is necessary, the reason for that change should be disclosed in the notes together with a statement of what the position would have been had the original treatment been retained.

As regards the provision for unearned premiums, the reinsurance amounts shall be calculated according to the methods referred to in paragraph 24 of Part II of this Schedule or in accordance with the terms of the reinsurance policy.

(23) *Provision for unearned premiums*

(Liabilities items C.1 and C.2)

In the case of life assurance the provision for unearned premiums may be included in Liabilities item C.2 rather than in this item.

The provision for unearned premiums shall comprise the amount representing that part of gross premiums written which is estimated to be earned in the following financial year or to subsequent financial years.

Where, in accordance with Note (24) this item also includes the amount of the provision for unexpired risks, the description of the item shall be "Provision for unearned premiums and unexpired risks".

(24) *Other technical provisions*

(Liabilities item C.6).

This item shall include the provision for unexpired risks, being the amount set aside in addition to unearned premiums in respect of risks to be borne by the insurance undertaking after the end of the financial year, in order to provide for all claims and expenses in connection with insurance contracts in force in excess of the related unearned premiums and any premiums receivable on those contracts. However, the provision for unexpired risks may be added to the provision for unearned premiums under item C.1. Where the amount of unexpired risks is material, it shall be disclosed separately in the notes to the accounts.

Ageing reserves should be disclosed under this item.

(26) *Claims outstanding*

(Liabilities item C.3)

This item shall comprise the total estimated ultimate cost to the undertaking of settling all claims arising from events which have occurred up to the end of the financial year, whether reported or not, less amounts already paid in respect of such claims.

(27) *Provision for bonuses and rebates*

(Liabilities item C.4)

This item shall comprise amounts intended for policy holders or contract beneficiaries by way of bonuses and rebates as defined in Note (5) (see below) on the profit and loss account format to the extent that such amounts have not been credited to policy holders or contract beneficiaries or included in Liabilities item Ba or in Liabilities item C.2.

> Note (5) - *Debt securities and other fixed income securities*
>
> (Assets item C.III.2)
>
> This item shall comprise negotiable debt securities and other fixed income securities issued by credit institutions, other undertakings or public bodies, in so far as they are not covered by Assets item C.II.2 or C.II.4.
>
> Securities bearing interest rates that vary in accordance with specific factors, for example the interest rate on the interbank market or on the Euromarket, shall also be regarded as debt securities and other fixed income securities and so be included under this item.

(28) *Equalisation provision*

(Liabilities item C.5)

This item shall comprise any amounts required by law to be set aside by an undertaking to equalise fluctuations in loss ratios in future years or to provide for special risks. An undertaking which otherwise constitutes reserves, falling

to be included under liabilities item A.IV to equalise fluctuations in loss ratios in future years or to provide for special risks shall disclose that fact in the notes to the accounts.

PART II, CHAPTER 2

CURRENT VALUE ACCOUNTING RULES

Preliminary

12. (1) The rules set out in paragraphs 2 to 11 are referred to subsequently in this Schedule as "the historical cost accounting rules".

(2) Paragraphs 2, 3, 4 and 5 are referred to in this Chapter as "the depreciation rules" and references subsequently in this Schedule to the historical cost accounting rules do not include the depreciation rules as they apply by virtue of paragraph 19.

13. Subject to paragraphs 19 to 21, the amounts to be included in respect of assets of any description mentioned in paragraph 14 may be determined on any basis so mentioned.

Current value accounting rules

14. (1) Investments falling to be included under Assets item C (investments) may be included at their current value calculated in accordance with paragraphs 17 and 18.

(2) Investments falling to be included under Assets item D (unit-linked investments) shall be shown at their current value.

15. (1) Intangible assets, other than goodwill, and assets falling to be included under Assets item F.II (cash at bank and in hand), F.III (own shares) and F.IV (other) may be included at their current cost.

(2) Assets falling to be included under Assets item F.I (tangible assets and stocks) in the balance sheet format (set out in Chapter 2 of Part I of this Schedule) may be included at a market value determined as at the date of their last valuation or at their current cost.

16. The same valuation method shall be applied to all investments included in any item denoted by an arabic number or shown as assets under Assets item C.I.

Valuation of investments

17. (1) Subject to sub-paragraph (5) in the case of investments other than land and buildings, current value shall mean market value determined in accordance with this paragraph.

(2) Where investments are officially listed on an official stock exchange, market value shall mean the value on the balance sheet date or, when the balance sheet date is not a stock exchange trading day, on the last stock exchange trading day before that date.

(3) Where a market exists for unlisted investments, market value shall mean the average price at which such investments were traded on the balance sheet date or, when the balance sheet date is not a trading day, on the last trading day before that date.

(4) Where on the date on which the accounts are drawn up listed or unlisted investments have been sold or are to be sold within the short term, the market value shall be reduced by the actual or estimated realisation costs.

(5) Except where the equity method is applied all investments other than those referred to in sub-paragraphs (2) and (3) shall be valued on a basis which has prudent regard to the likely realisable value.

(6) In all cases the method of valuation shall be precisely described and the reason for adopting it disclosed in the notes to the accounts.

18. (1) In the case of land and buildings, current value shall mean the market value on the date of valuation, where relevant, reduced as provided in sub-paragraphs (4) and (5).

(2) Market value shall mean the price at which land and buildings could be sold under private contract between a willing seller and an arm's length buyer on the date of valuation, it being assumed that the property is publicly exposed to the market, that market conditions permit orderly disposal and that a normal period, having regard to the nature of the property, is available for the negotiation of the sale.

(3) The market value shall be determined through the separate valuation of each land and buildings item, carried out at least every five years in accordance with generally accepted methods of valuation.

(4) Where the value of any land and buildings item has diminished since the preceding valuation under sub-paragraph (3), an appropriate value adjustment shall be made and the lower value arrived at shall not be increased in subsequent balance sheets unless such increase results from a new determination of market value arrived at in accordance with sub-paragraphs (2) and (3).

(5) Where on the date on which the accounts are drawn up and buildings have been sold or are to be sold within the short term, the value arrived at in accordance with sub-paragraphs (2) and (4) shall be reduced by the actual or estimated realisation costs.

(6) Where it is impossible to determine the market value of a land and buildings item, the value arrived at on the basis of the principle of purchase price or production cost shall be deemed to be its current value.

(7) The method by which the current value of land and buildings has been arrived at and their breakdown by financial year of valuation shall be disclosed in the notes to the accounts.

Application of the depreciation rules

19. (1) Where the value of any asset of an undertaking is determined in accordance with paragraph 14 (in the case of assets falling to be included under assets item C.1) or paragraph 15, that value shall be, or (as the case may require) be the starting point for determining, the amount to be included in respect of that asset in the undertaking's accounts, instead of its cost or any value previously so determined for that asset; and the depreciation rules shall apply accordingly in relation to any such asset with the substitution for any reference to its cost of a reference to the value most recently determined for that asset in accordance with paragraph 14 or 15 (as the case may be).

(2) The amount of any provision for depreciation required in the case of any asset by paragraph 3 as it applies by virtue of sub-paragraph (1) is referred to below in this paragraph as the "adjusted amount", and the amount of any provision which would be required by that paragraph in the case of that asset according to the historical cost accounting rules is referred to as the "historical cost amount".

(3) Where sub-paragraph (1) applies in the case of any asset the amount of any provision for depreciation in respect of that asset included in any item shown in the

profit and loss account in respect of amounts written off assets of the description in question may be the historical cost amount instead of the adjusted amount, provided that the amount of any difference between the two is shown separately in the profit and loss account or in a note to the accounts.

Additional Information to be provided

20. (1) This paragraph applies where the amounts to be included in respect of assets covered by any items shown in an undertaking's accounts have been determined in accordance with paragraph 14 or 15.

(2) The items affected and the basis of valuation adopted in determining the amounts of the assets in question in the case of each such item shall be disclosed in a note to the accounts.

(3) The purchase price of investments valued in accordance with paragraph 14 shall be disclosed in the notes to the accounts.

(4) In the case of each balance sheet item valued in accordance with paragraph 15 either—

(a) the comparable amounts determined according to the historical cost accounting rules, or

(b) the differences between those amounts and the corresponding amounts actually shown in the balance sheet in respect of that item,

shall be shown separately in the balance sheet or in a note to the accounts.

(5) In sub-paragraph (4) references, in relation to any item, to the comparable amounts determined as there mentioned are references to—

(a) the aggregate amount which would be required to be shown in respect of that item if the amounts to be included in respect of all the assets covered by that item were determined according to the historical cost accounting rules, and

(b) the aggregate amount of the cumulative provisions for depreciation or diminution in value which would be permitted or required in determining those amounts according to those rules.

21. (1) With respect to any determination of the value of an asset of an undertaking in accordance with paragraph 14, the amount of any profit or loss arising from that determination (after allowing, where appropriate, for any provisions for depreciation or diminution in value made otherwise than by reference to the value so determined and any adjustments of any such provisions made in the light of that determination) shall be credited or (as the case may be) debited to a separate reserve (referred to in this paragraph as "the revaluation reserve"), except in so far as it has already been recognised in the life assurance technical account or the non-technical account in accordance with note 10 to the profit and loss account.

(2) The amount of the revaluation reserve shall be shown in the undertaking's balance sheet under Liabilities item A.III in the balance sheet format (set out in Chapter 2 of Part 1 of this Schedule).

(3) An amount may be transferred from the revaluation reserve to the profit and loss account—

(a) if the amount was previously charged to that account or represents realised profit, or

(b) on capitalisation,

and the revaluation reserve shall be reduced to the extent that the amounts transferred to it are no longer necessary for the purpose of the valuation method used.

(4) The revaluation reserve shall not be reduced except as mentioned in this paragraph.

(5) The treatment for taxation purposes of amounts credited or debited to the revaluation reserve shall be disclosed in a note to the accounts.

(6) In sub-paragraph (3)(b) "capitalisation", in relation to an amount standing to the credit of the revaluation reserve, means applying it in wholly or partly paying up unissued shares in the undertaking to be allotted to members of the undertaking as fully or partly paid shares.

Extract from General Rules, found in Part II, Chapter 3

Technical provisions

23. The amount of technical provisions shall at all times be sufficient to cover any liabilities arising out of insurance contracts as far as can reasonably be foreseen.

Provision for unearned premiums

24. (1) Subject to sub-paragraph (2), the provision for unearned premiums shall be computed separately for each insurance contract.

(2) Notwithstanding sub-paragraph (1) statistical methods, in particular proportional and flat rate methods, may be used where they may be expected to give approximately the same results as would be obtained if individual calculations were made under sub-paragraph (1).

(3) In classes of insurance where the pattern of risk varies over the life of a contract, this shall be taken into account in the calculation methods.

Provision for unexpired risks

25. (1) The provision for unexpired risks shall be computed on the basis of claims and administrative expenses likely to arise after the end of the financial year from contracts concluded before that date, in so far as their estimated value exceeds the provision for unearned premiums and any premiums receivable under those contracts.

(2) In this paragraph, "unexpired risks" has the same meaning as it has in note 24 on the balance sheet format which is set out in Chapter 2 of Part 1 of this Schedule.

Provisions for claims outstanding

Non-life insurance

27. (1) Subject to sub-paragraph (2), a provision for claims outstanding shall be computed separately for each case on the basis of the costs still expected to arise.

(2) Notwithstanding sub-paragraph (1), statistical methods may be used if they result in an adequate provision for claims outstanding having regard to the nature of the risks.

(3) A provision for claims outstanding shall also allow for claims incurred but not reported by the balance sheet date, the amount of the allowance being determined having regard to past experience as to the number and magnitude of claims reported after previous balance sheet dates.

(4) All claims settlement costs shall be included in the calculation of the provision for claims outstanding, irrespective of their origin.

(5) Recoverable amounts arising out of subrogation or salvage shall be estimated on a prudent basis and either deducted from the provision for claims outstanding (in which case if the amounts are material they shall be shown in the notes to the accounts) or shown as assets.

(6) Where benefits resulting from a claim are required to be paid in the form of annuity, the amounts to be set aside for that purpose shall be calculated by recognised actuarial methods.

(7) In sub-paragraph (5)——

"salvage" means the acquisition of the legal ownership of insured property;

"subrogation" means the acquisition of the rights of policy holders with respect to third parties;

28. (1) There shall be no implicit discounting or deductions (including by way of financial reinsurance), whether resulting from the placing of a present value on a provision for an outstanding claim which is expected to be settled later at a higher figure or otherwise effected.

(2) The Minister may, on application by the undertaking concerned, permit explicit discounting or deductions (including by way of financial reinsurance) to take account of investment income subject to compliance with the following conditions and any other conditions which the Minister may from time to time consider necessary:

(a) the expected date for the settlement of claims shall be on average at least four years after the accounting date;

(b) the discounting or deduction shall be effected on a recognised prudential basis; any change in that basis shall be notified, in advance, to the Minister;

(c) when calculating the total cost of settling claims, an undertaking shall take account of all factors that could cause increases in that cost;

(d) an undertaking shall have adequate data at its disposal to construct a reliable model of the rate of claims settlements;

(e) the rate of interest used for the calculation of present value shall not exceed a prudent estimate of the investment income from assets invested as a provision for claims during the period necessary for the payment of such claims and that rate shall not exceed either of the following:

(i) a rate derived from the investment income from such assets over the preceding five years;

(ii) a rate derived from the investment income from such assets during the year preceding the balance sheet date.

(3) When discounting or effecting deductions, an undertaking shall, in the notes on its accounts, disclose the total amount of provisions before discounting or deduction, the categories of claims which are discounted or from which deductions have been made and, for each category of claims, the methods used, in particular the rates used for the estimates referred to in the clauses (c) and (e) of sub-paragraph (2), and the criteria adopted for estimating the period that will elapse before the claims are settled.

Appendix 1a

Extract from:

COMPANIES ACT, 1963

156.—(1) Every balance sheet and profit and loss account of a company shall be signed on behalf of the directors by two of the directors of the company.

(2) In the case of a banking company registered after the 15th day of August, 1879, the balance sheet and profit and loss account must be signed by the secretary and where there are more than three directors of the company by at least three of those directors, and where there are not more than three directors by all the directors.

(3) If any copy of a balance sheet or profit and loss account which has not been signed as required by this section is issued, circulated or published, the company and every officer of the company who is in default shall be liable to a fine not exceeding £100.

(4) Subsection (3) shall not prohibit the issue, circulation or publication of—

(*a*) a fair and accurate summary of any profit and loss account and balance sheet and the auditors' report thereon after such profit and loss account and balance sheet shall have been signed on behalf of the directors;

(*b*) a fair and accurate summary of the profit or loss figures for part of the company's financial year.

(d) all income and charges relating to the financial year to which the accounts relate shall be taken into account without regard to the date of receipt or payment, and

(e) in determining the aggregate amount of any item the amount of each individual asset or liability that falls to be taken into account shall be determined separately.

APPENDIX 2

GUIDELINES FOR INSURANCE COMPANIES: ACTUARIAL CERTIFICATION OF THE TECHNICAL RESERVES OF NON-LIFE COMPANIES

Insurance Financial Supervision Section
Department of Enterprise, Trade & Employment
July 2001

Guidelines for Insurance Companies: Actuarial Certification of the Technical Reserves of Non-Life Companies

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In July 2000, the Monetary and Exchange Affairs Department of the International Monetary Fund, in conjunction with the World Bank, completed an assessment of the regulation of the financial sector in Ireland. In relation to the insurance sector, the assessment was carried out by reference to standards and guidelines laid down by the IAIS (International Association of Insurance Supervisors).

The Team expressed surprise that an actuarial approach was not mandatory for long tail compensation classes of insurance.

Arising from the Team's comments, and having first obtained the preliminary views of the main industry and professional bodies, the Department commissioned a consultancy study on an appropriate form of actuarial sign-off of non-life insurance technical reserves.

Taking account of the consultants' report, the Department has decided to introduce a requirement for an actuarial Opinion on the reserves of non-life insurance companies supervised by it.

The intention is that the requirement would apply to the 2001 Annual Returns, but on the understanding that the first year would be treated as a familiarisation period. Based on the experience of the first year, changes might be introduced in subsequent years. These changes could include legislative underpinning of the new system.

The attached document explains the main features of the new system, including the form of Opinion that is required.

Guidelines for Insurance Companies: Actuarial Certification of the Technical Reserves of Non-Life Companies

Companies Affected & Criteria for Exemption

The requirement for an annual actuarial Opinion applies in principle to all non-life insurance undertakings supervised by the insurance supervisory authority[1]. It therefore includes Branches of 3rd-Country insurance undertakings.

We will be willing to consider requests for exemption from the requirement from companies that meet the following criteria:

- No third party business
- No motor, liability or financial guarantee business

We expect that a majority of 'pure' captive insurers will qualify for exemption based on these criteria.

Opinion on Technical Reserves

The Opinion should be in the format set out in the Annex. It should be provided as part of the company's Annual Return to the Supervisor. The Opinion should:

- Encompass all classes of business written by the company
- Apply to the company's technical reserves, both gross and net of reinsurance
- Cover the following components of the technical reserves:
  - outstanding claim reserves
  - unearned premium reserves
  - additional amounts to cover unexpired risks
  - future claims-handling expense reserves
  - MIBI reserve and any equivalent reserve in other jurisdictions

  But **exclude**:
  - future reinsurance bad debt reserves
  - claims equalisation reserves

Guidance to actuaries signing the opinions will be provided by the Society of Actuaries in Ireland.

[1] At present, the Department of Enterprise, Trade & Employment. In future, the Irish Financial Services Regulatory Authority (IFSRA)

Actuarial Report to Board

The actuarial Opinion provided to the Supervisor should be based on a comprehensive Actuarial Report to the Board of the Company. This Report will be available, on request, to the Supervisor.

If a copy of the Actuarial Report is requested by the Supervisor, the Supervisor will treat the report as a commercially sensitive document provided on a confidential basis.

Guidance on the preparation of this Report will also be provided by the Society of Actuaries in Ireland.

Qualifications of Actuary

The signing Actuary must be in possession of a Practising Certificate issued by the Society of Actuaries in Ireland. The Actuary can be an employee of the company (including of its parent or of another Group company) or an external consulting actuary.

Duties of Actuary (including 'whistle-blowing')

The Actuary is required to act independently of the company in providing the Opinion on the technical reserves, in accordance with professional guidance. While the Actuary is not required to check the data on which the Opinion is based, s/he should disclose any material concerns in respect of data accuracy, integrity and sufficiency in the context of the work undertaken

If, for whatever exceptional reason, the Actuary is unable to give an unqualified Opinion to the Supervisor, s/he should inform the Supervisor (and the external Auditor) as soon as possible.

Duties of Board of Directors

The company is required to provide the actuary with the data and information required for the preparation of the Opinion. As part of the annual Directors Compliance Certificate[2], the Directors are required to certify that:

- No relevant information that would materially affect the Company's reserves has been knowingly withheld from the certifying actuary
- The data provided to the certifying actuary and underlying the reserves are accurate and complete and have been reconciled to the data used to in preparing the company Law accounts and supervisory returns for the period
- The certifying actuary has been advised of all known changes in internal methods or procedures which would materially affect the determination of reserves
- Claims development data provided to the certifying actuary has been reconciled to the accounting information underlying the company law accounts

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[2]See separate Guidelines

Annex: Format of Opinion on Non-Life Technical Reserves

To: Insurance Supervisory Authority[3]

Statement of Actuarial Opinion – Company XYZ

Identification

I, ABC, am an actuary employed by XYZ ("the Company")

Or

I, ABC, am associated with the Firm of GHI Consulting Actuaries who have been retained by XYZ.

Qualification

I am a Fellow of the Society of Actuaries in Ireland and possess a Practising Certificate valid as at the date of this Opinion to provide opinions on non-life technical reserves, issued by the Society of Actuaries in Ireland.

Scope

I have examined the reserves listed below for Company XYZ as at (end of current financial year), as reported in the Company's returns to the Department of Enterprise, Trade and Employment.

	Gross of reinsurance €000s	Net of reinsurance €000s
Outstanding claim reserves		
Future claims-handling expenses		
Unearned premium reserves		
Additional amounts to cover unexpired risks		
Total reserves		

The preceding total reserves are for indemnity amounts and claims handling expenses (both allocated and unallocated) and include provision for future claims arising from unexpired periods of risk. They are net of salvage and subrogation and of anticipated future premiums (net of acquisition expenses) on past and current business. They are not discounted for the time value of money. The net reserves exclude any allowance for reinsurance bad debts.

