Board for Actuarial Standards

Preliminary Consultation Paper

Towards a Conceptual Framework

April 2007

THE BOARD FOR ACTUARIAL STANDARDS

PRELIMINARY CONSULTATION PAPER

TOWARDS A CONCEPTUAL FRAMEWORK

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Chairman's introduction

I was appointed by the FRC as the first Chair of the BAS in December 2005. We assembled an excellent Board (see Appendix 1) with strong representation of the many stakeholders affected by the work of actuaries. The Board started work in April 2006, and agreed that its initial focus should be on the development of a conceptual framework of the concepts and principles underlying the work of actuaries. This was a major recommendation of the Morris Review[1], and follows a path ploughed over past decades by the accounting profession. It is proving a challenging task, as we knew it would, particularly because we must take so many different people with us.

Why is our work so important? - Because actuarial standards will have a central role to play in enhancing the confidence of consumers of many financial products, notably insurance and pensions. In the UK we have had the problems of the Equitable Life and continuing difficulties in the pensions world. In other territories there have been major failures of property and casualty insurers. Our prime role is to issue standards which will set a benchmark for high quality actuarial information and advice. This will enable wise decision-making and regulation that allows ventures to flourish and minimises the potential for public detriment.

We have decided that early consultation on our intended structure for standards is likely to be beneficial before we turn to more technical matters. We intend to publish the full consultation on our framework proposals this autumn. But we wish to test some of our most important ideas now and to get early feedback. For example, one new concept introduced here is that of SAPT, Standard Actuarial Principles and Techniques (see section 1.7). The idea is that we should set standards not for individual actuaries but rather for different outputs, howsoever produced. The recent trend is for prudential regulation to be aimed at entities rather than individuals. SAPT fits well with this trend and parallels GAAP in the accounting world.

A great strength of the FRC is its belief that the market is an effective regulator. In this, the BAS is no exception. We have had excellent support from many eminent market practitioners working through our three separate working groups for risk, value and stakeholder interests (see Appendix 2). I thank all those who have contributed already. The ideas we are developing now will shape the future of actuarial work for many years to come. We need all possible input from our many stakeholders, and I urge you to read this preliminary paper and give us your views on the questions we pose, which can be found in section 3.

Paul Seymour
27 April 2007

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[1] Those readers not familiar with our history, and the background to the FRC's overseeing the UK Actuarial Profession, may prefer to start by reading the Annex to this paper, with its three chapters detailing:
1) Events Leading to the Establishment of the BAS
2) The Establishment of the BAS
3) Recent Developments outside the BAS

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1 Actuarial measurement standards

1.1 The BAS Objectives

1.1.1 The Board for Actuarial Standards was established in April 2006 to set technical standards applicable to actuarial practice. Its overall aim is to establish and improve actuarial standards, primarily of a technical nature, to ensure that they are coherent, consistent and comprehensive, and thereby to help promote high quality actuarial practice (please see the Aims and Objectives in Appendix 3).

1.1.2 In pursuing its objective, the Board will:

- develop an appropriate conceptual framework to guide the setting of relevant actuarial standards, including the explicit objectives and characteristics of such standards;
- consider the need for a generic standard for communications;
- target the use of its powers, taking a proactive, risk-based and proportionate approach, which emphasises principles and clarity in its standard-setting; and
- be consultative - involving preparers, users of corporate and actuarial reports, the wider public and other regulatory organisations in its decision-making and allowing adequate time for their views to be formulated and received.

1.1.3 There is at present no generally accepted definition of actuarial practice. We set out in Appendix 4 details of the areas to which the BAS adopted guidance notes currently apply. In order to determine the scope to which future technical standards should be applicable, the Board has therefore considered:

- the activities of actuaries and the wider framework within which they operate (section 1.2);
- the financial products covered by actuarial practice and the areas to which actuarial science is applied (section 1.3);
- the consumers and providers of these products and their needs for actuarial information (section 1.4); and
- the implications for the characteristics of actuarial information (section 1.5).

1.1.4 We then proceed to set out our views on the scope of the BAS standards (section 1.6) and our proposals for standardising actuarial information (section 1.7).

1.2 Actuarial information, actuarial advice and ethical standards

1.2.1 Actuarial practice is synonymous with the activities undertaken by actuaries, which include:

- *actuarial information* - the application of actuarial principles and techniques to produce (and report) information to be used in financial decision-making (this is set out more fully in section 1.5.1); and
- *actuarial advice* - this includes the provision of any advice by actuaries (other than that included in actuarial information) relating to those areas to which actuarial science is relevant. In practice, the advice provided by actuaries is wide ranging and often extends beyond strictly actuarial matters into such areas as competitive product / benefit design, risk management, investment strategy and regulatory requirements.

1.2.2 The Profession's existing Professional Conduct Standards and Guidance Notes (including those adopted by the BAS) cover both the technical and the ethical aspects of actuarial practice. Regulators increasingly require the application of these standards to reporting of actuarial information, for example FSA rules which require regulated entities such as insurers to use methods and prudent assumptions which are in accordance with 'generally accepted actuarial practice'.

1.2.3 The BAS's role is to set technical actuarial standards, while the Profession remains responsible for setting ethical standards. The Profession is undertaking a fundamental review of its Professional Conduct Standards, which cover ethical (and inevitably also some procedural) aspects of actuarial advice such as duties to the client and third parties, independence and conflicts, change of adviser, relations with other members, publicity and whistle-blowing. As a last resort the BAS has a reserve role to set ethical standards if asked to do so by the Professional Oversight Board or if it otherwise considers this appropriate.

1.2.4 The BAS considers that, after the completion of the conceptual framework, its main priority at this stage should be to set standards for the content of actuarial information, whether produced by actuaries or by entities (using actuarial techniques). This corresponds most closely to the financial reporting standards set by the Accounting Standards Board (and its international counterparts) for reporting entities. By directing its standards to the output from actuarial techniques, the BAS can help ensure that actuarial information is produced to appropriate standards of technical content and clarity.

1.2.5 A survey of pension trustees and insurance NEDs undertaken under the supervision of the FRC's actuarial stakeholder interests working group has highlighted the importance that is placed on the quality of actuarial advice, including recommendations, by users of actuarial services. The BAS agrees that standards for the giving of actuarial advice are important but considers that it would be unhelpful for it to make proposals for change while the framework for the ethical aspects of actuarial advice is being addressed by the Profession. Logically, it is important to set standards for the provision and reporting of actuarial information, before deciding what technical standards are required for the provision of advice by actuaries for decision-making purposes.

1.3 Financial products and actuarial techniques

1.3.1 Insurance protection, savings products and pensions rights together represent a substantial part of the claims on the accumulated wealth (and wealth protection) of the nation. These financial products and the entities that provide them (insurance companies and pension schemes) offer opportunities for the

- transfer of unacceptable individual risks
- accumulation and release of wealth
- provision of income at some defined future time or in defined circumstances.

1.3.2 Within the financial system described above there are a variety of stakeholders and decision-makers. For example, investors make decisions regarding which financial products (or other financial assets) to acquire, hold or dispose of. Pension scheme members make decisions regarding their membership of schemes, and the form in which benefits are taken. Managers of insurance companies make decisions regarding solvency, capital requirements, premiums and the declaration of policy bonuses. Trustees of pension schemes make decisions about contribution payments.

1.3.3 For this financial system to operate effectively it is important that

- individuals are placed in a position to make informed choices
- providers have information available to make informed assessments of their options and of the risks they run, including those which can be measured using actuarial techniques

1.3.4 Actuarial techniques are applied to produce actuarial information that is variously used by all the stakeholders and decision-makers mentioned above. The importance but also the limitations of actuarial information need to be understood.

1.4 Decision-making

1.4.1 The Board recognises that actuarial information is not required for its own sake, but is required to assist in a decision-making process. Accordingly, the Board has concluded that the primary consideration for the BAS standards is the needs of the decision-makers who rely on actuarial information.

1.4.2 For this reason, we have set out our views on:

- the needs of users when they make their decisions
- the implications of decision-making responsibilities

so that any presumptions that underlie the BAS's future activities can be commented upon by users as well as by actuaries.

THE NEEDS OF DECISION-MAKERS & CONSUMERS

1.4.3 Decisions are made in the context of an uncertain future and decision-makers will inevitably be faced with options whose outcomes cannot be determined with certainty in advance. The options represent alternatives that entail exposure to risk and reward, and the role of the decision-maker is to evaluate and judge the most appropriate choice from the available range of alternatives.

1.4.4 Decision-makers, including consumers of financial products, require information to assist this evaluation and to identify which option appears to be the most appropriate.

