INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS

TOWARDS A COMMON STRUCTURE AND COMMON STANDARDS FOR THE ASSESSMENT OF INSURER SOLVENCY:

CORNERSTONES FOR THE FORMULATION OF REGULATORY FINANCIAL REQUIREMENTS

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Towards a Common Structure and Common Standards for the Assessment of Insurer Solvency: Cornerstones for the Formulation of Regulatory Financial Requirements

Contents

1. Introduction

1. In October 2005, the IAIS approved a policy paper entitled *A new framework for insurance supervision: Towards a common structure and common standards for the assessment of insurer solvency* ('Framework paper'). This Framework paper describes the rationale and the contents of a framework for insurance supervision.

2. The IAIS presents in this associated paper (Cornerstones paper) eight cornerstones for working towards a common structure and common standards for the assessment of insurer solvency, as indicated in the Framework paper.

3. Insurer solvency takes a central position in risk management by insurers and in insurance supervision. A common structure and common standards for the assessment of insurer solvency support the IAIS's first objective of improving supervision of the insurance industry for the benefit and protection of policyholders by:

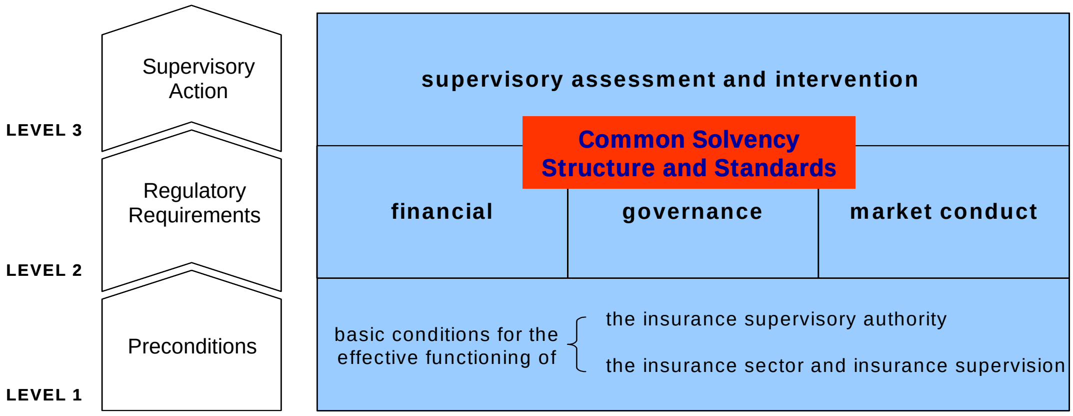
- assisting both industry and the insurance supervisory community in the determination and assessment of the risk and solvency position of insurers, reinsurers and financial groups
- serving to enhance the transparency and comparability of insurers worldwide, to the benefit of consumers, the industry, investors and other interested parties
- strengthening insurance market stability
- supporting a level playing field
- offering further opportunities for international cooperation
- reducing opportunities for unwanted regulatory arbitrage
- increasing public confidence in the insurance sector
- enabling a more effective use of resources by industry and the supervisory community.

4. A common structure and standards for the assessment of insurer solvency will support transparency and convergence. A first step is to improve substantially the transparency of the existing solvency regimes and of the financial condition of individual insurers. A next step is to work towards convergence of the solvency regimes. It may be expected that improved

transparency and disclosure itself will provide impetus and act as a catalyst for convergence of regulatory regimes and supervisory assessment.

5. The common structure and common standards for the assessment of insurer solvency will be embedded in, and be part of, the overarching framework for insurance supervision, as outlined in the Framework paper, and illustrated as follows:

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



6. This Cornerstones paper provides further direction to the development of a common structure and common standards for the assessment of insurer solvency. It sketches the contours of the common structure and standards, and highlights some of the critical cornerstones thereof. The cornerstones presented in this paper address the formulation of regulatory requirements of a financial nature, in the left hand ´block´ of the middle row in Figure 1.

7. It is envisaged that a draft of a separate further ´roadmap paper´, containing a proposal for a work plan and time path for the formulation of the common structure and common standards for the assessment of insurer solvency, will be circulated later this year for comment. The roadmap paper will also address the broader range of issues encompassed in the other elements of the Framework.