[In cases where the Company is permitted to discount reserves for the time value of money, the actuary should replace the words "They are not discounted for the time value of money" with "A credit of €… has been taken for the time value of money, based on a rate of discount of..% per annum.]

I have relied upon data and information prepared by the responsible employees of the Company. These data and information have not been checked by me, although the Company has confirmed that the data and information supplied to me are accurate and complete and I have not encountered anything during the course of my work that gives me material concern in this respect. I consider that the data and information are an

[3] It is likely that IFSRA will have taken over responsibility for insurance supervision from DETE when the Opinions on the 2001 Annual Returns are signed

appropriate basis for the purposes of this Opinion. My examination included the use of such actuarial assumptions and methods and such tests of the calculations as I considered necessary.

[If the actuary did not carry out independent calculations for the purposes of providing the SAO, but rather reviewed the methods and assumptions used by the Company in determining the reserves, then wording similar to the following may be used (in place of the final sentence of the previous paragraph):

"My examination included such review of the methods and assumptions used and such tests of the calculations made as I considered necessary."]

[Additional Comments
Other comments at the discretion of the Actuary

These additional comments do not constitute a qualification of my opinion.]

Variability

In evaluating whether the reserves make a reasonable provision for unpaid claims and claims expenses, it is necessary to project future premium, claim and claim handling expense payments. Actual future premiums, claims and claim handling expenses will not develop exactly as projected and may, in fact, vary significantly from the projections. I have not anticipated the emergence of major new types or classes of claims.

Opinion

In my opinion, subject to the above comments (and except for the qualifications stated below), the total reserves identified above, gross and net of reinsurance, comply with applicable Irish legislation (including legislation transposing relevant European Union insurance directives) and are greater than the sum of expected future liabilities plus the expected profit margin in the unearned premium reserves of Company XYZ as at [end of current financial year].

[Qualifications on Opinion
Other comments at the discretion of the Actuary.]

An actuarial report, supporting the findings expressed in this statement of opinion, has been [will be] provided to the Company.

This statement of opinion is solely for the use of, and to be relied upon only by the Company and the Department of Enterprise, Trade and Employment.

Signed:

Name:
Fellow of the Society of Actuaries in Ireland

Date:

Address:

APPENDIX 3

GUIDELINES ON THE REINSURANCE COVER OF PRIMARY INSURERS AND THE SECURITY OF THEIR REINSURERS

Prudential Supervision - Insurance
Irish Financial Services Regulatory Authority
January 2004

Guidelines on the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers

In July 2000, the Monetary and Exchange Affairs Department of the International Monetary Fund, in conjunction with the World Bank, completed an assessment of the regulation of the financial sector in Ireland. In relation to the insurance sector, the assessment was carried out by reference to standards and guidelines laid down by the IAIS (International Association of Insurance Supervisors).

They noted a number of areas not adequately addressed vis-a-vis the IAIS standards. The then supervisor (Department of Enterprise, Trade & Employment) subsequently, July 2001, issued guidelines to address the issues raised and to ensure full compliance with the existing IAIS standards and guidelines. In order to stay up to date with new IAIS standards the Authority[1] will periodically issue guidelines as required. Therefore the following guideline is based very closely on the 'Supervisory Standard on the Evaluation of the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers' as issued by the IAIS, January 2002. The level of documentation required for compliance with the guideline will be reflective of the complexity of the underlying policies issued and the consequential reinsurance purchased. It is considered vital that companies however small address the issues contained in this document, evaluate their compliance, and formalize policies and procedures.

If the self-evaluation reveals that the company is non-compliant with the requirements of this document then the company will need to develop a draft plan that will bring it into full compliance. This plan may be discussed with the Authority prior to finalisation.

The Authority would not expect every company to have a fully documented reinsurance strategy document during the early part of 2004. However, would expect this to be in place going into the January 1, 2005 renewal season.

[1] "Authority" means the Irish Financial Services Regulatory Authority

Guidelines on the Evaluation of the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers

This document provides guidance to insurers on the policies and procedures that companies should have in place for evaluating the adequacy of each company's reinsurance cover.

In addition, in recent years reinsurance has evolved with the introduction of many new products. These are commonly known as alternative risk transfer (ART) products. Although this subject will be dealt with in the future by a separate paper, we believe that much of the guidance provided in this document will also apply in the case of ART products.

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1. Introduction

1. Insurance companies assume risk on behalf of policyholders. They mitigate these risks by acquiring insurance with reinsurers. Through the use of reinsurance, an insurer can reduce risk, stabilise its solvency, use available capital more efficiently and expand underwriting capacity. Reinsurance helps an insurer obtain a desired, prudent risk profile (i.e. relationship between the risks a company runs and its financial strengths). An insurer may purchase reinsurance direct, or with the assistance of an intermediary. However, irrespective of the reinsurance obtained, the primary insurer remains contractually responsible for paying the full claim amounts to policyholders.

Accordingly the quality of the reinsurers selected is pivotal to the financial stability of the ceding insurer.

The guideline is laid out in the following manner:

- Section 2 sets out to explore the general subject of managing reinsurance security (N.B. this is for background purposes only);
- Section 3 addresses the strict regulatory requirements, which represent the minimum acceptable legal standard;
- Section 4 outlines the Authority requirements for a ceding insurer's reinsurance strategy and related corporate governance; and,
- Section 5 describes how the Authority intends to administer this guideline.

2. Managing Reinsurance Security

Reinsurance purchased at the best terms and the lowest price means nothing if the reinsurance company is no longer in business when the claim payment for indemnification comes due.

Selection of Reinsurers

The four most important criteria used for selecting reinsurers are availability, price, security, (financial ability to meet its obligations), and service. These factors involve inverse relationships; eg., the weakest reinsurers in terms of security and service may be most attractive with regard to availability and price. As selecting reinsurers involves tradeoffs among these four criteria the insurer needs to evaluate which tradeoffs are most suitable.

In practice it is understood that insurers need to tradeoff criteria and therefore some flexibility is required in the selection process. If the insurer sets the criteria for security too strictly, it may not be able to obtain adequate reinsurance, or the price may be too high. Similarly, if the insurer sets the criteria for price too strictly, adequate reinsurance may not be available; or the security may be imprudently weak. How these tradeoffs are handled is a reflection of the expertise and experience of the ceding insurer's management. It is usually beneficial to make several successive attempts to determine an optimal tradeoff. However, from a regulatory perspective security is of primary importance.

Role of Intermediaries

The role of the intermediary, if one is involved, is not to select reinsurers for the company, but merely to introduce them based on predefined quality criteria. Unless the intermediary accepts the responsibility for selection, it remains with the ceding insurer. If the company fails to define any criteria of its own and simply accepts whatever reinsurers the intermediary introduces, it has not delegated the responsibility for the selection of the reinsurers, and remains responsible for whatever reinsurers it accepts. This could potentially compromise the financial security of the company and would certainly not be in compliance with the requirements of this guideline.

Establishing Criteria for Evaluating Security of Reinsurers

The evaluation of a reinsurer's security can involve many complex considerations. To standardize this evaluation, insurer should establish certain initial criteria. Special circumstances may suggest some modifications of the initial criteria, but the more structured the process, the sounder the eva1uation. The most important and widely used initial criteria for security are size, rating, and ownership.

The influence of size on security is evidenced by the fact that the majority of insolvencies occur amongst the smaller reinsurers, rather than the larger reinsurers whose business is more diversified both geographically and across class of business.

The rating of a reinsurer by an independent source is a second security criterion that may be used in conjunction with size. A rating is a relative benchmark, based on rigorous, objective and independent analysis and opinions developed using a consistent and predictable methodology by experts in the complex field of global financial markets. However, a knowledge of how rating agencies rate reinsurers is useful in fully understanding the ratings and in evaluating the significance of changes in ratings. A significant limitation of ratings is the time lag in issuing reports

An insurer that selects only premier reinsurers is likely to have fewer problems with uncollectible reinsurance and needs to spend less time and resources evaluating its reinsurers. This does not mean that this insurer is a better evaluator of reinsurers than other insurers or the rating agencies. It means that *this* insurer places a higher priority on security relative to price and availability.

Insurers often modify security criteria under two circumstances: (1.) for some kinds of reinsurance, especially long-tail lines; and, (2) for maintaining continuity of relationships with existing reinsurers.

Long-tail reinsurance, such as excess of loss liability involves a longer time frame and requires more expertise than property catastrophe and pro-rata reinsurance. Accordingly, many insurers use stricter security criteria for long-tail reinsurance or restrict the amount of reinsurance placed with each reinsurer.

Many ceding insurers modify their security criteria, within reasonable limits, to include reinsurers that have served the ceding insurer well in the past. Continuity is an important element of good service. This is especially true for reinsurers that accommodated the ceding insurer during periods when availability of reinsurance coverage was a problem. Continuing such relationships helps to assure the insurer of adequate capacity during future periods of capacity contraction.

Limiting the Amount of Reinsurance Exposure with Selected Reinsurers

Many insurers limit the amount of their reinsurance exposure with any one reinsurer according to the size of the reinsurer's shareholders' surplus. They do so in order to reduce the chance the reinsurer will retrocede part of its business. The greater the participation in relation to the reinsurer's surplus, the greater the reliance on retrocessionaires. If a reinsurer uses a large amount of retrocessions, the financial security of the retrocessionaires becomes as important to the primary reinsurers as the reinsurer's financial security. Generally, a reinsurer is more likely to retrocede substantial portions of a block of business it has assumed when that block is more than 1 percent of its own shareholders' surplus. The existence of retrocessions may, potentially, lead to delays on claim payments, while the failure of a retrocessionaire may cause the reinsurer to become insolvent. It is therefore important that ceding insurer recognizes that the quality of retrocessionaires is an essential component in the evaluation of the reinsurer.

Exceptions to the limit that insurers cede to a reinsurer in relation to the shareholders' surplus of the reinsurer may be merited when backup security is obtained.

Many insurers also limit the amount they cede to any one reinsurer on the basis of their own shareholders' surplus. This is especially true when ceding to other than premier reinsurers, where the risk of insolvency is more significant. The amount of exposure to any one reinsurer, especially non-premier reinsurers, in terms of both the amount of one risk and the accumulation of balances recoverable, should not exceed the largest amount that the insurer is willing to retain on any one primary risk or catastrophe.

Another way to reduce the credit risk is to insert a right of offset clause in the reinsurance contract. Then, to the extent that uncollectible recoverables are due to the insurer, the insurer can reduce any payment that may be due the reinsurer.

When the insurer uses an unrated reinsurer from the same group of companies a concentration risk is created. Cut-through and insolvency clauses to retrocessionaires are only effective if the reinsurer accepting the insurer's risk is in turn retroceding a significant portion of the risk it is accepting to rated reinsurers. Another consideration is the volume of other reinsurance business the unrated group reinsurer is assuming, and the extent to which claims from these other sources will exhaust limits and aggregate retrocession cover provides.

Backup security or collateral is sometimes used (1) to make acceptable a reinsurer that otherwise would not meet the security criteria of the ceding insurer or (2) to cede greater amounts to one reinsurer than the usual limitations of the insurer allow. Backup security can take several forms, including letters of credit, funds withheld, and trust funds.

Monitoring Reinsurers

A prudent insurer monitors its reinsurers during the life of the reinsurance agreements and for as long as any obligations remain outstanding. If a reinsurer's financial condition deteriorates during the term of the agreement, the insurer may consider a mid-term cancellation. If such trouble develops while balances remain outstanding, the insurer may wish to negotiate a commutation while the reinsurer is still trying to retain its status in the marketplace.

The insurer should follow a systematic program for monitoring changes in the ratings, surplus, assets, reserves, premium volume, ownership, and management, for monitoring news reports, the timeliness of claim payments, and other information from miscellaneous sources. This information helps prepare the insurer to take timely corrective action if unexpected financial problems arise with its reinsurers.

Documentation

In addition to substantive documentation of the reinsurance cover in the form of:
- copies of contracts and amendments;
- copies of slips and cover notes; and
- written contract descriptions and summaries;

the ceding company should be careful to document their compliance with those internal control procedures that it considers necessary and adequate to (a) evaluate the financial responsibility and stability of the assuming company, and (b) provide reasonable assurance of the accuracy and reliability of information reported to the reinsurer and amounts due to or from the reinsurer.

As the insurer increases its use of second and third-tier reinsurers, and especially unrated, new and little-known reinsurers, it increases its need for information and analysis. This is particularly true if the insurer does not obtain available backup security and does not use prudent limitations. The insurer will be subject to a greater potential for loss from uncollectible reinsurance.

3. Regulations and Guidelines for their Interpretation

Insurance Act 1989 [1989 No. 3] Part II Supervision of Insurers, Article 12.

The Minister (now the Authority) may make regulations for the proper exercise of his functions under the Insurance Acts in respect of the following -

e) reinsurance cessions of authorised undertakings including information which undertakings must supply in respect of their reinsurance arrangements,

Article 13 (4) of the European Communities (Non-Life Insurance) Framework Regulations, 1994 (S.I. No 359 of 1994) deals with the allowance of a reduction of technical reserves arising from reinsurance.

Technical reserves may, subject to sub-article (3) be established and maintained after the deduction of reinsurance cessions, ***provided such reinsurance arrangements are acceptable to the Minister (now the Authority)***. However, any reduction in technical reserves arising from reinsurance shall be restricted to the extent of the insurance risk transferred under the reinsurance arrangements. Where the reinsurance arrangements are not acceptable, the Minister (now the Authority) may require that, in respect of the insurance contracts covered by such arrangements, reserves be maintained before the deduction of reinsurance cessions.

To provide context to the italicised phrase in the above paragraph, it is the undertakings themselves which are primarily responsible for the appropriateness and security of their reinsurance arrangements.

Sub-article (3) provides that, if more than 90% of the gross premiums written in any accounting class of insurance business adopted for the purpose of the annual returns is ceded by the insurer, then the insurance undertaking will be require to maintain technical reserves representing a minimum 10% of gross premium income or 10% of gross technical reserves relating to such business, whichever is the greater, in that class and to hold assets representing that amount accordingly.

Similarly, to the treatment of reinsurance on Non-Life insurers as noted above, the European Communities (Life Assurance) Framework Regulations, 1994 (S.I. No 360 of 1994), Article 12 (5) together Annex VII discusses the suitability of reinsurance cessions and the acceptability of reducing technical reserves by reinsurance. Again, the primarily responsible for the appropriateness and security of their reinsurance arrangements rests with the insurer and must acceptable to the Minister (now the Authority). The reduction, in the case of Life reinsurance, is limited to 75% of the gross premiums written.

Admissibility of Reinsurance Recoverables as support for Technical Reserves

Annex III, Article 5, 1 & 4 (Non-Life), provides that the value of any debt due the insurance undertaking under any contract of reinsurance to which the insurance undertaking is a party shall be the amount which can reasonably be expected to be recovered in respect of that debt (valued net of all amounts owed to the same third party) provided that no account shall be taken of any debts arising out of reinsurance operations which are owed by intermediaries and which have been outstanding for more than three months.

Annex III, Schedule 2, Part 1 (Non-Life) limits the admissibility of reinsurance recoverable, on paid claims, to 50% of net technical reserves, based on the reasonable expectation that the debt will be recovered.

Annex V, Article 5, 1 & 4 (Life), contain the same provisions for the valuation of debt due the insurance undertaking under contracts of reinsurance as in the Non-Life Regulations. Schedule 7 (Life) limits the admissibility of reinsurance recoverable, on paid claims, to 1% of net technical reserves for each reinsurer, and 2.5% in aggregate, again, based on the reasonable expectation that the debt will be recovered.

Impact of Reinsurance on Minimum Solvency

Annex II, Part A, 4 (a) (v) & 4 (b) (vii) (Non-Life), reduces the required solvency margins calculations based on the reinsurance recoverable in the last financial year, capped at a maximum of 50%. Similarly, Annex II, Part A, 3 (Life), limits the reinsurance reduction factor to a maximum of 15% for the solvency margin calculation based on mathematical reserves, and to a maximum of 50% for the solvency margin calculation based on the capital at risk.

4. Reinsurance strategy and corporate governance

Board of Directors

It is expected that every insurer should have a reinsurance strategy, approved by the company's Board of Directors, that is appropriate to the company's overall risk profile. The reinsurance strategy will be part of the company's overall underwriting strategy. The Board should review the reinsurance strategy annually. In addition, the reinsurance strategy should be reviewed when there have been changes in the company's circumstances, its underwriting strategy, or the status of its reinsurers.

The reinsurance strategy should define and document the insurer's strategy for reinsurance management, identifying the procedures for:

- the reinsurance to be purchased;
- how reinsurers will be selected, including how to assess their security;
- what collateral, if any, is required at any given time; and
- how the reinsurance programme will be monitored (i.e. the reporting and internal control systems).

The Board should ensure that all legal and regulatory requirements are met. It should set limits on:

- the net risk to be retained; and
- the maximum foreseeable amount of reinsurance protection to be obtained from the approved reinsurers.

Senior management

Senior management should document clear policies and procedures for implementing the reinsurance strategy set by the Board of Directors. This includes:

- setting underwriting guidelines that specify the types of insurance to be underwritten, policy terms and conditions, and aggregate exposure by type of business;
- establishing limits on the amount and type of insurance that will be automatically covered by reinsurance (e.g. treaty reinsurance); and
- establishing criteria for acquiring facultative reinsurance cover.

In order to avoid uncovered risks, the terms and conditions of the reinsurance cover should be compatible with those of the underlying business.

Limits on the net risk to be retained should be set either per line of business or for the whole account. The insurer may also set limits per risk or per event (or a combination thereof). The limits must be based upon an evaluation of its risk profile and the cost of the reinsurance. In particular, the insurer should have adequate capital to support the risk retained. Some insurers may use the results of dynamic financial analysis techniques (using the reinsurance cover as one of the variables) as input into these operating decisions.

The ceding insurer should ascertain whether the proposed reinsurer intends to retrocede any of the assumed business. If this is the situation it is then essential that the ceding insurer is equally satisfied as to the quality of the retrocessionaires used.

The insurer should maintain an up-to-date list of reinsurers that it has approved. For each approved reinsurer the appropriate level of exposure should be specified. To do this, the insurer should evaluate the ability and willingness of the reinsurer to fulfil its contractual obligations as they fall due (i.e. its security). Such assessment is required whether collateral is posted or not. The assessment should take into account the effects of any collateral the reinsurer has posted in favour of other insurers. The insurer's credit guidelines should describe the system for controlling exposures to each reinsurer.

To improve the security of the overall reinsurance cover, insurers may choose to use a number of different reinsurers. Diversification by the insurer reduces the impact of counterparty credit risk; or withdrawal of capacity on reinsurance renewal in periods of capacity contraction.

Generally speaking, the fewer the number of reinsurers used, the more an insurer should pay importance to the security of its reinsurers. If a company takes advice on the strength and security of a reinsurer, then it should satisfy itself that the advice given is sound. Similarly, if reinsurance cover is acquired through an intermediary, the company should evaluate the operational risk associated with the transaction.

Senior management should ensure that the management information system in place meets all Board requirements with respect to reporting frequency and level of detail. In addition, there should be adequate systems of internal control to ensure that all underwriting is carried out in accordance with company policy and that the planned reinsurance cover is in place. The underwriting control systems should be able to identify and report on a timely basis where underwriters infringe authorised limits, breach company guidelines or otherwise assume risks exceeding the ability of the company's capital base and reinsurance cover to service.

If an insurer in Ireland is part of a global insurance group the reinsurance strategy should include information on the global reinsurance strategy. The information should identify the control mechanisms and detail the reporting arrangements for monitoring the reinsurance arrangements of the group, including where the responsibility resides for the monitoring; i.e. at the local insurer level; or, with the foreign parent. The strategy should also include the reporting arrangements between Irish and foreign operations, the monitoring of Irish insurer's operations by the foreign parent and the home regulator's supervisory arrangements regarding reinsurance. Where elements of the strategy are controlled by parent these should be identified and detailed.

The following mandatory contract terms should appear in all reinsurance policies:

- Insolvency Clause requiring the reinsurer to perform its contract obligations without diminution in the event of the ceding insurer becoming insolvent.
- A policy provision stating that the reinsurance agreement constitutes the entire contract between the parties.
- A policy provision requiring reinsurance recoveries to be paid to a cedent without delay and in a manner consistent with the orderly payment of claims by the ceding insurer.
- A policy provision providing for reports, no less than quarterly, regarding premiums and paid and incurred losses.

