February 14, 2002

Mr. Knut Hohlfeld
Secretary General
International Association of Insurance Supervisors (IAIS)
c/o BIS
CH-4002 Basel
Switzerland

Dear Mr. Hohlfeld,

RE: Principles on Capital Adequacy and Solvency

Further to our letter of July 9, 2001 forwarding the International Actuarial Association’s (IAA) draft comments on the Consultative Document on the Principles on Capital Adequacy and Solvency, I am pleased to confirm that the IAA’s due process is now complete. The draft comments were approved by the member associations for release as an IAA public statement, subject to certain revisions which are highlighted in the attached submission.

If, upon reading these revised comments, you identify any points that you would wish to pursue, please do not hesitate to contact the chairperson of the Committee on Insurance Regulation, Nigel Masters, or any of the other members of the Committee. The IAA will be pleased to develop these ideas further with you.

Sincerely,

Edward J. Levay
President

cc: Nigel Masters (E-mail: nigel.masters@uk.pwcglobal.com)
    IAIS Secretariat (E-mail: jais@bis.org)
    Craig Thorburn (E-mail: kateandcraigus@yahoo.com)
A Commentary on the Consultative Document
‘Principles on Capital Adequacy and Solvency’

Published by the International Association of Insurance Supervisors.

The International Actuarial Association
The International Actuarial Association (the “IAA”) represents the international actuarial profession. Our Full Member actuarial associations exceed forty in number and represent more than 95% of all actuaries practicing around the world. The Full Member associations of the IAA are listed in an Appendix to this statement. The IAA promotes high standards of actuarial professionalism across the globe and serves as the voice of the actuarial profession when dealing with other international bodies on matters falling within or likely to have an impact on the areas of expertise of actuaries. The IAA’s interest in the Consultative Document ‘Principles on Capital Adequacy and Solvency’ is to assist the IAIS in developing a high quality standard on this very important topic. The IAA appreciates the opportunity to provide comments on this Consultative Document.

Due Process
These comments have been prepared by a committee of the IAA, the members of which are listed below by name and association. The comments have been approved by the member associations of the IAA. Accordingly, these comments constitute a formal response by the IAA.

Members of the IAA Insurance Regulation Committee
Nigel Masters
David Hartman
Félix Arias Bergadà
Morris Chambers
Isagani de Castro
John Allan Feyter
Rainer Fürhaupter
Gyula Horvath
Thomas Karp
Jean-Michel Kupper
Won How Lo
Helge-Ivar Magnussen
Ibrahim Muhanna
Ryoichi Nakamura
Gennaro Olivieri
Thierry Poincelin
Jukka Rantala
Angus John Robertson
David Sandberg
Simon Van Vuure
Robert E Wilcox

Chairman
Col.Legi d'Actuaris de Catalunya
Canadian Institute of Actuaries
Actuarial Society of the Philippines
New Zealand Society of Actuaries
Deutsche Aktuarvereinigung e. V. (DAV)
Hungarian Actuarial Society
Institute of Actuaries of Australia
Association Royale des Actuaires Belges
Actuarial Institute of the Republic of China
Den Norske Aktuarforeningen
Cyprus Association of Actuaries
Institute of Actuaries of Japan
Istituto Italiano degli Attuari
Institut des Actuaires
Suomen Aktuariyhdistys
Faculty of Actuaries
American Academy of Actuaries
Het Actuarieel Genootschap
Society of Actuaries; Conference of Consulting Actuaries
(1) Overall Assessment

The IAA welcomes the International Association of Insurance Supervisors’ proposed approach to the supervision of capital, solvency and risk management systems in the insurance sector. A capital adequacy and solvency regime that reflects the level of risk in the operations of an insurance institution leads to efficient pricing of capital and its effective use. We see the Principles on Capital Adequacy and Solvency as moving in a very positive direction and, subject to our detailed comments below, we are pleased to support its introduction.

(2) Introductory Remarks

Before commenting on the IAIS Draft paper, we wish to set forth some background for our comments. We have tried to make our comments consistent with the comments that we have made on the Consultative Document ‘The New Basel Capital Accord.’ Accordingly, some of our comments here may repeat what we have said in that context.

There are several issues of current importance that should be considered in relation to the capital adequacy and solvency of insurance companies. Those needing special attention include:

(2.1) The Convergence of the Financial Services Industry

The actuarial profession has historically been closely associated with insurance and its prudential supervision. However, with increasing numbers of actuaries working in the banking sector and for financial conglomerates, the IAA recognises the continuing convergence of the financial services industry and the consequent need for consistent accounting and prudential supervision regimes that operate across insurance, banking, and investment management.