1.4.5 Actuarial information is designed to help such decision-makers and is produced using a combination of actuarial methodologies and actuarial assumptions. The Board believes that the decision-makers who use this information need to be able to rely on it having been prepared using appropriate standards, and to be clear what it represents.

1.4.6 When considering the actuarial information, decision-makers should understand any limitations that apply. This should include the limitations of measurement in respect of the risks measured and knowledge of the risks that cannot be quantified. It is then for decision-makers to decide how to allow for these limitations in their decision-making.

1.4.7 For this reason it is important that there is transparency regarding both:

- the extent of uses to which actuarial information is applicable; and
- the content of the actuarial information provided and any inherent limitations.

In addition to this, there may well be a need for education amongst decision-makers including the general public regarding both actuarial and financial matters. This is recognised by the Government, the FSA and TPR who are taking steps to address this issue.

THE IMPLICATIONS FOR STANDARD SETTING

1.4.8 The Board believes that certain implications for standard setting flow from the responsibilities of decision-makers. The first of these is the principle that measurement should be based on a system of accepted standards. The second is that the reporting of the results of the measurements should be based on accepted reporting standards.

1.4.9 Informed choice requires consideration of relevant information before exercising a choice. Where information is to be used in decision-making, it should not contain implicit assumptions about decisions of a management nature and effectively usurp decision-makers. Nor should it withhold information from decision-makers regarding potential risks and rewards and the range of outcomes to which they are exposed.

1.4.10 Standards for actuarial information should uphold these principles by:

- recognising where the authority, responsibility and accountability for decision-making lie and ensuring that they are reinforced and supported, rather than weakened, by actuarial standards;
- having an objective of decision usefulness (see section 1.7); and
- requiring clear communication of the actuarial information (together with the basis on which it was prepared and any inherent limitations).

1.4.11 To do this, actuarial information needs to have clear and understood characteristics, as discussed in section 1.5.

PRUDENCE AND RISK MANAGEMENT

1.4.12 The Board believes that the above principles have implications for the concept of prudence.

1.4.13 Prudence concerns the behaviour inherent in decisions to reduce risk. For individuals and entities it concerns the risk exposures they are prepared to accept and the methods by which they absorb risk, including the level and form of risk capital they hold.

1.4.14 Decision-makers may rationally wish to seek or avoid risk, and seek or forgo possible return, depending on their responsibilities and objectives. To enable them to evaluate the extent of risk exposure that they wish to accept, the measurements of the potential risks and rewards must be neutral, and the acceptance or avoidance of risk should be a positive decision. This is discussed further in the section on Neutrality of Measurement (section 1.5.5) below.

1.4.15 For the above reason prudence should not be regarded as an element of measurement.

1.4.16 Given that the appropriate level of prudence is a matter for decision-makers, we envisage developing standards for the measurement and communication of different levels of prudence.

MEASUREMENT AND DECISION-MAKING RESPONSIBILITIES

1.4.17 Recent regulatory changes have placed the responsibility both for the assumptions and methodology used in the production of actuarial information, and for the resulting decisions, more firmly on governing bodies (the directors of insurance companies and trustees of pension schemes, as detailed in Appendix 5).

1.4.18 The Board has endeavoured to understand the needs of these decision-makers through a survey of insurance company non-executive directors and pension scheme trustees. The survey suggests that the managers of financial entities require considerable assistance in fulfilling their responsibilities. In general the directors of insurance companies felt able to challenge the appropriateness of the actuarial assumptions recommended for the production of actuarial information, but did not feel well placed to comment on the actuarial methodologies. The trustees of pension schemes were generally less confident in respect of actuarial assumptions, and were in a similar position to directors in respect of actuarial methodologies. Consumers have not been surveyed, but there is anecdotal evidence that there is a general lack of understanding regarding financial instruments and the actuarial information that may be provided in respect of them.

1.4.19 Improving the current situation is not easy and the responsibility does not lie with a single party. However, the Board believes that this can be helped by having a defined and developed set of actuarial standards, which if followed would result in clear and comparable actuarial information of a reliable and known quality.

1.5 The characteristics of actuarial information and the properties of measurement

1.5.1 We define actuarial information to be any information that is produced based on the principles of actuarial science and is relied on by any user (including financial institutions, their customers and their regulators) when making decisions. It is generally concerned with financial products (such as insurance, savings and pension provision) and provides information that can be relevant to understanding the value of financial products, the associated risks and forecasts of their future performance. It is important that the characteristics of financial products are understood by the relevant decision-makers. Also, those characteristics that can be measured must be subject to appropriately standardised measurement.

1.5.2 Actuarial information is the result of applying actuarial science to suitable situations to produce the most appropriate measurements for decision-making purposes.

1.5.3 Actuarial science is a robust and developed discipline. Although most commonly associated with financial institutions, it is a generic discipline capable of application to any situation suitable for measurement using actuarial techniques. Much of it involves the use of modelling techniques to project future cash flows and assess the associated risks. Typically, actuarial models specify a model of interrelationships between the different causes that are expected to affect future outcomes, using past data to estimate the magnitude (parameters) of the different interactions.

1.5.4 The principle of separation of measurement and decision-making leads to certain implications for the characteristics of actuarial information and the properties of measurement. These are developed in the remainder of this section.

NEUTRALITY OF MEASUREMENT

1.5.5 Measurements of value or risk, or forecasts of potential future circumstances, are neutral processes and do not contain implicit comment on:

- how a liability should be financed;
- the investment strategy that should be followed;
- the risks that should be accepted or avoided;
- how an entity should be managed; or
- the capital requirements that should be operated.

1.5.6 The process of measurement is intended to provide decision-makers with objective and impartial information to enable them to make decisions from an informed position. However the value judgements that lead to the preference of one option compared with another rest with decision-makers who will often need to communicate their decisions clearly and with detailed justification to others.

1.5.7 The act of measurement of value or risk, or of making a forecast, does not itself change future events, but provides information to decision-makers to help them decide whether to alter their exposure to potential future events.

1.5.8 The process of measuring risk recognises three elements:

- something bad that can happen (the source of the risk);
- the chances of it happening (the risk); and
- the consequences if it does happen (the exposure to risk).

1.5.9 The second element (risk) incorporates two alternative forms: variability and uncertainty. Variability can be quantified in terms of probabilities and links to the concept of randomness in statistics, where a random process is defined as a repeating process whose outcomes follow no describable deterministic pattern, but follow a probability distribution. Uncertainties are risks which, whilst identifiable, cannot be so easily quantified, especially if they arise from a lack of complete knowledge, data or understanding. In practice it may be difficult to distinguish between the real world impact of variability and uncertainty. In discussing the example of mortality risk in pensions and insurance, Mervyn King pointed out that statistical tools have long been used to pool risk within a generation, but actuaries have not found a way to put robust numbers on key risks between generations. He went on to say that no amount of complex demographic modelling is sufficient on its own to make decisions about these unknowns, and that it must be combined with good judgement.[2]

1.5.10 It follows that, where a risk arises from uncertainty, reliable expected values are usually unavailable. In these circumstances only the exposure can be measured with any reliability; whereas if the risk arises from variability, the frequency can be

[2] 2004 British Academy Annual Lecture

estimated and a risk measure employed (see the section on categorisation of risks in Appendix 6).

1.5.11 This does not mean that actuarial methodologies are flawed, but that there are limitations to the ability to predict future events based on a study of past events. Statistical principles cannot remove this uncertainty but, depending on the nature of the risk, they can play a valuable role in helping decision-makers evaluate how to organise their affairs and to manage their exposure to future uncertainties. Hence actuarial information should assist decision-making and enable decisions to be taken from a more informed position.

1.6 The scope of the BAS standards

1.6.1 The BAS is an independent body which has been given the responsibility for setting technical standards for actuarial practice. However, the BAS has no direct authority to enforce its standards, although the Actuarial Profession has, through a Memorandum of Understanding, agreed to require its members to observe them. Whereas the guidance notes which the BAS has adopted from the Profession are written for application by individual actuaries, the Board has decided that it will write its technical standards so that they can be applied either by entities or by individuals, and that future standards will apply to actuarial information rather than to the behaviour or conduct of actuaries. This is consistent with the standards written by its sister board, the Accounting Standards Board.

1.6.2 We do not currently see a role for the BAS in setting standards for decision-making. The BAS should be primarily a setter of standards for the measurement of actuarial information and should determine how actuarial information should be calculated and the nature of its content and presentation. We are also mindful of our reserve role of issuing ethical guidance concerning the conduct of qualified actuaries, and of the difficulty of defining the boundary between technical and ethical standards. Although we will aim to write standards helpful to other regulators, we are not ourselves directly responsible for setting standards relating to decision-making: that responsibility rests with Government and other regulators and in particular we are not an economic regulator (for premium rates etc.).

