

BAS STANDARDS – APPLICATION TO PUBLIC SECTOR PENSION SCHEMES UNDERSTANDING OF OPERATION (‘THE GAD STATEMENT OF UNDERSTANDING’)

INTRODUCTION

The Board for Actuarial Standards (BAS) has issued four standards which potentially cover the work GAD does in relation to public sector pension schemes¹. They are on:

- Reporting
- Data
- Modelling (calculations)
- Pensions.

Whilst these standards apply in different circumstances, GAD wishes to ensure that it delivers appropriate high quality actuarial work to a standard in excess of any minimum delivered by standards in relation to public sector work. Accordingly, GAD has produced this Statement of Understanding or simply ‘Understanding’. It represents a simple, clear statement of requirements which if followed is designed, through extensive analysis and checks, to ensure that BAS standards will be met in relation to public sector pension schemes and also introduces some extra requirements which can provide further assurance.

GAD will follow the requirements in this Statement of Understanding in relation to all public sector pension scheme work unless it is quite inappropriate to do so in which case we will advise at the relevant time (and explain areas of the BAS standards which are not being complied with) or unless instructed otherwise by any client. In the latter case we will supply the full standards to the client for consideration.

This document has been shared with BAS, HM Treasury and Treasury Ministers who have not raised any objections to this approach or pointed out any flaws.

This Understanding will be applied by GAD actuaries when carrying out any work in connection with public sector pension schemes with effect from 1 April 2011.

This Understanding will be updated from time to time; the latest version will be maintained on the GAD website at <http://www.gad.gov.uk>.

¹ A public sector pension scheme is a pension scheme under which a public sector body is obliged to provide the benefits under an enactment (including a local Act); or which is otherwise established, is exempt from the Pensions Act 2004 Scheme Funding provisions and which is generally regarded as a public sector pension scheme

A list of information which we will require clients to notify us of in accordance with paragraph 8.1 will also be maintained on the GAD website.

1 COMMUNICATION

1.1 GENERAL PRINCIPLES

Overview – There should be sufficient and clear information for recipients to take appropriate decisions

- 1.1.1 Every communication from an actuary acting in a professional capacity, to a party who may act on the communication and/or which, at the time of the communication, can be expected to be made available to third parties who may so act, should provide sufficient information such that the recipient(s) could not reasonably be expected to take a different decision if more, relevant, information were added.
- 1.1.2 The actuary should endeavour to ensure that the communication does not provide information which may be regarded as irrelevant to the decision.
- 1.1.3 Where the party requesting, or third party receiving, the information has not requested or received sufficient information (independent of other considerations) for the actuary to be confident that the recipient is able to take a sensible decision, the communication from the actuary can, instead of meeting the test above, make a statement to that effect.
- 1.1.4 For the avoidance of doubt, a decision not to act or defer acting (and, for example, seek more data) is a decision in this context, albeit a different decision to taking immediate action.

1.2 CONSIDERATIONS²

In considering the application of the principles, the actuary should, using his or her judgement, consider including one or more of the following pieces of information in any communication taking into account the level of knowledge and understanding of the recipient(s) and/or decision takers. The actuary should remember that a concise communication is often clearer to the recipient than a heavily caveated longer document.

² This is a list of considerations. The actuary only needs to do what a particular consideration states if it is relevant and if s/he feels that to otherwise ignore it could be expected to result in a change to a decision made by recipients.