The comments that follow are made on the basis that the IAIS and the Basel Committee will seek, in the near future, to harmonise the prudential supervision of financial institutions. This reflects, in part, the emergence of financial conglomerates and, in part, the importance of regulatory coherence and financial stability. We recognise that the degree of harmonisation may, of necessity, be restricted but the starting point for our comments is that regulators will move towards the greatest level of harmonisation possible.

(2.2) The Impact of Changes in International Accounting Standards

The proposed introduction of IAS accounting, notably in the European Union, requires a fundamental reappraisal of traditional insurance provisioning techniques in those jurisdictions where it is introduced. An immediate consequence in those territories is that the prudential capital system for insurers needs to be overhauled. A risk-based approach to prudential supervision, if implemented in an effective manner, has many advantages, including providing a system consistent with other parts of the financial services industry.

Ideally, an accounting regime that uses realistic technical provisions needs to be complemented with a regulatory regime that takes into account the technical provisions and how they are determined when setting regulatory capital requirements. In this way the appropriate overall level of prudence can be obtained. If technical provisions are targeted at anticipated outcomes,
the regulatory capital needs to be targeted at an appropriate level of extreme loss. For meaningful reporting, it is better if the regulatory requirements are clearly additional to the technical provisions while using similar and consistent risk measurement techniques. We believe that a realistic view of an enterprise’s financial progress is the clearest indicator of whether that enterprise is strengthening or weakening its financial condition.

(2.3) The Contribution of the Actuarial Profession

One of the original reasons for establishing an actuarial profession some two hundred years ago was managing the solvency of insurance enterprises. While some failures have occurred over that time, generally the insurance industry has served its policyholders well and the actuarial profession claims some credit for that.

Under the proposed Principles on Capital Adequacy and Solvency, the value of contributions by experts is mentioned more than once and we welcome that recognition. The contribution that can be made by actuaries as the principal experts in insurer solvency is of long standing and well recognised. In fact, the appropriate use of actuaries in maintaining and enhancing the solvency regime of insurance companies can be retained and extended to other financial institutions with significant benefit to the regulators, the financial community and to the consumers of financial products.

We believe that the involvement of actuaries in the solvency regime of insurers allows a flexibility of control that in turn promotes innovation without recklessness and provides regulators and management with a core of professionals on whom they can rely for competence and integrity. In this way the actuarial profession strengthens the regulatory framework. To this end, the IAA is promoting the development of internationally acknowledged standards for actuaries working for financial institutions operating under international accounting or regulatory regimes. The standards will cover both technical skills, including ongoing education, and professional conduct.

A theme of the Consultative Document on the New Basel Accord is that all those involved in the determination of provisions and solvency should take a wider view of all the risks, business as well as technical, on behalf of the investor. This theme is reflected and further specified in the IAIS Draft. For individuals to be able to balance commercial and ethical pressures, membership in a strong profession is extremely desirable if not essential. The existence of a code of conduct backed by an effective disciplinary regime allows regulators to rely on actuaries to have an unbiased perspective on policyholder interests in capital adequacy and solvency, thereby achieving the beneficial gearing required for cost-effective regulation. With their skills and experience in statistics, finance, insurance products and insurance operations, actuaries are needed to advise on appropriate aggregate policy and claims liabilities and the range and likelihood of possible outcomes.

Actuaries are also crucial to assessing, advising and reporting on the current and future capital needs of insurance operations under a range of circumstances and the major factors driving these needs. A number of insurance regulators rely on responsible actuaries to have the prime responsibility for these functions in insurance operations as this provides a level of detailed oversight which the regulators themselves are usually not able to provide. If and when the
responsible actuary provides a report to the Board, which is accessible by the regulator, on the calculation methods used, the results and the conclusions, there is a good mechanism for regulatory oversight and query back to the company at the highest level.

(2.4) Recognition of Diversity

In our consideration of the paper, it has become clear that, for many territories and for the various sectors of the insurance industry, depending on the historical practices and traditions, it is possible to interpret the Principles in different ways. An important part of the ongoing promotion of the Principles will be developing a consensus around the meaning and operation of the Principles in practice.

(2.5) Definition of Solvency

We note the definition of solvency adopted in paragraph 3. It may be that this is already an agreed principle in itself but we would observe (a) that the obligations to which the definition refers could be clarified to cover both contractual and constructive obligations; and (b) the committee might consider adding the phrase ‘from resources currently under its own control’ at the end of the definition in order that there is no reliance on the premiums of future policyholders to support current liabilities.

(3) Comments on the Principles


We agree with the contents of Principle 1, in the sense that technical provisions have to be adequate, reliable, objective and allow comparison across insurers. However, of necessity, it is important to recognise that insurance liabilities are inherently uncertain and that adequacy, reliability, objectivity and comparability can only be achieved through the consistent exercise of judgement within a framework of accepted guidance.

