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The Director
Board for Actuarial Standards
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Dear Sir

Consultation on actuarial mortality assumptions

I am writing on behalf of the Association of Consulting Actuaries, in response to the Board for Actuarial Standards' consultation on actuarial mortality assumptions.

Members of the ACA provide advice to thousands of pension schemes, including most of the country's largest schemes. Members of the Association are all qualified actuaries and are subject to the code of professional conduct of the Faculty and the Institute of Actuaries. Advice given to clients is independent and impartial. ACA members include the scheme actuaries to schemes covering the majority of members of defined benefit pension schemes.

The ACA is the representative body for consulting actuaries, whilst the Faculty and Institute of Actuaries are the professional bodies.

In general terms, we found the discussion paper a very balanced and helpful contribution to the ongoing debate on actuarial mortality assumptions. We also welcomed the accompanying paper of the Mortality Research Working Party, which provides a useful survey of a number of current areas.

We believe that the BAS does have a role to play in setting standards for mortality assumptions; however, any such standards are likely to be more effective in increasing the transparency of the assumptions, rather than in increasing the comprehensibility to the users of actuarial information. Different users will have very different needs, and there can be no substitute for direct education of and communication with clients that reflects their own particular knowledge and experience. A reporting standard can only set out minimum requirements.

We do not believe that the BAS should set limits to assumptions for either base mortality or future mortality improvements.

The paper does not make clear what are the next steps in developing these standards, nor how they will fit into the proposed framework of standards, and we would welcome clarification of how the BAS intends to proceed following the conclusion of this consultation.

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Our detailed comments on the specific questions asked by the consultation can be found in Appendix A to this letter.

We hope that you find our comments of assistance.

Yours sincerely

Keith Barton
Chairman
Association of Consulting Actuaries

Appendix A – Detailed questions

1 Do respondents have any views on the significance of the adverse effects that the over- or underestimation of future mortality may have on pension scheme members, scheme sponsors, life insurance policyholders and life insurance companies, as set out in section 2?

We concur with the view expressed in 2.19 that “both the over- and underestimation of future improvements in mortality can ... have adverse effects on pension scheme members and their employers” and welcome the balanced approach taken by the BAS (which stands in stark contrast to the recent consultation paper on mortality assumptions issued by the Pensions Regulator).

2 The BAS has discussed some of the issues surrounding mortality assumptions in section 3. In that context:

a) Do respondents have views on appropriate methods of communicating the extent and impact of the inherent uncertainty involved in mortality assumptions?

We agree that it is important to communicate the inherent uncertainty. The appropriate methods for communicating this are likely to depend on the sophistication of the users of the information. For example, some pension scheme trustees may struggle to understand concepts such as fan charts or confidence intervals. For such trustees, the use of scenarios may be a better way of communicating the extent of uncertainty.

We therefore believe that the BAS should not prescribe any particular methods of communicating uncertainty. Rather it should be for the individual actuary to communicate with their clients using the most appropriate methods based on their knowledge of the users' level of experience and sophistication in understanding actuarial information.

b) Do respondents agree that the use of separate assumptions for base mortality and future changes in mortality, not taking the form of margins in other assumptions, would be desirable?

Yes, we agree that separate assumptions should in general be used for base mortality and future changes in mortality.

However, we are not sure that it is necessary to rule out entirely the use of margins in discount rates as an alternative, which may be appropriate in some relatively rare circumstances (for example, because of cost considerations on a piece of work other than a full valuation).

Where margins in discount rates are used, however, it will be important that this is made explicit at the time of the calculation (rather than it later being claimed that there was an implicit allowance in the discount rate for mortality improvements). The actuary ought to quantify the effect in a transparent way, e.g. by quantifying the effective life expectancy implicit in the use of the assumptions, perhaps compared to the life expectancy using the same mortality assumptions without the discount rate reduction. For most lay readers, this would be just as transparent as saying, for example, that the client has adopted long cohort mortality.

c) Do respondents have views on appropriate methods of communicating the significance of assumptions, both in absolute terms and relative to that of other assumptions?

In line with our answer to 2(a), we do not believe that there should be prescribed methods of communicating the significance of assumptions. For most purposes, presenting the percentage change in pension scheme liabilities for particular assumptions will enable trustees and employers to compare the relative effects.

We believe that most clients will find the increase in liabilities a more useful measure than comparing the effect of a change in assumptions with a comparable change in the discount rate. However, we do not oppose the use of such a method and believe it may be a useful additional tool for explaining the results in some cases.

We note that there is a slight oddity in the BAS' proposal of banning margins being taken in discount rates for mortality assumptions, whilst at the same time recommending that changes in mortality assumptions might be demonstrated effectively using discount rates. This may cause confusion to some clients.

3 Some proposals regarding the use of summary statistics and benchmarks in reporting on mortality assumptions are considered in section 3.

a) Do respondents foresee any practical difficulties in communicating the assumptions about subsequent changes in mortality rates underlying life expectancy statistics?