- 1.2.1. Who has commissioned the communication (and in what capacity) and who may otherwise be expected to make use of it (and in what capacity).
- 1.2.2. A statement of the purpose for which the communication can and cannot be used, and the decisions that can and cannot reasonably be taken from it.
- 1.2.3. A cross-reference to any other previous communication which could fill in any gaps which may otherwise cause different decisions to arise.
- 1.2.4. A statement on professional compliance including, where material, a statement of any TASs complied with.
- 1.2.5. If the communication includes the results of calculations of monetary amounts, an explanation, for each result, of whether it is the outcome of a planning exercise, a valuation exercise or some other exercise.
- 1.2.6. Confirmation in writing of any information conveyed in a verbal or other non-permanent form.
- 1.2.7. Any material changes or events that are known to have occurred since the effective date of the data and other information on which it is based.
- 1.2.8. The source of any data or any other information used and a description of that data or information.
- 1.2.9. If there is any material uncertainty over the accuracy of the data, a description of the uncertainty along with details of any approach taken to the uncertainty in the calculations or in the results.
- 1.2.10. The material assumptions on which any calculations or judgements are based, the nature and objective of those calculations, what they are designed to show and their derivation.
- 1.2.11. Where any estimates include a margin for prudence or optimism, an indication of to the relationship to best estimate should be provided; noting that the term 'best estimate' or 'neutral estimate' should not be used if an estimate includes a margin for prudence or optimism.
- 1.2.12. Any differences between the assumptions used or recommended in different parts of the work (and/or differences with previous advice) together with an explanation for any such changes. A description of the rationales for
 - a) Any material assumptions used or recommended;
 - b) Any differences between the assumptions used or recommended in different parts of the work; and
 - c) The measures and methods used in calculations.

- 1.2.13. A suitable statement of any uncertainties in the assumptions, measures or methods
- 1.2.14. A suitable statement regarding how the needs of recipients and other relevant persons are met by any models together with any limitations of those models. An indication of the nature and extent of uncertainty in the information the communication contains.
- 1.2.15. For each material risk or uncertainty faced by the entity in relation to the communication, the nature and significance of the risk and an explanation of the approach taken to the risk.
- 1.2.16. An indication of the nature of any future cash flows being quantified, including their timing.
- 1.2.17. If the communication includes probabilities:
 - a) The intended meaning of the probability; and/or
 - b) The nature of any statistics on which the probability is based.
- 1.2.18. A comparison with any communication which has previously been provided for a similar purpose (if one exists), with explanations of any differences. The comparison could cover any one or more of data, assumptions, results of calculations, recommendations and other material matters. The comparison of the results of calculations could include a full reconciliation of the two sets of results.
- 1.2.19. A communication that includes the results of calculations that are performed at regular intervals could indicate the projected results from future corresponding calculations.
- 1.2.20. For an exercise where the actuary is making a determination (as opposed to giving advice), a statement of the data gathered and consultation information received and the thinking that led to the determination in order to get validation to the building blocks of the determination.
- 1.2.21. Any warnings for third parties as to whether or not the communication can be used as a basis for their decisions. (In practice this consideration is, for the time being, a requirement on GAD staff – albeit potentially changeable without notice.)
- 1.2.22. Clarification of the intended meaning of any terminology (including the meaning of data items).

- 1.2.23. Further information to clarify any known, or easily anticipated, misunderstandings.
- 1.2.24. Information on relevant alternative scenarios with likelihoods to enable the recipients to assess the potential impacts and risks of any main scenario.
- 1.2.25. The extent to which non-actuarial matters can or should affect decisions to be taken.
- 1.2.26. Any other considerations relevant to the circumstances in hand in delivering to the principles.
- 1.2.27. The extent to which assumptions take account of discretionary practices (whether past or future expectations).
- 1.2.28. In relation to the preparation of actuarial factors, the financial implications to the pension scheme of choosing a particular set of factors.
- 1.2.29. In relation to instruction to a third party to carry out calculations of benefits, the clarity of those instructions.
- 1.2.30. Any external constraints on the content of the communication, including any advice being given, for example limitations imposed by legislation or government policy.

2 DATA³

2.1 GENERAL PRINCIPLES

Overview – Enough data and consultation should be collected, verified and properly documented for appropriate advice to be given and appropriate decisions taken

- 2.1.1. Enough data is requested, tested for veracity and used such that decisions to be made by the recipient of any communication would not reasonably be expected to change if further data were to be available and used.
- 2.1.2. Where there is a gap in data such that there is a risk that the communication may be materially different, and so affect decisions if the gap is filled, any information supplied should provide relevant caveats about reliance on the information and warn on the likelihood and potential impact of the risks being taken by not securing more information.
- 2.1.3. All data held by the actuary should be adequately labelled and documented so that another actuary could reasonably be expected to pick up the working papers and be able to understand what had been collected, any limitations, how calculations had been performed and what judgements had been made.

