INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS

SUMMARY OF IAIS POSITIONS[I] ON THE VALUATION OF TECHNICAL PROVISIONS

OCTOBER 2007

[I] The positions of the IAIS were developed in :

- IAIS *Issues arising as a result of the IASB's Insurance Contracts project- Phase II: initial IAIS observations* (May 2005) - the First Liabilities paper
- IAIS *Towards a common structure and common standards for the assessment of insurer solvency: Cornerstones for the formulation of regulatory financial requirements* (Oct 2005) - the Cornerstones paper
- IAIS *Common structure for the assessment of insurer solvency* (Feb 2007) - the Structure paper
- IAIS *Issues arising as a result of the IASB's Insurance Contracts project- Phase II* (May 2006) - the Second Liabilities paper.

This document, prepared by the Solvency and Actuarial Issues Subcommittee and Insurance Contracts Subcommittee, includes positions set out in previous IAIS papers which have been finalised following consultation with IAIS members and observers.

This publication is available on the IAIS website (www.iaisweb.org).

Preamble

This Position paper presents a summary of IAIS positions, previously articulated in earlier working papers of the IAIS[II], in relation to the valuation of technical provisions.

The IAIS acknowledges that the process for establishing international financial reporting standards for insurance contracts is progressing in parallel with the IAIS project to develop international standards in relation to solvency assessment. In particular, the IAIS recognises the role of the International Accounting Standards Board (IASB) in formulating standards for general purpose financial reporting, specifically on the valuation of assets and the valuation of insurance liabilities for that purpose. It is not the intention of this paper to pre-empt or presume the outcomes of the IASB processes.

Rather, this paper reflects key concepts as already established by the IAIS in this arena, and presents them in a consolidated easy summary document. This Position paper aims to facilitate the clear communication of IAIS policy in this regard.

The IAIS believes that it would be preferable if the methodologies for calculating and analysing items in public financial reports are able to be used for, or are substantially consistent with, the methodologies used for regulatory reporting purposes, with as few changes as possible required to satisfy prudential reporting requirements. To the extent that there are differences, the IAIS will need to consider carefully how to address these in its future work on solvency assessment.

Therefore the release of this Position paper should not be taken to imply that there will be no further development of IAIS positions in this regard. This Position paper forms a useful internal summary, and will inform the development of future IAIS standards and guidance on solvency assessment – in particular the expected standards on the valuation of technical provisions, and capital requirements and resources.

[II] The previous working papers of the IAIS referred to in the development of this Position paper are :

- IAIS *Issues arising as a result of the IASB's Insurance Contracts project- Phase II: initial IAIS observations* (May 2005) - the First Liabilities paper
- IAIS *Towards a common structure and common standards for the assessment of insurer solvency: Cornerstones for the formulation of regulatory financial requirements* (Oct 2005) - the Cornerstones paper
- IAIS *Common structure for the assessment of insurer solvency* (Feb 2007) - the Structure paper
- IAIS *Issues arising as a result of the IASB's Insurance Contracts project- Phase II* (May 2006) - the Second Liabilities paper.

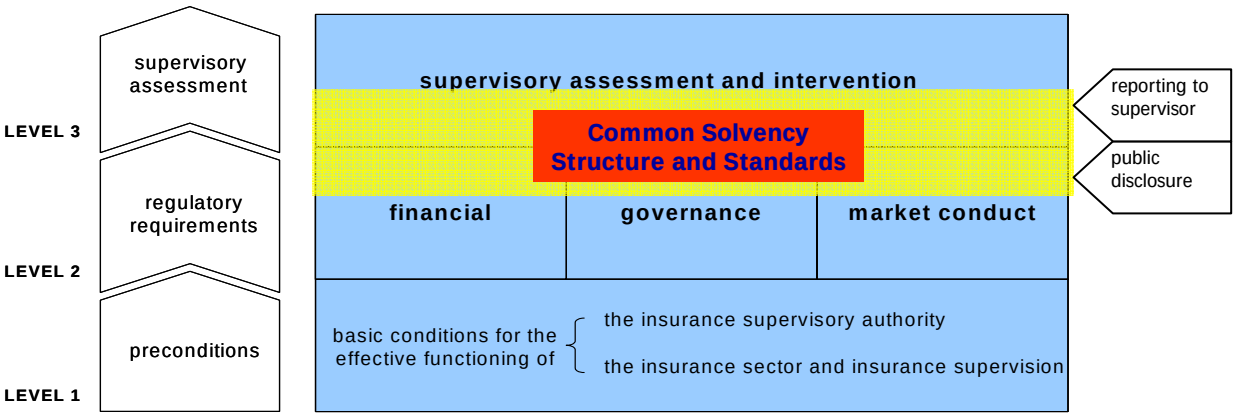
Summary of IAIS positions on the valuation of technical provisions

