

**Emily Brown**

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**From:** Louise K Perkins [PERKINL@norwich-union.co.uk]  
**Sent:** 27 February 2009 15:03  
**To:** BAS Modelling  
**Cc:** Susan J Eldridge  
**Subject:** Fw: Consultation Response (BAS Modelling)

Dear Sirs,

Please find our response to the modelling consultation below. Please note we are responding on behalf of the Defined Benefit Pensions area of Norwich Union, rather than Norwich Union as a whole.

Kind regards,  
Louise

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Defined Benefit Pension Schemes  
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We provide actuarial services to a portfolio of small insured defined benefit schemes.

We agree that there is clearly a danger in using models which are not clearly understood by the user. However, it is important to avoid over complication, and information overload for users, which may also lead to spurious accuracy.

For defined benefit schemes the users of the output from the actuarial models are the trustees (and sponsoring employer). For small DB schemes the trustees are likely to be lay trustees and therefore avoiding unnecessary complexity is important. In addition, for defined benefit pension schemes financed by employers, the relationship with the recipients of benefit (i.e. the members) is different to that of insurers and their customers. The employer is able to review their funding on a regular basis (to increase or reduce future financing) whereas an insurer must live with the initial price charged.

For DB schemes the key model is the triennial valuation model, which in our case is deterministic in nature and very long established. As a deterministic model it is very dependent on the assumptions adopted.

Over recent years, greater emphasis has been placed on trustees understanding the uncertainty around the assumptions used and this is now demonstrated through sensitivity testing of the model results using different assumptions.

As a long established methodology there is danger in complacency. However, we should avoid over complication. We believe the comment made in Section 5 about 'all estimates derived from model outputs, or used as assumptions in models, should be given statistical definitions and those definitions should be documented' may be impractical. It may also add over complication and spurious accuracy.

Question 8(b) on data shortcomings sounds good in principle, but may well not be workable in practice and if accommodated again could add spurious accuracy. Again under Q12 we do not believe requiring a range for every single point estimate is practical or necessarily meaningful in all cases.

Under Q13 we think it would be helpful to have some illustration of how these checks would work in practice e.g. the checks would be different for a newly developed model versus a long established one.

Under Q15 we would agree that back testing is a good idea in principle, but it may be difficult in practice, e.g. for investment performance modelling, where back testing over a short period may be meaningless.

Under Q16, for externally developed models this could become part of the practice moving forward for new models, but retrospective application may be impractical.

As a general comment, we think it would have been perhaps more helpful to include examples illustrating the specific risks around modelling in the financial sector.