2.2 CONSIDERATIONS⁴

In applying these principles, consideration should be given to:

- 2.2.1. The full range of possible data requirements which may be appropriate to deliver the required information.
- 2.2.2. The data checks that need to be made to ensure the accuracy of the data at a material level in order to comply with 2.1.1, and the extent to which these checks need to be documented.

³ Data includes numbers, documents, consultations and data checks

⁴ This is a list of considerations. The actuary only needs to do what a particular consideration states if it is relevant and if s/he feels that to otherwise ignore it could be expected to result in a change to a decision made by recipients.

- 2.2.3. The extent to which reliance can be placed upon data validated by others and the extent to which different standards can be applied to different sources of validated data (e.g. data validated by a professional auditor, a solicitor in practice or an individual with a vested interest in the outcome etc).
- 2.2.4. At what stage, and to what extent, information can be provided to recipients where there are data gaps or inadequacies and in what circumstances is it right to insist on further data before providing the work; noting that this depends on how the recipients and interested third parties may act as well as potential legal and regulatory obligations.
- 2.2.5. Adjustments that may be made to improve incomplete or inadequate data.
- 2.2.6. For accounting work, seeking information regarding materiality levels.
- 2.2.7. Gathering and understanding all the governing documents and applicable legal requirements
- 2.2.8. Obtaining any known legal opinions concerning the impact of legislation on the calculation of benefits.
- 2.2.9. Whether there is sufficient data collected such that a technically competent layperson with no previous knowledge of the exercise for which the data is being used could understand the matters involved and assess the judgments made.
- 2.2.10. The provision of material relevant data used in determining any communication from an actuary (covered by the previous section) in a suitable summarised form such that (a) another actuary could not, using that data, reasonably be expected to conclude that any actuarial figures supplied were unreasonable, (b) the recipient can use it as a testing mechanism to check that there are no material errors in the data used and (c) it is easy to see where the gaps occur if working within the principle 2.1.2 above.

3 MODELLING

3.1 GENERAL PRINCIPLES

Overview – Actuarial calculations should deliver the correct answers using appropriate, and properly documented, methods and assumptions

- 3.1.1. The methodology and assumptions used are such that the actuary could reasonably assume that a reasonably competent actuary would conclude that the calculation approach is fit for purpose.
- 3.1.2. The methodology used should be such that the actuary would not expect more sophisticated methodology to change the results to an extent where the decisions of recipients would be expected to change as a result.
- 3.1.3. The assumptions chosen for any calculation should comply with the principles relating to assumptions set out elsewhere in this document.
- 3.1.4. The documentation is clear and unambiguous and is sufficient so that another actuary can be expected to reproduce the results of the calculations (within an acceptable range).
- 3.1.5. Sufficient checks should be performed, and documented, such that if further checks were carried out, the actuary could reasonably assume that there would be no change, within what the actuary considers to be reasonable bounds, to the results.
- 3.1.6. If data is grouped, the reasons and rationale should be noted together with any likely impacts.

3.2 CONSIDERATIONS⁵

In applying these principles, consideration should be given to:

- 3.2.1. Whether measures, assumptions and judgements used to derive an estimate includes a margin for optimism or pessimism appropriate to the estimate described.
- 3.2.2. Whether the data used is appropriate to the purpose of the model for the work in question.
- 3.2.3. Whether it is appropriate to group data.

⁵ This is a list of considerations. The actuary only needs to do what a particular consideration states if it is relevant and if s/he feels that to otherwise ignore it could be expected to result in a change to a decision made by recipients.

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- 3.2.4. The extent to which assumptions used within associated models or calculations need to be consistent with each other.
 - 3.2.5. Whether the documentation describes the assumptions used and their derivation.
 - 3.2.6. Whether it is appropriate to document, rationalise and explain the impact of any items of data which have been removed from the dataset.
 - 3.2.7. The extent to which the issues modelled, the results of the model together with any judgments made can, or should, be understood by a technically competent layperson.