1. Introduction

1. This paper constitutes a consolidation of previously articulated IAIS positions in relation to the valuation of technical provisions.

2. It is expected that the IAIS will, in due course, promulgate a standard and guidance on the valuation of assets and technical provisions for solvency purposes, based on these positions. This standard and guidance will form part of a coherent set of advice on insurer solvency assessment within the context of the IAIS Framework for Insurance Supervision (refer figure 1).

Figure 1: The common solvency structure and standards and the role of disclosure within the Framework for insurance supervision



3. The IAIS recognises the need to assess the overall financial position of an insurer based on the consistent measurement of assets and liabilities and explicit identification and consistent measurement of risks and their potential impact on all components of the balance sheet. A total balance sheet approach[1] should be used to recognise the interdependence between assets, liabilities, capital requirements and capital resources and to ensure that risks are fully and appropriately recognised.

4. Consistent with the philosophy of a total balance sheet approach, the inherent interdependencies between the components of the balance sheet and their respective valuations must be recognised. This position paper complements two other important IAIS papers on solvency assessment – the IAIS Guidance paper on the structure of regulatory capital requirements and the IAIS Guidance paper on enterprise risk management for capital adequacy and solvency purposes. Development of requirements within a supervisory regime consistent with these papers will assist in establishing and maintaining a well regulated international insurance industry and facilitate convergence to an internationally accepted standard of solvency assessment.

Development of International Financial Reporting Standards on insurance contracts

5. The IAIS has articulated an overriding principle[2] that it believes that it would be most desirable if the methodologies for calculating items in general purpose financial reports are able to be used for, or are substantially consistent with, the methodologies used for regulatory reporting purposes. However, although it is clearly preferable for the insurance contracts measurement model for regulatory reporting to be consistent with that used for general purpose financial reporting, this may not be possible or appropriate in all cases, considering the potentially differing purposes of such reports. To the extent that there are any differences between regulatory reporting requirements and general purpose financial reporting, the IAIS believes it is essential that these differences are publicly explained and readily reconcilable.

2. Application and implementation

6. Based on previously articulated IAIS positions, this paper aims to set out key principles for the valuation of technical provisions that the IAIS would expect a well regulated insurer to follow.

2.1 General Requirements

7. The valuation of technical provisions should be undertaken on a market-consistent basis[III].

2.2 Valuation of Technical Provisions

8. Technical provisions represent the amount that an insurer requires to fulfil its insurance obligations and settle all expected commitments to policyholders and other beneficiaries arising over the lifetime of the insurer's portfolio of insurance contracts[3].

9. Technical provisions should be valued in a prudent, reliable and objective manner to allow comparison across insurers worldwide[4].

10. Similar insurance obligations with similar risk profiles should result in the determination of similar values for technical provisions[5]. Therefore, the valuation should reflect the risk characteristics of the portfolio rather than the characteristics of the specific insurer holding the portfolio[6].

11. However, for particular assumptions or in certain circumstances (particularly, for example, with regard to underwriting, claims handling and expenses), it may be appropriate to use assumptions that reflect aspects of the insurer's specific business model and practices where they can be sufficiently substantiated[7].