Internal control

There should be internal control systems in place to ensure that claims are reported to the appropriate reinsurer and that reinsurance claims payments are being promptly collected.
The underwriting control may include an actuarial assessment of the risk and whether it has been transferred as presumed. This assessment may also include a review of the reinsurance contracts. The Board of Directors should receive regular and comprehensive reports on the effectiveness and performance of the claims system and the reinsurance protection. Companies' internal control systems should be subject to regular audit examination.

5. Supervisory monitoring of compliance with the guideline

The supervisor may verify that the Board of Directors has established an overall strategy framework – addressing, *inter alia,* underwriting and reinsurance. This will include evaluation of reinsurance cover, reinsurer security and collateral that may be posted. The supervisor will take a risk-based approach – ensuring that the company has appropriate policies, systems and procedures in place and focusing more detailed examination work on areas posing specific and significant concern.

Before granting a license, the supervisor must be satisfied with the company's planned risk management and reinsurance strategies, and accompanying policies. When examining the business plan of an insurance company, the supervisor will evaluate if the proposed reinsurance covers maximum foreseeable loss. In the business plan the company must describe how, and to what extent, future policies will be reinsured.

Companies should maintain adequate reinsurance cover at all times based on their risk profile. While many reinsurance treaties operate on an annual basis, some treaties especially for life business and some ART contracts can operate for many years. In such cases, assurance that the reinsurer offers sufficient security to act as a long-term counterparty will be required. The supervisor should be made aware of the security and adequacy of the reinsurance or ART coverage for long-tail business (where claims development is slow) and the top layers of catastrophe programmes (where amounts involved can be large).

Sufficient and relevant information should be available on the reinsurers used and the reinsurance cover arranged. Relevant information may include:

- reports prepared by the ceding insurer describing the reinsurance cover, reinsurance programmes or treaties; and,
- the ceding insurer's financial statements, detailing the result of reinsurance, any amounts outstanding from reinsurers and the effect of the ART techniques, including financial reinsurance.

The company should have available on a timely basis:

- copies of contracts and amendments;
- copies of slips and cover notes;
- financial statements of reinsurers used; or
- written contract descriptions and summaries.

Using this information and other relevant information received during on-site inspection, the supervisor will evaluate:

- the prudence of the company risk profile including an evaluation of any risk concentration, i.e. an aggregate exposure with the potential to produce losses large enough to threaten the insurer's financial health or its ability to maintain core operations;
- compliance with the company's reinsurance strategy;
- the sufficiency of the reinsurance cover and the insurance company's financial strength, in particular under extreme, but plausible loss scenarios;
- the sufficiency of the reinsurance security, taking into consideration a wide range of factors including financial strength, whether reinsurers are properly supervised and whether or not collateral is posted; and,
- the appropriateness of any ART techniques, such as securitisation, used.

The choice of reinsurance cover is a business decision made by management within the overall reinsurance strategy of the insurer. However, where insufficient or inappropriate reinsurance cover affects the company's ability to pay policyholders' claims, the supervisor will enter into discussions with the management of the company.

The supervisor may disallow credit in whole or in part for reinsurance when calculating solvency requirements or technical provisions on a net basis or when determining the coverage of gross technical provisions by reinsurance recoverables. As well, the supervisor may require the insurer to:

- obtain additional reinsurance cover;
- provide additional capital;
- establish additional technical provisions; and,
- have additional collateral posted, if applicable.

Reinsurance recoveries in excess of 90 days overdue will generally not be admissible as assets; and in addition, for the reinsurers with balances that fall into this category, absent adequate collateral only 80% of the reinsurance recovery reserve from these reinsurer will be admissible. However, the Authority is cognisant of the fact that disputes/differences in interpretation do occur; as such it will extend the 90 days to 180 in the case of disputes on specifically referenced claims. The Authority will permit offsetting provided that the offsetting is with the same counterparty, there is provision in the reinsurance contract for offsetting, and that the offsetting actually occurs within a prescribed period of time. This is an important but necessary tightening of the position as laid out in the regulations.

Within a reasonable period after their finalisation, significant changes in reinsurance arrangements (including the panel) must be notified to the supervisor, who may request sight of all relevant documentation in assessing the appropriateness and adequacy of the changes.

APPENDIX 4

Extract from: Annex to Directive 73/239/EEC

'D. Methods of calculating the equalization reserve for the credit insurance class

Method No 1

1. In respect of the risks included in the class of insurance in point A No 14 (hereinafter referred to as 'credit insurance'), the undertaking shall set up an equalization reserve to which shall be charged any technical deficit arising in that class for a financial year.

2. Such reserve shall in each financial year receive 75 % of any technical surplus arising on credit insurance business, subject to a limit of 12 % of the net premiums or contributions until the reserve has reached 150 % of the highest annual amount of net premiums or contributions received during the previous five financial years.

Method No 2

1. In respect of the risks included in the class of insurance listed in point A No 14 (hereinafter referred to as 'credit insurance') the undertaking shall set up an equalization reserve to which shall be charged any technical deficit arising in that class for a financial year.

2. The minimum amount of the equalisation reserve shall be 134 % of the average of the premiums or contributions received annually during the previous five financial years after subtraction of the cessions and addition of the reinsurance acceptances.

3. Such reserve shall in each of the successive financial years receive 75 % of any technical surplus arising in that class until the reserve is at least equal to the minimum calculated in accordance with paragraph 2.

4. Member States may lay down special rules for the calculation of the amount of the reserve and/or the amount of the annual levy in excess of the minimum amounts laid down in this Directive.

Method No 3

1. An equalization reserve shall be formed for class 14 in point A (hereinafter referred to as 'credit insurance') for the purpose of offsetting any above-average claims ratio for a financial year in that class of insurance.

2. The equalization reserve shall be calculated on the basis of the method set out below.

All calculations shall relate to income and expenditure for the insurer's own account.

An amount in respect of any claims shortfall for each financial year shall be placed to the equalization reserve until it has reached, or is restored to, the required amount.

There shall be deemed to be a claims shortfall if the claims ratio for a financial year is lower than the average claims ratio for the reference period. The amount in respect of the claims shortfall shall be arrived at by multiplying the difference between the two ratios by the earned premiums for the financial year.

The required amount shall be equal to six times the standard deviation of the claims ratios in the reference period from the average claims ratio, multiplied by the earned premiums for the financial year.

Where claims for any financial year are in excess, an amount in respect thereof shall be taken from the equalization reserve. Claims shall be deemed to be in excess if the claims ratio for the financial year is higher than the average claims ratio. The amount in respect of the excess claims shall be arrived at by multiplying the difference between the two ratios by the earned premiums for the financial year.

Irrespective of claims experience, 3,5 % of the required amount of the equalization reserve shall be first placed to that reserve each financial year until its required amount has been reached or restored.

The length of the reference period shall be not less than 15 years and not more than 30 years. No equalization reserve need be formed if no underwriting loss has been noted during the reference period.

The required amount of the equalization reserve and the amount to be taken from it may be reduced if the average claims ratio for the reference period in conjunction with the expenses ratio shows that the premiums include a safety margin.

Method No 4

1. An equalization reserve shall be formed for class 14 in point A (hereinafter referred to as 'credit insurance') for the purpose of offsetting any above-average claims ratio for a financial year in that class of insurance. 2. The equalization reserve shall be calculated on the basis of the method set out below.

All calculations shall relate to income and expenditure for the insurer's own account.

An amount in respect of any claims shortfall for each financial year shall be placed to the equalization reserve until it has reached the maximum required amount.

There shall be deemed to be a claims shortfall if the claims ratio for a financial year is lower than the average claims ratio for the reference period. The amount in respect of the claims shortfall shall be arrived at by multiplying the difference between the two ratios by the earned premiums for the financial year.

The maximum required amount shall be equal to six times the standard deviation of the claims ratio in the reference period from the average claims ratio, multiplied by the earned premiums for the financial year.

Where claims for any financial year are in excess, an amount in respect thereof shall be taken from the equalization reserve until it has reached the minimum required amount. Claims shall be deemed to be in excess if the claims ratio for the financial year is higher than the average claims ratio. The amount in respect of the excess claims shall be arrived at by multiplying the difference between the two ratios by the earned premiums for the financial year.

The minimum required amount shall be equal to three times the standard deviation of the claims ratio in the reference from the average claims ratio multiplied by the earned premiums for the financial year.

The length of the reference period shall be not less than 15 years and not more than 30 years. No equalization reserve need be formed if no underwriting loss has been noted during the reference period.

Both required amounts of the equalization reserve and the amount to be placed to it or the amount to be taken from it may be reduced if the average claims ratio for the reference period in conjunction with the expenses ratio show that the premiums include a safety margin and that safety margin is more than one-and-a-half times the standard deviation of the claims ratio in the reference period. In such a case the amounts in question shall be multiplied by the quotient or one-and-a-half times the standard deviation and the safety margin.

APPENDIX 5

Extract from: EU Reinsurance Directive 2005/68/EC – Article 34(1)

Article 34 – Assets covering technical provisions

1. The Home Member State shall require of every reinsurance undertaking to invest the assets covering the technical provisions and the equalization reserve referred to in Article 33 in accordance with the following rules:

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

   (b) the reinsurance undertaking shall ensure that the assets are diversified and adequately spread and give the undertaking the possibilities to respond adequately to changing economic circumstances, in particular developments in the financial markets and real estate markets or large impact catastrophic events. The undertaking has to asses the impact of irregular market circumstances on its assets and has to diversify the assets in such a way that it reduces this impact;

   (c) investment in assets which are not admitted to trading on a regulated financial market must in any event be kept to prudent levels;

   (d) investment in derivative instruments shall be possible insofar as they contribute to a reduction of investment risks or facilitate efficient portfolio management. They must be valued on a prudent basis, taking into account the underlying asset, and included in the valuation of the institution's assets. The institution shall also avoid excessive risk exposure to a single counterparty and to other derivative operations;

(e) the assets shall be properly diversified in such a way as to avoid excessive reliance on any particular asset, issuer or group of undertakings and 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 shall not expose the institution to excessive risk concentration;

Member States may decide not to apply the requirements referred to in point (e) to investment in government bonds.

GUIDELINES FOR INSURANCE COMPANIES

ON ASSET MANAGEMENT

Insurance Financial Supervision Section

Department of Enterprise, Trade & Employment

July 2001

Guidelines for Insurance Companies on Asset Management

In July 2000, the Monetary and Exchange Affairs Department of the International Monetary Fund, in conjunction with the World Bank, completed an assessment of the regulation of the financial sector in Ireland. In relation to the insurance sector, the assessment was carried out by reference to standards and guidelines laid down by the IAIS (International Association of Insurance Supervisors).

With regard to the Insurance sector they noted that the safekeeping and the liquidity of assets were not explicitly addressed in the regulations. These issues can be either defined very narrowly, or, indeed very broadly. In attempting to rectify the situation it was considered preferable to adopt a broad approach and to provide all-inclusive guidelines for insurance companies on asset management rather than fill the specific gaps identified in a narrow way. Therefore the following is based very closely on the 'Supervisory Standard on Asset Management by Insurance Companies' as issued by the International Association of Insurance Supervisors. In an effort to provide a comprehensive view of the subject, the Guidelines include both current Regulations and previously issued guidance notes.

The implementation of the Guidelines needs to be tailored to the particular circumstances of the individual companies. For example, the Supervisor[1] does not expect that smaller insurance companies, such as captives, will have the same level of formalization as implied by the Note. Still, it is considered vital that companies however small address the issues contained in this document and formalize policies and procedures no matter how briefly.

Commencing with the financial year ended 31st December 2001, an expanded Directors' Certificate for Life Companies and a similar certificate for Non-Life Companies will be introduced. All insurance companies will be required to submit this Directors' Certificate with their Annual Returns. This Certificate will state, inter alia, that the company's practice in relation to the management of assets comply with this Guidelines Note.

[1] At present, the Department of Enterprise, Trade & Employment. In future, the Irish Financial Services Regulatory Authority (IFSRA)

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1. Preamble

1. The nature of the insurance business implies the formation of technical provisions, and investment in and the holding of assets to cover these technical provisions and a solvency margin. In order to ensure that an insurer can meet its contractual liabilities to policyholders, such assets must be managed in a sound and prudent manner taking account of the profile of the liabilities held by the company and, indeed, the complete risk-return profile. The complete risk-return profile should result from an integrated view on product and underwriting policy, reinsurance policy, investment policy and solvency level policy. The liabilities profile of a company with respect to term, and the predictability of the size and timing of claims payments, may differ significantly according to the nature of the insurance business conducted. It thus follows that the need, for example, to maintain a high degree of liquidity within the asset portfolio will similarly differ between insurers

2. The objective of this guidance document, in addition to detailing the relevant Regulations, is to describe the essential elements of a sound asset management system and reporting framework across the full range of investment activities. Given the wide variation in the nature of companies, it is acknowledged that the extent of the application of the practices described in this document by any given insurer may differ according to the size and structure of an insurance company and the type of business it conducts. However, the basic principles of Board of Directors' responsibility, the need for an investment policy, segregation of duties and control will be applicable to all insurance companies

2. Introduction

2.1 Asset Liability Management

3. A key driver of the asset strategy adopted by an insurer will be its liabilities profile, and the need to ensure that it holds sufficient assets of appropriate nature, term and liquidity to enable it to meet those liabilities as they become due. Detailed analysis and management of this asset/liability relationship will therefore be a pre-requisite to the development and review of investment policies and procedures which seek to ensure that the insurer adequately manages the investment-related risks to its solvency. The analysis will involve, inter alia, the testing of the resilience of the asset portfolio to a range of market scenarios and investment conditions, and the impact on the insurer's solvency position.

2.2 The Investment Process

4. Depending upon the nature of their liabilities insurers will typically hold, in varying

proportions, four main types of financial assets either directly, via other investment vehicles (such as UCITS [Undertakings for Collective Investments in Transferable Securities]), or through third party investment managers:

a. Bonds and other fixed income instruments;

b. Equities and equity type investments;

c. Debts, deposits and other rights;

d. Property.

5. The holding of a given asset portfolio carries a range of investment-related risks to technical provisions and solvency which insurers need to monitor, measure, report and control. The main risks are market risk (adverse movements in, for example, stocks, bonds and exchange rates), credit risk (counterparty failure), liquidity risk (inability to unwind a position at or near market price), operational risk (system/internal control failure), and legal risk.

6. The actual composition of an asset portfolio at any given moment should be the product of a well-structured investment process itself, which for the purposes of this document is regarded as a circular movement characterised by the following steps:

a. Formulation and development of a strategic and tactical investment policy;

b. Implementation of the investment policy, in a suitably equipped investment organisation, and on the basis of a clear and precise investment mandate(s);

c. Control, measurement and analysis of the investment results which have been achieved and the risks taken;

d. Feedback to the appropriate level of authority on points a, b and c.

7. Regulations impose restraints on the investment policies and procedures of insurers by placing restrictions on the type of, and extent to which, certain asset classes may be used to cover technical provisions, and specific requirements on the matching of assets and liabilities vis-à-vis currency. Nevertheless, insurers should develop and operate overall asset management strategies, which take account of the need to ensure the existence of:

a. The definition of a strategic investment policy by the Board of Directors, based on an assessment of the risks incurred by the company and its risk appetite;

b. On-going Board and senior management oversight of, and clear management accountability for, investment activities;

c. Comprehensive, accurate and flexible systems which allow the identification, measurement and assessment of investment risks, and the aggregation of those risks at various levels, for example for any separate portfolios held, for the insurance company and, as appropriate, at group level, at any given time. Such systems will vary from company to company, but should be:

- sufficiently robust to reflect the scale of the risks and the investment activity undertaken;
- capable of accurately capturing and measuring all significant risks in a timely manner;
- understood by all relevant personnel at all levels of the insurer;

d. Key control structures, such as the segregation of duties, approvals, verifications, reconciliations;

e. Adequate procedures for the measurement and assessment of investment performance;

f. Adequate and timely communication of information on investment activities between all levels within the insurance company;

g. Internal procedures to review the appropriateness of the investment policies and procedures in place;

h. Rigorous and effective audit procedures and monitoring activities to identify and report weaknesses in investment controls and compliance.

i. Procedures to identify and control the dependence on and vulnerability of the insurer to key personnel and systems.

3. Regulations and Guidelines for their Interpretation

8. Annex III of the European Communities (Non-Life Insurance) Framework Regulations 1994 (S.I. No. 359 0f 1994), and Annex V of the European Communities (Life Assurance) Framework Regulations 1994 (S.I. No. 360 0f 1994) aim to set standards for the valuation of assets appropriate to compliance with statutory solvency requirements, based essentially on realisable value.

9. Also, Annex III, together with Schedule 2 (Non-Life); and, Annex V, together with Schedule 7 (Life), are intended to encourage a prudent spread of insurance/assurance business assets without imposing undue restraints upon investment selection and management which might be disadvantageous to the company, or its policyholders. Regulations of this kind can be expected to achieve such a purpose only in a fairly broad manner. The mere fact that investments are within the permissible limits is no guarantee as to their suitability. The companies' management are responsible for their investment decisions which must be presumed to be dictated by, in addition to sound asset allocation policy, commercial profitability and, the policyholders' interests. It remains the duty of management, at all times, to satisfy themselves and, if required, to satisfy the Supervisor as to the suitability of a company's investment portfolio.

10. Schedules 2 (Non-Life Regulations) & 7 (Life Regulations) specify maximum percentage limits, on both individual and aggregate bases, on the admissibility of different categories of assets for representing technical reserves. The purpose of these limitations is to restrict the amounts acceptable as cover for technical reserves where there is considered to be too great a concentration of investment, either individually or in aggregate, in a particular asset or type of asset. It is important to note that the holding of amounts in excess of these limits is by no means prohibited but excess amounts must be left out of account for the purpose of covering technical reserves. However, such "excess" assets may be readmitted for solvency purposes.

11. Where, in the case of a particular asset, a valuation rule is not explicitly given in the Regulations a nil value must be assigned to it. Accordingly, such items such as advance commission and goodwill must be excluded.

12. Life assurance linked assets are not required to be valued in accordance with Annex V (Life Regulations). Linked assets, including approved derivative instruments held in linked funds, are required to be valued in accordance with generally accepted accounting concepts, bases and policies appropriate for life assurance companies and in practice would be valued on the same basis as that adopted for the calculation of the corresponding property linked benefits. The definition of linked assets refers only to life assurance business assets which are identified in a company's records as being assets by reference to the value of which property linked benefits are to be determined - it should be noted that the definition of property linked benefits does not comprehend benefits linked to an index of the value of assets not so held and identified with the consequence that such index linked assets are treated as non-linked assets.

4. Definition of the Investment Policy and Procedures

4.1 Board of Directors

13. The Board of Directors should be responsible for the formulation and approval of the strategic investment policy, taking account of the analysis of the asset/liability relationship, the insurer's overall risk tolerance, its long-term risk-return requirements, its liquidity requirements and its solvency position.

14. The investment policy, which should be communicated to all staff involved in investment activities, should in principle address the following main elements:

a. The determination of the strategic asset allocation, that is, the long-term asset mix over the main investment categories;

b. The establishment of limits for the allocation of assets by geographical area, markets, sectors, counterparties and currency;

c. The formulation of an overall policy on the selection of individual securities and other investment titles;

d. The adoption of passive or more active investment management in relation to each level of decision making;

e. In the case of active management, definition of the scope for investment flexibility, usually through the setting of quantitative asset exposure limits

f. The extent to which the holding of some types of assets is ruled out or restricted where, for example, the disposal of the asset could be difficult due to the illiquidity of the market or where independent (i.e. external) verification of pricing is not available;

g. An overall policy on the use of financial derivatives as part of the general portfolio management process or of structured products that have the economic effect of derivatives ;

h. The framework of accountability for all asset transactions.

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refer to 'Guidelines for Insurance Companies on the Risk Management of Derivatives' issued by the Supervisor

15. The Board of Directors should also be responsible for establishing policies on related issues of a more operational nature, including:

a. The choice between internal or external investment management, and, for the latter, the criteria for selection of the manager(s). Also, in case of external management, a choice usually needs to be made between having a segregated (discretionary) portfolio managed, or participating in a collective or pooled fund, or other indirect investment vehicles;

b. The selection and use of brokers;

c. The nature of custodial arrangements;

d. The methodology and frequency of the performance measurement and analysis.

16. The Board of Directors should authorise senior management to implement the overall investment policy. The Board of Directors must, however, always retain ultimate responsibility for the company's investment policy and procedures, regardless of the extent to which associated activities and functions are delegated or, indeed, outsourced.