There will always be difficulties in attempting to communicate on an issue as complicated as subsequent changes in mortality rates to a non-specialist audience. However, actuaries must strive to present the information, taking account of the particular knowledge and abilities of their clients. Summary statistics are an important part of this communication process.

Specifying annual or average rates of change may well be useful to many clients. However, some non-specialists struggle to understand the concept of second order effects, such as the speeding up or slowing down of rates of change. For such clients, simple life expectancies at different ages would convey the information in a more effective way.

Actuaries should be able to use a variety of methods of communicating life expectancy to clients, covering a range of different approaches. (Separately, it is possible that the BAS may wish to prescribe the disclosure of a particular summary statistic for its reporting standard; however, it will be important to ensure that actuaries feel able to use other methods where they feel that these are valuable to clients.)

b) Do respondents have suggestions for summary statistics that can be used to describe changes in mortality rates?

In line with our answers above, we believe that different users will find different statistics most helpful. Life expectancy statistics remain the easiest to explain.

c) Do respondents think that the use of benchmarks is useful, and if so, should the development of standard benchmarks for future changes in mortality be encouraged?

We agree that benchmarks can be a useful tool for clients. However, as the BAS recognises, there are very real concerns that any benchmarks prescribed by a body as influential as the

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BAS would come to be taken as 'recommended' projections. No matter how much the BAS stresses that these are not recommendations, it is unlikely that they could avoid being so taken.

We therefore believe that it is more appropriate for any benchmarking of assumptions to be carried out on a scheme specific basis by individual client advisers rather than as prescribed by the BAS.

4 The BAS would welcome any general comments that respondents may have on the various possibilities for standards set out in section 4. In particular:

a) Do respondents agree that the BAS should set some standards for mortality assumptions?

We are in favour for standards for reporting mortality assumptions on a consistent basis (for example, by reference to the CMI Library). However, it should be noted that this would be a disclosure only, and that a variety of methods of explaining assumptions to clients should be permitted.

It will be important for the BAS to set out the purpose and audience of any reporting standard. The BAS has set out two purposes – to increase the transparency of the assumptions and to increase the comprehensibility to the users of actuarial information.

A reporting standard is likely to be most effective in increasing the transparency of the assumptions. The BAS has not clearly specified whether it envisages the disclosures being transparent to an actuary who wishes to be able to replicate the results or to a user of the information. The needs of the two may be different (for example, a user of the information is unlikely to gain much from disclosure of the parameters being used in a P-Spline projection). The BAS should clarify the intended audience for the transparency.

The BAS also sets out that a reporting standard should also aim to increase the comprehensibility to the users of actuarial information. It is important to note, however, that different users will have very different needs, and there can be no substitute for direct education of and communication with clients that reflects their own particular knowledge and experience. A reporting standard can only set out minimum requirements.

The standards for the criteria for mortality assumptions seem unobjectionable as described in the consultation paper. We would have liked any such standard to be on a 'comply or explain' basis rather than mandatory; however, we note from the exposure draft of the conceptual framework that the BAS does not intend to issue standards on a 'comply or explain' basis, and would therefore suggest that the standard consists of a 'requirement to consider' these criteria.

We do not believe that the BAS should prescribe limits to mortality assumptions.

b) Do respondents agree that reporting standards would play a significant role in increasing the transparency of assumptions and their comprehensibility to users of actuarial information?

We believe that they would increase the transparency of assumptions, and would enable other specialists to understand and replicate the results of other actuarial calculations.

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However, we do not believe that a reporting standard on its own would be sufficient to explain mortality assumptions to the users of actuarial information. Further education and explanation on an individual basis is also likely to be necessary.

c) Do respondents have any comments on how to assess the likely impact of possible BAS standards for mortality assumptions?

Reporting standards would be unlikely to have significant effects on the cost of producing actuarial information for users (for example, we might expect that consistent labelling of mortality assumptions by reference to the CMI library is already best practice in many cases). We would be cautious however of prescribing too many summary statistics, benchmarks etc as producing these could add to the costs of any valuation without necessarily providing any additional benefit to the client.

As the BAS recognises, prescribing limits on assumptions could have significant and damaging effects, and we agree that the BAS should not pursue this line.

5 In section 5 the BAS considers possible standards for assumptions about base mortality.

a) Do respondents believe that it would be desirable for a BAS standard to require the use of the most recent applicable published tables, taking into account both the communication problems and the practicality of setting a limit on the tables to be used?

We do not agree that the Board should require actuaries always to use the most recent table. Whilst we agree that the most recently applicable published tables should always be considered when setting the assumptions, there are occasions on which an older table (suitably adjusted) gives a better fit. However, if an older table is used, we would suggest that the reporting standard should require disclosure both of the fact and of the reasons for it.

b) Do respondents have any comments on the proposals for possible requirements for reporting on assumptions about base mortality, criteria that assumptions should meet, or limits that should be observed when setting assumptions? Respondents are asked to focus on:

- any practical problems that might arise in complying with them; and
- whether they would further the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.