12. An exit model is preferable for the valuation of technical provisions, noting that the value of technical provisions includes a risk margin (refer paragraph 21) and that any profit

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[III] While the IAIS has not developed an explicit definition of the term market-consistent within the context of a basis for valuation, the Structure paper (paragraphs 41 and 42) refer to a market-consistent valuation as an economic valuation that is consistent with the assessment by market participants of value and risk or the principles, methodologies and parameters that market participants expect to be used. In the more specific context of the technical provisions, a market-consistent valuation approach is discussed in paragraphs 15-18.

on inception should be recognised only where the valuation has provided for an appropriate and sufficiently reliable risk margin[8].

13. The economic valuation of insurance obligations is conceptually based on the settlement notion. Insurance contracts are written in the expectation that the insurance obligation will be settled with the claimant or beneficiary, and the vast majority are discharged by the insurer through settlement rather than through transfer. Any transfer would need to be made to an entity capable of accepting the transfer which, in the case of a regulated industry like insurance, implies that the transferee would also need to be regulated and capable of settling the obligation to the claimant/beneficiary. Accordingly, any transfer notion would be strongly influenced by the settlement obligations that the transferee would undertake[9].

14. The credit standing of an insurer should not be considered[10] in the valuation of its insurance liabilities.

Market-consistent valuation approach

15. In line with a market-consistent valuation approach, observable inputs from deep and liquid markets should be used to the fullest extent possible[11] in the valuation of technical provisions.

16. In the absence of deep liquid secondary markets that provide sufficiently robust values of insurance obligations, elements of insurance obligations should be valued using cash flow models or other methods that reflect the settlement of the insurance obligations and accord with principles, methodologies and parameters that the market would expect to be used. Such valuations could be considered to be "market-consistent"[12].

17. Such valuations provide consistency with the other elements of the balance sheet for which reliable market values are available and with the assessments made by market participants of value and risk[13].

18. In a market-consistent valuation approach, technical provisions should be determined based on assumptions about the level of diversification of the relevant risk factors which are consistent with those expected to be made by market participants in assessing the value of the portfolio[14]. In certain circumstances, it may be appropriate to use assumptions that reflect aspects of the insurer's specific business model and practices where they can be sufficiently substantiated[15].

Components of the Technical Provisions

19. Technical provisions comprise two components[16] – the current estimate of the costs of meeting the insurance obligations (Current Estimate) and a margin for risk (Margin over Current Estimate[17] or MOCE).

a. Given the intrinsic uncertainty of insurance obligations, the technical provisions need to include a risk margin over the current estimate of the cost of meeting the policy obligations[18].

b. The risk reflected in the risk margin in technical provisions relates to all liability cash flows and thus to the full time horizon of the insurance contracts underlying these technical provisions[19].

20. Each component of the technical provision – the current estimate and the MOCE - should generally be explicitly determined[20]. Explicit determination of the components of the technical provisions supports the objectives of transparency and comparability and also should facilitate convergence[21].

21. The current estimate should be determined as an unbiased estimate of the future cash flows that are expected to arise from each policy or contract, reflecting the time value of

money. That is, the current estimate is the expected present value of probability weighted cash flows using current assumptions[22].

22. In taking into account the time value of money, a discount rate determined by reference to the relevant risk-free interest rates on the financial markets should be used, except where benefits are dependent on the performance of the underlying assets, and that discounting should utilise the entire yield curve, rather than an average rate[23].

23. The MOCE should be determined using market-consistent principles, methodologies and parameters, such that the technical provisions reflect the value that an insurer would be expected to require in order to take over the obligations[24].

24. Irrespective of the particular methodology used, an appropriate method for the determination of the MOCE should reflect the inherent uncertainty in the expected future cash flows and would be expected to exhibit the following characteristics[25].

a. The less that is known about the current estimate and its trend; the higher should be the risk margins

b. Risks with low frequency and high severity should have higher risk margins than risks with high frequency and low severity

c. For similar risks, contracts that persist over a longer timeframe should have higher risk margins than those of shorter duration

d. Risks with a wide probability distribution should have higher risk margins than those risks with a narrower distribution

e. To the extent that emerging experience reduces uncertainty, risk margins should decrease, and vice versa.