8. The IAIS wishes to emphasise that the IAIS will not prescribe a specific solvency regime, to be applied compulsorily by the jurisdictions of the IAIS members. The common structure and common standards are intended, however, to form the major benchmark for jurisdictions for their own solvency regimes and supervision. It is envisaged that the IAIS papers will lead to an enhancement of, and to improved transparency and convergence of, the assessment of insurer solvency worldwide. Many current solvency regimes will not comply fully with the benchmark set by these papers, but it is envisaged that the solvency regime that applies in a jurisdiction will over time be developed towards conformity with the IAIS papers.

2. Considerations

9. The IAIS has a wide membership covering most jurisdictions of the world. Some insurance lines of business are offered on a global basis and some insurance groups serve a global client base. Other insurance products have a more local flavour, reflecting local markets and conditions, and are offered by more locally operating insurers. Even so, insurance products, markets and companies have many characteristics in common,

enabling, and indeed calling for a common, globally acceptable and applicable structure and common standards for the assessment of insurer solvency. The common structure and standards must, however, be sufficiently flexible to take into account both the local and the global aspects of insurance, and allow for developments in best practices, products and markets.

10. In developing a common structure and common standards for the assessment of insurer solvency, the IAIS has taken note, and will continue to take note, of relevant work on insurer solvency undertaken in a number of jurisdictions. The IAIS will also closely follow and carefully consider developments within global fora such as the Bank for International Settlements (BIS); the Basel Committee on Banking Supervision (BCBS); the International Accounting Standards Board (IASB); the International Actuarial Association (IAA); the International Federation of Accountants (IFAC); the International Monetary Fund (IMF); the International Organisation of Securities Commissions (IOSCO); the Organisation for Economic Co-operation and Development (OECD); and the World Bank.

11. A considerable number of large financial groups are active across various financial sectors, and supervisors are now focussing more on specific types of risk, some of which are common to the different financial sectors in which they occur, whereas others are more sector-specific. This means that:

- particular attention needs to be paid to risk-based supervisory developments in other financial sectors such as 'Basel II'
- the proposed common structure and standards for the assessment of insurer solvency need to reflect the particular nature of insurance, and the specific risks associated with it.

12. In its *Principles on capital adequacy and solvency* (2002), the IAIS sets out fourteen principles for a capital adequacy and solvency regime. The IAIS *Insurance Core Principles and Methodology* (2003), in particular Principle 23, which relates to capital adequacy and solvency, provide a range of criteria which should apply to a solvency regime. The fourteen principles on capital adequacy and solvency, together with the relevant Insurance Core Principles, form the basis for the assessment of insurer solvency.

13. Building on these principles, the IAIS formalises in this paper a more precise view on a number of key elements or ´cornerstones´ for the further work on regulatory financial requirements as part of the common structure and common standards for the assessment of insurer solvency. Broader acceptance and global implementation of these cornerstones and the associated common structure and standards would lead to enhancements in many jurisdictions as they call for more precision and transparency.

14. The common structure and standards seek to improve the transparency concerning the risks that insurers face and encourage the enhancement of risk management by insurers. This general philosophy applies to all insurance markets. The diversity of markets and the wish to stimulate an ongoing improvement of risk management practices require the common structure and standards for solvency assessment to be principles-based. Even so, the desired comparability and convergence could be encouraged and demonstrated within a framework of not only qualitative but also quantitative benchmarks.

15. It should be noted that the responsibility for the assessment of risk, and the management of the financial position of an insurer, primarily rests with the Board and management of the insurer. Their duty of sound management extends beyond whatever measures of solvency are imposed by legislation and/or the supervisory authority. If a regulatory solvency regime does not provide an adequate measure of a particular risk that is

relevant to an insurer, the insurer should nevertheless address that risk through its own management.

16. Furthermore, the IAIS recognises that the development and application of sound risk management and governance practices by the insurance industry is of benefit not only to industry, but also serves the interests of consumers, supervisors and other parties. There is a degree of parallel interest for all of these parties and the common structure and standards should acknowledge and build on this, having regard to the practicality and all costs of supervision.

