## AMERICAN ACADEMY of ACTUARIES

November 1, 2006

International Association of Insurance Supervisors

Via email to: karen.doran@bis.org

CC: iais@bis.org

RE: American Academy of Actuaries' comments on the IAIS Common Structure for the Assessment of Insurer Solvency

To the International Association of Insurance Supervisors,

The American Academy of Actuaries<sup>1</sup> Risk Management and Solvency Committee has completed a review of the October 9, 2006 draft of the IAIS *Common Structure for the Assessment of Insurer Solvency* paper and prepared the attached comments for incorporation in this draft.

We believe the current draft has significantly improved from the last document. However, one of our remaining concerns is that certain theoretical statements on 'market consistent' concepts are not relevant for valuing (non-traded) insurance liabilities and yet are considered applicable in this paper.

The Risk Management and Solvency Committee members appreciate the opportunity to review this paper and provide comments to the IAIS. Should you have any questions or need further information on our comments, please feel free to contact us through Tina Getachew at getachew@actuary.org or at (202) 223-8196.

Sincerely,

James E. Rech

Chairperson, AAA RMSC

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The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.

## Members and Observers Comments on IAIS Draft Paper The IAIS Common Structure for the Assessment of Insurer Solvency (Draft Dated October 9, 2006)

## **American Academy of Actuaries' comments**

Name	Paragraph Reference	Comment <sup>1</sup>	Resolution
	Supporting	Suggest inserting the word "minimum" in the following paragraphs :	
	Principle #1, 10, 17, 21	<ul> <li>Supporting Principle 1, Set minimum regulatory financial requirements for individual insurers to protect policyholders' interests;</li> </ul>	
		<ul> <li>Paragraph 10, Set minimum regulatory financial requirements for individual insurers which ensure that under both normal and adverse circumstances an insurer holds sufficient assets to protect policyholders' interests;</li> </ul>	
		Paragraph 17, More specifically, the formulation of minimum regulatory financial requirements should follow from a coherent and systematic risk analysis.	
		Paragraph 21, Risk sensitive regulatory financial requirements should enable an alignment of risk management by the insurer and regulation, and support the relationship between internal economic capital and required <i>minimum</i> regulatory capital.	
	Principle #1	Suggest inserting the word "appropriate" so that it reads:	
	page 3. Third bullet	■ Ensure that, if necessary, an insurer takes action to reduce its risks so that the assets it holds are sufficient and appropriate"	
		Note that 'appropriate' assets should be required for liquidity	
	8	Suggest addition of words in italics and bold:	
		"The solvency regime in force in a jurisdiction will need to address any specific characteristics of the insurance market and the context in which it operates (e.g., taxes), including any consequences for supervisory powers and instruments.	
	20	Insert the words in italics and bold:	
		"that policyholder interests are <i>reasonably and appropriately</i> protected during"	
	24, 31 Supporting Principle #3 and #4	Suggest changing "robust quantification" to "sufficiently precise quantification" as used in paragraph 29. Alternatively, suggest "reliable quantification" as this is generally the focus of accounting.	
	40, 49, and Supporting Principle #5	"The latter does not stand in the way of using company-specific data or internal models where these may be considered more appropriate and are able to be substantiated."	
		Suggest changing "and are able to be substantiated" to "and are credible"	
		Particularly in the non-life area, actuaries generally use company	

<sup>&</sup>lt;sup>1</sup> Please provide comments of a more critical nature on content, together with alternate drafting suggestions on this template, comments of an editorial nature should be provided on the first template.

	specific data where available and credible as a starting point for valuing claim liabilities. To the extent that company specific data is not credible, industry data (adjusted where necessary) will be used to supplement company specific information. In general, use of data that is not company specific would need to be "substantiated", not the other way around.	
Supporting Principle #4	"In the absence of deep liquid secondary marketsvalues (for insurance obligations) calculated according to market consistent models or methods should be used".	
	We suggest changing "market consistent models or methods" to "market consistent principles and measurement objectives"	
	In particular, a generally accepted actuarial viewpoint when dealing with long-tail liabilities is that a variety of methods should be applied and that such methods should be adjusted to reflect the unique characteristics of the book of business as well as the claims handling and data processing systems of the company whose claim liabilities are being valued.	
42	"Insurance obligations almost always need to be marked-to-model. The concept of market consistent valuation of insurance obligations does not require or imply a view that these obligations are frequently traded in deep liquid secondary markets. It rather assumes that information from public financial markets is used to arrive at a value for the obligations, which is consistent with the market price of financial assets traded in liquid and transparent markets."	
	The last sentence is not clear. What type of information from public financial markets should be used to arrive at a value for (in particular, non-life) insurance obligations? Is it solely the principle that the value should be based on an arms-length transaction and conceptually based on transfer prices (albeit with due consideration of settlement values) as described in paragraphs 43 and 44 or is there something additional required here?	
43	"Hence, the valuation methodology – in order to be consistent – has to be based on the same principle."	
	Suggest deleting the word "methodology".	
45, 54	"The market consistent value of insurance obligations for which prices can not be directly observed is therefore defined as the sum of the current estimate of the cost of meeting the obligations and the risk margin determined using market consistent methods and assumptions."	
	And,  "The methodology for calculating the risk marginshould be determined with reference to market participants' methodologies (e.g., industry or actuarial standards)."	
	See comments above on Supporting Principle #4. Focus should be on market consistent principles and measurement objectives rather than methodologies.	
45 and 55	Paragraph 45 (and Supporting Principle #7 and paragraph 59) suggests that uncertainty (in cash flows) is reflected in the risk margin. Paragraph 55, and Figure 2 might suggest that provisions for "uncertainty" should be included in capital.	
50	Differences also exist in par and non-par to be reflected in these comments.	
51	Due to the illiquid nature of many insurance liabilities, the discounting of cash flows in the technical provision should reflect a liquidity premium.	