Technical provisions should include reasonable margins for uncertainty, but avoid double counting in respect of the solvency margin. Moreover, it is important to avoid significant arbitrary margins in the technical provisions as this encourages regulatory arbitrage.

We note the comment in paragraph 12 regarding the use of experts and refer the reader to the comment in the background comments above regarding the contribution that the actuarial profession can make in this area.

Principle 2: Adequate provisions for all liabilities

We support the call for consistency between prudential and accounting measures and would draw the reader’s attention to the discussion regarding the IASB proposals above.

We believe that the principle would require contingent liabilities to be provided for, even when the contingency is ‘out of the money’. We believe that the principle would be clarified by a
more detailed statement describing when an event was regarded as sufficiently remote that a reserve was not required. We would expect that this statement would be different from the statement that might be expected from an accounting standard setter and the distinction would be important for the development of capital management within an insurer.

In order to safeguard the expectations of policyholders, we suggest some recognition of an insurer’s constructive obligation to declare bonuses or dividends, at least in the immediate future, be taken into account. Equally, the principles might recognise that the presence of management discretion in the contracts of long-term policies allows the insurance industry to adapt to structural change in financial markets and as such should not be so regulated as to remove all relevant flexibility.

**Principle 3: Assets**

We agree with Principle 3. We agree with the risks noted in paragraph 17 but would suggest that interest rate risk should be added and its importance to insurers stressed as the long term insurance industry carries a wider exposure to interest rate risk not least on the valuation of assets.

**Principle 4: Matching of Assets with Liabilities**

We agree with Principle 4. We note that the techniques used to examine this risk should cover both net present value techniques and matching on a cash flow to cash flow basis.

**Principle 5: Technical and Other Risks**

We agree with Principle 5. We endorse the statement that insurance companies should have the capability to evaluate the risks that they underwrite. For example, where guarantees and options are provided, it is essential that insurers assess quantitatively the risks undertaken. However, we also note that there are times when the statistical base for an insurance risk is not well understood. In these cases, we regard it as acceptable to enter a market in order to build that statistical base provided that the capital of the company is sufficiently strong that it can withstand the mis-pricing risk.

We agree that operational risks that might damage the financial system should be provided for. We see operational risk as including many elements from computer failure and fraud to strategic and reputational risks. However, we note that the bases so far put forward for the measurement of such risks, for example by the New Proposals for the Basel Accord, are not well aligned with the risks concerned and that a great deal of work is required for this Principle to be realised.
**Principle 6: Sensitivity of Capital Adequacy to Risk**

We strongly support this principle. As noted in our introductory remarks, this sets a positive direction for the IAIS’s development of a robust regulatory system.

Regarding paragraph 29, we welcome the possibility of the development of internal capital models. The insurance industry is diverse in scale, product and geography. It is important that an international regulatory system be relevant to and operable by both the most and the least sophisticated of organisations. For this reason we recommend that the Principle recognise explicitly the possibility of the use of a two-tier approach. A two-tier approach with standard factors can allow less sophisticated organisations to operate a straightforward but capital intensive system while the largest, most diverse operations can gain real advantage by developing strong risk management techniques and measurement models.

**Principle 7: Control Levels**

Experience suggests that the ability of regulators to provide proportionate responses to developing regulatory concerns offers an effective way of ensuring that all options required to rectify a situation are open to supervisors at a time when they have the best chance of success. This supports the concept of multiple control levels.

**Principle 8: A minimum level of capital**

While we would not disagree with the general idea of setting minimum capital levels, we would wish this Principle to be modified to allow internal capital models, suitably endorsed by the regulator, to reduce the required capital if appropriate. This provides a financial incentive for developing good risk management techniques.

**Principle 9: Suitable forms of capital**

We support Principle 9. It might be useful, as a test of the efficacy of the Principle, to see whether it would restrict the use of certain forms of financing reinsurance where the main benefit is regulatory arbitrage.

A further point that might be added is that the value of an asset taken to support solvency should not itself be dependent on the solvency of the insurer. Again, this might restrict the use of certain financial structures whose value collapses on the failure of an insurer, leaving policyholders exposed to large financial loss.

**Principle 10: Risk Management Systems**

We agree with Principle 10 in the sense that capital adequacy and solvency regimes have to be supplemented by risk management systems.
As a result of the complex nature of insurance liabilities, the actuarial profession has needed to develop valuation techniques based on stochastic models. The models cover investment markets and also demographic movements, claims frequencies and claim severity, including extreme event provisions. The best of these models now recognise the importance of correlation between risks. The actuarial profession would be pleased to contribute this expertise to the IAIS thinking on the development, certification and audit of internal risk management and measurement models.

Also, the insurance industry has developed scenario modelling and stress testing techniques in some insurance disciplines that are comparable to those used by banks and we would welcome participating in further research aimed at applying such techniques to insurance operations.