17. Presently, in many jurisdictions, prudential reporting and supervisory assessment of the solvency of an insurer take as their starting point the accounting principles used for public financial reporting. However, for supervisory assessment purposes, a number of adjustments, or ´prudential filters´, are usually applied to reflect the specific aims of prudential supervision. This does not suggest the development of two distinct sets of accounts, but rather an approach by which generally consistent principles are applied for both prudential and public financial reporting and appropriate prudential adjustments are made when undertaking solvency assessment for supervision purposes. The IAIS has a clear preference for as much similarity between public financial reporting and prudential reporting for solvency assessment purposes as is appropriate. The IAIS is therefore making an active contribution to Phase II of the IASB's Insurance Contracts Project[1].

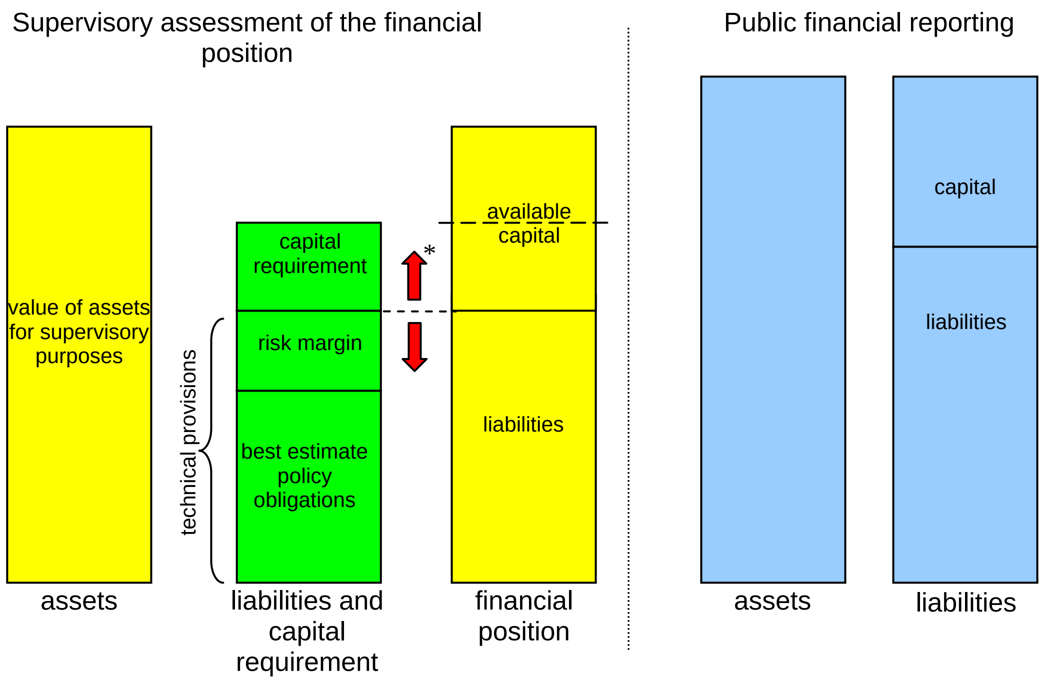
18. The cornerstones in this paper relate only to the assessment of the financial position of an insurer from the perspective of insurance supervision. They are not intended and should not be understood as reflecting or having the same meaning as public financial reporting concepts or terms. The effects of developments in Phase II of the IASB's Insurance Contracts Project will be considered in the future development of the common structure and common standards for solvency assessment. It may be appropriate in the future to amend the assessment approaches in the common structure and standards for solvency assessment to achieve appropriate correspondence between public financial reporting and solvency assessment. Even so, the IAIS has not committed itself to adopting the outcomes of Phase II for supervisory purposes.

