FRC

Board for Actuarial Standards

Exposure Draft:
Reporting Actuarial Information

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PART I

ANALYSIS OF RESPONSES TO THE CONSULTATION PAPER

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INTRODUCTION

1 In November 2007, the BAS published a consultation paper on a *Conceptual Framework* for technical actuarial standards, including specific proposals for a reporting standard. In addition to the 45 written responses to the *Consultation Paper*, which have been published on the BAS website at www.frc.org.uk/bas, the BAS received comments at a number of consultation meetings around the country.

2 This analysis (or *Feedback*) identifies the issues that arose in relation to the reporting standard and discusses the conclusions arrived at by the BAS in the light of the feedback. Part II of this document contains an exposure draft of a reporting standard. The analysis that follows gives equal weight to comments made at consultation meetings and comments made in written responses.

3 In March, the BAS published an exposure draft on the *Conceptual Framework*, together with an analysis of responses on that subject.

SUMMARY

4 The general message coming through from the responses was one of support for the principle of a generic reporting standard, but there were concerns about some of the specific proposals, particularly the following issues:

- *The length of actuarial reports under the proposed generic standard:* A number of respondents argued that the proposed reporting requirements would make the reports too long. This concern was often coupled with the suggestion of an exemption for reports on small(er) entities.
- *Calculating the probability that the assets will be sufficient*: There was widespread resistance to the proposal that reports which contain a quantification of liabilities should include an estimate of the probability that the assets will be sufficient to meet those liabilities. The opposition was on the grounds that the calculation cannot be done.
- *Disclosing the undiscounted cash flows:* The responses from actuaries were fairly consistently opposed to the proposal for the disclosure of the total undiscounted cash flows.

THE LENGTH OF ACTUARIAL REPORTS UNDER THE PROPOSALS

5 A number of respondents argued that the proposed requirements would make reports too long. If that were the result of the proposed standard, the BAS would be very concerned. But there was an absence of real evidence to substantiate this assertion, for example by way of any suggestions of items that would contribute unnecessarily to the length of a report.

6 Moreover, some objectors seemed to undermine their own arguments, for example by suggesting that to disclose “all material assumptions” would, in some cases, lead to a voluminous report. The BAS certainly does not want to see voluminous reports in the absence of a real need. But the BAS is not persuaded by an argument that it is right and proper to omit information which the proponent of the argument acknowledges is material.

7 A few respondents made the point that certain of the disclosures might not be relevant in all cases, which the BAS accepts and has taken into account in the exposure draft. As a matter of principle, if a piece of information is not relevant to a particular report, it can be – indeed, *should be* – omitted. A standard which requires information to be included regardless of its relevance has moved into the tick-box territory that the proposed *Conceptual Framework* specifically eschews.

8 The BAS intends that the reporting standard will have the effect of encouraging reports of an appropriate length – neither too long, nor too short – consistent with the overall objective that users of actuarial information should be able to place a high degree of reliance on the information's relevance, transparency, completeness and comprehensibility. The BAS places a high priority on the principle that important information in a report should be clearly indicated and not obscured by the inclusion of items that are not material.

THE REPORTING PROCESS: STAGED REPORTS

9 A significant number of actuaries commented that advice to trustees of pension schemes on the formal valuation is typically staged over a period of months, with interim papers issued along the way. The same is true for advice to directors of insurance companies. For some respondents, this seemed to constitute an obstacle to making the disclosures proposed in the *Consultation Paper*.

10 The BAS sees no reason why the staging of reports over a period of time should constitute an obstacle to the proposals in the *Consultation Paper*. The motivation behind the proposed standard is that users of actuarial services should receive information that is, amongst other things, relevant and complete. If the information is best delivered by breaking down the total presentation into a series of separate parts, delivered over time, so that decisions can be taken in sequence, the BAS would wish to encourage that.

11 What matters, for the purposes of the reporting standard, is that each decision taken by the decision-maker is taken only after receiving a complete presentation of the information that is relevant to the decision at hand.

12 The appendix to this *Feedback* contains some suggestions on the way in which the reporting proposals might be implemented for a staged report. The appendix is not part of the exposure draft and will not be included in the standard. Accordingly, it is not binding on actuaries. The suggestions are included here merely to demonstrate how the reporting standard might be implemented and to provide support for the BAS's conclusion that staging a report is not an obstacle to compliance with the proposed standard.

A REPORT TO FACILITATE A DECISION vs A REPORT OF RECORD

13 As a corollary to the foregoing point about staging the advice, a number of respondents remarked that the *Consultation Paper* had not been clear whether the reporting requirements apply to the advisory reports at each step of the way or to the report of record that is produced at the end – or to both.

14 The *Consultation Paper* could have been clearer on this point. But it is the same principle at play once again. The objective of the reporting standard is to enable users of actuarial information to make informed decisions. Accordingly, it is the pre-decision information that needs to comply with the standard.

15 If a report of record is produced after *all* the relevant decisions have been made, the imperative for that report to comply with the reporting standard is reduced and perhaps eliminated. This is particularly so in relation to aspects of an actuarial calculation which have been decided by the user, for example the selection of methods or assumptions. It would not be for the actuary to explain, for example, the reasons for choosing particular assumptions if the choice was not the actuary's.

16 But there is one very important caveat to this. Where a report of record is to be sent to the entity's regulator or to beneficiaries of the entity (eg to policyholders or scheme members), whether routinely or on demand, this creates additional potential users of the information. The report of record which those users receive *will* need to comply with the standard.