17. As part of the development of the asset management strategy the Board of Directors must also ensure that adequate reporting and internal control systems are in place, designed to monitor that assets are being managed in accordance with the investment policy and mandate(s), and legal and regulatory requirements. The Board of Directors must ensure that:

a. They receive regular information, including feedback from the company's risk management function, on asset exposures, and the associated risks, in a form which is understood by them and which permits them to make an informed judgement as to the level of risk on a mark-to-market basis;

b. The systems provide accurate and timely information on asset risk exposure and are capable of responding to ad hoc requests;

c. The internal controls include an adequate segregation of the functions responsible for measuring, monitoring and controlling investment activities from those conducting day to day asset transactions;

d. Remuneration policies are structured to avoid potential incentives for unauthorised risk taking.

18. Where external asset managers are used, the Board of Directors must ensure that senior management is in a position to monitor the performance of the external managers against Board approved policies and

procedures. External managers should be engaged under a contract that, inter alia, sets out the policies, procedures and quantitative limits of the investment mandate. The insurer must retain appropriate expertise and ensure that, under the terms of the contract, it regularly receives sufficient information to evaluate the compliance of the external asset manager with the investment mandate.

19. The Board of Directors should collectively have sufficient expertise to understand the important issues related to investment policy and should ensure that all individuals conducting and monitoring investment activities have sufficient levels of knowledge and experience.

20. At least annually, the Board of Directors should review the adequacy of its overall investment policy in the light of the insurance company's activities, and its overall risk tolerance, long-term risk-return requirements and solvency position.

4.2 Senior Management

21. The responsibility for the preparation of a written investment mandate(s) setting out the operational policies and procedures for implementing the overall investment policy established by the Board of Directors will frequently be delegated to senior management. The precise content of the mandate will be different for each insurance company but the level of detail should be consistent with the nature of the current regulatory constraint and complexity and volume of investment activity, and should specify as appropriate:

a. The investment objective, and the relevant limits for asset allocation, and the currency allocation and policy; any relevant investment benchmarks should also be specified;

b. An exhaustive list of permissible investments and, as appropriate, derivative instruments, including details of any restrictions as to markets (e.g. only securities listed at specified stock exchanges), minimum rating requirements or minimum market capitalisation, minimum sizes of issues to be invested in, diversification limits and related quantitative or qualitative limits;

c. Details of whom is authorised to undertake asset transactions;

d. Any other restrictions with which portfolio managers have to comply, for example maximum risk limits within the overall investment policy (or in terms of limits on the duration of the portfolio in the case of a fixed-income portfolio), authorised counterparties;

e. The agreed form and frequency of reporting and accountability.

22. Supporting internal management procedures should be documented and include:

a. Procedures for seeking approval for the usage of new types of investment instruments:

the desirability of retaining the flexibility to utilise new investment instruments should be balanced with the need to identify the risks inherent in them and ensure that they will be subject to adequate controls before approval is given for their acquisition. The principles for measuring such risk, and the methods of accounting for the new investments should be clarified in detail prior to approval being given for their acquisition;

b. Procedures for the selection and approval of new counterparties and brokers;

c. Procedures covering front office, back office, measurement of compliance with quantitative limits, control and reporting;

d. Details of the action which will be taken by senior management in cases of non-compliance;

e. Valuation procedures for risk management purposes;

f. Identification of who should be responsible for the valuation. Valuations should be carried out by individuals independent of those responsible for trade execution or, if this is not possible, valuations should be independently checked or audited on a timely basis.

Accounting and taxation rules should be taken into consideration in developing the above operational policies and procedures.

23. Senior management should ensure that all individuals conducting, monitoring and controlling investment activities are suitably qualified and have appropriate levels of knowledge and experience.

24. At least annually, senior management should review the adequacy of its written operational procedures and allocated resources in the light of the insurance company’s activities and market conditions.

5. Monitoring and Control

5.1 Risk Management Function

25. Insurers should be capable of identifying, monitoring, measuring, reporting and controlling the risks connected with investment activities. This process should be performed by a risk management function with responsibility for:

a. Monitoring compliance with the approved investment policy;

b. Formally noting and promptly reporting breaches;

c. Reviewing asset risk management activity and results over the past period;

d. Reviewing the asset/liability and liquidity position

26. The risk management function should also assess the appropriateness of the asset allocation limits. To do this, regular resilience testing should be undertaken for a wide range of market scenarios and changing investment and operating conditions. Once an insurer has identified those situations to which it is most at risk, it should ensure that it feeds back appropriate amendments to the policies and procedures defined in its investment mandate in order to manage those risk situations effectively.

27. The risk management function should regularly report to appropriate levels of senior management and, as appropriate, to the Board of Directors. The reports should provide aggregate information as well as sufficient detail to enable management to assess the sensitivity of the company to changes in market conditions and other risk factors. The frequency of reporting should provide these individuals with adequate information to judge the changing nature of the insurer's asset profile, the risks that stem from it and the consequences for the company's solvency.

5.2 Internal Controls

28. Adequate systems of internal control must be present to ensure that investment activities are properly supervised and that transactions have been entered into only in accordance with the insurer's approved policies and procedures. Internal control procedures should be documented. The extent and nature of internal controls adopted by each insurer will be different, but procedures to be considered should include:

a. Reconciliations between front office and back office and accounting systems;

b. Procedures to ensure that any restrictions on the power of all parties to enter into any particular asset transaction are observed. This will require close and regular communication with those responsible for compliance, legal and documentation issues in the insurer;

c. Procedures to ensure all parties to the asset transaction agree with the terms of the deal. Procedures for promptly sending, receiving and matching confirmations should be independent of the front office function;

d. Procedures to ensure that formal documentation is completed promptly;

e. Procedures to ensure reconciliation of positions reported by brokers;

f. Procedures to ensure that positions are properly settled and reported, and that late

payments or late receipts are identified;

g. Procedures to ensure asset transactions are carried out in conformity with prevailing market terms and conditions;

h. Procedures to ensure that all authority and dealing limits are not exceeded and all breaches can be immediately identified;

i. Procedures to ensure the independent checking of rates or prices: the systems should not solely rely on dealers for rate/price information.

29. The functions responsible for measuring, monitoring, settling and controlling asset transactions should be distinct from the front office functions. These functions should be adequately resourced.

30. Regular and timely reports of investment activity should be produced which describe the company's exposure in clearly understandable terms and include quantitative and qualitative information. The reports should, in principle, be produced on a daily basis for senior management purposes; less frequent reporting may be acceptable depending on the nature and extent of asset transactions. Upward reporting by senior management is recommended on at least a monthly basis. Reports should at least include the following areas:

a. Details of, and commentary on, investment activity in the period and the relevant period end position;

b. Details of positions by asset type;

c. An analysis of credit exposures by counterparty;

d. Details of any regulatory or internal limits breached in the period and the actions taken thereto;

e. Planned future activity;

f. Details of the relative position of assets and liabilities.

5.3 Audit

31. Auditors should be expected to evaluate the independence and overall effectiveness of the insurer's asset management functions. In this regard, they should thoroughly evaluate the effectiveness of the internal controls relevant to measuring, reporting and limiting risks. Auditors should evaluate compliance with risk limits and the reliability and timeliness of information reported to senior management and the Board of Directors.

32. Auditors should also periodically review the insurer's asset portfolio and written investment policies

and procedures to ensure compliance with the insurance company’s regulatory obligations.

Guidance Paper No. 9

INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS

GUIDANCE PAPER ON INVESTMENT RISK MANAGEMENT

OCTOBER 2004

This document was prepared by the Investments Subcommittee in consultation with members and observers

Guidance paper on investment risk management

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1. Introduction

1. The main focus of prudential regulation and supervision of insurers is usually considered to be the protection of the rights of policyholders. This includes oversight of the continuing ability of insurers to meet their contractual and other financial obligations to their policyholders. The nature of insurance business implies the establishment of technical provisions, and the investment in and holding of assets to cover these technical provisions and a solvency margin. The interplay between the characteristics of the insurance liabilities and the assets backing those liabilities is one of the most important sources of risks to insurers and hence one of the most important aspects of its operations for an insurer to manage. Investment management should therefore be undertaken as part of the overall asset liability management of the insurer. IAIS recognises that asset liability management is a topic for a separate paper. However, insurers also need to specifically control the risks associated with their investment activities, which is the focus of this paper.

2. This paper provides guidance on effective investment risk management for insurers and reinsurers and highlights issues applicable to the management of market risk, credit risk, and liquidity risk. The paper also provides guidance for the supervisor when evaluating investment risk management policies and practices of insurers, including the main set of data and documents the supervisor should consider when assessing and monitoring the investment risk management of insurers.

3. This guidance paper mainly addresses the insurer's investment risk management procedures, referred to in some jurisdictions as the "prudent person" approach. Elements of this approach can also be useful for other jurisdictions which are more prescriptive in nature. Insurers and supervisors should use judgment in assessing to what extent the guidance in this paper is relevant to their jurisdiction and does not create an unnecessary regulatory burden.

4. For the purposes of this paper, 'insurer' describes any corporate body or individual that is operating as an insurer or reinsurer, which is subject to insurance regulation, whether they be a domestic or a global insurer. Financial conglomerates may be considered within the scope of this document as far as they involve insurance activities.

5. Risk management is the process whereby the insurer's management takes action to assess and control the impact of past and potential future events that could be detrimental to the insurer. These events can impact both the asset and liability sides of the insurer's balance sheet, and the insurer's cash flow. Investment risk management addresses investment related events that would cause the insurer's investment performance to weaken or otherwise adversely affect its financial position. Various investment risks tend to focus on different parts of the investment portfolio. Market risk impacts capital investments, including stocks and real estate, as well as the bond and mortgage portfolios. Credit risk is present in the insurer's lending activities, typically in the bond and mortgage portfolios. Liquidity risk is concerned with current and future maintenance of appropriate levels of cash and liquid assets, particularly in the context of the demands for liquidity that are imposed by the insurer's liability profile. A variety of other risks, including operational and legal risk, also arise from investment activities.

6. Jurisdictions may approach investment risk management issues by imposing regulatory constraints on the investment policies and procedures of insurers, by placing restrictions on the categories of assets which may be used to cover technical provisions and the extent to which they may be used for that purpose, and/or by setting specific requirements on the matching of assets and liabilities. Accordingly, appropriate investment risk management policies, as detailed in this guidance paper, are in addition to these regulatory requirements.

7. As a result of regulatory change and globalisation of financial services, together with the growing sophistication of financial markets, the activities of insurers (and thus their risk profiles) are becoming more diverse and complex. In jurisdictions allowing their use, the inclusion of derivatives, or structured products that have the effect of derivatives, as part of the portfolio management processes, has become common practice. In order to be able to manage these diverse and complex risks, the insurers should organise themselves and act according to best practices applied to the business they conduct. The quality and quantity of their resources should be appropriate to the nature and complexity of their business.

8. This paper should be considered in conjunction with other principles, standards or guidance papers developed by the IAIS, in particular the *Principles on capital adequacy and solvency*, the *Solvency control levels guidance paper* and the *Stress testing by insurers guidance paper*. Given the particular importance of the liability structure in determining the investment policies, and the key role of asset liability management for insurers, this paper should be considered together with any IAIS work thereon.

9. The paper contains guidance supporting a number of the IAIS insurance principles. It addresses in part the principle 10, on "*Risk management*" of the January 2002 *Principles on capital adequacy and solvency* that sets out principles that generally underlie solvency regimes for insurers. Furthermore, investment risk management is relevant to many of the *Insurance Core Principles* adopted in October 2003, including:

- *Principle 1: Conditions for effective insurance supervision*
- *Principle 2: Supervisory objectives*
- *Principle 9: Corporate governance*
- *Principle 10: Internal control*
- *Principle 11: Market analysis*
- *Principle 18: Risk assessment and management*
- *Principle 21: Investments*
- *Principle 22: Derivatives and similar commitments*

10. The responsibility for investment risk management lies with the insurer. The insurer should demonstrate to the supervisor compliance with the relevant guidance outlined in this paper. The application of this guidance by the supervisor should be sensitive to the risk profile of the insurer and should take into account the size, nature and complexity of the business of the insurer. The scope of the application and review should be tailored to the supervisor's own regulatory framework.

2. Investment management by insurers

11. The characteristics of liabilities are the driving force in developing investment policies for an insurer. The nature of the insurance business conducted and the nature, terms and conditions of the policies written require the establishment of technical provisions, and the investment in assets which are appropriate to the insurer's liabilities. The design and underwriting of products, and thus the resulting liabilities of an insurer, cannot be considered in isolation from its investment activities. In order to ensure that it can meet its contractual liabilities to policyholders, an insurer should manage its assets in a sound and prudent manner, taking account of the profile of its liabilities, its solvency position and its complete risk-return profile.[1] This forms the essence of the insurer's asset liability management policies.

12. The complete risk-return profile is of particular importance in insurance businesses in so far as insurers are, by nature, risk transformers and their primary function remains risk mitigation. The associated risk level should be compatible with the effective protection of policyholders. It should result from an integrated view of the insurer's business, organisational structure and strategy, taking into account its:

- product and underwriting policies
- reinsurance policies
- asset liability management policies
- solvency level policies

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1 See the definition of "complete risk-return profile" in the IAIS Glossary of Terms

- investment management policies.

13. Insurers should manage their business taking into account all risks. The focus of this guidance paper is investment risk management, including market, credit and liquidity risk. The relative importance of market, credit and liquidity risk will vary depending on, for example, business line, investment strategy and regulatory framework.

14. Consideration should also be given to operational risks within investment activities. For insurers, operational risks can be described as risks of direct or indirect loss resulting from inadequate or failed internal processes, people or systems. They would include, for example, risk arising from failures in corporate governance, systems, outsourcing arrangements and business continuity planning.

15. Given the insurer's profile of liabilities, the investment policies should ensure that the insurer holds sufficient assets of appropriate nature, term and liquidity to enable it to meet the liabilities as they become due. Thus, investment management should be performed as part of the overall asset liability management of the insurer. Key influences on investment decisions include the legal, regulatory, accounting and taxation environment, the various types of insurance business conducted, marketing literature and the availability of assets.

16. The timing and amount of insurance benefit payments is usually uncertain and in some cases sensitive to changes in financial markets (i.e. policyholder behaviour can be related to expectations in financial markets, relative investment performance and quality of customer service). Furthermore, the business of insurance usually involves a mismatch, in timing or amount, between receipt of premium income and payment of expenses and policy benefits. It is important for an insurer to monitor and assess the volatility of its income together with the volatility of its outflows, with respect to size and frequency of both expected and exceptional situations.

17. Detailed analysis and management of this asset and liability relationship will therefore be a pre-requisite to the development and review of investment policies and procedures, which should seek to ensure that the insurer adequately manages the investment related risks to its solvency. At a minimum, investment policies would be expected to address each of the following areas:

- asset and liability considerations, including asset liability management policies
- financial market environment
- eligible asset classes
- amount of delegated limits by management level
- strategic asset allocation
- conditions under which the insurer can pledge or lend assets
- maximum allowed deviation from strategic asset allocation (for example, tracking error)
- capital considerations
- solvency and liquidity considerations
- concentration risk
- risk parameters, including the investment risk management policies or reference to them.

18. Investment policies and procedures should be reviewed regularly and kept up-to-date. Such reviews should be formally documented and approved by the insurer's senior management and its board of directors.

19. Ultimate responsibility for the determination, implementation and monitoring of compliance with the overall investment strategy and policies and procedures and the compliance with legal requirements remains with the insurer's board of directors. However, elements of the implementation of investment management and investment risk management policies may be outsourced (for example, to external investment managers or brokers). Therefore, management of the risks associated with outsourced arrangements also needs to be considered. The insurer should establish outsourcing policies and require compliance with the investment policies defined and with the specific control guidelines regarding the outsourced functions.

3. Investment risk management framework

20. The insurer should have an effective investment risk management framework. In jurisdictions regulating investments and investment procedures of insurers, the investment risk management framework should adhere to any regulatory requirements in relation to investment policies, asset mix, valuation, diversification, asset and liability matching, and risk management. The framework should include: setting market, credit, liquidity and other investment risk management strategies and policies; developing management procedures to ensure that investments are only transacted in line with these policies, and; having an appropriate system of measurement, monitoring, reporting and control underpinning the investment activities.

21. At a minimum, the investment risk management framework should include:

- a description and criteria for measuring each of the investment risks to be monitored
- market risk
  - credit risk
  - liquidity risk
  - operational risk
- compliance policies
- reputation risk management policies
- control procedures, including risk tolerances
- reporting format and frequency.

22. The exact approach to the insurer's investment risk management will depend on a wide range of factors, including the size, level of sophistication and complexity of the insurer's activities. Regardless of the approach, basic principles such as the board of directors' and senior management's responsibility, the need for an investment policy, segregation of duties and appropriate controls should be applicable to all insurers.

23. The quality of the assets and related risks should be clearly communicated and understood throughout the organisation. Special management procedures, monitoring and controls have to be established on riskiest activities, such as complex operations, structured assets with embedded options and blind investments.[2]

2 See the definition of "blind investments (or pools)" in the IAIS Glossary of Terms

Role of the board of directors

24. The board of directors is ultimately responsible for ensuring that sound and comprehensive investment and risk management policies, which adhere to applicable regulation, are developed and for ensuring compliance with these policies. In most cases, the board will delegate the development of these policies to management for its approval, recognising that the policies remain its responsibility. The board should require that processes are in place to enable management to report and demonstrate compliance with these policies on a regular basis. Reporting should include instances of non-compliance and actions taken or planned to bring the insurer back in line with policies.

25. The board of directors is responsible for the determination and periodic review of the overall risk tolerance of the insurer and overseeing senior management in the formulation of the overall investment strategy. The board should take into consideration the insurer's assets and liabilities, regulatory requirements, and the insurer's solvency position. Based on the overall investment strategy, senior management sets the operational policies and procedures and assigns responsibilities. The board should ensure that adequate controls, including management reporting and internal audit, are in place to monitor that investments are being managed in accordance with the investment policies and regulatory and other legal requirements.

26. The board of directors should include members possessing knowledge and understanding of the insurer's markets, products, and risk management and of the markets and products in which the insurer invests. Any committees involved in investment risk management, such as an asset liability committee, should comprise of members possessing such knowledge and understanding.

27. The board of directors should:

- establish, maintain, and regularly review the process for identifying investment risk on existing and new products on both sides of the balance sheet
- set out the process for recommending, approving and implementing decisions
- identify potential sources of conflict of interest and establish procedures to ensure that those involved with the implementation of the investment and lending policies understand where these situations could arise and how they should be addressed
- assign responsibility for investment risk identification and assessment to a person or persons who are independent of the investment function.

Investment risk management function

28. In order to manage investment risk effectively the insurer should clearly identify measure, monitor and control the risks inherent in the investment portfolio. The methods and tools used to measure those risks should be appropriate for the nature and complexity of the risks assumed in the portfolio. Where the methodology is based on external sources (for example, rating agencies), it should make an assessment of the appropriateness of using and continuing to use those sources.

29. Investments risk exposures should be clearly defined and measured, using appropriate risk measurement methods on an ongoing basis. These methods should also be used for establishing

and monitoring risk limits and tolerances. Further, an insurer needs to be able to measure and document the overall amount of risk in its business, which includes the risk in its investment portfolio.

30. In constructing the risk management framework, the insurer should take into account possible material changes in correlations between different products, and between different business lines, on both sides of the balance sheet under stress scenarios. For example, increasing liabilities arising from real estate insurance written may correlate with increased market or credit risk on real estate related assets such as mortgage backed securities.

31. Where an insurer is a member of a conglomerate or group, the group should be able to monitor investments risk exposures on an aggregated basis. An insurer should also be able to demonstrate that it meets the risk management standards on a legal entity and business line basis where applicable. This is particularly important for subsidiaries of groups subject to matrix management where the business lines cut across legal entity boundaries.

32. Insurers should have information systems and analytical techniques that enable management to measure the risk inherent in all investment activities, on and off-balance sheet. The level of sophistication for analysis should be commensurate with the potential materiality of exposures.

33. The insurer should understand the source, type and amount of risk that it is accepting across all lines of business. For example, where there is a complex chain of transactions it should understand who has the ultimate legal risk or basis risk. Similar questions arise where the investment is via external funds, or blind pools. The insurer should have robust reporting lines and staff of sufficient quality and experience to make the risk assessments. It should also have an appropriate methodology to measure its risk.

34. The investment risk management function should assess the appropriateness of the asset allocation limits in the insurer's investment strategy periodically. To do this, regular stress testing should be undertaken for market scenarios, and changing investment and operating conditions appropriate to the insurer's own risk profile.[3] Once an insurer has identified the most risky scenarios, it should ensure that its investment policies and procedures are sufficiently defined to ensure the effective management of those high-risk situations.