1.7 Standard Actuarial Principles and Techniques (SAPT)

1.7.1 We believe that it will be helpful to decision-makers to be able to recognise and rely on actuarial information that has been prepared consistently with actuarial standards and for this reason we will develop standards meeting this requirement. These standards will be suitable for adoption by either individuals or entities.

1.7.2 The actuarial standards may consist of a combination of concepts (including defined terminology), principles, assumptions, techniques, methodologies, specific rules and context constraints and will be referred to as Standard Actuarial Principles and Techniques (SAPT). The concept of SAPT is to provide a framework that providers of actuarial information should work to and which enables decision-makers to recognise whether the information they have received should be accepted as being complete and reliable.

1.7.3 Providers of actuarial information will be able to state that it is compliant with SAPT only if it complies with all relevant standards provided by the BAS, in terms of both its extent and its technical content. In particular, if an entity uses SAPT compliant information to produce additional or further information (that it provides to a second party), the entity will not be able to claim that the information it supplies is SAPT compliant, unless that further information is in turn fully compliant with SAPT.

DECISION USEFULNESS

1.7.4 Actuarial information should be complete and prepared in a manner that is consistent with the particular type of financial product and the way in which stakeholders make decisions regarding that type of product.

1.7.5 Stakeholders use actuarial information to assist their decisions in a number of areas. To be suitable for a particular purpose the actuarial information needs to be provided consistently with a clear set of concepts and principles, and presented in the manner most useful to the stakeholders. For example, it may be that stakeholders arrive at decisions through a series of steps and that the actuarial information is most usefully presented in steps consonant with their decision-making process.

1.7.6 The Board recognises the concept of decision usefulness and believes that this should be fulfilled by prescribing the appropriate content for actuarial information. The alternative would be for the content of actuarial information to be determined by contractual agreement. That could accommodate the needs of a client and his advisor, but would fail to provide a framework by which an affected third party could establish the appropriateness of the actuarial information.

STANDARD REPORTS AND COMMUNICATIONS

1.7.7 Unless mandated by law or regulation, stakeholders are free to commission any reports for their own decision-making. However, when exercising this choice they should be able to rely on a selected standard report to have been prepared consistently with SAPT and on the content of the standard report for that actuarial information. The Board will consult with stakeholders to determine the content of the standard report appropriate to particular decisions.

1.7.8 The Morris Review recommended that the BAS should develop a generic standard on communication covering the content of actuarial communications and the use of those communications by others, and that this standard should cover certain items, as set out in A1.14. It envisaged that the substance of the new standard should, where applicable, be reflected in all future professional standards. The Review specified the content of such communications and stated that much of current actuarial practice falls short. Therefore there is an immediate need to improve the position. In the longer term, we believe that the communication requirements are best dealt with through standard reports rather than through a generic standard, as it is difficult to cover different requirements within a generic standard. There may, however, be a case for collecting some of the principles we include in our initial framework under the single heading of generic communication.

1.7.9 Actuarial information needs to be understandable—in other words, users need to be able to appreciate its significance. Whether actuarial information is understandable will depend on:

- the way in which the effects of transactions and other events are characterised, aggregated and classified. For example, information that does not properly reflect and communicate the substance of transactions and other events will not help users to understand the entity's financial performance or financial position;
- the way in which the information is presented; and
- the capabilities of users. Those preparing actuarial information are entitled to assume that users have a reasonable knowledge of business and economic activities and a willingness to study with reasonable diligence the information provided.

APPROPRIATE MEASUREMENT

1.7.10 The BAS will consider whether measurement should be standardised for separate types of actuarial information setting out both the nature of the information to be provided and standards for its technical content. For certain types of information, for example a value measure, a single best estimate may be the most appropriate measurement. However, for risk exposures, an assessment of the potential range is likely to be a more appropriate measurement.

MARGINAL MEASUREMENT AND DIVERSIFICATION

1.7.11 Value and risk may sometimes be measured by

- dividing the associated cash flows into separate marginal components;
- measuring each separate marginal component; and
- adding the results for the separate marginal components to produce an overall measurement.

1.7.12 However, this methodology has limitations, and actuarial information should only be prepared on this basis when it is appropriate to do so.

1.7.13 In the measurement of value, it is well known that the sale of large quantities of a quoted asset can alter the price of that asset, with the result that the value of a good is not equal to the sum of the value of its components. However, marginal based pricing of quoted securities is the basis of accounts and this basis is accepted by the BAS as it is an objective and practical measure, despite this limitation.

1.7.14 In the measurement of risk this methodology has a more serious limitation. This is because the pooling of similar individual risks, which depend on unrelated events, can result in the reduction (through diversification) of the overall risk, with the result that the risk of the pool is not the sum of the individual risks in that pool. Risk diversification and its use is one of the major methods of absorbing risk used in insurance business. However, if the risks depend on related events, the pooling of risk can lead simply to risk concentration and for this reason the effectiveness of diversification requires examination.

RELEVANCE, RELIABILITY, MATERIALITY AND COMPARABILITY

1.7.15 Actuarial information is relevant if it has the ability to influence the economic or risk decisions of stakeholders, and so it needs to be relevant to the matters that stakeholders are likely to consider when making a decision. The Board believes that this consideration is best determined through consultation with stakeholders.

1.7.16 However, advance knowledge of the outcome of future events is not possible with the result that much information that would be relevant (if known) is either:

(a) not available (this largely relates to information concerning uncertain outcome events);
(b) expected to vary consistently with previous experience (this largely relates to variable events); or
(c) subject to measurement limitations with the result that there are levels of uncertainty connected with those measurements that can be undertaken.

1.7.17 Actuarial information is reliable within the context of the above constraints if:

- it can be depended upon by stakeholders to represent faithfully what it purports to represent and clearly explains which (potentially relevant) information has been measured (and where possible which has not);

- it is free from deliberate or systematic bias and material error, and where possible indicates the uncertainty attached to the measurements undertaken (see 1.7.16 (c) above); and
- the assumptions and methodology (and their appropriateness) used in its measurement are transparent.

1.7.18 Not all actuarial information, or details regarding the assumptions and methodologies that were used in its preparation, will be of equal importance to decision-makers, and excessive detail may obscure the more important information. For this reason the Board is minded to consider the extent to which certain detailed information should not be required to be disclosed on grounds of materiality.

1.7.19 Stakeholders are likely to have their own particular needs for decision-making. They should be able to place a high degree of reliance on the actuarial information having a known content, and faithfully representing what it purports to be (including the uncertainty attached to those measurements and disclosure of matters that have not been measured). However, it is for decision-makers to determine the degree to which they take account of actuarial information (which may depend in part on their attitude to risk).

1.7.20 As far as possible, standards should ensure that actuarial information does not differ significantly in terms of its content, how it is measured and how it is presented depending on the actuary who provides it. The determination of what is a significant difference may vary according to the actuarial information in question.

2 Some key conceptual issues

2.1 This interim paper has concentrated on the framework within which actuarial standards will operate, but has not detailed the separate types of actuarial information or the concepts that underlie them. This work is in development, and for this reason we are not seeking responses to material in this section at this stage.

2.2 At this stage the Board believes that actuarial information is likely to involve issues of value, risk and the forecast of future conditions, but is still considering whether these are separate issues or simply facets of the same issue. It is also considering the philosophy that should apply to the measurement of such information and the constraints that are applicable to the separate measures.

2.3 Value

2.3.1 Value measurement has long been part of actuarial science but the underlying philosophy of value has been less clear. Although values have been derived by discounting future cash flows, a discounted cash flow model (DCFM) can only be regarded as a mathematical model which reveals nothing about the philosophy underlying the measurement basis. The underlying philosophy is often not clearly stated, but it is this that determines the discount rate and other assumptions.

2.3.2 For example, a philosophy of market consistency would indicate that discount rates and other assumptions should be determined based on how products are likely to be priced by the market. This would logically lead to making the same allowance in an assessment of value as would be made by a commercial seller of a similar financial product. On the other hand, values may be derived for different purposes or to address different questions, which suggests that a single philosophy may not adequately cover the range of actuarial information.

2.3.3 The Board is aware that there are alternative views of the determination of value. However in many cases the philosophy is not clearly stated, and can only be derived by deduction from a consideration of the basis on which these values are determined. These alternatives present further challenges regarding the metric of measurement. Money is a phenomenon of the market and is the medium of exchange used to determine the relative rates at which goods and services are exchanged. As such it represents relative and time based values that can be objectively justified by the everyday use of money. Once value is divorced from market consistency, this objective realism is arguably lost, and the metric used for measurement may have deviated from the normal context of money.