Other considerations in determining the Technical Provisions

25. In the determination of technical provisions, any valuation or modelling assumptions should be based on current data and the most credible current assumptions.

26. Reconsideration of data and assumptions should occur every time the technical provisions are determined and assessed, with revisions made as appropriate to ensure data and assumptions remain current [26].

27. The determination of the technical provisions should take into account, on the basis of credible current assumptions, any embedded options or guarantees for the policyholder or the insurer, including the possibility of policy lapse and the payment of a surrender value[27].

28. There is no requirement for the application of a surrender value floor to the measurement of the technical provisions[28]. However, in the determination of the overall financial requirements for solvency assessment purposes, a form of surrender value minimum may be appropriate.

29. Amounts relating to future policyholder distributions in respect of both the guaranteed and discretionary elements of participating contracts should be treated as liabilities based upon the expected future cash flows[IV]. To treat them as equity would misrepresent the financial position of the company[29]. In assessing an insurer's capital adequacy, insurance supervisors may take into account the possibility that future benefits may be reduced if future

[IV] The IAIS Second Liabilities paper sets out discussion on the nature of discretionary elements of participating contracts. The IAIS also notes the wide variety of participating contracts and legal frameworks for those contracts in member countries and intends to do more detailed work on the resulting treatment of discretionary elements going forward. This document is not intended to pre-empt future work in this area.

performance is unfavourable. However, this does not mean that the amount in respect of these future payments is somehow more in the nature of equity[30].

30. It is preferable that acquisition costs are fully expensed at inception with appropriate allowance then made in the prospective measurement of the contractual obligations for future premiums and other sources of revenue from which those acquisition costs are expected to be recovered[31].

Endnotes

[1] Structure element 4 in the Structure paper

[2] This overriding principle has been stated in the Second Liabilities paper, paragraph 3 and the Structure paper, paragraph 7.

[3] Refer to paragraph 56 of the Structure paper.

[4] Cornerstone V in the Cornerstones paper.

[5] The fifth highlighted principle in the Second Liabilities paper (before paragraph 50).

[6] Structure element 6 in the Structure paper.

[7] Structure element 6 in the Structure paper.

[8] Based on the fourth highlighted principle in the Second Liabilities paper (before paragraph 40).

[9] Refer to Structure paper, paragraph 44 and the Second Liabilities paper, paragraph 11.

[10] The fifteenth highlighted principle in the Second Liabilities paper (before paragraph 100).

[11] The second highlighted principle in the Second Liabilities paper (before paragraph 15).

[12] Structure element 5 in the Structure paper.

[13] Structure element 5 in the Structure paper.

[14] Structure element 9 in the Structure paper.

[15] Refer to paragraph 61 of the Structure paper.

[16] Based on paragraph 62 in the Structure paper.

[17] The terminology MOCE (margin over current estimate) derives from the Second Liabilities paper.

[18] Structure element 7 in the Structure paper.

[19] Structure element 11 in the Structure paper.

[20] Derived from cornerstones V and VI in the Cornerstones paper.

[21] Refer to paragraph 54 of the Structure paper.

[22] Paragraphs 35 and 36 of the Second Liabilities paper.

[23] Cornerstone VI in the Cornerstones paper and paragraph 47 of the First Liabilities paper.

[24] Structure element 7 in the Structure paper and paragraph 57 of the Second Liabilities paper.

[25] Paragraph 59 of the Second Liabilities paper.

[26] Refer to paragraph 53 in the Structure paper.

[27] The ninth highlighted principle in the Second Liabilities paper (before paragraph 74).

[28] The ninth highlighted principle in the Second Liabilities paper (before paragraph 74).

[29] The thirteenth highlighted principle in the Second Liabilities paper (before paragraph 90).

[30] Refer to paragraph 96 in the Second Liabilities paper.

[31] The twelfth highlighted principle in the Second Liabilities paper (before paragraph 87).