35. Insurers should have contingency plans on hand that describe the action to be taken under a variety of extreme scenarios. These plans should be reviewed and updated regularly and management should be fully briefed on the plans.

Internal audit

36. In order to adhere to good corporate governance practice, an insurer should have a process (for example, an audit committee of the board) that approves the audit program. Internal audit should provide independent assurance to the board, its audit committee or an appropriate senior manager of the integrity and effectiveness of the insurer's systems and controls for investment risk management, and should make recommendations, where appropriate.

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3 The use of scenario testing as a measurement tool is contained in the IAIS *Stress testing by insurers guidance paper.*

37. Internal audits should be conducted to review the insurer's compliance with overall risk management policies (including asset liability management) and procedures. An insurer should establish a system of independent, ongoing assessment of its investment risk management processes and the results should be communicated directly to the board of directors, its audit committee, and/or senior management according to their materiality.

38. Internal auditors should have the requisite level of training and expertise in investment risk management in order to be effective.

Compliance

39. The board of directors and senior management should ensure that a named individual is responsible for all compliance matters and that individual should be independent of the risk-taking units. The insurer should have a process for the dissemination of compliance information, ensuring that it has up-to-date staff training, and that regular compliance reports are produced. Further, it should ensure that there is a procedure to ensure the monitoring of compliance with the overall investment strategy, policies and procedures, legal and regulatory compliance requirements, and the notification of compliance breaches and senior management response and follow up. Senior management and the board of directors should receive regular, timely reports on compliance.

40. A proposed investment decision should have adequate documentation demonstrating that the decision is in compliance with the investment policies and the investment risk management framework.

Control procedures

41. The insurer should have sufficient internal controls, operating limits and other practices to ensure that investments risk exposures are maintained within levels consistent with prudential standards and risk tolerance, as defined by internal limits. An insurer should also have procedures for taking appropriate action according to the information within its management reports.

42. These procedures should address exposures arising from both on-balance sheet and off-balance sheet items.

43. Investment decisions and their execution are subject to the approval authorities described in the insurer’s investment policies. There should be governance procedures surrounding both the investment strategy decision making (such as choice of markets and sectors) and investment transaction decision making (such as stock selection). The rationale and approval process for such decisions should be documented and maintained by the investment risk management function. Where material, the documentation should include:

- the rationale and recommendation for the investment decision (this may include documentation of other possible alternatives and the reason(s) why the recommended strategy was chosen)
- the level of risk that will result from execution of the investment decision

- presentation to the appropriate approval authorities
- evidence that the appropriate authority was obtained
- evidence that the decision was executed as authorised (no variation in the terms of the decision) within a specified time frame.

44. The measurement criteria defined for each of the investment risks being monitored should be compared with its risk tolerance on an ongoing basis. Proposed changes in the strategic or tactical allocation should be given a time horizon in which the changes should be executed.

45. When entering into or varying an outsourcing arrangement for aspects of investment related activities, an insurer should consider how the proposed outsourcing will:

- affect its risk level
- comply with regulations, where applicable
- how it will assess the service providers' financial viability
- how it will assess the concentration and liquidity risk implications.

The insurer should also ensure smooth transition when entering, ending or varying the arrangement.

Reporting

46. Procedures and formats for reporting to senior management, the board of directors, auditors and regulators should exist within the investment risk management policies. Reports may differ in design and level of detail included for each of these users. Procedures should include defining where the responsibility for production of each of the reports resides, the layout of each of the reports, and the timing of production and delivery. Reports should include a presentation of the results of the measurements used to assess each of the investment risks broken down by asset class, compared with the constraint outlined in the investment risk management policies. Reports should describe the method for classifying assets and the basis for valuing assets that are not regularly traded.

47. There should also be a presentation of special situations that may fall outside of the normal operations addressed by the policies (for example, special liquidity requirements as they may arise during acquisition or sale of a business unit). Where guidance on a future course of action is needed, reports should list possible alternatives with discussion of their merits and risks, and, if possible, a recommended course of action for management or board approval.

48. An insurer's internal controls should ensure that exceptions to policies, procedures and limits are reported in writing in a timely manner to the board of directors and to the appropriate level of management for action. The reporting on implementation of the investment risk management policies should address compliance with the key elements of the policies such as:

- target markets and approved products
- portfolio concentration limits
- approval authority limits
- investment limits
- rating systems

- the granting, acceptance and quality of the collateral
- minimum required transparency, where applicable (for example, blind pools or hedge funds).

49. The insurer should have compliance procedures to monitor that reviews have taken place, appropriate scenario/stress testing of the investment portfolio performed, decisions taken by the appropriate level of staff, and financial information is regularly and accurately updated.

50. Particular attention should be given to compliance procedures to monitor that the investment risk that does not conform to the usual investment risk policies or that exceeds predetermined risk limits and criteria, but is approved because of particular circumstances, and is in accordance with the insurer's procedures. In those cases, there should be monitoring of the associated conditions and of the remedial plan.

51. Unauthorised exceptions to policies, procedures and limits should be reported in a timely manner, as appropriate to the nature of the breach, to the appropriate level of management together with the remedial action proposed and/or taken.

4. Market risk

52. Market risk is introduced into an insurer's operations through variations in financial markets that cause changes in asset values, products or portfolio valuations.

Definitions

53. Market risk is the risk to an insurer's financial condition arising from adverse movements in the level or volatility of market prices. Market risk involves the exposure to movements of financial variables such as equity prices, interest rates or exchange rates. It includes the exposure of derivatives to movements in the price of the underlying instrument or risk factor. Market risk also involves the exposure to other unanticipated movements in financial variables or to movements in the actual or implied volatility of asset prices and options. Market risk incorporates general market risk (on all investments) and specific market risk (on each investment).

Identification

54. Market risk includes:

- interest rate risk: risk of losses resulting from movements in interest rates; to the extent that future cash flows from assets and liabilities are not well matched, movements in interest rates can have an adverse economic impact
- equity and real estate risks: risk of losses resulting from movements of market values of equities and other assets; to the extent the insurer makes capital investments, including stocks and real estate, the insurer is exposed to sustained declines in market values
- currency risk: risk of losses resulting from movements in exchange rates; to the extent that cash flows, assets and liabilities are denominated in different currencies, currency movements can have an adverse impact on the insurer.

55. Some insurers have sold investment products that guarantee return of policyholder capital, and may include a guaranteed minimum return or offer other forms of embedded options. This risk is generally not diversifiable but increases directly with the amount of such business that is sold. Insurance policies which contain guaranteed values, supported by investments, whose values rise and fall with market conditions, may experience the adverse effects of this type of market risk.

Measurement and management

56. An insurer should be able to measure its market risk exposure across risk factors (i.e. interest rate, equity and currency) and across the entire portfolio. The insurer should set appropriate metrics to measure exposure to market risk factors.

57. An insurer with a complex portfolio is expected to demonstrate more sophistication in its modelling and risk management than an insurer with a simple portfolio. Some trade-off is permissible between the sophistication and accuracy of the model and the conservatism of underlying assumptions or simplifications.

58. Various methods can be used to hedge market risk. An insurer should document the appropriate products to be used to hedge exposures, the items that can qualify to be hedged, how hedging instruments' effectiveness will be assessed and identify individuals responsible for monitoring hedge performance.

59. An insurer should set an appropriate limit structure to control its market risk exposure. The degree of granularity[4] within the limit structure, or how hierarchical it is, will depend on the nature of the products involved (for example, whether the risks are linear or non-linear), the scale of the insurer's overall business, and whether the insurer has an active or passive investment style. An insurer should set limits on risks such as interest rate risk and equity risk as well as more complex, non-linear factors arising from optionality.

60. The insurer should determine whether the market risk measures for different products should be added, compounded, have offsetting characteristics, or be combined in a more complex way.

61. Market risk limits should be periodically reviewed in order to verify their suitability for current market conditions and the insurer's overall risk tolerance. An insurer should use a model or some form of analytical tool to assess risk in complex instruments or across portfolios. The insurer should evaluate the risks arising from such business independently from those who trade market risk.

62. An insurer should also use stress testing to determine, amongst others, the potential effects of economic shifts, market events, changes in interest rates, changes in foreign exchange and changes in liquidity conditions. Particular attention should be given to the relevance and to the reliability of the underlying assumptions.

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4 In this context, granularity refers to the level of detail in policies used to set exposure limits. At a high level, limits may be set with respect to asset class exposure. At a more detailed level, limits regarding specific industries, geographic areas, or even specific issuers may be considered.

63. Sufficient records should be retained to enable the insurer to perform back testing of methods and assumptions used for stress and scenario testing and for back testing of market risk models such as Value at Risk (VaR).

5. Credit risk

64. For most insurers, extending credit through investment and lending activities comprises an important portion of their business. Therefore, the quality of an insurer's credit portfolio affects the risks borne by policyholders and shareholders. Credit risks arising from reinsurers, brokers, agents and clients are not included as "Investment Risks". These categories of credit risk should be dealt with under the analysis of reinsurance coverage and the underwriting process. These risks must be managed but are not the focus of this paper, which deals only with investment risk management.

Definitions

65. Credit risk is the risk of financial loss resulting from default or movement in the credit quality of issuers of securities (in the company's investment portfolio), debtors (for example, mortgagors), or counterparties (for example, on reinsurance contracts, derivative contracts or deposits given) and intermediaries, to whom the company has an exposure. Credit risk includes:

- default risk: risk that an insurer will not receive, or receives delayed, or partially, the cash flows or assets to which it is entitled because a party with which the insurer has a bilateral contract defaults on one or more obligations
- downgrade or migration risk: risk that changes in the probability of a future default by an obligor will adversely affect the present value of the contract with the obligor today
- indirect credit or spread risk: risk due to market perception of increased risk on either a macro or micro basis
- concentration risk: risk of increased exposure to losses due to concentration of investments in a geographical area, economic sector, counterparty, or connected parties.

66. The accepting of credit, in the context of an insurer's claims management, hedging, investment and lending activities, is the provision of funds on agreed terms and conditions to a counterparty (or borrower) who is obliged to repay the amounts owing (often but not always, together with any interest thereon). Credit may be extended, on a secured or unsecured basis, by way of instruments such as reinsurance ceded, premiums for hedging vehicles, mortgages, bonds, asset-backed securities, private placements, leases, and stock lending (from both a quantitative and qualitative perspective), derivatives, and structured products that have the effect of derivatives. Some of these instruments may lead to potential future exposures.

Identification

67. The general areas of credit risk in which an insurer is prepared to engage should be identified in its investment policies. The type of credit activity, type of collateral security or real estate, and types of borrowers on which an insurer may focus should be specified. Special attention should be paid to embedded transactions of credit risk (such as credit derivatives). Furthermore, credit risk of investment activities should be coordinated with credit risk of other

activities of the insurer (i.e. an insurer is exposed to additional counterparty credit risk when dealing with reinsurers and brokers, among others – see the Appendix – Reference 9).

68. Transactions and exposures involving entities that are connected or affiliated to each other require special attention. These transactions and exposures could give rise to non-market terms and conditions, concentration risk or liquidity risks or a combination of them. Therefore, the insurer should have policies on connected exposures, as well as policies on intra-group exposures that ensure:

- connected exposures are viewed at group level and consider potential exposures to all assets and liabilities, as well as reinsurance
- where an insurer is a member of a conglomerate or group, the insurer has policies on its transactions
- with and its exposures to the group.

69. Procedures should be in place for assessing the credit worthiness of counterparties to whom the insurer is exposed and for setting internal limits on such exposures, where appropriate.

70. Procedures should exist which define prudent criteria for identifying and reporting potential problem credit exposures to ensure that they are regularly reviewed, and that provisions are made where necessary. Once these credits have been identified, insurers should prepare a "Watch List" that is monitored by senior management and presented to the board of directors regularly. Insurers should have a disciplined remedial management process, triggered by specific events, which is administered through appropriate credit administration and problem recognition systems.

71. Another instance of credit risk relates to the process of settling financial transactions. If one side of a transaction is settled but the other fails, a loss may be incurred that is equal to the principal amount of the transaction. Even if one party is simply late in settling, the other party may incur a loss relating to a missed investment opportunity. Settlement risk (i.e., the risk that the completion or settlement of a financial transaction will fail to take place as expected) includes elements of market, credit, liquidity, operational risks. The level of risk is determined by the particular arrangements for settlement. Factors in such arrangements that have a bearing on credit risk include the timing of the exchange of value, payment and settlement finality, and the role of intermediaries.

72. Insurers engaged in the use of instruments, such as derivatives, should also take into consideration that counterparty exposures could change depending on the mark-to-market value of the underlying financial instrument. Effective measures of potential future exposure are essential for the establishment of meaningful limits, placing an upper bound on the overall scale of activity with, and exposure to, a given counterparty, based on a comparable measure of exposure across an insurer's activities both on and off balance sheet.

73. Insurers should have policies for approval, accepting and monitoring of collateral. This should include assessment of the controls supporting funding exposures, the valuation policies of collateral, including the basis, frequency, discounted assessment and reviews made of the security (see Appendix – Reference 11).

Measurement and management

74. Credit exposure limits should be established within the insurer's investment policies. Measuring compliance with these limits will involve developing the ability to aggregate the insurer's investment exposure within each defined risk classification. These could include exposure limits on the following risk classifications:

- type of collateral security or real estate
- single counterparties and connected counterparties (such as through legal, economic or managerial basis)
- industries or economic sectors
- geographic regions.

75. Rules for the aggregation of individual exposures within a common risk classification, such as conglomerate, industry and geography, should be established and well defined in credit policies.

76. Measurement tools to be used to determine the insurer's credit risk exposure could include:

- internal ratings
- external ratings
- results of stress testing
- concentration aggregations (geography, issuer, group of issuers)
- concentrations within the insurer's group of affiliated companies.

77. Credit risk exposure limits defined by the insurer's investment policies should be expressed in a manner consistent with the risk measures that will be used to monitor the insurer's credit risk activities. Hence, limits and monitoring systems should be determined in conjunction with each other. Measured credit risk exposure will be compared with the limits outlined in the investment policies. For example, the policies may impose a credit limit on the insurer's investing activities defined as:

- a maximum amount or percentage of investment exposure to a single issuer, industry, geographic region, or some other risk classification
- a limit on the amount or percentage of investment exposure to certain levels of credit ratings (external or internal or a combination of these)
- more sophisticated measures may be developed, such as a maximum value at risk, according to the insurer's stress testing capabilities.

78. In order to track portfolio diversification characteristics, insurers should have a system that enables credits to be grouped by characteristics such as type of credit activity, ranking by size of counterparty credit exposures, credit ratings, type of collateral security or real estate, type of borrower, type of industry and geographic regions.

79. The credit risk management function should actively participate in the development, selection, implementation and validation of rating models. It should assume oversight and supervision responsibilities for any models used in the rating process, and ultimate responsibility for the ongoing review and alterations to rating models.

80. Insurers should take into consideration potential changes in financial and economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions.

81. Although the determination of whether or not a particular concentration (as mentioned in previous paragraphs) is excessive is a matter of judgement, it should satisfy regulatory requirements, be benchmarked against industry norms (if available), and viewed in light of the insurer's capital base and stress test results. In circumstances where an insurer's credit risk has become excessively concentrated, the insurer should take timely steps and have options available to diversify its credit portfolio. This includes assessment on both sides of the balance sheet.

82. The insurer should measure and monitor its risk at both the transaction and portfolio levels to the appropriate time horizon. Insurers should regularly monitor the status of counterparties and underlying security and re-evaluate individual credits, commitments, and their credit ratings. Failure to do so can result in an undetected deterioration of the credit portfolio. Depending on the type of credit and the underlying security, the credit risk management program of each insurer should include procedures governing the regular formal review and, where applicable, the re-rating of credits.

Rating system

83. The term "rating system" comprises all of the methods, processes, controls, data collection and information systems that support the assessment of credit risk, the assignment of internal risk ratings, and the quantification of default and loss estimates. Each insurer could articulate in its credit policies the relationship between risk rating grades in terms of the level of risk each grade implies. Perceived and measured risk should increase as credit quality declines from one grade to the next. The policies should articulate the risk of each grade, both in terms of rating criteria associated with the grade, and the approximate range of risk parameters associated with each grade.

84. The structure of an insurer's rating system should be designed in a way that makes certain there is a meaningful distribution of exposures across grades, and a sufficient number of grades to support a meaningful differentiation for lesser grades, including one for borrowers that have defaulted. Insurers with lending activities focused on a particular market segment, such as originating mortgages, will require fewer grades than insurers that lend to borrowers of diverse credit quality.

85. A "rating grade" is defined as an assessment of credit risk on the basis of a specified and distinct set of rating criteria. The grade definition should include both a description of the degree of credit risk typical for credits assigned the grade and the criteria used to distinguish that level of credit risk. Insurers with non-marketable investments, such as loans and private placements, concentrated in a particular market segment and range of credit risk should have enough grades within that range to support meaningful differentiation of risk in respect of the investments held.

86. When assigning ratings insurers should:

- take all relevant information into account
- ensure that such information is current
- verify the integrity of all data used
- be more conservative in circumstances where there is less information available
- ensure that ratings are consistent across the portfolio
- be careful to differentiate between ratings assignment, which is issuer specific, and credit limit setting, which is portfolio based.

87. An external rating may be a primary factor determining an internal rating assignment; however, the insurer should make certain that it considers other relevant information. If an external rating is used, the insurer should address how much reliance it gives to external ratings and how it proposes to keep track of external rating changes.

6. Liquidity risk

88. Liquidity is concerned with the current and future maintenance of appropriate levels of cash and liquid assets, in the context of the demands for liquidity that are imposed by the insurer's asset and liability profile. Under normal business conditions, liquidity risk is limited by the cash flow structure of the insurance business. The business of insurance usually involves the existence of a substantial time lag between the receipt of premium income and payment of expenses and policy benefits. Liquidity stress conditions may materialise primarily due to an unanticipated sequence of policyholders' claims but may sometimes be increased through specific market conditions.

Definitions

89. Liquidity risk is the risk that an insurer, though solvent, has insufficient liquid assets to meet its obligations (such as claims payments and policy redemptions) when they fall due. The liquidity profile of an insurer is a function of both its assets and liabilities.

90. Liquidity risk includes:

- liquidation value risk: the risk that unexpected timing or amounts of needed cash may require the liquidation of assets when market conditions could result in loss of realised value
- affiliated investment risk: the risk that an investment in a member company of the conglomerate or group may be difficult to sell, or that affiliates may create a drain on the financial or operating resources from the insurer
- capital funding risk: the risk that the insurer will not be able to obtain sufficient outside funding, as its assets are illiquid, at the time it needs it (for example, to meet an unanticipated large claim).

Identification

91. The most striking example of loss due to liquidity risk is a "large claim and/or surrender" event (i.e. catastrophes, such as large windstorms or earthquakes). This event may require insurers to pay a large amount of claims within a short period of time. This situation can cause a substantial drain on liquidity, reduce solvency, and may lead the insurer to fail. Some reinsurance contracts include a provision whereby the insurer may be able to receive early claims payments. Such "cash claims" from its reinsurer could be considered as a form of liquidity hedge within the context of liquidity management.

92. There are different levels of liquidity management, including:

- day-to-day cash management
- testing and scenario analysis, including an analysis of catastrophe risk.

93. A single or a few contract holders that control large sums of money (policies or contracts) can expose the insurer to a high degree of liquidity risk. Institutional type products are the biggest risk in this respect, although in retail lines, a small group of agents and/or brokers may control large blocks of business, and that poses a similar risk.

94. The size or credit rating of the insurer, and/ or local regulation, may limit its access to capital markets. If an insurer is too small, it may not have all of the funding choices that are available to larger insurers. Also, when several insurers are faced with a large unpredictable liquidity requirement at the same time and need to liquidate some of their asset portfolio, the marketplace may not be able to absorb the volume other than at unfavourable prices.

95. To the extent that they are predictable, immediate demands on cash should not pose undue liquidity risk for an insurer. Any immediate demand for a cash payment can be a risk if cash is in short supply. A well-managed insurer will structure its assets in such a way so that it has enough cash and marketable securities to cover its known obligations.

96. An unpredictable cash demand is a larger risk. For example, a surrenderable non-life insurance contract may have a 90-day delay provision, which under normal circumstances gives the insurer a reasonable amount of time to access its liquidity sources. The shorter the deferral period, the larger the risk.

97. In jurisdictions that allow borrowing, insufficient ability to borrow short term such as through bank lines of credit or commercial paper increase liquidity risk. For example, following an insurance risk event banks may be unwilling to lend to an insurer. Where possible, formal credit lines should be established to mitigate that risk.