2.4 **Risk and reward**

2.4.1 Financial products could be viewed in terms of the range and probabilities of future payments to which they give rise. It is this distribution that gives rise to the potential for gains or losses. Risk reflects the range of such outcomes combined with the probability of them arising, whereas value could be regarded as the mid point of a payment distribution.

2.4.2 The Board is aware that there are likely to be many opinions on the interrelationship between value, risk and reward and will seek input on this issue after it has progressed its work. However it is mindful of two points. The first is the point made by the Morris Review that it would be wrong to communicate only the mid point of a range of outcomes, as the eventual outcome may well be very different, and stakeholders need to understand the risks to which they are exposed. The Board is considering the measurement of risk and the principles that should apply

2.4.3 Secondly, the Board is mindful that the traditional view of risk (as concerned only with loss) is perhaps outdated and that decision-makers will be interested in evaluating the potential for and probability of gain as well as of loss, subject to any constraints that may apply. It is probable that the provision of additional information may change behaviours: in this respect the Board is conscious that stakeholders need to be advised of all aspects of risk, including both the upside and the downside, together with how these risks would impact upon them.

2.4.4 The impact of risk is likely to be user specific and to depend on both attitude to risk and the capacity to withstand it. We are conscious that this will require us to consider difficult areas and that this might reveal that there are very real limits to what can be achieved by actuarial science. For example, certain risks may not be readily measurable and the stress testing of risk bearing capacity may be the only possible measurement.

2.5 **Categorisation of risks**

2.5.1 Risk may be categorised in different ways and this is useful to provide decision-makers with understanding of both the nature as well as the extent of the associated risks. For both clarity and pragmatic purposes the Board believes that it is sensible to build upon existing categories of risk such as the FSA categories of Market, Credit, Liquidity, Insurance, Group and Operational Risk.

2.5.2 Within the above classifications of risk the BAS has been considering how it should analyse risk based on measurement and manageability (and how this should be reflected in actuarial information) as shown in Appendix 6.

2.6 Forecasting

2.6.1 Forecasting may be regarded as the generic area concerned with risk, return mortality and other future events.

2.6.2 The valuation of a financial instrument is the assessment of its current worth allowing for the expected uncertainties and variability of the future economic benefits or cash flows. Forecasting, on the other hand, is the process of estimating the future. These forecasts do by themselves not change the future, but provide decision-makers with information that enables them to organise their affairs with the intention of avoiding exposure to risk, or achieving opportunity for gain. We intend to investigate how this distinction between valuation and forecasting informs areas of actuarial practice, such as funding advice for pension schemes.

2.6.3 Although forecasting is a central element of actuarial practice, it is of course applied in many other situations, such as weather forecasting, transport planning, economics, technology forecasting, earthquake prediction, land use and product forecasting. Actuarial practice is typified by complex statistical models that apply time series methods (with or without judgemental adjustments) to historical data and extrapolate in order to estimate future outcomes. However, there are a large number of other forecasting methods, which to varying degrees are more judgemental and less statistical, and various ways of selecting appropriate forecasting methods. We intend to investigate whether some of these forecasting methods might be considered as part of SAPT for possible use in actuarial practice.

2.7 Mortality

2.7.1 Forecasting mortality is one of the main factors with which actuarial science has been involved since its inception. It is an area where extensive arrangements are in place to gather and analyse the statistics on death, both by the Government in respect of national mortality statistics and by insurance companies pooling their data of insurance statistics. Recently pension schemes have also started pooled mortality investigations.

2.7.2 A great deal is known regarding mortality and rates of death by age have been established from many different surveys. However, much remains unknown regarding two key areas- lifestyle and medical advances. Although it is well known that people do not live to the same age, it is also apparent that the differences are due to more than statistical variability and that they are changing. For example lifestyle has an effect on mortality and certain lifestyle factors (such as smoking, diet, exercise, weight, occupation and geographical location) lead to changes in mortality experience. However, people are not normally required to provide detailed information on their daily lives, with the result that most mortality studies are restricted to a consideration simply of medical condition and ageing as the causes of death. The available data means that mortality can only be examined in relation to age and to certain limited causes of death. Actuaries have tended to focus almost entirely on age.

2.7.3 It is also known that mortality is changing over time, with people generally living longer than previously. Over the last fifty years or so, the pace of improvement has been very significant. However, the level of improvement has not been universal and has varied in different time periods and over different generations.

2.7.4 Medical science has been a contributor to such changes, but what is not clear is the extent to which this development is attributable to different causes and how these separate causes will continue to develop in the future. For example, will man acquire the technology to slow, prevent or even reverse the process of natural ageing? Although the Board plans to consider mortality in greater detail, this cannot remove the inherent uncertainty of future developments.

2.7.5 Population data provide one reference point for those charged with making such difficult judgements about future trends. Figures produced by the Government Actuary's Department are therefore one very important benchmark. In addition, many papers have been written by demographers, gerontologists and others on the likely future course of mortality improvement. There is some polarising of views between those who argue that there is no limit to what can be achieved, and others who believe that wear and tear will effectively impose some upper limit to the human lifespan.

2.7.6 The BAS is conscious that this is a question of major importance and is closely following developments.

3 Next steps and areas on which views are sought

We are working towards issuing a full consultative paper in the autumn, when the investigations outlined above have been completed. This paper will set out the rationale leading to any conclusions we have come to and, where appropriate, will set out the range of reasonable alternatives. In the meantime the FRC welcomes the views of those stakeholders and other parties interested in actuarial practice who wish to comment on the content of this document.

In particular the Board would welcome views on whether:

1. the BAS priority should be to focus on standards that relate to actuarial information, over the other issues discussed (section 1.2);
2. the needs of those who rely on actuarial information should be the primary foundation on which actuarial standards are developed as discussed (section 1.4.1);
3. prudence should be regarded as decision–makers' attitude to risk (evidenced by the risks they accept or avoid) and is not an element of measurement, as discussed (section 1.4.12 et seq);
4. the concept of SAPT will provide a useful means of distinguishing high quality actuarial information (section 1.7); and
5. the BAS should develop a generic communication standard (as recommended by Morris – see sections 1.7.8 and A1.14) as well as detailing specific communication requirements and standard reports in each SAPT standard. If so, which of the six items from the Morris listing are applicable to every report containing actuarial information.

Although this Preliminary Consultation Paper raises specific questions, commentators should not feel that they are constrained by those questions, or required to answer all of them. However, it will assist collation of views, if the questions are used to structure responses on the topics raised.

For ease of handling, we prefer comments to be sent by e-mail (in Word format) to: **basapril07@frc.org.uk**

Comments may also be sent in hard copy form to:
Director, Actuarial Standards
Financial Reporting Council
5th Floor, Aldwych House
71-91 Aldwych
London WC2B 4HN

Comments should reach the FRC by 6 July 2007.

All responses will be regarded as being on the public record unless confidentiality is expressly requested by the respondent. If you are sending a confidential response by e-mail, please include the word ‘confidential’ in the subject line of your e-mail.

Annex

A1. Events leading to the establishment of the BAS

A1.1 In March 2004, the Government asked Sir Derek Morris to undertake a wide-ranging review of the actuarial profession. The background was the criticisms of the actuarial profession made by Lord Penrose in his inquiry into the Equitable Life. Lord Penrose had been asked by the Government in 2001 to enquire into the circumstances leading to the situation of the Equitable Life Assurance Society and to identify any lessons to be learnt for the conduct, administration and regulation of life assurance business. Morris produced an interim assessment in December 2004 and the final report in March 2005.