One area where the IAIS Draft might undertake a fuller discussion is when and what supervisory action might be taken when significant but not ‘terminal’ issues are identified by the risk assessment and measurement process. An enterprise that is financially weak, but stable, is arguably ‘an accident waiting to happen’. However, there may be no action that the regulator can take because the enterprise is not in breach of any regulation. A risk based regime is only effective if it can proactively force enterprises to manage their risks more prudently and adapt earlier than under current regimes. While we recognise the difficulty of setting general rules in this area, we believe the Consultative Document should discuss what proactive action might be appropriate. If this is not done, then risk assessment may be perceived as an end in itself.

**Principle 11: Reinsurance**

The suppliers of insurance products rely heavily on reinsurance to transfer and diversify risk and control their exposure to risk. Such a transfer is generally considered to reduce significantly the risk faced by an insurer, replacing frequently material insurance risk with generally materially lower credit risk.

However, as we stated above, your Principle 11 is welcomed where any allowance for reinsurance in a capital adequacy and solvency regime should consider the effectiveness of the risk transfer and make allowance for the likely security on the reinsurance counterparty.

**Principle 12: Disclosure**

We note the reliance in Principle 12 on risk disclosure. In many cases appropriate disclosure of risk exposures is essential for public confidence and understanding. For example, disclosure of changes in assumptions and the reasoning behind the changes can be very beneficial. Tracking changes such as can be done for general insurance loss reserves and health is one way of assessing the refinements required to amend statistical models of the risks.

However, some experience suggests that the power of disclosure is diluted by the need, in practice, to limit the level of detail provided. This, in turn, may lead to bland statements that can obscure important details of assumptions or approach. This may be avoided by adopting a targeted approach to disclosure and focusing on material assumptions.
We also note that, in certain territories, this information can be regarded as confidential, for example revealing pricing details. It is arguable that, when information valuable to a competitor, including business plans and other commercial forecasts, is required by a regulator, consideration should be given to whether the confidential filing of that information with the regulator is appropriate.

An alternative is a greater emphasis on audit, review and certification by independent, external bodies. Such bodies might include the regulators, the audit firms, consulting actuarial practices and other experts involved. The important factors in assessing the suitability of such bodies to provide the certification are their objectivity, independence and competence to undertake the reviews required.

**Principle 13: Solvency Assessment**

We agree with Principle 13.

**Principle 14: The Need to Address Double Gearing.**

We agree with Principle 14 and draw the reader’s attention to our opening remarks on the convergence of the financial services industry.

**(4) Concluding Remarks**

The IAA welcomes the broad approach to prudential supervision as set out in the Consultative IAIS Document, Principles on Capital Adequacy and Solvency. We strongly support its emphasis on relating capital requirements to entity-specific risks.

Edward J. Levay  
President  
International Actuarial Association
FULL MEMBER ASSOCIATIONS OF THE IAA

Consejo Profesional de Ciencias Económicas de La Ciudad Autónoma de Buenos Aires (Argentina)
Institute of Actuaries of Australia (Australia)
Aktuarvereinigung Österreichs (AVÖ) (Austria)
Association Royale des Actuaires Belges (Belgique)
Instituto Brasileiro de Atuária (IBA) (Brazil)
Canadian Institute of Actuaries (Canada)
Cyprus Association of Actuaries (Cyprus)
Ceská Spolecnost Aktuářů (Czech Republic)
Den Danske Aktuarforening (Denmark)
Egyptian Society of Actuaries (Egypt)
Estonian Actuarial Society (Estonia)
Suomen Aktuaariyhdistys (Finland)
Association des Actuaires de Bretagne (France)
Association des Actuaires Diplômés de l'île de France (France)
Institut des Actuaires Français (France)
Union Strasbourgeoise des Actuaires (France)
Deutsche Aktuarvereinigung e. V. (DAV) (Germany)
Hellenic Actuarial Society (Greece)
Actuarial Society of Hong Kong (Hong Kong)
Hungarian Actuarial Society (Hungary)
Félag Islenskra Tryggingastærðfræðinga (Iceland)
Actuarial Society of India (India)
Society of Actuaries in Ireland (Ireland)
Israel Association of Actuaries (Israel)
Istituto Italiano degli Attuari (Italy)
Institute of Actuaries of Japan (Japan)
Japanese Society of Certified Pension Actuaries (Japan)
Colegio Nacional de Actuarios A.C. (Mexico)
Het Actuarieel Genootschap (Netherlands)
New Zealand Society of Actuaries (New Zealand)
Den Norske Aktuarforening (Norway)
Actuarial Society of the Philippines (Philippines)
Instituto dos Actuários Portugueses (Portugal)
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