17 This last point does not negate the observation that it is not for the actuary to explain the choice of method or assumptions etc, if the choice was not made by the actuary. The appropriate approach for the actuary's report is to set out the methods and assumptions adopted and to state (briefly) that the decision on which methods and assumptions to use rests with the directors or the trustees in consultation with the employer etc, as the case may be.

18 By the same token, where an actuarial calculation is carried out in circumstances where the entire process is prescribed by a third party, such as a valuation for the purposes of the PPF levy, the explanation of the methods and assumptions would typically be limited to stating that fact.

CALCULATING THE PROBABILITY THAT THE ASSETS WILL BE SUFFICIENT

19 There was widespread resistance to the proposal to require disclosure of the probability that the assets will be sufficient to meet the liabilities. The dissent was on the grounds that the probabilities underlying many of the uncertainties – for example, the chance that future longevity will turn out to be higher than allowed for in the valuation – simply are not known.

20 The BAS was aware of this concern before the *Consultation Paper* was published. The Board's intention was to expose the idea in order to explore just how close to this result practitioners thought it would be possible to get.

21 On the basis of the responses received, the BAS has decided that the generic format of the requirement posed too many difficulties. An alternative approach tailored to the different circumstances of insurance and pensions etc will be explored, where appropriate, in the specific standards.

DISCLOSING THE UNDISCOUNTED CASH FLOWS

22 The responses from actuaries were fairly consistently opposed to the proposal for the disclosure of the aggregate of the undiscounted cash flows. The dissent was based largely on the belief that the simplicity of the proposal in the *Consultation Paper* – adding up the undiscounted cash flows – would lead to potentially misleading information:

- Some respondents were content to disclose the cash flows year by year, but quite vehement that adding up the figures was to be deprecated. This could be addressed by allowing the actuary the flexibility to choose whether to disclose the cash flows as one single aggregate figure or to break them down into periods such as decades or even individual years.

- The proposal was silent on whether the cash flows should be in real or nominal terms. Many respondents interpreted this as a requirement to aggregate the *nominal* cash flows. This could be addressed by leaving the actuary to decide – and state in the report – whether the cash flows are, in any particular instance, expressed in real terms or nominal terms.

- Other objections related to the potential for numerical distortion by showing undiscounted cash flows projected to arise far into the future. The BAS recognises that there is a big difference, financially, between, for example, £1m today and £99m in 20 years as compared with £99m today and £1m in 20 years, yet they both add up to £100m.

  As true as this is, the difference emerges through the discounted figures. The proposal did not require undiscounted figures *in place of* discounted figures. Moreover, the consultation paper specifically encouraged (but did not compel) the juxtaposition of the discounted and undiscounted figures, precisely so that the undiscounted figures are not presented out of context.

23 It goes without saying that the BAS does not intend that actuarial reports should include any misleading information. The responses suggest that there needs to be greater flexibility and clarity around the proposal if it is to achieve its goal. The BAS has decided that alternative approaches which are tailored to different circumstances will be explored, where appropriate, in the specific standards. In the meantime, the generic reporting standard will go no further than existing practice in this area.

PROPORTIONALITY

24 One recurring theme from respondents was the suggestion of an exemption for reports on small(er) entities, on the grounds that the proposed requirements would involve disproportionate effort or cost.

25 The BAS is committed to proportionate regulation. But it is important to be careful not to be proportionate in favour of the wrong people. The fees for carrying out an additional step in a piece of work relating to a pension scheme with only ten members *might* add disproportionately to the cost, but the pension scheme is just as important to each member in a ten-person scheme as it is in a scheme with 100,000 members.

26 Moreover, it should be borne in mind that there are relative savings to be made when writing about, for example, the assumptions relating to a ten-person scheme compared with a much larger scheme. With so few members, and therefore such a small population to analyse, the actuary will inevitably suggest assumptions that are rather more "off the shelf" than is the case for a large scheme and, therefore, have less original material to write (and less underlying analysis) on each occasion.

27 The BAS will always bear in mind the cost of implementing standards, and the question of proportionality. In relation to the reporting standard, the BAS considers that the only potentially disproportionate element of the proposals in the *Consultation Paper* was the requirement to calculate the sufficiency of the assets described in paragraphs 19-20 above. In view of the amended proposal set out in paragraph 21, the BAS considers that proportionality is no longer a concern in relation to the proposed reporting standard.

MISCELLANEOUS POINTS

28 There were several other points:

- One respondent wanted reassurance that graphs and charts are permitted as an alternative to prose. This is spelled out in the exposure draft.

- Another respondent proposed that the reporting requirements should not apply to (telephone) conversations. This is a potentially important point. The exposure draft confirms that the standard applies only to mechanisms of reporting which are handed over in a permanent form, whether in hard copy or electronic format.

REGULATORY IMPACT

29 The BAS is not aware of any requirements in the proposed generic reporting standard that would impose extra costs on entities. Moreover, the BAS is of the view that the standard will lead to benefits to users of actuarial information through the improvement in reporting which the proposed generic reporting standard will engender. The BAS would welcome any comments that respondents might have on this issue.

CONCLUSIONS

As described above, the BAS has decided to proceed as follows:

- The BAS intends that the reporting standard will have the effect of encouraging reports of an appropriate length, consistent with the overall objective for actuarial information.

- The BAS does not consider that the staging of a report over a period of time should constitute an obstacle to the proposals in the *Consultation Paper*. The appendix to this *Analysis* contains some suggestions on the way in which the reporting proposals might be implemented for a staged report.