98. Lack of diversity in either the liability or the asset portfolio when analysed by product, geography, industry or creditor can lead to increased liquidity risk. An over-concentration of illiquid assets, such as real estate or thinly traded securities, may be especially risky. Resources should be well diversified, and not over-rely on a single source. This is particularly important for mutual insurers who generally have access to a smaller range of funding sources.

99. Policy redemption options that are sensitive to changes in asset values will increase liquidity risk.

100. Liquidity problems also arise when there is a mismatch between the term of the liabilities and their underlying assets. In these situations, trigger events, such as the insurer receiving a downgrade from a rating agency, can lead to a liquidity crisis. If this is coupled with other factors, such as large policies with flexible surrender terms with short time horizons, the liquidity risk is compounded.

101. Other examples of unexpected strains on liquidity are:

- negative publicity
- reports of problems of other insurers or similar lines of business
- deterioration of the economy
- abnormally volatile or stressed markets.

Measurement and management

102. In order to determine an insurer's exposure to liquidity risk, a set of measurement tools should be selected and then applied to its portfolio. There are no simple formulas that work for all insurers. However, the basic tools that the industry uses can be classified into two groups: cash flow modelling and liquidity ratios. These are tools used to monitor an insurer's liquidity risk profile and should be kept current (modified as the business changes), run periodically and may be used for a business unit or an entire insurer.

103. Cash flow modelling is done to assess the magnitude of deficits, surpluses and the ability of contingent funding to meet the needs of the insurer. It lends itself to a stress testing approach, allowing the insurer to examine its potential liquidity needs under a variety of future scenarios. In this way, the insurer can assess the probability of requiring immediate access to liquidity at a time when this may prove costly (due to forced liquidation of assets at low market values, or high borrowing costs). The insurer can take steps to ensure that it will have sufficient cash and short-term liquid assets on hand to meet unexpected, but not highly unlikely, liquidity requirements.

104. Use of liquidity ratios addresses the need for liquidity by establishing a normal expected amount of liquidity that would be required to meet the demands of the underlying liability portfolio. Taking this as the minimum level of required liquidity and adding an appropriate margin to cover unexpected liquidity requirements will define the required liquidity ratio to be used in the insurer's investment policies.

105. As indicated above, insurers may be able to obtain emergency liquidity funding in the event of a catastrophe by drawing cash early under their reinsurance policies or by other means. This form of liquidity hedging could be recognised when assessing the amount of liquidity available to meet the required level defined by the insurer's investment policies.

106. The insurer should have a liquidity contingency plan to be implemented in the event that its usual liquidity management is unable to meet demands.

7. Supervisory considerations

107. The responsibility for the investment risk management lies with the insurer. The insurer should demonstrate to the supervisor compliance with the guidance outlined in this paper. The application of this guidance should take account of the size, nature and complexity of the business of the insurer. The scope of the application and review should be sensitive to the risk profile of the insurer, together with the supervisor's own regulatory framework.

108. In assessing an insurer's investment risk management function, a supervisor should review the insurer's investment risk management framework, investment policies, and the execution thereof. The supervisor should satisfy itself that an insurer understands the risks it is bearing and has effective procedures for identifying, monitoring and managing its investment activities to ensure that its assets are consistent with its liability profile.

109. Supervisors have to keep in mind the increasing complexity of financial activities and continuous innovations, both in assets or products and in methods or systems. Therefore, supervisors have to be organised in such a way to ensure that supervisory activities are carried out by personnel with a high level of knowledge in financial markets and products. One key step to achieve this goal is to maintain continuous training.

110. The insurer's investment risk management framework should include at a minimum:

- the identification of risks
- the measurement of risks
- control procedures
- reporting procedures.

111. In reviewing the insurer's investment policies, the supervisor should consider whether these:

- are in compliance with regulatory requirements, and contain clearly defined procedures to ensure that regulatory requirements are adhered to
- are protecting the policyholders' rights
- consider operational risks that could arise from investment activities
- are clearly defined with appropriate emphasis on risk management and demonstration of asset liability management
- address the extent of use and management of third parties
- address the use of derivative products or structured products that have the effect of derivatives, in asset classes and insurance products, where applicable
- define the risk-return profile adequately given the product(s) used.

112. Where the investment policy has a direct impact on the returns available to policyholders, the supervisor should satisfy itself that the insurer has procedures in place to monitor that the investment policy is carried out in accordance with the policy conditions or any information provided to the policyholders.

113. Consideration should also be given to whether the insurer’s overall investment risk management policies:

- have been developed to appropriately reflect the insurer's risk tolerance given the insurer’s financial position
- address how the insurer organises its investment risk management function
- contain clear investment guidelines and procedures to ensure the investment policies are adhered to
- have regard to adequate staff being involved with investment risk issues (at whatever level, such as board level, trading or risk monitoring) who understand the risks involved, are of an appropriate level within the organisation, and have clearly defined responsibilities
- have been approved and are subject to regular review by the board of directors.

114. The supervisor should satisfy itself that the investment risk management functions within the insurer are independent of the investment function.

115. The supervisor should assess whether the insurer is aware of the range of risks that it faces, has procedures in place to identify, monitor and measure these risks and takes steps to manage and mitigate them effectively. The supervisor should conduct regular evaluations of an insurer’s policies, procedures and practices related to its investment risks.

116. The supervisor may apply its own tests to the insurer’s portfolio to assess whether the measurement of investment risk by the insurer is adequate. Use of benchmarks and tools such as industry norms and stress testing may be useful in this type of exercise.

117. Where the insurer is part of, or heads, a group or conglomerate of companies, the supervisor should assess compliance with the above guidance in a group context.

118. The supervisor may use various means to assess the insurer’s investment risk management framework, including:

- required regulatory reporting to capture relevant data (standardised reporting may be considered to enable greater market comparisons)
- external validation and/or use of experts (such as auditors, actuaries, risk managers)
- review of the insurer’s systems and controls
- on-site inspections
- off-site surveys and surveillance
- internal audit reports
- review of the insurer’s product control
- publicly disclosed reporting
- documentation describing risk management and investment committee framework.

119. The supervisor should satisfy itself that the insurer initiates processes to implement new risk management strategies quickly in response to the emergence of significant new risks or changes in significant risk.

120. The supervisor should satisfy itself that the investment risk management function provides the board of directors, the insurer's management, and any committee(s) involved in investment risk management with timely risk reports in order to take appropriate decisions on risk issues.

121. Deficiencies identified during the supervisory review should be addressed in a timely manner through a range of actions. The supervisor should communicate findings and recommendations to the insurer's management and the board of directors promptly and perform a timely follow up.

8. Information the supervisor may request from the insurer

122. In order to assess the insurer's risk management framework, the supervisor may request, amongst other, the following information:

Documents relating to management of investment risk

- a copy of the insurer's investment risk management policies, including the insurer's tolerance and limits for managing its market, credit and liquidity risks
- a copy of an insurer's asset liability management procedures. For example, the terms of reference of the insurer's asset liability committee, if there is one
- details of the insurer's investment policies, including its identification, monitoring and control procedures, and the terms of reference of the insurer's investment committee, if there is one, including details on the investment guidelines for derivatives or structured products that have the effect of derivatives
- the insurer's procedures for the approval of counterparties, including details on the insurer's procedures for selecting and monitoring external asset managers and brokers used
- details in relation to embedded options
- the insurer's procedures for seeking approval to use new investment instruments and for monitoring the risks associated with these instruments once the insurer commences using them
- a description of the board of directors' overall approach and policies on products, underwriting, reinsurance cover and security, investments and solvency
- details on the employee remuneration structure, to assess whether there are any excessive bonuses or unusual remuneration incentives, which encourage excessive risk taking.

Sample reports

123. Reporting entails costs for insurers and this aspect should be taken into account in setting the reporting requirements. The supervisor may request, amongst others, the following reports:

124. Investment risk management reports:

- reports from the insurer's internal and external audit and risk assessment functions, if applicable, including exception reports, where risk limits and policies have been breached or systems circumvented
- investment risk measurement reports that, at a minimum, cover the following areas:

- details of, and commentary on, investment activities in the period and the relevant period end position
- details of positions by asset type
- concentration analysis of credit exposures by counterparty
- details of any regulatory or internal limits breached in the period and subsequent actions taken, where appropriate
- planned future investment activities.

125. Market risk reports:

- specific details relating to market risks types such as interest rate risk, equity and real estate risk, commodity risk and currency risk
- interest rate risk run by the insurer via a mismatch in the cash flow can be assessed by comparing the expected change in the economic value of assets and the liabilities for changes in interest rates
- the significance of the economic value of derivatives or structured products that have the effect of derivatives like embedded options, with specific attention to asset and/or insurance products that include a guaranteed minimum return
- returns made on the investment portfolio need to be explained. The sources of return can be identified and checked whether the outcome was in line with the mandate. Two types of reporting will provide helpful information:
  1) performance contribution: this concerns the decomposition of total returns and determines what factors have contributed to the return made on the investment portfolio
  2) performance attribution: this concerns the decomposition of excess returns (positive or negative) relative to an assigned benchmark and determines the factors that have caused the relative performance of the investment portfolio.

These reports are to give insight into the development of returns over a single time period (for example, one month) and over multiple periods (for example, one year).

126. Credit risk reports:

- specific details relating to credit risk such as credit exposures, including aggregations of credit exposures, as appropriate, by groups of connected counterparties, and/or by the nature or geographical location of the counterparty
- details of credit decisions, including the facts or circumstances upon which decisions were made
- information relevant to assessing current credit quality.

127. Liquidity risk reports:

- specific details relating to the prospective cash flows of the insurer for both single periods and multiple periods. Expected premium income, liability payments, expenses, payments resulting from lapses of policies, investment income and repayment of principal by debtors as budgeted for that period should allow assessment of the liquidity profile of the insurer under the assumption of a going concern. Stress testing the various flows could give an insight into the liquidity risk under more difficult conditions than assumed

- specific details relating to the level of liquid assets held by the insurer and the terms and conditions of existing credit lines for insurers in jurisdictions that allow borrowing. A way to assess the liquidity of assets is by determining the average number of days required to liquidate that security based on the daily volume of market transactions in that security.

Regular reporting to the supervisor

128. In order to receive current information on investment risk management, the supervisor may wish to establish reporting mechanisms, directly with insurers, including internal audit, and third party (e.g. auditors and actuaries) reports, depending on the regulatory framework.

129. Consideration should be given to the frequency of the data requests. These should be timely, the frequency being determined by factors such as:

- the volatility of the business in which an insurer is engaged (i.e. the speed at which its risks can change)
- any time constraints on when action needs to be taken
- the level of risk that the insurer is exposed to compared to its available financial resources and investment risk tolerance.

Ad hoc requests

130. The supervisor may also request the following information:

- an overall business plan that includes information in respect of the types of business, indicating new products, strategy for distribution, underwriting, investments, reinsurance, a multi year budget and liquidity forecasts. This information should be used to assess whether risk management systems are adequate for the insurer's business
- cost and investment income allocation methods
- financial projections under expected and abnormal (such as stressed) conditions. In addition, reconciliation of actual profit and loss to previous financial projections and an analysis of any significant variances. Scenario testing could be done (for example the percentage change in interest rates and equity values both on the insurer's assets and liabilities)
- details on the insurer's stress testing for economic trends in investment markets
- internal management information on asset portfolios such as:
  - details of the relative position of assets and liabilities
  - details on intra-group investments
- list of matters that required a decision from the board of directors or senior management (such as a significant variation to a business plan, amendments to risk limits or the creation of a new business line)
- when on-site at an insurer, the supervisor could ask how signatories to the insurer's financial returns satisfy themselves that the regulatory financial returns are complete and accurate
- professional qualifications of those entrusted with investment activities and investment risk management
- audit management letters received by the insurer, and the insurer's responses
- details on the insurer's investment function outsourcing, including third party service agreements (if applicable)

- copies of the insurer's compliance reports in relation to investment risk management policies and procedures.

Appendix 1 – References

IAIS References

1. *Glossary of Terms*, September 2003.

2. *Solvency control levels guidance paper*, October 2003.

3. *Stress testing by insurers guidance paper*, October 2003.

4. *Paper on credit risk transfer between insurance, banking and other financial sectors,* presented to the Financial Stability Forum, March 2003.

5. *Principles on capital adequacy and solvency*, January 2002.

6. *Supervisory standard on asset management by insurance companies*, December 1999:

    - chapter 3 provides details on the role and responsibilities of the board of directors and senior managers, and the investment strategy
    - chapter 4 provides details on the risk management function, internal controls and audit.

7. *Supervisory standard on derivatives*, October 1998.

8. *Supervisory standard on supervision of reinsurers*, October 2003.

9. *Supervisory standard on the evaluation of the reinsurance cover*, January 2002.

Other

10. Bank for International Settlements, *Sound Practices for Managing Liquidity in Banking Organisations*, February 2000.

11. The International Organization of Securities Commissions, *Securities lending transactions: Market Development and Implications*, Joint Report by the Technical Committee and the Committee on Payment and Settlement Systems (CPSS), July 1999.

12. International Actuarial Association, *A Global Framework for Insurer Solvency Assessment,* Research report of the Insurer Solvency Assessment Working Party, 2004.

Appendix 2 – New IAIS Glossary of Terms definitions used in this paper

The new definitions and changes to current definitions that are introduced in this guidance paper are as follows:

- **Affiliated investment risk –** the risk that an investment in a member company of the same conglomerate or group may be difficult to sell, lose its value or create a drain on the financial resources of the insurer.
- **Asset liability management –** refers to the management of an insurer's assets with specific reference to the characteristics of its liabilities so as to optimise the balance between risk and return. The insurer's policy with respect to its asset liability management processes will include measures to be used to assess the degree of risk that the insurer is assuming and constraints or boundaries on the value of these measures. Asset liability management will form part of the overall investment risk management framework and will provide direction for investment activities with reference to the demands of the insurer's liability portfolio.
- **Basis risk –** the risk that yields on instruments of varying credit quality, marketability, liquidity and maturity do not move together, thus exposing the insurer to market value variation that is independent of liability values.
- **Blind investments (or pools) –** portfolio of investments managed by an external investment manager. The pool may consist of investments whose general characteristics are known to the pool participants, but the specific holdings are not always known. It may also consist of a pool of capital not yet invested, but with a mandate to be invested by the manager in certain investment vehicles in which the manager has specialised expertise.
- **Capital funding risk –** the risk that the insurer will not be able to obtain sufficient outside funding at the time it needs it (for example, to meet an unanticipated large claim).
- **Commodity risk –** the risk of exposure to losses resulting from movements of market values of commodities, either physical commodities themselves or derivatives that have commodities as the underlying instruments.
- **Complete risk-return profile –** the establishment of a well defined risk tolerance and desired target return that the insurer may wish to achieve in its overall operations or in some specific aspect (for example, product line) of its operations.
- **Concentration risk –** the risk of increased exposure to losses due to concentration of investments in a geographical area, economic sector or individual investments. Concentration risk may exist at either the legal entity level or the group level (after the holdings of all legal entities have been consolidated) or both [Related definitions: *conglomerate risk*, *contagion*, and *risk concentration*].
- **Correlation risk –** the risk of increased exposure to losses due to the level of, or movement in, the correlation of investments in or across geographical areas, economic sectors or individual investments or with and between liabilities.
- **Counterparty credit risk –** the risk that a counterparty is not able or willing to pay amounts owing to the insurer as they fall due.

- **Credit ratings –** assessments of the abilities of debtors (e.g. bond issuers) to pay amounts owing to investors as they fall due. [Related definitions: *credit rating assignment, rating agency, rating grade, rating model, rating process, rating system*]
- **Credit rating assignment –** the credit rating assigned to a particular issuer of debt instruments, or to a specific debt instrument.
- **Credit risk –** the risk of financial loss resulting from default or movements in the credit rating assignment of issuers of securities (in the company's investment portfolio), debtors (e.g. mortgagors), or counterparties (e.g. on reinsurance contracts, derivative contracts or deposits) and intermediaries, to whom the company has an exposure. Credit risk includes default risk, downgrade or mitigation risk, indirect credit or spread risk, concentration risk and correlation risk. Sources of credit risk include investment counterparties, policyholders (through outstanding premiums), reinsurers, and derivative counterparties. [Related definitions: *reinsurance credit risk*]
- **Default risk –** the risk that an insurer will not receive the cash flows or assets to which it is entitled because a party with which the insurer has a bilateral contract defaults on one or more obligations.
- **Downgrade or migration risk –** the risk that changes in the probability of a future default by an obligor will adversely affect the present value of the contract with the obligor today.
- **Equity and real estate risk –** the risk of exposure to losses resulting from movements of market values of and income from equities and real estate.
- **Granularity –** the level of detail that investment policy includes in setting market exposure limits. At a high level, limits may be set with respect to asset class exposure. At a more detailed level, limits regarding specific industries, geographic areas, or even specific issuers may be considered.
- **Hedge –** to invest in a manner that reduces the risk having regard to the underlying assets or liabilities. A hedging strategy will take into account the risks, return required and the projected cash flow of the assets or liabilities, including the existence of policyholder options which may be exercised. Risks to be considered will include market and credit risk.
- **Indirect credit or spread risk –** the risk due to movements in market perception or appetite for risk on either a macro or micro basis.
- **Interest rate risk –** the risk of exposure to losses resulting from movements in interest rates.
- **Internal controls –** the means by which compliance with the insurer's risk management policies is maintained. Regular reporting, including the use of measurements and metrics required to be within limits specified by the risk management policies, may be used to verify compliance.
- **Investment management –** the activity of making and controlling investment decisions [Related definitions: *investment policy, investment risks, investment risk management, investment risk management policy, investment risk management framework, investment risk management function, investment risk exposures, investments risk limits*].
- **Investment policy –** the insurer's policy with respect to the overall characteristics for an investment portfolio or for the investments of the insurer as a whole. A statement of a

portfolio's investment policy will normally include the objectives of the portfolio, its risk tolerance, constraints to be obeyed in the management of the portfolio, such as minimum liquidity requirements, and a list of eligible assets or asset classes in which the portfolio may be invested, along with a target asset mix and limits on how much the portfolio may diverge from the target.

- **Investment risks –** the various kinds of risk which are directly or indirectly associated with the insurers' investment management. They concern the performance, returns, liquidity and structure of an insurer's investments. Such risks can have a substantial impact on the asset side of the balance sheet and the company's overall liquidity, and potentially can lead to the company being over indebted or insolvent.

  The investment risks include:

  - market risk
  - credit risk
  - liquidity risk
  - operational risk

- **Investment risk management –** the process an insurer uses to identify investment risk exposures, and to monitor, measure, report, and mitigate this risk.
- **Investment risk management policy –** the insurer's policy with respect to investment risk management including definition of the investment risk exposures that are present in an insurer's operations, a description of the investment risk management process, and assignment of the investment risk management function within the insurer's structure.
- **Investment risk management framework –** the strategies, policies, procedures, methodology and the organisational structure that an insurer uses to perform its investment risk management function. The investment risk management function is normally separate and distinct from the investment management function, to the extent that this is practical for the insurer.
- **Investment risk management function –** the committees, departments, or persons charged with the responsibility to ensure that the insurer complies with its investment risk management policy and the activities that they carry out, including the oversight of timely corrective action when investment policy constraints are breached and other mitigating action.
- **Investment strategy –** the overall direction by the insurer's investment management governing the insurer's investment policy and investment risk management policy.
- **Investments risk exposures –** measures of the amounts by which an insurer's financial position may vary adversely.
- **Investments risk limits –** the maximum amount of risk exposure that an insurer is prepared to accept. Limits are normally included in the insurer's risk management policy, and monitoring of compliance with these limits is part of the risk management function.
- **Market risk –** the risk to an insurer's financial condition arising from movements in the level or volatility of market prices. Market risk involves the exposure to movements of financial variables such as equity prices, interest rates, exchange rates or commodity prices. It also includes the exposure of derivatives to movements in the price of the

underlying instrument or risk factor. Market risk also involves the exposure to other unanticipated movements in financial variables or to movements in the actual or implied volatility of asset prices and options. Market risk incorporates general market risk (on all investments) and specific market risk (on each investment). [Related definition: *matching risk*]

- **Rating agency –** entity that specialises in assigning credit ratings to borrowers.
- **Rating grade –** an assessment of credit risk satisfying a specified and distinct set of rating criteria. The grade definition should include both a description of the degree of credit risk typical for credits assigned the grade and the criteria used to distinguish that level of credit risk.
- **Rating model –** a systematic approach to determining one or more of the risk characteristics of a potential, or an existing, investment in a consistent manner with other investments to facilitate comparison.
- **Rating process –** the steps used to determine an appropriate rating for a potential or existing investment.
- **Rating system –** comprises all of the principles, methods, processes, controls, data collection and information systems that support the insurer's or credit rating agencies assessment of credit risk, the assignment of risk ratings, and the quantification of default and loss estimates.
- **Risk tolerance –** an insurer's risk tolerance is a statement of the nature and amount of risk exposure that the insurer is willing to accept. The risk tolerance will dictate the risk limits that are established as part of the insurer's risk management policy.
- **Settlement risk –** the risk that the completion or settlement of a financial transaction will fail to take place as expected. It includes elements of market, credit, liquidity and operational risks. The level of risk is determined by the particular arrangements for settlement. Factors in such arrangements that have a bearing on credit risk include the timing of the exchange of value, payment and settlement finality, and the role of intermediaries.
- **Value at risk –** A measure of the potential financial loss in the investment portfolio or on the whole balance sheet. Value at risk provides an estimate of the worst expected loss over a certain period of time at a given confidence level. For example, a 12 month value at risk with a 95% confidence level of $1 million means that an insurer would only expect to lose more than $1 million 5% of the time or once in 20 years.
- **Value at risk (VaR) models –** systems which use statistical approaches to determine the value at risk of all or part of an insurer's operations.