A1.2 The Morris Review began by listing a number of issues concerning the actuarial profession, which had been raised by the Penrose Inquiry. Those issues included:

- a lack of comprehensive professional standards;
- an over-reliance on the role of the Appointed Actuary;
- a lack of scrutiny and audit of actuarial calculations;
- reactive disciplinary procedures;
- a reluctance to challenge fellow actuarial professionals; and
- concerns about the Government Actuary's Department's role in advising on the prudential supervision of insurance firms.[Ref: Morris 1.1]

A1.3 On the first point, the Morris Review asserted that "perhaps the most serious of Lord Penrose's criticisms was that the Profession [defined as the Faculty and the Institute of Actuaries] had failed to develop comprehensive professional standards in a number of key areas……Lord Penrose argued that in the past the Profession's guidance notes had been consensus driven and had therefore tended towards the lowest common denominator and had been drawn too widely with too much discretion permitted for individual actuaries within the guidance." [Ref: Morris 1.2]

A1.4 The Morris Review examined actuarial work for pensions, life and general insurers. Although Lord Penrose's inquiry had been focused on one life insurance company, the starting point for the Morris Review was the more general set of concerns which Lord Penrose raised about the actuarial profession and which were reinforced in the Morris Review's own consultation. The regulatory framework for members of the actuarial profession was one of the broad areas the Morris Review investigated. [Morris 1.7/1.8]

A1.5 The Morris Review took place against a background of widespread concern that the population was not saving enough for its long-term needs. Actuaries were actively involved in the pensions and insurance industry and, as the relevant experts, had been too slow to adjust to changing circumstances. Explicitly or implicitly, they had provided considerably more assurance to customers than was warranted. [Morris 1.20/1.23] At the same time the Morris Review recognised that actuarial expertise must not be confused with the ability always to forecast the future accurately, and that an actuary who, in the early 1990s, persisted with forecasts of inflation and interest rates that in the event turned out to be correct would, at that time, have lost a substantial amount of credibility. [Morris 1.22]

A1.6 The interim assessment was that there were weaknesses in the framework of self-regulation by the actuarial profession, including:

- professional standards that had been weak, ambiguous or too limited in range and perceived as influenced by commercial interests;
- an absence of pro-active monitoring of members' compliance with professional standards; and
- a profession that had been too introspective, not forward-looking enough and slow to modernise.

The result was that the self-regulatory framework had proved inadequate to protect the public interest. [Morris 1.31/2] A further criticism was that there had been insufficient independent and lay input into the standard-setting process. [Morris 6.3]

A1.7 Nevertheless, the interim assessment concluded that there was a continuing need to reserve specific roles for actuaries in the life and pensions areas, to ensure that technical and professional standards are met. It also sought views on a possible regulatory role in general insurance.[Morris 1.37]

A1.8 The interim assessment criticised the Profession's standard-setting process, which, it said, had produced weak and ambiguous professional standards, had not resolved contentious issues, had led to inconsistent approaches across practice areas and perceived conflicts of interest. The Morris Review welcomed the Profession's proposal for an independent Actuarial Standards Board and suggested that independence could be achieved through oversight by the FRC. [Morris 1.38]

A1.9 The final report concluded that the Profession's approach to standard-setting through separate Practice Boards had failed to ensure a coherent, consistent and comprehensive set of standards. The Profession had used Practice Boards to develop its standards, both ethical (Professional Conduct Standards) and technical (Guidance Notes). Other bodies, FSA, DWP and Opra also provided rules and guidance.[Morris 6.1/6.4]

A1.10 The Morris Review rejected the options of an Actuarial Standards Board quasi-independent of the Profession and of the FSA/DWP/Opra setting standards. It preferred an Actuarial Standards Board subject to oversight by a suitably independent body, for example the Financial Reporting Council. It saw such independence as vital to restore confidence in the process of setting actuarial standards and their content in the UK. It also sought to preserve the involvement of members of the Profession in the setting of technical standards. [Morris 6.5/6.9]

A1.11 The proposal that the FRC should establish a new operating body to set actuarial standards received wide-ranging endorsement given the already significant overlaps between the accounting and actuarial professions, the respect in which the FRC was held and its wide membership, the apparent fit with the FRC's aim of promoting confidence in corporate reporting and governance and the scope for potential synergies. Nevertheless there were concerns which needed to be addressed, principally by the FRC altering the composition of certain of its bodies to give representation to the actuarial profession. It was also noted that consumer interests were not represented in the FRC. [Morris 3.19/3.28]

A1.12 The Morris Review set out a modus operandi for the new body with a recommended early step being to set out an appropriate conceptual framework, which would include the explicit objectives and characteristics of technical standards, broadly equivalent to the Profession's existing Guidance Notes. The Profession would continue to set its own ethical standards, broadly equivalent to the existing Professional Conduct Standards and that process was recommended to be subject to oversight by the Professional Oversight Board for Accountancy (POBA). If POBA had concerns about the quality of the Profession's ethical standards or if the new Board believed it appropriate, the new Board should have reserve powers to issue ethical standards. [Morris 6.11/6.18]

A1.13 It expressed the view that the new Board should contain a cross-section of parties with interests in actuarial standards, and lay members. A majority of actuarial members including UK practising actuaries and possibly non-practising actuaries, academic or overseas actuaries was envisaged, alongside representation of users of actuarial advice, consumers and regulators. [Morris 6.16]

A1.14 It did not seek to set out detailed suggestions about individual standards although, because of the significant concerns about the communication of actuarial advice, it expected the new Board to develop a generic standard on communication covering the content of actuarial communications and the use of those communications by others. The new standard was recommended to cover the need for actuaries to disclose relevant information on:

- assumptions;
- methodologies;
- nature of calculations and the exercise of judgement;
- sensitivity and scenario analysis;
- characterisation of risk in relation to sensitivities and scenarios; and
- relative importance of risks and the capacity of the client to bear them.

It envisaged that the substance of the new standard should, where applicable, be reflected in all professional standards going forward. [Morris Chapter 2 Final Recommendation]

A1.15 Standard-setting processes were just one area of criticism. The interim assessment also concluded that there was a need to provide clarity over to whom actuaries are accountable and for what; to have a clear hierarchy of accountabilities; clear guidance on when actuaries must whistle-blow and act in the public interest; and clear protections and incentives for whistle-blowing. [Morris 1.39] The final report made recommendations to ensure that actuaries' compliance with professional standards is monitored within the overall regulatory framework. The central role of standards would thus be reinforced.

A2. The establishment of the BAS

A2.1 The Morris review reported in March 2005 and, from April 2006, the FRC took on its new role in setting actuarial standards and overseeing the regulation of the actuarial profession. A group of senior individuals was appointed by the FRC to become the Board for Actuarial Standards (the BAS). The FRC agreed with the Profession the arrangements to apply in relation to actuarial technical standards. Initially, the BAS would adopt the technical standards (Guidance Notes) previously set by the Profession. Over time the BAS would revise the standards in line with the approach it developed, which would reflect the recommendations of the Morris Review and full consultation with the preparers and users of actuarial advice.

A2.2 The FRC also extended the remit of its Professional Oversight Board to cover the Actuarial Profession and reached agreement with the Profession to extend the scope of the Accountancy Investigation and Discipline Board (AIDB) to cover public interest cases involving actuaries. A Memorandum of Understanding was prepared to set out the ways in which the FRC and the Profession would work together to ensure that the FRC regime is proportionate and effective and that members of the actuarial professional bodies are subject to appropriate regulatory arrangements.

A2.3 The FRC appointed the members of the Board for Actuarial Standards to represent a cross-section of groups with an interest in actuarial standards, and lay members. Overall, the Board is considered to contain the necessary variety of disciplines and practice areas to avoid the criticisms identified by the Morris Review. The Chairman and the Director, Actuarial Standards are both qualified Fellows of the Institute of Actuaries. Of the remaining twelve members of the Board, five are qualified Fellows of the Institute or Faculty of Actuaries. The remaining seven members have careers with a wide range of relevant experiences. In addition, four organisations, Department for Work and Pensions, Groupe Consultatif Actuariel Europeen, Financial Services Authority and The Pensions Regulator, took up the right to appoint observers to the Board. A list of the members and observers is included at Appendix 1.

A2.4 The new Board agreed its Aims and Objectives. They are included at Appendix 3. They incorporate the need to ensure that technical standards are coherent, consistent and comprehensive. In accordance with the Morris Review recommendation (see A1.12 above); the objectives include the development of a conceptual framework to guide the setting of relevant standards. The framework should set out the explicit objectives and characteristics of such standards. Another objective is consideration of the need for a generic standard for the communication of actuarial advice.

A2.5 The Aims and Objectives also set out the guidelines the BAS will use in carrying out its work. Working on the basis that well informed users are the best regulators, the guidelines include a commitment to be consultative, involving preparers and users of corporate and actuarial reports, the wider public and other regulatory organisations in its decision-making and allowing adequate time for consultation. They also include a commitment to be transparent and efficient and to ensure that appropriate publicity is given to the work of the BAS.

A2.6 The BAS is committed to transparency in its operations. Details of its Aims and Objectives, its members, its agendas and minutes, the progress of the Framework Project and Activity Reports are included on its website. Also available there are the adopted guidance notes, including any necessary amendments since the BAS began operation.

A2.7 In order to ensure that nothing was lost in the transition to the new regime, the BAS adopted the existing standards which fell within its area of responsibility, and agreed transitional arrangements to enable standards in the final stages of production to be completed. These standards will be amended where it is considered necessary. The BAS will return to review areas of current guidance once the conceptual framework is finalised.