- A report which is purely a report of record without any expectation that it is intended to be relied on need not comply with the standard, but the BAS expects such reports to be fairly rare. In practice, a report of record is often submitted to a regulator, tax authorities and/or the beneficiaries themselves and should comply with the standard.

- The BAS has decided that the proposed requirements to disclose (a) the aggregate of undiscounted cash flows and (b) the probability that the assets will be sufficient to meet the liabilities presented too many difficulties for a generic reporting standard. These disclosures will be revisited, where appropriate, in the specific standards.

- The BAS is committed to proportionate regulation. In relation to the reporting standard, the BAS considers that the amended proposal set out in paragraph 21 ensures that proportionality is not a concern in relation to the proposed reporting standard.

- The BAS recognises that the reporting standard cannot realistically apply to a purely spoken communication. The standard will apply to any mechanisms of reporting which are handed over in permanent form whether in hard copy or electronic format.

A COMPOUND AND REPEAT REPORTS

SUMMARY OF THIS APPENDIX

A.1 As noted in paragraph 9 of the *Feedback* section, advice to trustees of pension schemes and to directors of life insurance companies on a formal valuation is typically staged over a period of months, with interim papers issued along the way. Some commentators thought that the proposed reporting standard would not accommodate (or permit) this practice.

A.2 The BAS sees no reason why the staging of reports over a period of time should constitute an obstacle to its proposals. The key principle, for the purposes of the reporting standard, is that each decision taken by the decision-maker is taken after receiving a presentation of information that is sufficient to enable the decision to be made. If information is best delivered by breaking down the total presentation into a series of separate parts, delivered over time, so that decisions can be taken in sequence, the BAS would wish to encourage that. The standard has been drafted specifically with that possibility in mind.

A.3 A further issue raised, along similar lines, was the belief that repeat calculations, such as the transfer values for members leaving a pension scheme, would each need to be accompanied by a full report setting out the basis and rationale for the transfer value calculations, which would mean sending the same report many times over.

A.4 That was not a correct reading of the BAS's proposals. So long as the information underlying the calculations has been presented once, it is sufficient for the information supplied with subsequent calculations to refer to the original presentation.

THE NATURE OF THIS APPENDIX

A.5 This appendix has been written as a result of the comments described above. If the commentary set out below seems obvious or unnecessary, that is, in many ways, a good thing. The (draft) standard is a stand-alone document and those who read the standard should not need this appendix in order to interpret the standard. It may be that simply pointing out that the standard does not require information to be contained in a single document is a sufficient response to those who thought the proposals unworkable. But, in order to forestall further doubts, the BAS offers these additional comments.

COMPOUND INFORMATION

A.6 As explained above, the division of information into a series of reports, papers or other presentation formats is not in breach of the proposed standard (a point stated explicitly in Section 8 of the Exposure Draft). What matters is that, when users of actuarial information come to make a decision about any of the matters discussed in the information, the totality of information available in relation to those matters should satisfy the standard.

A.7 As readers of the standard will quickly discover, compliance requires information to be complete, comprehensible, relevant and transparent. Information is not compliant if it is scattered over a series of papers, obscured by a mass of other information. The argument "It's all there: you just need to know where to look for it" is no defence to a criticism that the actuarial information does not meet the requirements of the reporting standard. In fact, it is tantamount to an admission of guilt in relation to at least two of the four proposed *Core Principles* (see Section 4 of the Exposure Draft).

A.8 The steps needed to make compound information compliant are already second nature to many actuaries. For example, a series of papers on an actuarial valuation is normally titled in a manner that includes a common phrase such as "Valuation as at [date]." Within those papers, separate sections on methods and assumptions – and perhaps sub-sections on demographic and economic assumptions – normally identify where the information on each of these topics is to be found.

A.9 If information is presented in such a manner (or any other manner which is sensibly structured and ordered), it should be straightforward for a reader to identify the information which supports each of the decisions to be made.

A.10 Some parts of the information may be completed before others. If the decisions on the assumptions are being taken in stages by the trustees – this month mortality; next month discount rates – the information on each of the assumptions does not need to be complete until that particular assumption falls to be decided. The decision on, for example, a pension scheme's Recovery Plan cannot be taken until all the decisions on methods, measures and assumptions have been made *and* the calculations carried out.

A.11 There is, of course, the option to produce a report, immediately prior to the users making a decision, bringing together all the earlier discussion of that matter. This is not required. It may be helpful, in which case it is to be encouraged. But it may be counterproductive if this final report in the series is no more than a repetition of all that has gone before with the result that the user fails to give proper attention to it.

A.12 There is normally a *reason* why information on a topic has been spread out over a period of time, rather than being addressed in one document. For example, if the mortality assumptions are based on an analysis of the scheme's own mortality experience, the information available at the end of the process will be greater than that which was known at the outset. Repetition of obsolete information from the start of the exercise may well obscure the new information that users need to focus on for their decision.

REPEAT INFORMATION

A.13 If a report has been presented on the methods and assumptions etc underlying a repeat calculation, future calculations need only be accompanied by a statement that the latest calculation has been carried out in accordance with the previous (identified) information.

A.14 As and when any material part of the calculation methodology changes, compliance with the proposed standard implicitly requires that a revised presentation is issued, either in full or by way of an update on the aspects which have changed. In the case of an update, the commentary accompanying future calculations should refer to the first piece of information "as amended by" the second (or some similar wording).

A.15 Likewise, any calculations, in an individual case, which depart from the normal approach would need to be accompanied by information which explains the departure so that the decision-maker is able to decide whether to adopt the outcome of the calculation in question.