APPENDIX 8

Extract from: EU Reinsurance Directive 2005/68/EC – Article 36

Article 36 – Eligible items

1. The available solvency margin shall consist of the assets of the reinsurance undertaking free of any foreseeable liabilities, less any intangible items, including:

   (a) the paid-up share capital or, in the case of a mutual reinsurance undertaking, the effective initial fund plus any members' accounts which meet all the following criteria:

      (i) the memorandum and articles of association must stipulate that payments may be made from these accounts to members only in so far as this does not cause the available solvency margin to fall below the required level, or, after the dissolution of the undertaking, if all the undertaking's other debts have been settled;

      (ii) the memorandum and articles of association must stipulate, with respect to any payments referred to in point (i) for reasons other than the individual termination of membership, that the competent authorities must be notified at least one month in advance and can prohibit the payment within that period;

      (iii) the relevant provisions of the memorandum and articles of association may be amended only after the competent authorities have declared that they have no objection to the amendment, without prejudice to the criteria stated in points (i) and (ii);

   (b) statutory and free reserves not corresponding to underwriting liabilities or classified as equalisation reserves;

   (c) the profit or loss brought forward after deduction of dividends to be paid.

2. The available solvency margin shall be reduced by the amount of own shares directly held by the reinsurance undertaking.

   For those reinsurance undertakings which discount or reduce their non-life technical provisions for claims outstanding to take account of investment income as permitted by Article 60(1)(g) of Directive 91/674/EEC, the available solvency margin shall be reduced by the difference between the undiscounted technical provisions or technical

provisions before deductions as disclosed in the notes on the accounts, and the discounted or technical provisions after deductions. This adjustment shall be made for all risks listed in point A of the Annex to Directive 73/239/EEC, except for risks listed under classes 1 and 2 of that Annex. For classes other than 1 and 2 of that Annex, no adjustment need be made in respect of the discounting of annuities included in technical provisions.

In addition to the deductions in subparagraphs 1 and 2, the available solvency margin shall be reduced by the following items:

(a) participations which the reinsurance undertaking holds in the following entities:

- (i) insurance undertakings within the meaning of Article 6 of Directive 73/239/EEC, Article 4 of Directive 2002/83/EC, or Article 1(b) of Directive 98/78/EC,
- (ii) reinsurance undertakings within the meaning of Article 3 of this Directive or non-member-country reinsurance undertaking within the meaning of Article 1(l) of Directive 98/78/EC,
- (iii) insurance holding companies within the meaning of Article 1(i) of Directive 98/78/EC,
- (iv) credit institutions and financial institutions within the meaning of Article 1(1) and (5) of Directive 2000/12/EC,
- (v) investment firms and financial institutions within the meaning of Article 1(2) of Council Directive 93/22/EEC and of Article 2(4) and (7) of Council Directive 93/6/EEC;

(b) each of the following items which the reinsurance undertaking holds in respect of the entities defined in (a) in which it holds a participation:

- (i) instruments referred to in paragraph 4,
- (ii) instruments referred to in Article 27(3) of Directive 2002/83/EC,
- (iii) subordinated claims and instruments referred to in Article 35 and Article 36(3) of Directive 2000/12/EC.

Where shares in another credit institution, investment firm, financial institution, insurance or reinsurance undertaking or insurance holding company are held

temporarily for the purposes of a financial assistance operation designed to reorganise and save that entity, the competent authority may waive the provisions on deduction referred to under (a) and (b) of the fourth subparagraph.

As an alternative to the deduction of the items referred to in (a) and (b) of the fourth subparagraph which the reinsurance undertaking holds in credit institutions, investment firms and financial institutions, Member States may allow their reinsurance undertakings to apply mutatis mutandis methods 1, 2, or 3 of Annex I to Directive 2002/87/EC. Method 1 (Accounting consolidation) shall only be applied if the competent authority is confident about the level of integrated management and internal control regarding the entities which would be included in the scope of consolidation. The method chosen shall be applied in a consistent manner over time.

Member States may provide that, for the calculation of the solvency margin as provided for by this Directive, reinsurance undertakings subject to supplementary supervision in accordance with Directive 98/78/EC or to supplementary supervision in accordance with Directive 2002/87/EC, need not deduct the items referred to in (a) and (b) of the fourth subparagraph which are held in credit institutions, investment firms, financial institutions, insurance or reinsurance undertakings or insurance holding companies which are included in the supplementary supervision.

For the purposes of the deduction of participations referred to in this paragraph, participation shall mean a participation within the meaning of Article 1(f) of Directive 98/78/EC.

3. The available solvency margin may also consist of:

(a) cumulative preferential share capital and subordinated loan capital up to 50 % of the available solvency margin or the required solvency margin, whichever is the smaller, no more than 25 % of which shall consist of subordinated loans with a fixed maturity, or fixed-term cumulative preferential share capital, provided in the event of the bankruptcy or liquidation of the reinsurance undertaking, binding agreements exist under which the subordinated loan capital or preferential share capital ranks after the claims of all other creditors

and is not to be repaid until all other debts outstanding at the time have been settled.

Subordinated loan capital must also fulfil the following conditions:

(i) only fully paid-up funds may be taken into account;

(ii) for loans with a fixed maturity, the original maturity must be at least five years. No later than one year before the repayment date the reinsurance undertaking must submit to the competent authorities for their approval a plan showing how the available solvency margin will be kept at or brought to the required level at maturity,
unless the extent to which the loan may rank as a component of the available solvency margin is gradually reduced during at least the last five years before the repayment date. The competent authorities may authorise the early repayment of such loans provided application is made by the issuing reinsurance undertaking and its available solvency margin will not fall below the required level;

(iii) loans the maturity of which is not fixed must be repayable only subject to five years' notice unless the loans are no longer considered as a component of the available solvency margin or unless the prior consent of the competent authorities is specifically required for early repayment. In the latter event the reinsurance undertaking must notify the competent authorities at least six months before the date of the proposed repayment, specifying the available solvency margin and the required solvency margin both before and after that repayment. The competent authorities shall authorise repayment only if the reinsurance undertaking's available solvency margin will not fall below the required level;

(iv) the loan agreement must not include any clause providing that in specified circumstances, other than the winding-up of the reinsurance undertaking, the debt will become repayable before the agreed repayment dates;

(v) the loan agreement may be amended only after the competent authorities have declared that they have no objection to the amendment;

(b) securities with no specified maturity date and other instruments, including cumulative preferential shares other than those mentioned in point (a), up to 50 % of the available solvency margin or the required solvency margin, whichever is the smaller, for the total of such securities and the subordinated loan capital referred to in point (a) provided they fulfil the following:

(i) they may not be repaid on the initiative of the bearer or without the prior consent of the competent authority;

(ii) the contract of issue must enable the reinsurance undertaking to defer the payment of interest on the loan;

(iii) the lender's claims on the reinsurance undertaking must rank entirely after those of all non-subordinated creditors;

(iv) the documents governing the issue of the securities must provide for the loss-absorption capacity of the debt and unpaid interest, while enabling the reinsurance undertaking to continue its business;

(v) only fully paid-up amounts may be taken into account.

4. Upon application, with supporting evidence, by the undertaking to the competent authority of the home Member State and with the agreement of that competent authority, the available solvency margin may also consist of:

(a) one half of the unpaid share capital or initial fund, once the paid-up part amounts to 25 % of that share capital or fund, up to 50 % of the available solvency margin or the required solvency margin, whichever is the smaller;

(b) in the case of non-life mutual or mutual-type association with variable contributions, any claim which it has against its members by way of a call for supplementary contribution, within the financial year, up to one half of the difference between the maximum contributions and the contributions actually called in, and subject to a limit of 50 % of the available solvency margin or the required solvency margin, whichever is the smaller. The competent national authorities shall establish guidelines laying down the conditions under which supplementary contributions may be accepted;

(c) any hidden net reserves arising out of the valuation of assets, in so far as such hidden net reserves are not of an exceptional nature.

5. In addition, with respect to life reinsurance activities, the available solvency margin

may, upon application, with supporting evidence, by the undertaking to the competent authority of the home Member State and with the agreement of that competent authority, consist of:

(a) until 31 December 2009 an amount equal to 50 % of the undertaking's future profits, but not exceeding 25 % of the available solvency margin or the required solvency margin, whichever is the smaller; the amount of the future profits shall be obtained by multiplying the estimated annual profit by a factor which represents the average period left to run on policies; the factor used may not exceed six; the estimated annual profit shall not exceed the arithmetical average of the profits made over the last five financial years in the activities listed in Article 2(1) of Directive 2002/83/EC.

Competent authorities may only agree to include such an amount for the available solvency margin:

(i) when an actuarial report is submitted to the competent authorities substantiating the likelihood of emergence of these profits in the future; and

(ii) in so far as that part of future profits emerging from hidden net reserves referred to in paragraph 5 (c) has not already been taken into account;

(b) where Zillmerising is not practised or where, if practised, it is less than the loading for acquisition costs included in the premium, the difference between a non-Zillmerised or partially Zillmerised mathematical provision and a mathematical provision Zillmerised at a rate equal to the loading for acquisition costs included in the premium; this figure may not, however, exceed 3,5 % of the sum of the differences between the relevant capital sums of life assurance activities and the mathematical provisions for all policies for which Zillmerising is possible; the difference shall be reduced by the amount of any undepreciated acquisition costs entered as an asset.

6. Amendments to paragraphs 1 to 5 to take into account developments that justify a technical adjustment of the elements eligible for the available solvency margin, shall be adopted in accordance with the procedure laid down in Article 55(2) of this Directive.

Appendix 9

Financial Regulator’s Interpretation of EU Reinsurance Directive 2005/68/EC - Article 34(1.(c))

“Investment in assets which are not admitted to trading on a regulated financial market shall in any event be kept to prudent levels.”

This, among the other requirements in this particular subsection of the Article 34 on assets covering technical reserves comes from the Pension Directive, which takes a “Prudent Man Plus” approach.

The problem with applying this approach to reinsurance is that it fails to recognise that in conjunction with investment assets a reinsurer will have significant reinsurance assets. One of the primary objectives of the EU Reinsurance Directive is to facilitate access by European Reinsurers into the U.S. market without the need to provide collateral. It is consistent with the objective to take the view that where a reinsurer’s business was predominately from a U.S. source, “funds withheld” to facilitate the collateral requirements of the U.S. cedent would be admissible as an asset.

The Pensions Directive deals with European Pensions, which one would prudently expect from a matching perspective to be invested predominately in European securities. However, reinsurance is a global business where one would prudently expect assets to be invested in securities, which match the claims reserves and risks underwritten from both a currency and liquidity perspective.

Lets take for example the situation of a reinsurer writing predominately U.S. risk. If the investment assets of the reinsurer were entirely in U.S. Treasury Bills, as these are traded OTC this would result in 100% of securities being “not admitted to trading on a regulated financial market”. The Board of Director may consider this a prudent level based on the currency and liquidity requirements, and it is possible that the Financial Regulator would not disagree. Conversely, if all these assets were invested in equities listed on the New York Stock Exchange, a regulated financial market, the Financial Regulator for reason of liquidity would probably not consider this prudent.

Form R14: Solvency Margin Calculation **(Appendix 10)**

Company: **Year:**

	Schedule 1	**EUR '000**	**EUR '000**
1.1	Paid up share capital or effective initial fund	635	
1.2	One half of the unpaid share capital or effective initial fund once the paid up part reaches one quarter of the capital or fund	0	
1.3	Reserves not corresponding to underwriting liabilities		
	1.3.1 Statutory reserves	0	
	1.3.2 Free reserves	0	0
1.4	Carry-forward of profits		
	1.4.1 Balance carried forward from previous years	1,914	
	1.4.2 Non allocated profits in respect of the last financial period after appropriation on the balance of the profit and loss account	0	1,914
1.5	One half of the possible call for supplementary contributions within the financial year (up to a limit of 1/2 of the solvency margin)	0	
1.6	Preferential share capital and subordinated loan capital, securities of unspecified term up to a maximum of 50% of the available solvency margin or the required solvency margin (whichever is smaller), no more than 25% of which may be securities with a specified term	0	
1.7	Other items (specify)	0	
	Total 1.1 to 1.7		2,549
1.8	Intangible items (to be detailed on a separate sheet)	0	
	Total schedule 1 (Sum 1.1 to 1.7 less 1.8)		2,549
	Schedule 2		
	Note: The items in schedule 2 may be allowed on request and subject to proof being shown to the Financial Regulator		
2.1	Hidden Reserves resulting from under-estimation of assets	0	
	Total schedule 2		0
	All assets available to cover the minimum solvency margin (Sum of Schedules 1 and 2)		**2,549**
	Items shown under schedule 2 represent % of the margin	0%	
	First result		
	Note: Accounts for the last financial year to be used.		
1	Premiums or contributions before deducting premiums ceded through retrocession	2,885	
	Plus		
	1.1 Portion of 1(above) in respect of Classes 11, 12 and 13 x 50%	355	
	Less		
2	Total of premiums or contributions cancelled and taxes and levies	0	
	Less		
	2.1 Portion of 2 (above) in respect of Classes 11, 12 and 13 x 50%	0	
	Total 1 (1 + 1.1 - 2 - 2.1)		3,240
	Total 1 is then divided into:		
(i)	That portion of Total 1 which is not greater than EUR 50,000,000 x 18%	583	
(ii)	That portion of Total 1 which is greater than EUR 50,000,000 x 16%	0	
	Total 2: (sum of (i) and (ii) above)		583
4	Net incurred claims (a) as a percentage of gross incurred claims (b) =	45%	
Notes:			
(a)	*Net Incurred Claims to be taken as:* Claims arising on reinsurance acceptances less claims arising on retrocessions ceded.	890	
(b)	*Gross Incurred Claims to be taken as:* Claims arising on reinsurance acceptances	2,000	
5	Relevant percentage % (amount of % at 4 above or 50%, whichever is the greater)	50%	
	First Result = (total 2 x by relevant % at 5 above) EUR		**292**
	Second result	**EUR '000**	**EUR '000**

	Note: three or seven year reference period - please enter number of years	3	
1	Claims paid including those arising on retrocessions ceded but excluding recoveries including salvages (for past three or seven years as applicable)	1,271	
	Plus		
	1.1 Portion of 1(above) in respect of Classes 11, 12 and 13 x 50%	85	
	Plus		
2	Reserve for outstanding claims, established at the end of the reference period (current year)	4,663	
	Plus		
	2.1 Portion of 3 (above) in respect of Classes 11, 12 and 13 x 50%	689	
	Less		
3	Amount of recoveries and salvages effected for three or seven years as applicable	0	
	Less		
	3.1 Portion of 4 (above) in respect of Classes 11, 12 and 13 x 50%	0	
	Less		
4	Reserve for outstanding claims, established at the beginning of the reference period	3,415	
	Less		
	4.1 Portion of 5 (above) in respect of Classes 11, 12 and 13 x 50%	486	
5	Cost of claims during the reference period (1 + 1.1 + 2 + 2.1- 3 - 3.1 - 4 - 4.1)		2,807
6	Annual average = 1/3 or 1/7 of (5) if writing for 36 months or 84 months, repectively	936	
The annual average under 6 above is then divided into:			
(i)	That portion of 6 above which is not greater than EUR 35,000,000 x 26%	243	
(ii)	That portion of 6 above which is greater than EUR 35,000,000 x 23%	0	
	Total 3 (sum of (i) and (ii) above)		243
8	Net incurred claims as a percentage of gross incurred claims	45%	
9	Relevant percentage (amount of % at 8 above or 50% whichever is greater)	50%	
	Second result = (total 3 x by percentage entered at 9 above) EUR		**122**
	Summary		
	First Result	292	
	Second Result	122	
	Amount of margin to be established (the higher of first and second results)		**292**
	Total of schedules 1 and 2		**2,549**
	Of which items under schedule 1 amount to	2,549	
	And items under schedule 2 amount to	0	

Signature ________________________ Date: ______________ Position: ______________
Name: ________________________
(Name and signature of a responsible officer of the undertaking)

Optional:
Signature ________________________ Date: ______________ Position: ______________
Name: ________________________

Signature ________________________ Date: ______________ Position: ______________
Name: ________________________

Signature ________________________ Date: ______________ Position: ______________
Name: ________________________

This Form will not be made available for public inspection

A non-life reinsurance undertaking whose Head Office is situated in the State must establish an adequate solvency margin in respect of its entire business. The first part of the Form, Schedules 1 and 2, is used to calculate the assets available to meet the solvency margin. The second part of the Form, the First Result and the Second Result, is used to calculate the solvency margin itself.

The summary section is used to compare the assets available with the solvency margin required in order to determine whether the undertaking meets its solvency margin requirement.

Part 1 - Schedules 1 and 2 - Calculation of Available Assets

Schedule 1 and **Schedule 2** are used to calculate the value of all assets available to cover the solvency margin. Please note that all references to share capital equally apply to the initial fund in the case of a mutual concern.

1. The solvency margin shall correspond to the assets of the undertaking, free of all foreseeable liabilities, less any intangible items, and in calculating the amount of the solvency margin the following shall be considered: -

1.1 the paid up share capital or in the case of a mutual concern the effective initial fund,

1.2 one-half of the share capital or the initial fund which is not yet paid up, once the paid-up part reaches 25 per cent of this capital or fund,

1.3 statutory and free reserves which neither correspond to underwriting liabilities nor are classified as equalisation reserves (whether voluntary or otherwise)

1.4 any carry forward of profits,

1.5 in the case of a mutual or mutual-type association with variable contributions, any claim which it has against its members by way of a call for supplementary contribution, within the financial year, up to one-half of the difference between the maximum contributions and the contributions actually called in, and subject to an over-riding limit of 50 per cent of the margin,

1.6 with the consent of the Financial Regulator, preferential share capital, subordinated loan capital, and securities of unspecified term up to a maximum of 50% of the available solvency margin or the required solvency margin (whichever is smaller), no more than 25% of which may be securities with a specified term (subject to certain criteria specified in Article 36 of Directive 2005/68/EC),

1.7 other assets to be specified.

1.8 deduct any intangible items appearing on the balance sheet which have been included in the calculation of items 1.3 - 1.7.

The sum of items 1.1 to 1.7, as reduced by 1.8 listed above, represent the Total Schedule 1.

2. Schedule 2 comprises hidden reserves resulting from under-estimation of assets.

These reserves can only be included in the calculation of assets available to cover the solvency margin provided agreement of the supervisory authority (Financial Regulator) has been received. A request by the Undertaking with supporting proof to the Financial Regulator should be made for this approval. An entry in this Schedule would be considered unusual where assets are valued at market value.

The total of Schedules 1 and 2 represents the total amount of assets available to meet the minimum solvency margin.

As a separate calculation, items under Schedule 2 must be expressed as a percentage of the Solvency Margin.

Part 2 - First Result And Second Result - Calculation of Solvency Margin

Subject to the exception below, the solvency margin shall be determined on the basis either of the annual amount of premiums or contributions, or of the average burden of claims for the preceding *three financial years*.

In the case of undertakings which essentially underwrite only one or more of the risks of credit, storm, hail, frost, the preceding *seven financial years* shall be taken as the period of reference for the average burden of claims.