4 PRINCIPLES ON VALUATIONS AND CALCULATIONS WHICH COULD AFFECT BENEFITS

Overview – Sufficient data gathering and consultation is conducted to enable appropriate methods and assumptions to be determined

- 4.1 Where the role of the actuary is to determine 'contribution charges' for the scheme to pay to Treasury net of employee contributions and/or factors or parameters which impact member benefits, the actuary will undertake sufficient consultation and gather sufficient data such that any further consultation or data gathering would not, in the actuary's opinion, result in any changed decisions.
- 4.2 Where it is not possible or practical to gather sufficient data or undertake sufficient consultation for whatever reasons, the actuary can work on the basis of the collected information provided that (a) there is full disclosure to the recipients of the valuation statement as soon as this conclusion is reached and subsequently in the formal statement to this effect and (b) the actuary concludes, in their opinion, that it would not be proportionate to adopt any other course of action.
- 4.3 Where the role of the actuary is to advise others on 'contribution' charges for the scheme to pay to Treasury net of employee contributions and/or advise on factors or parameters which impact member benefits, the actuary should follow the principles set out elsewhere in this document and, in particular, those in the communications section.

5 CONSIDERATIONS⁶ IN RELATION TO ASSUMPTIONS AND CALCULATIONS

In considering the application of the principles in this document, the actuary should consider, and consider including the analysis within the communication, the following list of matters.

- 5.1. Where assumptions to be used in determinations, or in part of the process of deriving advice, are set by the actuary:
 - 5.1.1. The need to consult with relevant stakeholders (but consider also whether this might lead to potential conflicts).
 - 5.1.2. The extent to which further information is required, and in particular to determine the practice in relation to discretionary benefits.
 - 5.1.3. The purpose of the calculations.
 - 5.1.4. The availability of sufficient or relevant experience to derive the assumptions.
 - 5.1.5. The appropriateness of the assumptions to the exercise being conducted, and the needs of users.
 - 5.1.6. The need to adopt assumptions for the scheme specific base rate of mortality and, separately, for changes to mortality rates (using the scheme's own mortality if statistically significant).
 - 5.1.7. The consistency of assumptions adopted between two similar and related exercises and between the current exercise and previous such exercises.
 - 5.1.8. Whether all assumptions used are independently appropriate and without any margin to compensate for a shortcoming in, or adjustment made to, a different assumption.
 - 5.1.9. Whether insolvency of 'sponsor/employer' is an issue to be allowed for.
 - 5.1.10. Whether inter-generational equity is an issue to be allowed for.
 - 5.1.11. Whether a holistic approach to Government finances is to be allowed for.

⁶ *This is a list of considerations. The actuary only needs to do what a particular consideration states if it is relevant and if s/he feels that to otherwise ignore it could be expected to result in a change to a decision made by recipients.*

- 5.1.12. The degree of prudence (or not) in the assumptions used.
- 5.1.13. The link between the assumptions made and the data gathered and results of consultation and the purpose of the exercise.
- 5.1.14. The extent to which discretionary benefits should be allowed for.
- 5.1.15. Where approximations are used in calculations, the impact that this might have on the accuracy or sensitivity of the results.

6 ASSUMPTIONS SET BY A THIRD PARTY

- 6.1 Where an assumption has been set by a third party (or is set in legislation or equivalent), there is no need for the actuary to make comments about such assumption (except to state who has set the assumption) unless, in the opinion of the actuary, by making comments it could affect any decisions made. For example, there is no need for the actuary to comment on Treasury imposed discount rates unless to do so could affect decisions of the party(ies) for whom a specific communication has been prepared.

7 FUNDED SCHEMES

7.1 EXTRA CONSIDERATIONS: DISCOUNT RATES

In considering the application of the principles in this document to funded schemes the actuary should also consider, and consider including within the communication, the following matters.

- 7.1.1. An explanation of the derivation of and implications of adopting any discount rates used in, or proposed for use in, an exercise, and details of the cash flows that are being discounted.
- 7.1.2. An explanation of how the discount rates used, or proposed for use in, an exercise compare with the return on assets that can be expected from assets invested according to any stated investment strategy, including any anticipated changes in that strategy.