PART II

DRAFT OF

TECHNICAL ACTUARIAL STANDARD R:

REPORTING ACTUARIAL INFORMATION

CONTENTS [OF THE REPORTING STANDARD EXPOSURE DRAFT]

REPORTING ACTUARIAL INFORMATION (TAS R)

Status & Scope

This standard is a Generic Technical Actuarial Standard, as defined in the *Scope & Authority for Technical Actuarial Standards* ("*Scope & Authority*"), and is governed by the terms of the *Scope & Authority*. In particular, this standard applies to work specified in the Schedule to the *Scope & Authority*.

Wider adoption of this standard is encouraged (but not required) wherever the terms of the standard are, in the judgement of the report writer, applicable to a report.

Commencement

By virtue of the Schedule to the *Scope & Authority*, this standard will not come into formal effect until there is one or more Specific Technical Actuarial Standards in place. Nevertheless, this standard is being published in advance of that event in order to support earlier and wider adoption of this standard wherever applicable.

Relationship with Specific TASs and with GNs

This standard sets out principles to be adopted across a range of work described in the *Status & Scope* above. Specific Technical Actuarial Standards set out additional principles to be applied in particular circumstances.

In the event of a conflict between this standard and a Practice Standard Guidance Note adopted by the BAS (as described in the *Scope & Authority*), the GN shall prevail for so long as the GN remains in force.

1 PURPOSE OF THIS STANDARD

1.1 The purpose of this standard is to ensure that readers of actuarial reports can place a high degree of reliance on the *relevance*, *transparency*, *completeness* and *comprehensibility* of the report's content.

2 APPLICATION OF THIS STANDARD

2.1 This standard applies to the totality of information, relating to any particular issue within the scope of this standard (see *Status & Scope* above) and which is handed over by a report writer to a user in permanent form, whether in hard copy or electronic format.

2.2 By way of exception to the generality in paragraph 2.1, if a report is produced after *all* the relevant decisions have been made by *all* the intended users (a "report of record"), and the report is not required by regulations or any other legal obligation, the requirements of this standard may not be necessary, or even appropriate. In such circumstances, the decision whether to comply with this standard is left to the judgement of the report writer, having regard to the purpose for which the report of record was prepared.

3 DEFINITIONS

Ordinary English terms

3.1 The following ordinary English terms appear several times in this standard. For the avoidance of any doubt, they have the meanings shown below:

- *Report:* Information relating to any particular issue within the scope of this standard handed over by a report writer to a user in permanent form, whether in hard copy or electronic format and including tables, charts and other diagrammatic presentations as well as text.

- *Report writer(s):* Those individual(s) who have the authority to determine, or to veto, the content of the actuarial information.

- *Materiality:* An item of information is considered to be *material* to a document if its inclusion in, or exclusion from, the document could influence the decisions taken by the intended users.

3.2 In addition, the term "report of record" is used in paragraph 2.2 and has the meaning ascribed to it in that paragraph.

Terms relating to quantification exercises

3.3 Section 7 of this standard, which addresses information relating to quantitative aspects of actuarial work, uses the following terms with their standard meanings from the fields of finance and economics:

- *Discounting*: A calculation which converts a stream of cash flows at one or more dates to an equivalent amount at another (usually earlier) date.

- *Deterministic calculation*: A calculation using a single set of assumptions.

- *Stochastic calculation*: A calculation using multiple scenarios (typically, hundreds or thousands), with a probability of occurrence attached to each scenario.

Terms adopted in the *Conceptual Framework for Technical Actuarial Standards*

3.4 This standard uses the following terms in the manner explained and defined in the *Conceptual Framework for Technical Actuarial Standards* [published as an exposure draft in March 2008]:

- *Valuation*: A calculation which seeks to crystallise an amount which can be applied to a transaction or recorded in a formal document.

- *Planning*: A calculation which seeks to arrive at a provisional amount for budgeting or target-setting purposes.

3.5 Regulations and other legal documents typically do not draw this distinction. They tend to use the term "valuation" to include a "planning" exercise as described above. This creates a communication difficulty that needs to be addressed carefully. It is important that actuarial reports explain clearly the purpose of any underlying actuarial calculations. But reports will also need to refer, at least once, to the terminology used in the governing documents in order that readers can be reassured that the report addresses the matters it was intended to address.

4 CORE PRINCIPLES

4.1 In pursuit of the purpose set out in Section 1 above, this standard sets out four core principles for actuarial reports:

a) actuarial reports should include sufficient information, presented in a clear and comprehensible manner, to enable the reader to judge the appropriateness of the information contained in the report and the implications of the intended user accepting any recommendations made;

b) actuarial information should not be regarded as complete unless it includes an indication of any uncertainty inherent in the information;

c) material information should not be obscured by the inclusion, in an inappropriate way, of items that are not material or not relevant; and

d) the information provided in compliance with this standard, and the cost of providing the information, should be proportionate to the benefit the user would be expected to obtain from the information, striking a balance (where necessary and appropriate) between those who pay for the information and those who use it.

4.2 The content of the following sections of this standard should be interpreted in the light of these core principles. Any apparent conflict between the content below and these principles should be resolved in favour of these principles.

5 QUALITY OF COMMUNICATIONS

5.1 The quality of actuarial reporting is important, particularly since actuarial reports often address complex issues and have gained a reputation for being difficult to understand. A high-quality presentation of the matters identified in this standard is crucial to fulfilling the core principles.