Premiums or contributions in respect of the liability classes (11, 12 and 13: i.e., aircraft, ships', and general (not aircraft, ships', or motor vehicle)) listed in point A of the Annex to Directive 73/239/EEC must be increased by 50%. Similarly, the claims basis shall be calculated, using in respect of the liability classes (11, 12 and 13) listed in point A of the Annex, claims, provisions and recoveries increased by 50%. See Solvency I example below.

The amount of the solvency margin shall be equal to the higher of the following two results: -

1. First result (premium basis):

1.1 Line 1 is the aggregate of the premiums or contributions (inclusive of charges ancillary to premiums or contributions) due in respect of all reinsurance and retrocession business assumed in the last financial year for all underwriting years. This is before deducting retrocession premiums ceded.

1.2 At Line 2 deduct the total amount of premiums or contributions cancelled in the last financial year, as well as the total amount of taxes and or levies included in the premiums or contributions at line 1

1.3 The amount so obtained (**Total 1**) shall be divided into two portions, the first portion extending up to EUR 50 million, the second comprising the excess: 18% and 16% of the portions respectively shall be calculated and added together (**Total 2**)

1.4 The **First Result** shall be obtained by multiplying the sum calculated as Total 2 by the claims ratio (Line 3) as defined below existing in respect of the previous financial year. However, if this ratio is less than 50%, the multiplier (Line 4) to be used is 50%.

DEFINITION:

Claims Ratio: The ratio is calculated as the percentage of net incurred claims over gross incurred claims as follows: -

Net Incurred Claims:
Claims arising on reinsurance and retrocession business assumed, less claims arising on retrocessions ceded,

Divided by

Gross Incurred Claims:
Claims arising on reinsurance and retrocession business assumed.

Please again note that, if this ratio is less than 50%, then the figure to be used as the multiplier (to obtain the First/Second Results) is 50%

2. Second Result (Claims Basis)

This calculation should be based upon the average claims of the preceding three financial years. However, where an undertaking substantially underwrites only one or more of the risks of credit, storm, hail or frost, then the average claim burden is based on the preceding seven, not three, financial years, as follows:

2.1 Line 1 represents the aggregate amount of claims paid in respect of reinsurance and retrocession business assumed (excluding claims recoverable from retrocessionaires and salvages) in the relevant periods;

2.2 Line 2 is the amount of provisions or reserves for outstanding claims established at the end of the reference period for reinsurance and retrocession business assumed;

2.3 Line 3 is the total amount of recoveries (including salvages) effected;

2.4 Line 4 is the amount of provisions or reserves for outstanding claims established at the commencement of the reference period, for reinsurance and retrocession business assumed;

2.5 Line 5 is self explanatory;

2.6 One-third or one-seventh (of the amount at line 6) according to the period of reference shall be divided into two portions, the first extending up to EUR 35 million and the second comprising the excess: 26% and 23% of these portions respectively shall be calculated and added together. This amount represents **Total 3**;

2.7 The **Second Result** shall be obtained by multiplying the sum calculated at 2.6 (**Total 3**) by the ratio calculated at 1.4 above. Again, if this ratio is less than 50%, then a figure of 50% must be used.

The fractions applicable to the portions referred to in the fifth subparagraph of paragraph 3 and the seventh subparagraph of paragraph 4 of Directive 2005/68/EC shall each be reduced to a third in the case of reinsurance of health insurance practised on a similar technical basis to that of life assurance, if:

(a) the premiums paid are calculated on the basis of sickness tables according to the mathematical method applied in insurance;

(b) a provision is set up for increasing age;

(c) an additional premium is collected in order to set up a safety margin of an appropriate amount;

(d) the insurance undertaking may cancel the contract before the end of the third year of insurance at the latest;

(e) the contract provides for the possibility of increasing premiums or reducing payments even for current contracts.

SUMMARY

The solvency margin to be established is the greater of the First Result and the Second Result.

The assets available to meet this solvency margin are the totals of Schedules 1 and 2.

A comparison of these results is made to test whether the undertaking meets its solvency margin requirements.

PREMIUM BASIS (Solvency I)

			€000
Gross Premiums - uplifted:			
Total Gross Premiums		110,000	
Liability Gross Premiums	50,000		
(+) One half of liability Gross Premiums		25,000	135,000
Portion less or equal to EUR 50 million	50,000	x 18%	9,000
(+) Portion greater than EUR 50 million	85,000	x 16%	13,600
			22,600
Net Incurred Claims as a percentage of Gross Incurred Claims (minimum 50%)		x	70%
Solvency Margin Required on Premium Basis			15,820

CLAIMS BASIS (Solvency I)

			€000
Claims paid (2002-2004 period) - uplifted:			
2002 Return (Total Claims paid)		70,000	
(Claims paid re Liability)	31,500		
One half of claims paid re Liability		15,750	
2003 Return (Total Claims paid)		75,000	
(Claims paid re Liability)	33,750		
One half of claims paid re Liability		16,875	
2004 Return (Total Claims paid)		80,000	
(Claims paid re Liability)	36,000		
One half of claims paid re Liability		18,000	275,625
(+) Closing claims provision (2004 Return) - uplifted:			
Total Closing claims provision		50,000	
Closing claims provision re Liability	22,500		
One half of closing claims provision re Liability		11,250	61,250
(-) Opening claims provision (2002 Return) - uplifted			
Total Opening claims provision		5,000	
Opening claims provision re Liability	2,250		
One half of opening claims provision re Liability		1,125	6,125
Cost of claims (2002-2004 period)			330,750
Annual Average (2002-2004= 3 years) =	330,750	/3	110,250
Portion less or equal to EUR 35 million	35,000	x 26%	9,100
Portion greater than EUR 35 million	75,250	x 23%	17,308
			26,408
Net Incurred Claims as a percentage of Gross Incurred Claims (minimum 50%)		x	70%
Solvency Margin Required on Claims Basis			18,485

SOLVENCY MARGIN REQUIRED	**18,485**

APPENDIX 12

Frequently Asked Questions –
Transitional Requirements for Non-Life Reinsurance Undertakings

1. Introduction

Q. Will there be a separate regulatory environment for captive reinsurance undertakings ('captives')?

A. Notwithstanding that captives will still be required to comply with the minimum standards set out in the EU Reinsurance Directive ('Directive'), there will almost certainly be differences in the levels of compliance required for some parameters where the reinsurance undertaking is a captive. It is worth noting that the current work being undertaken by the Captive Working Group is expected to address issues of this nature.

Q. Will collateral be abolished and how will this be enforced?

A. The Financial Regulator cannot force a commercially negotiated collateral arrangement to be reversed, nor can it direct that collateral arrangements cannot form part of a reinsurance contract, when it has been agreed by all commercial parties. Article 32 of the EU Reinsurance Directive states that a Member State cannot introduce (or retain) a regulatory system whereby collateral is required (to cover technical provisions).

1.1 Scope

Q. When will a sample 'Reinsurance Transitional Compliance Submission' issue?

A. It is not intended to issue sample submissions.

The Financial Regulator will expect a statement confirming that as at 31st December, 2005 (or if 31st December is not the reinsurance undertaking's year end, the nearest year end) that the undertaking was compliant, or otherwise, with the following Articles of the Reinsurance Directive:

Article 32 – Establishment of technical provisions

Article 33 – Equalisation reserves

Article 34 – Assets covering technical provisions

Article 36 – Available solvency margin – eligible items

Article 37 – Required solvency margin for non-life reinsurance activities

2. Transitional Requirements

Q. Could the Financial Regulator confirm the deadlines for technical provisions, equalisation reserves, assets covering technical provisions and solvency margin?

A. The guidance paper has been amended to show specific deadlines.

2.1.1 Statement of Actuarial Opinion (SAO)

Q. Do captives have to provide a SAO?

A. Yes, unless there is no potential for third party claimants or beneficiaries.

Q. Must the actuary hold a practising certificate issued by the Society of Actuaries in Ireland?

A. Yes. This is an operational requirement of the Society.

Q. What will be the format of the SAO?

A. The Financial Regulator is currently in consultation with the Society of Actuaries in Ireland regarding the format of the SAO. It will most likely reflect the format to the current non-life SAO, modified to cover the unique features of reinsurance and life aspects (where applicable).

2.1.2 Provisions for claims outstanding

Q. What is IBNER?

A. Incurred But Not Reported (IBNR) claims are claims arising from events which have occurred but have not been reported as at balance date. Incurred But Not Enough Reported (IBNER) claims are claims arising from events

which have occurred and have been reported as at balance date, but the amount reported may be understated and/or are likely to develop in an adverse manner. This development may be the result of additional information specific to a claim, or more generally social inflation or a changing legal environment.

2.1.4 Gross/Net Technical Provisions, Retrocession

Q. Will the Financial Regulator issue criteria on the suitability of retrocession programmes?

A. Due to the heterogeneous nature of reinsurance, the Financial Regulator will consider each and every company's retrocession programme on its own merits (see Appendix 3).

The programme will be considered in its entirety, including:

- Risk profile of reinsurer
- Extent of programme
- Terms and Conditions
- Security profile
- Diversification across the programme

Q. Is retrocession to the parent company considered appropriate?

A. Subject to the issues considered above, the Financial Regulator will examine the appropriateness (or otherwise) of any retrocession to a parent company. When considering the programme, as well as the items mentioned above, the Financial Regulator will examine if any concentration risk issues arise, and if so, then whether and to what extent they affect the programme.

It should be noted that this may be one of the situations in which some or all of the retrocessionaires' share of technical provisions may not be considered admissible for covering the technical provisions.

2.2 Equalisation Reserves

Q. Will there be classes other than credit subject to equalisation reserves?

A. The Financial Regulator does not intend to require equalisation reserves for classes other than credit reinsurance.

It should be noted, however, that Article 33 provides for such a requirement to be made for any class at any time.

Q. In what situations must equalisation reserves be maintained?

A. Equalisation reserves are compulsory for credit reinsurance under Article 33 if the minimum threshold of business (defined in Article 33) is exceeded.

Q. Is it possible to change the equalisation reserving method?

A. Any of the four methods (in Appendix 4 of the guidance paper) may be used. Note that the Financial Regulator would expect to be formally notified if a company decided to change methodology, along with an outline of the reasoning supporting the decision. The Financial Regulator may require that subsequent reporting includes a separate reserving calculation using the 'old' method (for comparison purposes against the 'new').

2.3 Assets covering technical provisions

Q. In the context of the prudent person approach, please provide further clarification regarding the admissibility and necessary diversification of assets.

A. As stated in the guidance paper, it is the responsibility of the Board of Directors ('Board'), having considered the nature of the risks underwritten, to determine the structure of the reinsurance undertaking's asset mix.
These decisions must be made within the guidelines set out – the process is expected to be that the Board decides its strategy, and then submits the strategy to the Financial Regulator, along with a statement supporting its prudent nature.

Q. How will Funds Withheld assets be treated?

A. There will be some more specific guidance over and above that already in the guidance paper issued on Funds Withheld in the near future. This guidance will focus on the legal enforceability of rights of "offset" in the cedent's jurisdiction.

Q. Please clarify the position regarding admissibility of reinsurance recoveries.

A. Regarding debtors, whilst the Board may well be in a very good position to judge recoverability, it is the opinion of the Financial Regulator that, certainly in the case of reinsurance recoverables (and arguably in the case of other debtors), if an account issued for any quarter is not settled by the time the account for the following quarter is issued, then (if the account is not being disputed) there is clearly something amiss with the settlement process.

Therefore, any debtor aged over 90 days will not be admitted as an asset covering technical provisions (see Appendix 3 which also outlines the situations in which disputed recoverables may be admitted, up to 180 days).

Q. Please clarify the provision in the Directive regarding assets not admitted to trading on a regulated financial market

A. A new appendix has been added to clarify this point (Appendix 9).

2.3.3.1 Inter-company loans

Please note that the guidance paper has been amended to provide additional clarification to the Financial Regulator's requirements.

Q. What are "certain limited circumstances"?

A. In order to allow inter-company loans or liquidity and/or 'sweeping' facilities to qualify as admissible assets covering technical provisions, they must be legally ring-fenced to cater for possible insolvency or other similar 'trigger' events, so that if such an event occurs, **all** monies are immediately repayable to the reinsurance undertaking.

Note that if assets of this type will not be required as admissible assets for technical provision cover, then whilst prior approval must still be obtained from the Financial Regulator, the asset(s) would not have to be ring-fenced.

Q. What is the procedure for obtaining approval?

A. For approval of inter-company loans intended to be used to cover technical provisions, the reinsurance undertaking will need to provide the Financial Regulator with evidence that the assets will be legally ring-fenced and that the level of the loan(s) is appropriate to the undertaking's overall asset mix and consistent with its stated asset strategy.

For approval of inter-company loans not intended to be used to cover technical provisions, the application should contain a statement confirming that the loan is being made from free assets (assets exceeding both 100% of required solvency margin cover and the level of technical provisions). The application should include solvency margin calculations and extracts from the financial statements, showing both the current position, and then the (proposed) position showing the effect of the loan.

Note that in the case of a 'sweeping' arrangement, the Financial Regulator will approve the arrangement, and not every single transaction. Reinsurance undertakings will require prior approval of changes to previously agreed arrangements.

Q. Please define 'inter-company'.

A. Article 2, 1.(i), (j), (k), (l), and (n) of the Directive form a comprehensive (but non-exhaustive) list of criteria the Financial Regulator would consider to render a relationship 'inter-company' – note that the substance of a relationship (and/or transaction) will be considered in addition to its legal form.

2.4 Required solvency margin for non-life reinsurance activities

Q. Will there be a requirement to maintain a Solvency Ratio similar to that required by non-life insurance undertakings?

A. No.

Q. Will the admissibility of a reinsurance undertaking's retrocession programme be capped at 50%?

A. There are two aspects to this question, firstly the degree to which the retrocession programme will impact the solvency requirements and, secondly, the degree to which the retrocession can be used to cover technical reserves.

Regarding the retrocession reduction factor used for calculation of the solvency margin requirement, it should be noted that 50% is the maximum permissible under the Directive.

However, all the retrocessionaires' share of technical provisions may be used to cover the reinsurance undertaking's technical provisions, subject to the suitability of the retrocession programme.

The Financial Regulator considers that the information in Appendix 3 - Guidance on the Reinsurance Cover of Primary Insurers and the Security of their Reinsurers – is sufficient to enable the Board to reach a decision as to the suitability of their retrocession programme.

There appears to be some concern that reinsurance between companies in the same industrial group (from one captive to another) will lead to the factor being partially or wholly decreased. This will only be the case if, after considering the entire retrocession programme (including use of criteria described in Appendix 3), the Financial Regulator considered that part or all of the programme was unsuitable and therefore not meriting the relevant reduction factor. This consideration will include not only the financial strength of the retrocessionnaire, but also the consider in which countries the

industrial group operates and whether their risk management process and conduct of business is consistent across all jurisdictions.

Q. Will the Financial Regulator require reinsurance undertakings to hold 150% of the minimum solvency requirement as is required of non-life insurance undertakings?

A. There will be no requirement for any reinsurance undertaking to maintain solvency margin at 150%, as 100% is deemed to be compliance.

This is to provide maximum flexibility for reinsurance undertakings in Ireland to determine their solvency margin cover, whilst maintaining the standard as set out in the Directive.

However, The Boards of Directors of reinsurance undertakings must understand the ramifications, as set out in 2.4.3.2. of the paper, if the available solvency of the undertaking falls below 100% of the required solvency. It is for the Boards of Directors to establish a level of capitalisation above the required solvency that they believe is sufficient in the circumstances.

Q. As it is often difficult to separate a multi-line liability programme into its discrete components, would the Financial Regulator accept an estimate accompanied by supporting reasoned argument, so that the 50% loading for liability business may be best calculated?

A. The Financial Regulator is aware of this difficulty. As long as the methodology is verifiable and agreed, this would be an acceptable approach.

2.4.1 Required Solvency Margin

Q. Can the €3 million (€1 million for captives) minimum guarantee fund comprise paid-up share capital, capital contribution and contributed surplus?

A. Yes. It should be noted, however, that a minimum paid-up share capital of €635,000 must be maintained **at all times**. For companies that do not have their share capital denominated in euro, they would be advised to remain

vigilant that the equivalent in euro of their paid-up share capital does not fall below the €635,000 level, as this is a condition of authorisation.

2.4.2. Definition of Captive Reinsurance Undertaking

Q. Please distinguish between a 'captive' and a 'pure captive'.

A. The term 'pure captive' should not be coined in future - either a company is a captive reinsurance undertaking ('captive') or it is not.

The Directive has decreed that if a reinsurance undertaking is owned by an insurance undertaking, reinsurance undertaking, or group of insurance (or reinsurance) undertakings, then it **cannot** be defined as a captive.

Q. Please clarify the Financial Regulator's definition of "third party" business.

A. Regarding what constitutes "reinsuring third parties", if **both** the original policyholder and the beneficiary of the policy are outside the group, then the risk is third party and therefore the reinsurance undertaking cannot be defined as a captive.

This should not be confused with situations where:

- the cedent insurer is outside the group, but the original policyholder is within the group (typically in a fronting arrangement), or
- the original policyholder is within the group, but the beneficiary is outside the group (e.g. public liability)

Note that the Financial Regulator will consider the substance of a series of transactions, including fronting insurance and/or reinsurance, in addition to their legal form when determining whether a reinsurance arrangement is third party.

Regarding General Manager requirement queries, the Financial Regulator can confirm that if the reinsurance undertaking is not a captive, or can no longer be defined as such, then a natural person must be employed as General Manager – please refer to Corporate Governance paper for further guidance.

Also, €3 million is the Minimum Guarantee Fund required if the undertaking is not a captive.

2.4.3. Notification Requirements

Q. There were many queries, mostly again regarding 'solvency margin cover - 100% or 150%?', but also concerning quarterly reporting requirements.

A. As stated above and in the guidance paper, 100% of solvency margin cover is deemed to be compliance.

It is the responsibility of the Financial Regulator to monitor whether any reinsurance undertaking has less than 100% of cover. Based on experience in the direct insurance sector the Financial Regulator has decided that if the solvency margin cover falls below 150% then the reinsurance undertaking will be required to file more frequent returns.

There are two distinct situations where a reinsurance undertaking may find itself below the minimum 100% of solvency cover during the transition period:

Firstly, if upon review of its compliance to the requirements the reinsurance undertaking finds itself non-compliant, it will be required to submit a "Full Compliance Timeline" before close of business on 29 September 2006, detailing its milestone dates, which in this instance would be injections of capital. Please note that anticipated profits will only be considered appropriate items to be included as increases in capital if they materialise in the transition period. Therefore, as part of the plan there must be contingency arrangements in place for alternative provision of additional capital, if the anticipated profits do not materialise.

Secondly, if upon review of its compliance to the requirements the reinsurance undertaking finds itself compliant, it will certify this to the Financial Regulator. However, if subsequent to that date, but prior to the end of the transitional period, the reinsurance undertaking finds that it no longer meets the minimum solvency requirements, it needs to inform the Financial

Regulator immediately and submit a "Full Compliance Timeline" within 14 days.

As stated in the guidance paper, the only way a reinsurance undertaking that does not hold 100% of solvency margin cover can continue reinsurance business is when it has submitted a "Full Compliance Timeline", either, before the (29 September) deadline, or subsequently (but still within the transition period), within 14 days of determining its solvency is below 100%. The "Full Compliance Timeline" must be agreed by the Financial Regulator, and be adhered to by the undertaking.

Q. Please provide examples of the interaction between solvency margin cover and the Minimum Guarantee Fund (MGF).

A. To clarify:
Firstly, the required solvency margin should be calculated.

However, the MGF requirement of €3 million (€1 million for a captive) is still to be considered – please examine the two examples below:

Example 1 – A captive reinsurance undertaking:

	€
Calculated Required Solvency Margin:	500,000
Surplus Assets:	900,000

Although 150% of cover (€750,000) is exceeded, this undertaking holds €100,000 less than the required MGF of €1 million. A compliance plan would be required in this case outlining how and when the undertaking proposes to bring the level of their cover to €1 million.

Example 2 – A third party reinsurance undertaking:

	€
Calculated Required Solvency Margin:	2,800,000
Surplus Assets:	4,000,000

In this case, the MGF of €3 million is required, being greater than the calculated solvency margin. Although this is covered, this undertaking holds €200,000 less than 150% of cover – please note that this is €4,200,000 (€2,800,000 x 150%) and not €4,500,000 (€3,000,000 x 150%). So, whilst not being required to submit a compliance plan (where €3,000,000 is the required compliance level), this undertaking would be subject to quarterly reporting until 150% of cover is maintained.