19. Figure 2 below illustrates in a very basic schematic form the relationship between the assessment of the financial position of an insurer for supervision purposes and the public financial reporting of an insurer, and the differences between them[2]. Technical provisions for insurance supervisory purposes include some level of prudence in excess of best estimate policy obligations. The level of prudence which insurance supervisors seek in technical provisions may well differ from the level of risk margins in public financial reporting, but any such differences can be understood and interpreted correctly if the methodologies used and the information provided are similar enough. The arrows in the columns indicate that the assessment of the financial position of an insurer for supervision purposes depends on a combination of the degree of prudence in the determination of the insurer's liabilities (or technical provisions) and the required capital margin. The cornerstones do not specify how the overall level of prudence that is determined as appropriate for the solvency regime may be divided between these two elements; this issue will be addressed in the further work.

[1] The IAIS wishes to refer in particular to the IAIS comment paper of 1 June 2005 to the IASB*, Issues arising as a result of the IASB's Insurance Contracts Project – Phase II, Initial IAIS Observations*.

[2] The difference in height of the columns in Figure 2 between the supervisory assessment of the financial position and the public financial reporting illustrates that the valuations may differ to some extent. It should be noted that the valuations for public financial reporting purposes may be lower or higher than those for supervisory solvency assessment purposes, depending on the valuation principles applied and the nature of the particular adjustments made.

Figure 2: The supervisory assessment of the financial position of an insurer and the public financial reporting of an insurer



** Risk factors may lead to a financial charge in technical provisions and/or in capital. The arrows do not imply that such charges are necessarily substitutable on a one-for-one basis. The IAIS will explore this issue in further work.*

20. The determination and assessment of the financial position of an insurer, and the robustness thereof, require a coherent view of the total balance sheet of the insurer. The term insurer solvency in the cornerstones refers to the total financial position of an insurer, i.e. all means available to an insurer to meet its obligations. The term insurer solvency itself does not define the distinction between technical provisions and solvency margin requirements, or any assets or forms of capital covering these.

21. The cornerstones below refer to requirements that apply to ´the solvency regime´, that is the solvency regime that is in force in a jurisdiction. It is envisaged that the solvency regime that applies in a jurisdiction will over time be developed to conform to the common structure and standards for the assessment of insurer solvency. Such dynamics imply also a convergence of supervisory regimes and practices. The transition process will depend on the specific market structure within a jurisdiction.

22. It seems worthwhile underlining that these cornerstones are not intended to cover all aspects of solvency and solvency assessment. Their role is to act as conceptual ´guide rails´ for the further work of the IAIS on the issue of regulatory financial requirements. This work is embedded in a wider approach.

23. Insurers may be part of a wider group, e.g. an insurance group or financial conglomerate. The cornerstones presented below are relevant for the formulation of regulatory financial requirements for all insurers, irrespective of any group context. The solvency regime should, of course, consider all risks arising from an insurer being part of a wider group, and transactions with and exposures to other companies within the group, both financial and non-financial. The solvency regime should define solvency requirements for insurers in a group context, both regarding the required level and suitable constituents of solvency. A major objective of the regime should be the avoidance of double or multiple

gearing, and of unsound intra-group creation of capital. The regime should further seek to eliminate any scope for unwanted regulatory arbitrage.

24. Regulatory financial requirements need to be understood within a context of adequate risk management and control by the insurer. The solvency regime should thus require that insurers have in place adequate governance, including risk management processes and internal control mechanisms, with sound administrative, accounting and reporting procedures. Sound governance and management include periodical review of the strategies and policies, and decision making, by the appropriate governing body of the insurer with respect to the risks that the insurer assumes. In particular they would include policies on managing the solvency level of the insurer in order to anticipate the potential impact of the insurer's business strategy on its risk profile and solvency position. Risk monitoring systems must be well integrated into the organisation, and measures must be taken to ensure that risks can be measured, assessed, monitored, reported and controlled in a consistent manner.

25. Sound market conduct policies and procedures are a key part of the risk management of an insurer, and are therefore closely related to the solvency regime. Liabilities that were not anticipated may arise if an insurance contract is unclear or if the insured has not been adequately informed or advised about its nature during the sales process. There needs to be timely and correct provision of information to potential contract parties so that there is clarity and a shared understanding by the contract parties on the contents and possible consequences of the contract, including any embedded options. The solvency regime must be fully transparent on how consumer expectations are reflected in the solvency requirement.