We are broadly in agreement with the material set out in 5.41-5.46. We agree that it is important to disclose the method for updating the base tables to the date of the valuation (5.45). There are a number of methods in operation, and this can give rise to some significant differences in results.

5.47 on mortality risk mitigation would seem to be better dealt with as part of a wider discussion of risks within the valuation as a whole, rather than specifically in a disclosure on mortality assumptions. Mitigation of mortality risk should only need to be mentioned where materially significant action has been taken.

The material covered by 5.48 is clearly of great importance, and actuaries must communicate the sources, extent and impact of the risk and uncertainty to their clients. We would question however whether any statement in a standard disclosure could do this

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effectively, and believe that additional communication outside the scope of the reporting standard will also be required.

In most cases, we would be happy for the reporting standard to include a requirement for a statement on whether assumptions on base mortality are best estimate (5.49), although we note that for small schemes, it may be difficult to confirm that an assumption is 'best estimate'. Rather than expressing a view on prudence, we believe that the actuary should specify whether the assumption is more (or less) pessimistic than best estimate. Prudence is more appropriately a concept for the trustees.

We do not object to the proposals for criteria for base mortality rates set out in 5.50-5.55, although we would prefer that the standard expressed a requirement to consider the criteria rather than making them mandatory.

We agree with the BAS's assessment that it is not appropriate to set limits to base mortality assumptions, because the assumption is likely to be specific to the group of lives in question. We would prefer any prescription about using older tables to be dealt with in the terms covered by 5.53 rather than as a straight prohibition.

6 In section 6 the BAS considers possible standards for assumptions about future changes in mortality.

a) Do respondents agree there is no objective basis for differentiating the future changes in mortality likely to be experienced by a particular small group of lives from those likely to be experienced by the population as a whole? If respondents disagree, the BAS would be interested in examples to the contrary, together with supporting evidence.

We were surprised that the BAS discussion paper does not indicate at this point in the consultation paper (though it does so later in 6.60) that it may well be appropriate to make different assumptions of mortality improvements for males and females. Recent evidence (for example the 92 and 00 tables) suggests that the gap is narrowing, and it is common practice to use different underpins for future improvements for males and females (as the PPF does in its s143 and s179 assumptions).

We agree with the BAS that the evidence on differences in future changes in mortality by reference to place of residence, pension size or occupation is not as clear cut and, in particular, that the SAPS data cannot be used (at present) to provide future projections. However, ONS data does suggest that there may be differing trends between social classes and we are aware that some insurance companies are differentiating by social class in their future mortality improvements on the basis of the data from their own books of business. In addition, some pension schemes are considering different assumptions for manual and non-manual workers.

We therefore believe that it may be appropriate to differentiate for future changes in mortality, but that it should be done with considerably more caution than for base mortality, and only where there is evidence to support the assumptions.

b) Do respondents have any comments on the proposals for possible requirements for reporting on assumptions about future changes in mortality, criteria that assumptions should meet, or limits that should be observed when setting assumptions?

Respondents are asked to focus on:

- any practical problems that might arise in complying with them; and

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- **whether they would further the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.**

We are doubtful about the merits of benchmark projections (6.55) for the reasons given above.

As with base mortality, we believe that an actuarial mortality disclosure may not always be the right place to disclose measures taken to mitigate risk, except where there has been material action taken to mitigate mortality risk (6.56) and that the sources, extent and uncertainty of the assumptions will need to be supplemented by direct communication with clients (6.57).

We do not believe that it is appropriate to specify whether assumptions about future mortality changes are best estimate or prudent (6.58). This is a subjective measure where future mortality is concerned, and the reporting standard should focus on objective disclosures. The terms 'best estimate' and 'prudent' are not even well-defined when looking at future improvements.

With regard to criteria for future changes, if it is felt necessary to prescribe standards in these areas, we agree with the proposals made. However, we notice that 6.62-6.64 contain the word 'generally' allowing departure from the standard, where it is felt to be appropriate, whereas 6.60 and 6.61 are presenting as bald requirements. We believe these statements should also be qualified with a 'generally'. As above we do not believe that the criteria should be mandatory, so any mandatory standard should be expressed as a 'requirement to consider' rather than a requirement to comply.

We have serious reservations about any decision to impose limits on assumptions for future mortality. Given the uncertainty attaching to future improvements, any limit would have to be either set very low or only for a short period of time to be widely accepted as credible. Any other limit would introduce a subjective view of the future, which we do not believe is appropriate to the role of the BAS.

In addition to the specific questions listed above, the BAS invites respondents' views on any other aspects of possible standards for mortality assumptions in actuarial calculations. To ensure that the significance of their point is fully appreciated by the BAS, respondents are encouraged to indicate how their comments address the BAS's aim of increasing the transparency of assumptions and their comprehensibility to users of actuarial information.

We have no further comments.

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