7.2 FUNDING ASSESSMENTS

7.2.1 GENERAL PRINCIPLES

For work relating to funding assessments for funded schemes, the actuary should also follow the principles set out below.

- 7.2.1.1 Any communication in respect of a funded scheme to a party who may take actions relating to funding strategy, assumption setting or contribution arrangements as a result shall contain sufficient actuarial information to support that party in taking those actions. Although it should be written to be comprehensible, it should not exclude information about complex matters on the grounds that it might be too difficult for some readers to understand.
- 7.2.1.2 Any communication relating to the funding of the scheme shall be written so that a party who may act on the communication and/or which, at the time of the communication, can be expected to be made available to third parties who may so act shall be written so that those parties can understand the financial position of the scheme, including its development since the previous similar communication and how it might change in the future.

7.2.2 CONSIDERATIONS⁷

For work relating to funding assessments for funded schemes, the actuary should also consider, and consider including within the communication, the following matters.

- 7.2.2.1 A description of different funding measures and an explanation of the implications of adopting them.
- 7.2.2.2 Any information required by legislation, including the scheme's governing documents.
- 7.2.2.3 Any funding objective specified by the scheme managers or other body.
- 7.2.2.4 If the scheme contains provision for wind-up, a description of the effect on members' benefits had the scheme been wound up at the effective date of the funding assessment.
- 7.2.2.5 The current funding level and projections of the funding level at the expected effective date of the next funding assessment on the current funding basis.

7.2.3 WHAT WE WILL DO⁸

For work relating to funding assessments for funded schemes, the actuary will also include within the communication, the following matters.

- 7.2.3.1 The following information on data and information:
 - summary membership data including average ages;
 - a summary of the benefit provisions or a reference to a document already provided to members summarising benefit provisions
 - a statement of the assets (if the scheme holds real rather than notional assets)
 - a summary of any stated investment strategy
 - a summary of experience since the previous funding assessment including membership changes, contributions paid and investment returns; and

⁷ This is a list of considerations. The actuary only needs to do what a particular consideration states if it is relevant and if s/he feels that to otherwise ignore it could be expected to result in a change to a decision made by recipients.

⁸ These points will always be included in the communication.

- a summary of significant events, including changes to benefits, that have taken place since the previous funding assessment.
- 7.2.3.2 The funding measure and key assumptions used for the funding assessment along with a comparison with the key assumptions used in the previous funding assessment.
- 7.2.3.3 An explanation of the reasons for changes in the funding level from the previous funding assessment and quantification of any significant change in the funding level by cause (including scheme experience and changes in assumptions).
- 7.2.3.4 A description of the nature of future cash flows, split by category of membership if relevant.
- 7.2.3.5 A description of the risks to the financial position of the scheme and any actions taken to mitigate them.
- 7.2.3.6 A summary of the results of the calculations together with an analysis of the sensitivity of the results of the calculations to changes in key assumptions and, if relevant to the purpose of the report, agreed contributions payable.

8 ARRANGEMENTS BETWEEN US

8.1 In order to allow us to undertake our responsibilities, scheme managers agree to provide the relevant GAD actuary with such information, either automatically or on request, as is notified from time to time. The list of requirements current at any given time will be maintained on the GAD website.

8.2 CONSIDERATIONS

If the actuary becomes aware of any matter that may be significant either to the actuary's statutory or professional responsibilities the actuary should consider:

8.2.1. Whether further advice is required by scheme managers or other associated parties, whether from the actuary or another adviser. If so, the actuary should consider informing the scheme managers and/or and other relevant decision making bodies accordingly.

9 ACTUARIES' CODE

This document should be read in conjunction with the Actuaries' Code which applies to all work conducted by the actuary.

10 OTHER GUIDANCE NOTES

Guidance Notes issued by the Actuarial Profession (whether legacy guidance or Actuarial Profession Standards) and/or Legacy Guidance Notes adopted by BAS may also impact on the work within the scope of this document. Where relevant such guidance should be read (and considered) in conjunction with this document.

Guidance issued by other bodies should also be considered where relevant.