26. The cornerstones relate to the formulation of regulatory financial requirements and analytical techniques to be applied by the insurer and supervisory authority for the assessment of the financial position of the insurer. A correct application of such techniques and a meaningful interpretation and understanding of any calculations may well require specialist knowledge and skills. This notwithstanding, public disclosure of key information assists outside parties to form a balanced view on the affairs of the insurer, and helps to instil discipline in the operating of the insurance business. The IAIS supports appropriate exchange of information between supervisors and holds the opinion that disclosure to the public of relevant, reliable and timely information is critical to the operation of a sound market and to achieving the aims of transparency, comparability and convergence[3]. Disclosure is the subject of ongoing IAIS work and is not explicitly addressed further in this paper.

3. Cornerstones for the further work on regulatory financial requirements

27. The cornerstones set out below are intended, together, to form the basis for the further work on regulatory financial requirements, and they should thus be considered in conjunction with one another. The way in which the cornerstones are presented is based on the following considerations:

- Cornerstone I emphasises the need for an insurer to meet its liabilities under all reasonably foreseeable circumstances, in the short and long-term
- Cornerstone II outlines that in order to achieve that aim there should be clarity on the main risk factors an insurer faces, their possible impact, and the way in which these risks are reflected in the regulatory financial requirements
- Cornerstone III stresses the need for explicit prudence in the regulatory financial requirements

[3] The IAIS refers also to the IAIS *Insurance Core Principles*, more particularly ICP 26, the *Guidance paper on public disclosure by insurers (*January 2002*)*, and the *Standard on disclosures concerning technical performance and risks for non-life insurers and reinsurers* (October 2004).

- Cornerstone IV emphasises that in formulating regulatory financial requirements and undertaking solvency assessment, there is a need to attach appropriate and consistent values to assets and liabilities
- Cornerstone V makes clear that a solvency regime should be specific on the determination of technical provisions
- Cornerstone VI outlines the need for a clear understanding by both the insurer and the supervisory authority of the expected cost of meeting the insurer's liabilities and the main determining factors thereof. This is a prerequisite to attaining insight into the level of prudence of the insurer's solvency position and of the technical provisions.
- Cornerstone VII indicates that there is a further need to define a number of control levels for assessing the financial condition of an insurer
- Cornerstone VIII acknowledges that the structure of the insurance markets may call for a menu of approaches for the assessment of insurer solvency.

28. Cornerstone I: the solvency regime addresses the robustness of the insurer to meet its liabilities both short-term and over a longer time span.

A prime purpose of insurance supervision and a solvency regime is the protection of the policyholders and beneficiaries. An insurer may be deemed to be solvent if it is able to fulfil its contractual obligations under all reasonably foreseeable circumstances. An insurer's assets thus need to be sufficient to cover its obligations under most circumstances: the financial position must display robustness when tested under a range of adverse assumptions. Insurance liabilities should be met even if the insurer is unable to continue in business. Insurance liabilities often span a very considerable period of time. The solvency regime should impose requirements for insurers to be resilient to possible unfavourable developments both short-term and in the medium to longer term. The regime should have due regard to possible pro-cyclical and systemic risks and their effects.

29. Cornerstone II: the solvency regime is sensitive to risk, and is explicit as to which risks, individually and in combination, lead to a regulatory financial requirement and how they are reflected in the requirement.

The insurer is faced with a range of risks. The solvency regime should address all risks of potentially material importance. Some risks may be easier to quantify than others. The solvency regime should identify which risks call for a financial requirement, and which risks are dealt with purely through governance or market conduct requirements and supervisory assessment. Different risks may be dealt with differently in the insurer's risk management or in the supervisory assessment and may call for different management or supervisory action, which may include requiring additional capital. The solvency regime should be transparent as to how each risk, individually and in combination, is reflected in the solvency requirement, including the assumptions underlying the regime. The composition of the solvency requirement should reflect the sensitivity of the financial position of the insurer to the various risks identified to the extent reasonably practical, including any risks arising from the asset-liability position, and needs to capture explicitly embedded options, guarantees and any risk transfer, e.g. through reinsurance.