A2.8 In accordance with the Morris Review recommendation that this objective be an early step (A1.12 above), the BAS set about a major project to develop the required forward-looking conceptual framework of the concepts and principles underlying actuarial work. It is intended to address core issues of concepts and understandings common across all areas of actuarial practice and which are fundamental to users in the appreciation of the actuarial information with which they are provided.

A2.9 The BAS received advice from the Scrutiny Committee (SC) which had been established by the Actuarial Profession in 2004 to help it to maintain and improve its standards or guidance through independent input into the standard-setting processes. The SC had developed criteria for a sound actuarial standard, which were approved by the Profession's Faculty and Institute Management Committee and became effective from 6 September 2005. The SC, which stood down in September 2006, commended the criteria to the BAS. It also produced a report in March 2006 about "Lessons learnt from its work that may be taken into account in the operation of the BAS". The lessons led the SC to recommend reviews by the BAS in a number of specified areas where there were gaps in guidance, inconsistencies or perceived inconsistencies. The BAS is grateful for the input from the SC. The BAS Chair has written to the Chief Executive of the Actuarial Profession with a brief commentary on how the SC recommendations have been reflected in this paper. The SC letter and our response may be found on our website.

A2.10 Research showed that although actuaries in the US had drafted a statement of "Principles of Actuarial Science" (see A3.17 below) nothing meeting the desired objectives of our conceptual framework has been published by actuaries anywhere in the world. Therefore an analysis of the existing guidance notes and of the concerns highlighted by the Morris Review, the Scrutiny Committee and others was used to define the concepts and principles which needed to be addressed. The BAS approached this work by setting up three Working Groups covering Risk, Value and Stakeholder Interests, and will shortly commence further work on forecasting.

A2.11 The Stakeholder Interests Working Group has been established by the FRC to provide input to both the BAS and the Professional Oversight Board on the needs of users of actuarial practice.

A2.12 Each of these three groups is led by a member of the BAS and includes two other BAS members. In addition each has a wide range of co-opted members to give the required breadth of experience. The members of each group are listed in Appendix 2.

A2.13 As the work in these groups proceeded, a fourth group was formed. This Publications group will focus on how the outputs of the various groups and of the other work streams, such as the survey and interviews, can be brought together into a coherent whole in the final discussion paper. It too is led by a member of the BAS backed by two other members. All four groups are led by non-actuarial members of the BAS.

A2.14 The project plan for the development of a comprehensive framework includes the publishing of a comprehensive discussion paper, now expected to be issued in autumn 2007, with a view to publishing the definitive framework within a further year. This first consultation exercise is seeking views on a number of the most difficult issues and indicates the broad areas which the autumn consultation document is expected to cover. It also offers an opportunity to assist understanding of the way in which the BAS and its scope fit into the total regulatory framework being developed.

A2.15 The responses to this exercise will be considered in drawing up the autumn document. The need for early feedback on the central issues it will set forth is vital to ensure that the definitive document next year has the widest possible support across the many stakeholder groups.

A3. Recent developments outside the BAS

Financial Reporting Council

A3.1 The FRC's new responsibilities for actuarial standards and regulation were reflected in its Draft Updated Regulatory Strategy, published for consultation in December 2006. The FRC's overall aim is to promote confidence in corporate reporting and governance and its Strategic Framework sets out six Strategic Outcomes contributing to that aim.

A3.2 Strategic Outcome Four deals with actuarial practice:

"Users of actuarial information can rely on its

- relevance,
- reliability,
- transparency of assumptions,
- completeness and
- comprehensibility."

A3.3 This Strategic Outcome is backed up by Supporting Outcomes which indicate the wide range of bodies with roles to play if it is to be achieved for users. The legislative and regulatory framework needs to provide clarity on what is required to provide relevant, transparent, clear and complete actuarial information. Actuaries and actuarial firms need to provide actuarial information to a consistently high quality standard. Monitoring and enforcement by institutional users of actuarial information, regulatory authorities and the actuarial profession need to incorporate effective scrutiny to ensure that actuarial information is produced in accordance with the relevant technical and ethical standards.

A3.4 The FRC's plan makes clear that an essential component contributing to the achievement of this Outcome will be a conceptual framework which sets out the principles and concepts that underlie actuarial information and gives coherence and consistency to the standards. It will also require actuarial standards to be developed or amended which are consistent with the conceptual framework (and best practice) and the provision of clear and complete actuarial information. These aspects of its plan are to be delivered by the BAS. That delivery will take account of many other related developments, both inside and outside the UK.

The Pensions Act 2004

A3.5 Building on the systems in earlier legislation, and taking a more holistic and proactive approach to safeguarding work-based pensions, the Pensions Act 2004 is progressively bringing in a new regime. The Pensions Regulator (TPR) has been established to be the proportionate, transparent, accountable and risk-based regulator of work-based pensions in the UK, with wide-ranging and flexible powers under the Pensions Act 2004. The regulatory powers now available to TPR improve its effectiveness in dealing with risks to pension schemes and members' benefits, and in tackling these risks in a focused, targeted and proportionate manner. Its powers include the ability to:

- collect detailed scheme information;
- issue improvement notices and third party notices, enabling the regulator to ensure problems are put right;
- freeze a scheme that is at risk while the regulator investigates;
- prohibit trustees who are judged not fit and proper to carry out their duties; and
- issue a contribution notice or financial support direction.

A3.6 The Pensions Act 2004 also imposes a statutory obligation on employers, anyone involved in the administration of the scheme, and professional advisers, including scheme actuaries, to report breaches of material significance of the legislation

A3.7 The Pension Protection Fund (PPF) was established to pay compensation to members of eligible defined benefit pension schemes, when there is a qualifying insolvency event in relation to the employer and where there are insufficient assets in the pension scheme to cover Pension Protection Fund levels of compensation. The PPF is a statutory fund run by the Board of the Pension Protection Fund, a statutory corporation established under the provisions of the Pensions Act 2004. The PPF became operational in April 2005.

Financial Services Authority

A3.8 In its 2006/07 Business Plan, the Financial Services Authority (FSA) restated its intention to move towards a more principles-based approach to regulation, placing more reliance on the eleven Principles for Businesses and high-level rules in order to provide firms with greater flexibility to decide how best to meet its requirements, encourage greater innovation and align good ‘regulatory’ practice with good ‘business’ practice. This is designed to create a more mature, more confident and less mechanistic approach to regulation and to promote innovation and competition and hence achieve better delivery of the FSA’s statutory objectives.

A3.9 The FSA intends to take a high-level approach that makes the purpose of each rule clear. However, it recognises that more detailed and prescriptive rules continue to have a role to play, to meet external requirements (such as EU Directives) or where they are necessary to achieve its regulatory objectives. The FSA plans to facilitate greater use of Industry Guidance as it moves towards a more principles-based approach to regulation. In a discussion paper issued in November 2006, the FSA outlined a framework for the industry to gain recognition for the guidance it produces. Around the same time, when the FSA published new sub-principles for Individual Capital Assessments (ICAs), a number of industry trade associations, principally the Association of British Insurers, developed some additional ICA guidance material as a complement to the FSA’s sub-principles and guidance. The FSA welcomed this initiative and believes trade associations can and do continue to play a valuable role in sharing practical experience to help firms undertake their ICAs effectively.

EU Insurance Solvency Regime

A3.10 Solvency II is the EU’s project to reform the prudential regulation of insurance, which is aiming for a modernised risk-based solvency system across the European Union. An insurance company should have a solvency position that is sufficient to fulfil its obligations to policyholders and other parties. It is important that insurance undertakings in the EU are subject to the same solvency margin requirements to provide the same protection of policyholders' interests as well as to create a level playing field between undertakings. The current solvency regime was created in the 1970s and it has recently been amended and updated as part of the "Solvency I" package. In addition to these amendments, the Commission Services - in co-operation with the Member States - have started the "Solvency II project" to assess whether more fundamental changes to the EU insurance solvency regime are needed. This comprehensive project should analyse and bring together subjects such as a more risk-based approach, harmonisation of the establishment of technical provisions, new risk transfer techniques and recent developments in financial reporting. Implementation is expected to be finalised in 2010 or later, following a consultation paper on capital requirements planned for July 2007 with the final advice in spring 2008.

International Developments

A3.11 Meanwhile, the International Association of Insurance Supervisors (IAIS) has taken an important step in formulating a more consistent, reliable and transparent approach to the assessment of insurer solvency worldwide with the release in February 2007 of *The IAIS common structure for the assessment of insurer solvency*. Building on the earlier Framework and Cornerstones papers, the new document is, in the words of Tom Karp, Chair of the Technical Committee, "fundamental in developing a common structure for the assessment of insurer solvency and an important stepping stone for the IAIS in developing its standards and guidance on this topic."   The paper presents a coherent risk-based methodology for the setting of regulatory financial requirements. It describes the respective roles of technical provisions and required capital and discusses the concepts that underpin the determination of these components in the context of a risk-based solvency regime.