5.2 Readers of a report cannot be said to have understood the information fully unless they have understood the *purpose* of the information and its *implications*:

- Knowing the purpose of the information focuses the users' expectations of the information. For this reason, the purpose is best stated as early as possible in the report. The clarity with which the purpose is explained can be enhanced if the report also states who has commissioned the report and why the report and the underlying work were commissioned.

  The users' expectations of the report can also be managed by stating which Technical Actuarial Standards (TASs) have been complied with in the course of carrying out the work and whether this standard has been complied with in preparing the report.

- The implications of the information are a critical aspect of a report's contents, especially for those who will be called upon to make decisions based on the report. Having an understanding of the *implications* of a piece of information will not only help to explain its purpose and significance, it will typically contribute also to the understanding of that information.

6 COMPLEXITY OF COMMUNICATIONS

6.1 Report writers will be expected to take into account the technical proficiency of those to whom the report is intended (at the time of writing) to be shown.

6.2 Where a report is expected to be shown to readers with very different levels of technical proficiency, the entire report need not necessarily be written for those at the least advanced level. The needs of readers at higher levels of proficiency will also need to be met and this may be achieved by providing more detailed, or more complex, explanations in addition to setting out the basic information.

6.3 This standard does not impose any one particular form of presentation, but it is likely to suit the convenience of the various readers if the more complex explanations are presented *after* setting out the basic information. For technical information that is lengthy, presentation options include deferring the more complex information to a later section of the report, or to an appendix. By this means, the more complex information is easily identifiable by all the readers. But separation in this way is not always necessary and is less likely to be helpful for technical information of only a few paragraphs, or less, in length.

6.4 It is important to try to establish that the intended users of a report have understood its meaning before they take any decisions based on the report. This is an imperfect art: readers do not always know when they have misunderstood something, so simply asking if the report is clear may secure an unjustified reassurance (ie a false positive).

6.5 Report writers are not expected to submit readers to a comprehension test, but they should be watchful for any evidence that their reports may have been misunderstood and, where a misunderstanding is potentially material to the decisions which need to be taken by the users, the report writer should take appropriate steps to remedy the misunderstanding.

6.6 In the case of reports which the writer intends to reproduce in a standard or similar format for many clients, it may be possible to secure the co-operation of a few clients in a formal test of the report's effectiveness in communicating its message. This is to be encouraged, at as early a stage in the life of the report format as is practicable.

6.7 Notwithstanding the care which may have been given to the writing and testing of such standard formats, there is a risk that the writer will rely too heavily on the standard wording and, as a result, give less attention to the intended audience of specific reports. This risk is exacerbated when a firm or organisation adopts a standard format for certain types of report which is expected to be used by all writers in the firm for that type of report. To overcome this risk, care is needed to ensure that individual reports are suitable for the intended readers.

7 COMMUNICATING QUANTITATIVE ASPECTS OF ACTUARIAL WORK

7.1 This section of the standard is expressed in more detail than other sections. In order to comply with this section, judgement is required by report writers not only in relation to the manner in which the principles are applied, but also in relation to the decision whether, and the extent to which, the principles should be applied in order to avoid disclosures that are excessive or at risk of obscuring more important information.

7.2 When presenting actuarial information in relation to a valuation or planning exercise, there is a presumption in favour of including all the information identified below in order to secure the relevance, transparency, completeness and comprehensibility of the report. In the case of other actuarial work which has a quantitative element, it is likely that at least some of the aspects listed below will need to be included.

7.3 By way of an exception to the generality of paragraph 7.1, there are some instances of actuarial work where a valuation is required to be carried out, for which particular methods and assumptions are specified in regulations (or in some other legal document governing the valuation) and for which the entity being valued has no decision to make, or action to take, on receipt of the information, other than ensuring that the valuation report is passed on to the relevant authority.[1] In these circumstances, it would be sufficient for the report merely to refer to the governing regulations. The actuarial information described in the paragraphs below is unlikely to be relevant to the needs of the user in this context.

Calculations

7.4 The description of an actuarial calculation would not normally be complete unless the following aspects of the calculations have been disclosed in the report:

a) the *nature* and *objective* of the calculations;

b) the *methods* used to achieve the calculation objective;

c) where applicable, any specific *liability measure*(s) adopted; and

d) a *justification* for the methods and measures adopted.

7.5 It is not usually necessary for the reader(s) of a report to understand *how* the underlying calculations were performed in order to understand the results of the calculation or to make decisions based on the information. Descriptions of the intricacies of a calculation – as distinct from the nature or objective of the calculation – may detract from the clarity of the actuarial information, rather than enhancing it.

7.6 If, however, the report writer deems that descriptions of the calculations are required, careful thought should be given to the location of the explanations in relation to the rest of the information (see also paragraph 6.3 relating to the treatment of complex communications).

Data

7.7 An understanding of the calculations and an assessment, by the user, of the reliability of the recommendations will normally depend on the report including a description of the data used, its source and, where there is any uncertainty over the accuracy of the data, a description of the uncertainty and an explanation of the measures taken to avoid the uncertainty in the data causing a misleading presentation of the results of the calculation.

Assumptions

7.8 The transparency of assumptions, and the completeness of their presentation, will normally be dependent on the following being disclosed:

a) all material *assumptions*, whether implicit or explicit and whether qualitative or quantitative (see paragraphs 7.9-7.10 below);

b) a *justification* of the assumptions adopted or recommended, distinguishing fact from judgement and distinguishing objective and subjective judgement (see paragraphs 7.11-7.12 below); and

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[1] At the time of publishing this standard, examples of valuations falling within this paragraph include the calculations required from pension schemes under s143 and s179 of the Pensions Act 2004 in connection with the Pension Protection Fund.

c) the *meaning intended* by the writer when describing any assumptions as a "best estimate", "central estimate" or any other term which may not be uniquely defined (see paragraph 7.13 below).