"Therefore volatility in underwriting risk greater than used to calibrate the technical provisions should be covered by capital requirements not technical provisions"	
We do not understand this sentence and suggest that it be deleted.	
Unclear whether first sentence of paragraph 59, including footnote 17, is suggesting that risk provisions for parameter and model error should be reflected in the risk margin. In addition, the word "also" in the footnote suggests that there is "intrinsic uncertainty" that is in addition to parameter/model error but does not indicate what that is. Yet, Paragraph 32 defines uncertainty as "the risk that the models used to estimate the claims or other relevant processes are mis-specified or that the parameters within the models are mis-estimated." Also, paragraph 73 indicates that parameter risk should be considered in capital requirements.	
(Note, the CAS White Paper on <u>Fair Valuing Property/Casualty Insurance Liabilities</u> , <u>Section D - Methods of Estimating Risk Adjustments</u> (2000) pages 19-21 is a helpful reference in describing varies types/characteristics of estimation risks).	
The examples would better illustrate the point if they were more completely explained.	
These paragraphs relate to the time horizon for calibration of capital (including for risks inherent in estimating insurance obligations).	
The paper should avoid the implication that a one-year "shock period" is appropriate for establishing capital requirements for risks associated with estimating non-life insurance obligations.	
For non-life insurers in the US, the solvency standard is generally articulated as assets at any point in time must be adequate to discharge the liabilities. One of the purposes of capital is to provide a cushion to ensure that subsequent increases in reserve estimates can be absorbed by current assets.	
For non-life insurance companies in the US, an explanation often associated with insolvencies is under-reserving. In many instances increases of prior estimates occurs over a period of years. Therefore it would appear appropriate for the "shock period" and "effect horizon" for determining capital requirements (associated with these insurance obligations) to be the time horizon over which current liabilities are settled.	
Moreover, insurance obligations are difficult to "unwind". The option of transfer of the liabilities of a troubled non-life insurer is likely to take more than a year and may be impossible if the liabilities are significantly under-reserved (and assets are inadequate to pay for the transfer/settlement of the obligations).	
Insert words in italics and bold:	
"provisions over <b>each year</b> of a defined shock period." [this assumes that a "shock period" as defined in the Paper would never be over a year, is that always the case?] Elise suggests dropping this comment	
Cost-of-capital approach implies that the capital needed to back a specific line of business is known. Capital requirements are generally calculated at the total entity level and reflect diversification benefits. Allocating capital to specific lines can be arbitrary, and a bottom-up approach would overstate the required capital for the total entity.	
Cost-of-capital approach implies a certain risk tolerance for the issuer, i.e., an "AA" or "BBB" rating. This assumption should be dictated or be required to be disclosed.	
	the technical provisions should be covered by capital requirements not technical provisions"  We do not understand this sentence and suggest that it be deleted.  Unclear whether first sentence of paragraph 59, including footnote 17, is suggesting that risk provisions for parameter and model error should be reflected in the risk margin. In addition, the word "also" in the footnote suggests that there is "intrinsic uncertainty" that is in addition to parameter/model error but does not indicate what that is. Yet, Paragraph 32 defines uncertainty as "the risk that the models used to estimate the claims or other relevant processes are mis-specified or that the parameters within the models are mis-estimated." Also, paragraph 73 indicates that parameter risk should be considered in capital requirements.  (Note, the CAS White Paper on Fair Valuing Property/Casualty Insurance Liabilities, Section D - Methods of Estimating Risk Adjustments (2000) pages 19-21 is a helpful reference in describing varies types/characteristics of estimation risks).  The examples would better illustrate the point if they were more completely explained.  These paragraphs relate to the time horizon for calibration of capital (including for risks inherent in estimating insurance obligations).  The paper should avoid the implication that a one-year "shock period" is appropriate for establishing capital requirements for risks associated with estimating non-life insurance obligations.  For non-life insurers in the US, the solvency standard is generally articulated as assets at any point in time must be adequate to discharge the liabilities. One of the purposes of capital is to provide a cushion to ensure that subsequent increases in reserve estimates can be absorbed by current assets.  For non-life insurance companies in the US, an explanation often associated with insolvencies is under-reserving. In many instances increases of prior estimates occurs over a period of years. Therefore it would appear appropriate for the "shock period" and "effect ho

Editorial	45	"The risk margin above the current estimate policy obligations"	
		Insert "of" before "policy"	
Editorial	58	"The same applies to a transfer of a portfolio: the accepting party may in future need to inject further capital"	
		Insert "the" before "future"	