A3.12 The International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB) are seeking to develop a common conceptual framework (i.e. a single converged framework) that is complete and internally consistent and improves upon the existing frameworks of both boards. Such a framework would provide a sound foundation for developing future accounting standards and is essential to fulfilling the Boards' goal of developing standards that are principles-based, internally consistent, internationally converged, and that lead to financial reporting providing the information needed for investment, credit, and similar decisions. The Boards are conducting the project in eight phases:

Phase	
A	Objectives and qualitative characteristics
B	Elements and recognition
C	Measurement
D	Reporting entity
E	Presentation and disclosure
F	Purpose and status
G	Application to not-for-profit entities
H	Remaining Issues, if any

A3.13 The Boards published for comments a Discussion paper “Preliminary Views on an improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information” in July 2006. They also anticipate publishing discussion papers arising from Phase D in the second quarter of 2007 and Phase B in the fourth quarter of 2007.

A3.14 The IASB is also working on a project to develop an International Financial Reporting Standard (IFRS) on accounting for insurance contracts. The project will address accounting by both insurers and policyholders. The IASB decided to develop an IFRS on insurance contracts because:

(a) It did not exist yet insurance contracts were excluded from the scope of existing IFRSs that would otherwise have been relevant (e.g. IFRSs on provisions, financial instruments, intangible assets).
(b) accounting practices for insurance contracts were diverse, and also often differed from practices in other sectors.

A3.15 The IASB completed phase I of this project in March 2004 by issuing IFRS 4 Insurance Contracts. The project is now in phase II, and the IASB staff estimate that a discussion paper will be published in the second quarter of 2007.

A3.16 The International Actuarial Association (IAA) is the worldwide Association formed by national professional actuarial associations and their individual actuaries. It issues International Actuarial Standards of Practice (IASP). It has finalised eight IASPs to date, all of which give only advisory, non-binding guidance; one of the IASPs relates to social security programmes and the other seven all relate to IFRS 4 (the IASB’s phase 1 standard on insurance contracts). It is consulting on drafts of four other IASPs relating to IFRS 4 and is planning a further round of IASPs. It expects these to be issued prior to the implementation of what is currently expected to be in the IASB standard on Insurance Contracts, phase II.

A3.17 In the USA, the Society of Actuaries (SOA) published “Principles of Actuarial Science” in 1991. Subsequently, the Casualty Actuarial Society (CAS) and SOA worked together to produce a further discussion draft of General Principles of Actuarial Science in 1997. The document has gone through further drafts since then, and it is understood that the SOA and the CAS expect to issue an exposure draft in 2007. The stated objective is to articulate their current understanding of the significant principles that form the scientific framework underlying all areas of actuarial practice. The reasons for articulating these principles include providing a basis for formulating sound and consistent standards, as well as:

- describing and strengthening the intellectual foundation of the actuarial profession;
- providing a foundation for the extension of actuarial models to new applications;
- guiding the articulation of practice-specific principles;
- furthering actuarial education;

- focusing research efforts; and
- aiding in strategic planning for the profession by providing a foundation upon which actuaries can offer their services in current and potential areas of actuarial practice.

Appendix 1

The Board for Actuarial Standards

Chair	***Title***
Paul Seymour (*)	Director: BGI Endowment Fund II, SCOR Global Life Reinsurance UK Limited
Members	
Mike Arnold (*)	Principal and Head of Life Practice at Milliman, London
Nigel Bankhead (*)	Director, Actuarial Standards, BAS
David Blackwood	Former Group Treasurer of ICI plc
Lawrence Churchill	Chairman of the Pension Protection Fund and Senior Independent Director at The Children's Mutual and Monkton Group.
Harold Clarke (*)	Independent General Insurance Consultant, formerly Actuarial Partner at Deloitte & Touche LLP
Christopher Daws	Consultant to, formerly Financial and Deputy Secretary, Church Commissioners; Trustee, NCH; Trustee – Director NCH Superannuation Fund
Steven Haberman (*)	Professor of Actuarial Science and Deputy Dean of Cass Business School City University
Dianne Hayter	Chair of the Consumer Panel of the Bar Standards Board, member of the Board of the National Consumer Council, the Insolvency Practices Council and the Determinations Panel of The Pensions Regulator.
Julian Lowe (*)	General Insurance Actuarial Director, Aviva plc
Jerome Nollet	Corporate Finance Advisor in Risk and Capital Management for the insurance industry
Tom Ross (*)	Senior Independent Director of Royal London Mutual Insurance Society
Sir Derek Wanless	Chairman of the Audit and Risk Committees of Northern Rock plc; Vice Chairman, Statistics Commission
Martin Weale	Director, National Institute of Economic and Social Research. He is also a Statistics Commissioner and a Hon Treasurer of the Alzheimer's Research Trust
Observers	
Peter Askins	Head of Policy for Defined Benefit Pension Schemes at the Department for Work and Pensions
Jim Kehoe (*)	Consulting Actuary - representing Groupe Consultatif Actuariel Europeen
Sue Rivas	Head of Policy and Guidance, The Pensions Regulator
Paul Sharma	Head of Department for Risk Modelling and Review, Financial Services Authority

(*) FIFA (Actuary)

Appendix 2

Risk Working Group

Name	***Title***
Kate Angell (*)	Consulting Actuary, Grant Thornton
Manoj Bhaskar (II)	Manager, Traded Credit & Market Risk, HSBC
Harold Clarke (*)	BAS Member. Consultant, formerly Actuarial Partner at Deloitte & Touche LLP
Melanie Cooper (*)	Actuary, Asset and Product Protection Group, QBE Europe
Tim Gordon (*)	Principal
Rob Green (*)	Director, Deloitte & Touche LLP
Steve Haberman (*)	BAS Member. Professor of Actuarial Science and Deputy Dean of Cass Business School City University
Paul Ingram (I)	Global Head of Traded Credit and Market Risk, HSBC
Andrew Lennard (O)	Research Director, ASB
Chris Lewin (*)	Chairman, RAMP Working Party
Jonathon Macdonald (*)	Director, PwC
Peter Mansell (*) (I)	Regional President, UK and Ireland, AIG Life
Jerome Nollet (L)	BAS Member. Corporate Finance Advisor, Risk and Capital Management
Derek Pike (*)	Project Director, BAS
Tilly Ross (*)	Group Head of Pensions, National Grid plc
Ben Rowe (*)	Chief Actuary, FSA
Crispin Southgate	Consultant to asset managers and corporates on pension plan investment
Steve Townsend (*II)	Group Insurance and Market Risk Director, Lloyds TSB
Steve Wearne	Head of Strategy, Regulation and International Division, Food Standards Agency

(*) FIFA (Actuary)
(L) Group Leader
(O) Observer from the FRC
(I) Stage I only
(II) Stage II only

Information as of 14 March 2007

Value Working Group

Name	***Title***
Bill Abbott	International Actuarial Association
Mike Arnold (*)	BAS Member. Principal and Head of Life Practice, Milliman.
Guy Ashton	Managing Director, Head of European Company Research, Deutsche Bank
Nigel Bankhead (*)	Director, BAS
John Bannon (*)	Group Director, Liverpool Victoria
Stewart Calder (*)	Head of Life Actuarial and Actuarial Function Holder, AXA
Lawrence Churchill (L)	BAS Member. Chairman, PPF
Ruth Goldman	Head of Pensions, Linklaters
Nigel Green	Previously Director of Financial Control, Nestle
Pat Hakong	Head of Accounting Policy, Lloyds Finance & Risk Management
Chris Hitchen (*)	Chief Executive, Railways Pension Trustee Company Ltd (RailPen)
Malcolm Kemp (*)	Executive Director Quantitative Research, Threadneedle Investments
Andrew Lennard (O)	Research Director, ASB
Peter Tompkins (*)	Partner, PwC
James Tuley (*)	Chief Actuary, FSA
Phil Turner (*)	European Partner, Mercer Human Resource Consulting
Martin Weale	BAS Member. Director, National Institute of Economic and Social Research.
Martin White (*)	Actuary, Equitas