7.9 If the disclosure of all material assumptions has been made in compliance with sub-paragraph (a) above, it follows (from the definition of materiality adopted in this standard) that the assumptions have been disclosed in sufficient detail that a second person carrying out the same calculations, and using the same data, should arrive at results which are not materially different.

7.10 Sub-paragraph (a) above applies to assumptions used in the context of stochastic calculations as much as to deterministic calculations and, in particular, to any implicit assumptions.

7.11 In the context of the disclosure in sub-paragraph (b) above, a subjective judgement is one which is influenced by personal opinion and an objective judgement is one which is not.

7.12 If any of the assumptions have been derived by means of a quantitative analysis carried out by the report writer, rather than derived from published sources, the report writer should consider whether the analysis is substantial enough to be treated as a quantification in its own right and subject to the relevant disclosures of this section of the standard.

7.13 In relation to sub-paragraph (c) above, where the statistical mean is intended, it will be important for the report to be clear whether the mean applies to the assumptions or to the outcome of the calculation, unless there is no material difference. This is important because it is a mathematical effect of discounting that the mean assumptions do not usually give rise to the mean outcome.[2]

Cash flows

7.14 A report on the quantification of future cash flows would not normally be complete without some information regarding those cash flows. It is in the nature of much (but not all) actuarial work that the result of a calculation is presented in the form of a discounted value and this may be all that is required to be said about future cash flows.

7.15 For some purposes, however, an actuarial report discloses (in addition or instead, depending on the nature of the exercise) the *undiscounted* cash flows expected to be paid or received over time. In such cases, these cash flows are typically presented:

- in real or nominal terms, with the applicable metric stated;
- period-by-period, where the period is any length of time (years are typical choices, but other periods are used as appropriate);
- alongside other related information, such as the discounted figures and/or investment cash flows, where that is relevant to the purpose of the report;
- in a chart, a table or as part of the text of the report.

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[2] By way of example, if £100 is discounted for 10 years at 3% pa, 4% pa and 5% pa, the outcomes are £55.37, £45.64 and £37.69, respectively. The mean outcome is, therefore, £46.23, but the outcome derived from the mean assumption (4% pa) is £45.64. More complex scenarios can lead to more significant differences.

7.16 It is a matter of judgement for the writer of each individual report whether the undiscounted cash flow information described above should be shown in addition to discounted values, where the latter are already included in a report. This standard encourages such additional information where it has the potential to assist the user to understand the overall content of the report. In particular, some users may find a presentation of undiscounted cash flows (in some form) is helpful to an understanding of the effect of discounting.

Risks

7.17 Actuarial information would not normally be complete unless it includes an indication of any uncertainty inherent in the information, including the key risks which the entity faces. In order to convey an understanding of risks, the report will normally need to include, for each material source of risk or uncertainty, the following information, as amplified by the paragraphs below:

a) the *nature* of the risk;

b) an explanation of the *link* between the *risks* and the *assumptions* made in relation to the risks;

c) where applicable, that the *frequency* or the *impact* of the risk is *unquantifiable*;

d) whether actions taken by management can be said, objectively, to have *mitigated* or even eliminated the risk; and

e) the *relative importance* of the risk in relation to the other risks faced by the entity, the *relative degree of concern* the entity should have for various scenarios and the entity's *capacity* or *appetite* to bear the risks.

7.18 For the purposes of these disclosures, the "entity" is the *entity being reported on*, and the "risks" are the risks faced by that entity *in relation to the work commissioned from the report writer*. It may be appropriate for the report also to draw the readers' attention to the existence of a wider range of risks in order to ensure that readers are not given the impression that *all* risks have been addressed in the report if that is not the case. But this standard does not suggest that a report should address risks which extend beyond the scope of the commissioned work or beyond the expertise of the report writer to comment on.

7.19 An explanation of the link between the risks and the assumptions plays an important part in addressing the implications of the work (see also paragraph 5.2).

7.20 Some risks occur with a frequency and an impact that is reasonably believed to be quantifiable, in which case appropriate assumptions can be made and justified, in the manner identified in paragraphs 7.8-7.13 above. But, for some risks, an assumption has to be made even though there is no basis on which to assess the frequency (or the probability) of occurrence and/or the impact (or cost).[3] It is important that these *unquantifiable* risks should be identified as such in order to avoid giving the impression that the assumption is more soundly based than is the case.

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[3] The distinction between quantifiable and unquantifiable risk is discussed in paragraphs 3.13-3.14 of [the exposure draft of] the BAS's *Conceptual Framework for Technical Actuarial Standards*.

7.21 Where a management action has been put in place which can be said to mitigate or even eliminate a risk, this is a highly pertinent fact for inclusion in the report, provided that the likely success of management's mitigating actions can be assessed without going beyond the scope of the work.

7.22 The following matters are interrelated and should typically be reported on together: the *relative importance* of a risk; the *degree of concern* the entity should have for various scenarios; and the entity's *capacity* or *appetite* to bear the risks.

7.23 Some of the items listed in paragraph 7.17 above arise, by definition, each time a calculation is reported on to an entity. The items in sub-paragraphs (a), (b) and (c) of 7.17, ie the risks taken into consideration in the calculations, the link between the risks and the assumptions made and an indication of those assumptions which are unquantifiable, can be expected to be included in each report on a calculation.