30. Cornerstone III: the solvency regime is explicit on how, for each of the risks that attract a financial requirement, individually and in combination, prudence is reflected in these requirements.

The solvency regime should be specific and transparent with regard to the overall level of safety that the regime aims for. There is not necessarily a single best way to quantify the financial capacity needed to provide a particular level of prudence. For some products or markets or risks it may be possible to derive and estimate a probability distribution and determine a statistical confidence level that will give an acceptable indication of the level of prudence. In other cases, it may be more appropriate to employ an approximation by means of a set of risk charges, reflecting the uncertainty in the estimation and modelling of the underlying risks. Prescribed stress or scenario tests may be another practical means for setting prudential margins in a solvency regime.

31. Cornerstone IV: the solvency regime requires a valuation methodology which makes optimal use of and is consistent with information provided by the financial markets and generally available data on insurance technical risks.

The solvency regime should ensure transparency of the valuation method to be used for the assessment of insurer solvency, and consistency with the generally available information: the valuation should as far as possible be derived directly from this information. Consistency of valuation is a prerequisite for obtaining a meaningful insight into the asset-liability position of an insurer and an understanding of the financial position of an insurer relative to other insurers. Consistency refers to a common methodology across all insurers, and also means that the assumptions used in the valuation methods are themselves applied consistently for all assets and liabilities and certainly not contradictory. Such consistency is supported by using information provided by the financial markets and generally available data on insurance technical risks as a common basis. This does not stand in the way of using company-specific data where this may be considered more appropriate.

For assets and asset-based assumptions such as those relating to discount rates, reliable quoted market values are often available, but where these are not available values calculated according to market consistent models or methods should be used. The valuation of insurance liabilities should be prospective and based on the calculation of the net present value of all future cash flows associated with the insurance portfolio. The valuation of liability items should use generally available data on insurance technical risks as far as appropriate, in a way consistent with the valuation of the assets, and mindful of the valuation constraints imposed by the contractual and constructive obligations to policyholders.

A solvency regime should prescribe one common valuation methodology, but its application, for the assessment of a particular insurer, will take into account the specific circumstances of that insurer. Insurers must be able to demonstrate the reliability of their assumptions and substantiate their use of data, whether company-specific or of a more general nature and any consequences for the determination and assessment of their financial position.

It should be noted that this cornerstone only relates to the supervisory requirements in relation to solvency assessment and not to public financial reporting requirements. Please also see paragraphs 17-19, which refer to the relationship between the assessment of the financial position of an insurer for supervision purposes and the public financial reporting of an insurer.

32. Cornerstone V: the solvency regime includes the definition of technical provisions. Technical provisions have to be prudent, reliable, and objective and allow comparison across insurers worldwide. Technical provisions include an explicit risk margin.

The solvency regime should define and be transparent on methodologies to be followed by insurers in determining their liabilities and, in particular, their technical provisions. For supervision purposes, technical provisions are the amount set aside on the insurer's balance sheet to meet obligations arising out of insurance contracts, consistent with other components of the solvency regime. The regime should ensure that technical provisions are sufficient to cover all expected claims and expenses and some which are more adverse than expected, making use of reliable and objective methods, which allow comparison across insurers worldwide.

In particular, the regulatory financial requirements should be explicit on the level of prudence required in the determination of the technical provisions, as represented by the risk margin.

33. Cornerstone VI: the solvency regime requires the determination of a ´best estimate´ of the costs of meeting the obligations arising from the insurance portfolio, taking into account the time value of money, determined by reference to the relevant risk free interest rates on the financial markets.

It should be noted that this cornerstone does not specify a method for determining technical provisions for supervision purposes and does not concern requirements for public financial reporting.

The regime should require insurers to provide evidence on the actual level of prudence embedded in the technical provisions, as well as the reliability of their assumptions. The difference between the value of the technical provisions and the ´best estimate´ of the costs of meeting the obligations arising from the insurance portfolio constitutes a risk margin in the financial position of the insurer, representing prudence of the technical provisions.