(*) FIFA (Actuary)
(L) Group Leader
(O) Observer from the FRC

Information as of 8 September 2006

Stakeholder Interests Working Group

Name	***Title***
Gordon Beaumont	Chairman, Alfred McAlpine Pension Trustees Ltd
Rosemary Beaver	Head of International Compliance, Lloyd's (and Chair of the Insurance Institute International Committee)
Jocelyn Blackwell	CEO, Higham Dunnett Shaw
Steve Balmont	Director, Law Debenture
Roger Carroll	PR Consultant, Bell-Pottinger
Norma Cohen	Financial Times
Hilary Daniels	POB Member. Interim Chief Executive, Norfolk PCT
Christopher Daws	BAS Member. Consultant to, formerly Financial and Deputy Secretary, Church Commissioners; Trustee, NCH; Trustee – Director NCH Superannuation Fund
Fiona Draper	Independent Pensions Consultant/Trustee
Dianne Hayter (L)	BAS Member. Board member, National Consumer Council
Melanie Johnson	ABI Consumer Impact
Trevor Larman	Independent Trustee, Golden Charter
Julian Lowe	BAS Member. General Insurance (GI) Actuarial Director Aviva plc
Anne Maher	POB Member. Formerly Chief Executive of the Pensions Board for Ireland. Board member of the Irish Accounting and Auditing Supervisory Authority and of Allied Irish Banks plc
David Metz	Financial Services Consumer Panel
Peter Murray	Trustee, Retired pensions manager: Railway Pensions Scheme
Patricia Peter	Head of Corporate Governance and Employment, Policy Unit, IOD
Penny Shepherd MBE	Chief Executive, UK Social Investment Forum
Jay Sheth	Senior Policy Advisor, CBI
Anna Sofat	IFA, AJS Wealth Management Ltd
Doug Taylor	Which?
Roger Turner	Executive Officer, Occupational Pensioners Alliance

(L) Group Leader

Information as of 5 March 2007

Appendix 3

Aims & Objectives

a. **Aim**

Our overall aim is:

- To establish and improve actuarial standards, primarily of a technical nature, to ensure that they are coherent, consistent and comprehensive. and thereby to help promote high quality actuarial practice.

b. **Objectives**

Our objectives are to:

- Develop an appropriate conceptual framework to guide the setting of relevant actuarial standards, including the explicit objectives and characteristics of such standards.
- Create a process for the development and adoption of standards which ensures that the objectives of the conceptual framework can be applied in practice.
- Issue new relevant actuarial standards, or amend existing ones, in response to evolving commercial practices, economic developments and deficiencies identified in current practice with, where appropriate, written case studies or practical guidance in support of those standards.
- Take account where appropriate of the regulatory requirements of the legislation, the Financial Services Authority, The Pensions Regulator and any other relevant regulatory body. Liaise with the Actuarial Profession regarding areas of practice for which new standards may be required or existing standards should be modified or clarified.
- Consider the need for a generic standard for the communication of actuarial advice.
- Address urgent issues promptly.
- Liaise with the International Actuarial Association, other international bodies, national standard-setters and EU institutions on the development and application of international actuarial standards.

c. **Membership**

The membership of the Board is chosen to represent a cross-section of groups with an interest in actuarial standards, and lay members.

Membership includes:

- Practising UK actuaries, covering different areas of actuarial practice
- Users of actuarial advice provided to:
    - insurance companies
    - corporate pension scheme sponsors
    - trustees

Membership may include persons concerned with other financial organisations such as banks, securities firms, fund managers and investment advisers, or other persons who have an interest in actuarial practice, including consumer representatives, members of other professions which work with actuaries, and academics (e.g.

economists, statisticians and demographers).
The following organisations are entitled to appoint observers to the Board:

- DWP, FSA, TPR, HMT
- such other organisations as the Board shall agree

d. **Operating guidelines**

In carrying out its work, the BAS will:

- Work on the basis that well informed users are the best regulators.
- Target the use of its powers, taking a proactive, risk-based and proportionate approach, making effective use of Regulatory Impact Assessments.
- Emphasise principles and clarity in its standard-setting.
- Be consultative - involving preparers, users of corporate and actuarial reports, the wider public and other regulatory organisations in its decision-making and allowing adequate time for consultation, without compromising its independence or confidentiality.
- Take account of any emerging EU and global approaches to actuarial standards.
- Be transparent, accountable and efficient in its work, and ensure that it receives appropriate publicity.

Footnote

In May 2006, the FRC and the Actuarial profession agreed a Memorandum of Understanding setting out their respective responsibilities for actuarial regulation. Arrangements for communications between the actuarial profession and the FRC were agreed in October 2006.

The Actuarial Profession will continue to set ethical standards. The Profession's arrangements for setting these standards and the standards themselves will be overseen by the FRC's Professional Oversight Board (POB). The BAS will have a reserve power to issue ethical standards if either POB has concerns about the Profession's ethical standards or the BAS believes it to be appropriate.

Appendix 4

Areas of actuarial practice

The following are areas that are already covered by BAS adopted guidance notes:

- Technical reserves for insurance companies, Lloyds syndicates and friendly societies for the purpose of regulatory returns
- Technical provisions for insurance companies, Lloyds syndicates and friendly societies for the purpose of annual accounts
- Capital requirements for insurance companies, Lloyds syndicates and friendly societies
- Distribution of surplus and exercise of discretion (including with profits bonus rates and compliance with PPFM)
- Disclosure of remuneration and allocation of expenses for the purpose of projections of future benefits under retail investment products
- Solvency position of pensions schemes for regulatory and corporate reporting purposes
- Funding of pension schemes and ongoing contribution rates
- Transfer values for pension schemes
- Statutory money purchase illustrations
- Valuation of reversions and life interests
- Pre-paid funeral plans
- Post retirement medical plans

Appendix 5

Categories of actuarial information and their characteristics

Sector	**Actuarial Information**	**Decision Usage**	**Suitable for BAS Standards?**	**Measurer**	**Decision-maker**	**Independent Measurement Verification**	**Regulator (TPR/FSA)**
Pensions/ Benefit Plans	Corporate pension costs	Investment	Yes	Directors	Investors	Yes - audit	
	Scheme financial assessment	Contribution payments	Yes	Trustees	Trustees & Sponsor	No	TPR
	Scheme financial position	Scheme membership	Yes	Trustees	Members	No	
	Transfer values	Scheme membership	No *	Trustees	Members	No	
	Commutation values	Form of benefits	No	Trustees	Members	No	
Insurance	Corporate reporting	Investment	Yes	Directors	Investors	Yes – audit (not embedded values)	
	Regulatory reporting	Solvency determination	Yes	Directors	Directors	Yes - audit	FSA (US regulators for Lloyds)
	Individual capital assessment (ICA)	Capital determination	Yes	Directors	Directors	No	FSA
	Report from with profits actuary	Exercise of discretion: - PPFM	Yes	Directors	Directors	Varied	FSA (background)
	Surrender / paid-up values	Policy change	No	Directors	Policyholders	No	FSA (background)
	Ad hoc report	Setting premium rates / product design	No +	Actuary or Directors	Directors	No	None
	Policy information	Policy purchase	Yes	Directors	Policyholders	No	FSA

* No in respect of risk to the decision-maker, but undecided in respect of measurement.

\+ No in respect of measurement, yes in respect of risk to the decision-maker

Appendix 6

Actuarial classification of risk by measurability and manageability

Category	Response		
	Risk is Measurable?	**Capable of being mitigated?**	**Communication**
Frequency and severity can be estimated	Modelling for probability and outcome	Holding capital, reinsuring or hedging	Standard reporting output and analysis of alternatives with measured outcomes
Only frequency or severity can be estimated	Focus on stress testing to identify key variable and model break points. Modelling of possible outcomes (e.g. Maximum Possible Loss)	Holding capital, reinsuring or hedging. Focus on risk diversification	Results of stress tests and advice on possible impact, break points, and mitigating action(s)
Hard to quantify – very limited data - but capable of being managed	No but potential impacts can be explained and sometimes measured	By defining management actions in possible scenarios and, possibly, trigger points for action	Advice on mitigating action(s) and trigger point(s)
Identifiable but not easily managed	Risk cannot be estimated by statistical means. In some cases the impact of events can be estimated (e.g. tax rate change)	By horizon scanning	Clarity on the extent to which the actuary (or his firm) carries out relevant horizon scanning

Measurability is to be understood as applying standard analytical methods, therefore requiring sufficient and relevant data. We make a distinction here between the likelihood of the event happening and the measure of the outcome.

Capable of being mitigated Some risks that are hard to measure are still insurable or can be mitigated by operational and management rules.

Communication The cost/impact analysis is an important function. Importantly market prices should not be used to illustrate the potential cost or impact for the user unless there is a reasonably deep and liquid market. Otherwise that cost or impact may be unduly infected by user specific elements based on the participants' appetites for risk, which may differ for good reasons from the user's own risk appetite, the latter being the main driver of actuarial risk analysis.