7.24 Items (d) and (e) are not intrinsic to each and every calculation. Reports are not, therefore, expected to include those items every time a calculation is reported on, but the matter should be addressed and communicated to the entity periodically. For some actuarial reports, there may be a Specific TAS[4] which requires items (d) or (e) to be included in the report. In the absence of such a requirement, it is a matter of judgement for the report writer to determine whether the information has been communicated to the entity sufficiently recently and sufficiently well for it to be omitted from the current report.

Outcomes

7.25 Actuarial information which presents the results of a quantification would not normally be complete unless it includes the following:

a) an indication whether the results (in whole or in part) are in the nature of a *value* or the outcome of a *planning, targeting or budgeting* process or some *other* result;

b) a *comparison* of the outcomes on this occasion with the outcomes on the previous occasion; and

c) some indication of the *uncertainty* of the results.

The nature of the results

7.26 A result which is presented as a value (or an "actuarial value") without any further explanation is likely to be interpreted by the reader as a market value or, in the absence of an open market, interpreted as an estimate of the likely realisable value in an exchange between a willing buyer and a willing seller. If any other value is intended, a statement of the alternative nature of the value will almost invariably be necessary, accompanied by an explanation if there is any room for doubt about the intended meaning.

7.27 A process which is in the nature of a planning, targeting or budgeting exercise will normally require some explanation of what is being planned, targeted or budgeted, as the case may be.

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[4] A *Specific TAS* (as defined in [the exposure draft of] the *Scope & Authority of Technical Actuarial Standards)* is a Technical Actuarial Standard relating to a specific area or type of work.

7.28 It is not unusual for an actuarial report to combine the results of a valuation with elements of a planning (or similar) exercise. The work in which actuaries are engaged often includes an assessment of a liability *value*, coupled with a funding or distribution *plan*, as the case may be, and the resulting report will need to address both aspects.

7.29 In cases where actuarial information contains the result of a calculation which is neither a *value* nor the outcome of a *planning, targeting or budgeting* process, the report should explain the nature of the results and how they are to be interpreted.

Comparison with the previous quantification

7.30 Reports which include a quantification that has been carried out previously for the entity should include a comparison of the outcomes on this occasion with the outcomes on the previous occasion.

7.31 The comparison should be supported by a reconciliation of the current results with the previous results. The most appropriate form of reconciliation in any given circumstances is a matter of judgement for the report writer. One format which is often used is an analysis showing how the surplus or deficit revealed by the previous quantification, together with events since that quantification and any differences in the methods or assumptions at the two quantification dates, have led to the surplus or deficit revealed by the current valuation.

7.32 The level of detail of the reconciliation is a matter of judgement for the report writer, taking into account:

a) the proportionality considerations set out in paragraph 4.1(d) of this standard; and

b) any limitations on what it is practical and cost effective to do, especially if the previous quantification was conducted by a person from a different firm.[5]

7.33 In the event of a conflict between the two considerations in (a) and (b) above, a judgement will be called for. The consideration in (b) will override (a) to the extent that a part of the reconciliation is *impossible* to carry out, but (b) should not be interpreted as giving permission to limit work on the reconciliation at the first sign of any obstacle.

Indication of uncertainty

7.34 As set out in the core principles (Section 4 above), actuarial information should not be regarded as complete unless it includes an indication of any uncertainty inherent in the information.

7.35 There are a number of ways which might be used to express the uncertainty of the results. It is a matter of judgement for the report writer to determine which mechanism to use in any given circumstances. The method(s) used to express the uncertainty and the amount of detail communicated in the report

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[5] The writer of the current report may not have access to the working papers underlying the previous quantification if it was carried out by a person in a different firm. But a change of personnel within the same firm (including a change of personnel within the entity itself) should not normally create an obstacle for the purposes of this paragraph.

should be proportionate to the scope of the work being reported on. Options include, but are not limited to:

- a *range* (eg from the M^{th} percentile to the N^{th} in the range of potential outcomes, if the percentiles are quantifiable);
- the numerical consequences of *changes in assumptions*;
- *stress testing*, ie testing the outcome of extreme scenarios; and
- the severity of *potential losses* or, if the probabilities are quantifiable, a measure of the *value at risk*.

Quantification under instruction from the entity

7.36 In many cases of actuarial work, some or all of the decisions underlying a quantification fall to be made by the entity being reported on, rather than by the report writer. In such cases, any requirements in this standard for the report writer to disclose a justification for a particular decision can be satisfied by stating that the report writer was required to follow the entity's instructions on the matter and that the report writer did so.

7.37 There may also be a requirement on the entity to take advice *before* giving the relevant instructions. Usually, but not necessarily, the requirement is to take the advice from the individual who will perform the calculations, ie the report writer in the terms of this standard. In order to comply with this standard, the information which sets out the adviser's recommendations should include an appropriate justification for the recommendations.

Communicating probabilities

7.38 Probabilities are an essential part of much actuarial work, but they are not always easily understood by those who are not familiar with the mathematics. This section addresses probabilities that are derived by the report writer as the result of a quantitative exercise. This section does not apply to probabilities which the report writer has adopted entirely from another source as assumptions for input into the writer's own calculations (the reporting requirement for which are addressed paragraphs 7.8-7.13).

7.39 The transparency and comprehensibility of probabilities estimated by the writer of an actuarial report will normally depend on the report explaining:

a) what real world event the probability relates to (in statistical terminology, what is the population or sample space which the probability relates to);

b) the nature of any statistics on which the probability is based, distinguishing:

   - *past evidence* of actual events;
   - research into *expected future developments*;
   - how directly *comparable* the past events are to the events now under consideration; and

c) whether the analysis is derived objectively (ie uninfluenced by personal opinion) or estimated subjectively.