It is thus fundamental to the solvency regime, and of course the risk management of an insurer, that there is clarity about the expected cost (in the statistical sense) of meeting the obligations which may flow from the insurer's insurance contracts. Insight into the impact of risks on the solvency position requires, firstly, the estimation on a realistic basis of the expected future outgoing and incoming undiscounted cash flows of the insurance portfolio for each line of business, without any explicit or implicit risk margins. This estimation needs to capture explicitly embedded options and guarantees. The regime must furthermore take any risk transfer, e.g. through reinsurance, into account. Secondly, in the estimation of the expected costs, the insurer should use discount rates also without any risk margin. The solvency regime should make full use of the information on the financial markets to determine appropriate discount rates to arrive at a ´best estimate´ of the present value of the insurance obligations. This does not imply the presumption that financial markets are necessarily always efficient.

The requirements of this cornerstone are naturally associated with those for sound risk management. Gathering and understanding information on expected costs should be a key element of sound product development and pricing by insurers.

34. Cornerstone VII: the solvency regime establishes a range of solvency control levels and the supervisory instruments associated with each of the control levels.

The control levels have to be set sufficiently high to allow intervention at an early enough stage for there to be a realistic prospect that action will rectify any undesirable situation or development. The regime should recognise that some time may pass between occurrence of problems at an insurer, the identification thereof, and the time needed to prepare and take action. The regime should provide for a range of adequate and proportionate enforcement measures. The regime should clearly recognise that the supervisor needs to have the discretion to use the enforcement measures that are appropriate to all the circumstances of each case. That is, the measures used should not depend only on what control levels have been breached. The efficacy of a regulatory control level has to be viewed in light of the wider conditions that may exist.

One of the control levels should be set at such a level that a smooth transfer of the insurance portfolio to another insurer can normally take place. The regime should at least require that the financial means equal to this control level will be available at all times.

35. Cornerstone VIII: the solvency regime allows a set of standardised and more advanced approaches to determine the solvency requirements, and includes the use of internal models if appropriate.

The solvency regime needs to reflect the overall market, and must thus be robust and suitable for general application. The regime should acknowledge, however, that in some instances a simplified approach may well suffice, for certain business lines and insurers, whilst in other cases more sophisticated methods may be preferred, reflecting more refined data and risk management capacity and the possible suitability of full or partial internal models. Where the insurer has an internal model that better reflects its risks than the standard approach, and is integrated into its risk management and reporting, the solvency regime could allow the use of such available information to determine a more tailored solvency requirement. This would be subject to prior approval by the supervisor based on a transparent set of criteria and would need to be evaluated at regular intervals in the overall legal context within which the supervisor operates.

4. Towards a common structure and common standards for the assessment of insurer solvency: roadmap

Deliverables

36. This project will deliver a range of globally agreed standards and guidelines that can be applied in assessing insurer solvency. These standards, and associated guidelines, would be used to develop and implement, and serve as a benchmark for, the solvency regime to be applied in a particular jurisdiction. The IAIS recognises that full adherence to the common structure, standards and guidelines may in some instances require an adjustment period.

37. The common structure and standards will take the form of a coherent set of documents, consisting of a main document describing the general philosophy of the approach to solvency and solvency assessment, and a range of standards defining and describing in more detail the main groups of elements of solvency. Together the common structure and standards, and additional guidelines, will provide the contours within which a solvency regime and solvency supervision in a particular jurisdiction should take form.

Process

38. The IAIS wishes to make full use of the wealth of knowledge and insight available in the supervisory community, industry and elsewhere. This will be reflected throughout the process undertaken to develop the common structure and common standards. Given the interrelationship between the issues to be elaborated, the IAIS wishes to follow an open, transparent and structured iterative process, including an open dialogue with the IAIS observers. This will include inviting industry to participate in the relevant IAIS meetings, and wide circulation of draft documents for consultation.

39. As indicated in the introduction, the IAIS is currently preparing a roadmap paper for the elaboration of a common structure and common standards for the assessment of insurer solvency. The IAIS envisages circulating the roadmap paper for comments and suggestions later this year.