8 COMPOUND AND REPEAT INFORMATION

8.1 Actuarial information on a particular issue is often not provided in one single document. Some actuarial work is more in the nature of a project, with several stages to be completed in order to achieve the project's overall objective and with actuarial information imparted in stages as the project evolves.

Compound information

8.2 The use of the phrase "totality of information" in the *Application* section of this standard (Section 2) recognises that actuarial information may be imparted in stages. This standard does not require each piece of information provided during the course of a project to comply individually with this standard. (This may not even be possible, because some of the information is necessarily imparted before all the work on the relevant issue is complete.) The requirement is that the *totality* of the information addressing an issue (ie all the information taken together) is compliant.

8.3 Spoken information is not included within the ambit of this standard. It follows that, for a report to be complete, any information given orally which is material to the decisions to be taken by the users must be repeated in writing.

8.4 A formal valuation or planning exercise, in which the entity's management has ultimate responsibility for the quantification methods and assumptions, almost invariably involves multiple exchanges between the entity and those who make the actuarial calculations for the entity. Those who make the calculations may also be called upon to advise the entity on the appropriate methods and/or assumptions to use. In a project of this nature, the information provided for *each* decision must be compliant with this standard.

8.5 Sometimes, the final document in a series supersedes all that has gone before, in which case compliance with this standard rests solely on that final document. But this may not be the most effective means of communication, especially if it leads to the final communication repeating much that has gone before, with the risk that it may not be read thoroughly. This standard does not require or encourage that approach.

Repeat information

8.6 Some actuarial work calls for a method of calculation to be specified, or a precedent to be set, which is then re-applied many times over in a succession of calculations addressing individual cases. The exit payments for participants electing to withdraw from an entity are often determined in this way.[6]

8.7 This standard does not require the information accompanying or supporting the individual calculations to repeat on each occasion the information setting out the method or precedent. It would be sufficient to refer to a pre-existing communication which contains that information.

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[6] In the context of pension schemes and life insurance companies, the terms "transfer" and "surrender" are typically used to denote the exit or withdrawal described in this paragraph.

9 JUDGEMENT

9.1 This standard sets out principles for the content and presentation of reports. It does not seek to mandate one particular information compilation or format for the wide range of actuarial reports falling within the scope of this generic standard.

9.2 The way in which these principles are applied is a matter of judgement for the individual(s) taking responsibility for the content of an actuarial report (referred to in this standard as "report writers"). The judgements permitted by this standard, including judgements as to what is, or is not, material, must be exercised in an appropriate manner. Report writers who are subject to some form of regulatory or professional disciplinary regime must exercise their judgement in a manner consistent with that regime.[7]

[7] The effect of the disciplinary schemes applicable to members of the UK actuarial profession is, broadly, that the exercise of judgement in a manner which falls short of the standards of judgement reasonably to be expected of a member is liable to be held to be misconduct.

PART III

INVITATION TO COMMENT

INVITATION TO COMMENT

ISSUES FOR COMMENT

The BAS invites the views of those stakeholders and other parties interested in actuarial practice who wish to comment on the content of the Exposure Draft in Part II of this document.

This current consultation is not intended as an opportunity to re-visit those issues that have already been exposed for comment in the previous consultation document. Those wishing to comment at this stage should bear in mind that the BAS has already consulted on the majority of the policy decisions underlying the Reporting Standard.

With this in mind, commentators are asked to avoid the repetition of arguments already heard and to focus on the policy decisions which introduce new or changed policies that were not articulated in the November 2007 Consultation Paper. Specifically, commentators are asked to consider:

1 the definition of a “report” (Section 2 and paragraph 3.1);

2 the approach to “compound” and “repeat” information (Section 8);

3 the text of the exposure draft as a means of implementing the policy decisions outlined in Part I of this document; and

4 the BAS’s assessment that the proposals are free from any (material) costs, whilst generating benefits to users of actuarial information (see paragraph 29 of the *Feedback* section of this paper).

SUBMISSION OF RESPONSES

For ease of handling, we prefer comments to be sent electronically to **basreporting@frc.org.uk**. Comments may also be sent in hard copy form to:

The Director
Board for Actuarial Standards
5th Floor, Aldwych House
71-91 Aldwych
London
WC2B 4HN

Comments should reach the BAS by **18 July 2008.**

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.

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“A” denotes a Fellow of the Institute of Actuaries or the Faculty of Actuaries

B LIST OF RESPONDENTS TO THE NOVEMBER 2007 CONSULTATION PAPER

This is a list of all those who responded in writing to the November 2007 consultation paper. That consultation related primarily to the development of a Conceptual Framework for Actuarial Standards, as well as the reporting issues addressed in this exposure draft. Not all of the respondents addressed reporting issues.

The Actuarial Profession

The Actuarial Profession's Disciplinary Board

Aon Consulting

The Association of British Insurers

The Association of Consulting Actuaries

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Cass Business School

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Hewitt

Peter Hinton

Hymans Robertson

The Institute of Chartered Accountants in England & Wales

Lane Clark & Peacock

Allan Martin

Mercer

Grant Mitchell

Richard Murphy

The Pension Protection Fund

The Pensions Management Institute

The Pensions Regulator

PricewaterhouseCoopers

Punter Southall

Ian Reynolds

Rajeev Shah

Clifford Sharp

Colin Slater

Standard Life

Paul Thornton

Watson Wyatt

Martin White

Steven Wishart

Huw Wynne-Griffith

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