Draft Guidance notes Actuarial Reporting in General Insurance

The Institute have issued guidance notes and official "exposure drafts" on a number of topics. None of these specifically relate to general insurance, although those on professional conduct and practice and legal liability are not irrelevant.

There is a perceived need to fill that gap. However, the absence of a statutory or traditional role imbues a certain lack of clarity in the ground to be covered by any such guidance notes. The attached draft, which has no status other than as a discussion document for the Bournemouth seminar, could be regarded as the first of a series of guidance notes related to general insurance.

The present aim is to prepare a second draft of the discussion document following the discussion at Bournemouth and any other contributions. It could then be presented to the General Insurance Committee of the Institute for further consideration not only on its content but for the need for such guidance notes.

Other actuarial bodies in the US, Canada and Australia have been preparing guidance notes for actuaries with either a given statutory task on certifying reserves or an assumed "given brief". The evolution of guidance notes would be helped by the formulation of a UK 'Statement of Recognised Accounting Practice'.

WMA
16 August 1984

DRAFT A

ACTUARIES AND GENERAL INSURANCE BUSINESS

1. INTRODUCTION

1.1 General insurance business in the UK is carried on under the terms of the Insurance Companies Act 1982. Actuaries have no statutory responsibility for general insurance under this Act. Nevertheless from time to time actuaries are called upon to report on the outstanding claim reserves, on all of the technical reserves or on the financial soundness or solvency of a general insurance business. These notes give some guidance to such actuaries.

1.2 There has not been a long tradition of actuarial involvement in general insurance in the UK, comparable with that in life assurance. In these circumstances it is especially important to give consideration to the nature of the brief given to the actuary. The report may have been commissioned from the actuary specifically in a professional capacity. For an employee of an insurer who is an actuary there may be some difficulty in identifying the capacity of the actuary. The report may be in a form not covered by the guidance notes and would not indicate that the writer was acting in an actuarial capacity. However it may be difficult to prevent the report's recipient referring to it as an actuarial report. In these circumstances it would be advisable for the actuary to take these guidance notes into account. The final report should state:-

(a) who has commissioned the report

(b) where this is different from (a), the addressee of the report

(c) the terms of reference given

(d) the extent to which the report meets these terms of reference and any departure from or extension to those terms.

(e) where the actuary is acting in a professional capacity, the name of the actuary and that he/she is a Fellow of the Institute of Actuaries.

1.3 There may be circumstances in which a report has been commissioned where the actuary has a statutory responsibility. Typically these rare instances may relate to some overseas regulatory authorities requiring statements on UK branches or subsidiaries. The actuary should ensure that he/she is familiar with the legislation concerned and the report is in accordance with any local professional code of practise.

1.4 Examples of the varying briefs which could be received by actuaries are given below:-

(i) A report commissioned by the management of a company to recommend the level of outstanding claim reserves to be established in the insurer's accounts, both statutory and, if different, financial or fiscal. Such reports may give some discretion to management on the final choice of the reserving amount. The actuary may need to comment on the suitability or otherwise of the chosen reserves as a basis for making decisions on premium rating.

(ii) A report commissioned by management/shareholders to "audit" a reserve computation and to establish its reasonableness. For the purpose of this independent check the actuary would need to have full access to the insurer's data and worksheets of the original computations.

(iii) A report commissioned by an insurer to provide supporting evidence for outside bodies (e.g. tax authorities, potential purchasers, supervisors, etc.). If reference is to be made by the insurer to third parties to the report, or if the notes to the accounts made reference to the report, then the phrases contained in Appendix 1 may be considered as acceptable.

(iv) A report relating to the totality of technical reserves rather than being limited to outstanding claims.

(v) A report commissioned by supervisors, potential purchasers, reinsurers, investment analysis firms etc., without the knowledge or assistance of the insurer to provide a view on the strength of the reserves. Typically such a report would be based on published data.

(vi) A report for supervisors on the financial strength of an insurer which will provide sufficient evidence for the supervisor to act (or provide comfort not to act).

(vii) A report to company management or its shareholders on the capital considered necessary to establish the insurer as being financially sound.

1.5 The reports on technical reserves could cover:-

(i) for business accounted on a one year basis:-
- outstanding claims (see section 2)
- unexpired risks (see section 3)
- technical reserves (which includes both outstanding claims and unexpired risks)

(ii) for other business, combined reserves which may cover the outstanding liabilities (see section 4) in respect of closed and open years, separately or in aggregate.

There is no universally accepted terminology for general insurance and the actuary must ensure that the words used are clearly understood by the recipient of the report. Where appropriate, recognition must be given to the guiding accounting principles and these must be clearly stated in the report.

1.6 Where the actuary is reporting on the solvency or financial strength/soundness of an insurer, the word solvency should generally be used in its statutory sense, e.g. an insolvent company is one which has failed to satisfy minimum statutory requirements. Where necessary, further clarification of the term may be necessary. The concept of financial strength/soundness, covers not only the sufficiency the excess of assets over liabilities necessary to ensure that claim payments are made as they fall due, but also the ability of the insurer to remain solvent in statutory terms.

1.7 Following EC directives, actuaries may use the words provisions and reserves interchangeably. They must, however, be aware of the distinction under the Companies Acts.

1.8 Reports on reserves may be produced in terms of point estimates or ranges of acceptability. So far as is possible, reports should indicate the sensitivity of the estimates to variations from the stated assumptions.

1.9 The report must make clear the degree to which cross-funding exists, i.e., whether a liability is sufficient in aggregate but one part is deficient. For example:-

(i) unexpired risks by outstanding claims or vice versa.

(ii) combined reserves for one cohort year by another year or years.

(iii) one class of business by another class of business.

Such cross funding may be acceptable provided it is in accordance with the guiding acounting principles.

1.10 It would be essential for the actuary would comment on:-

(i) the accuracy of the data and, where appropriate, the steps taken to verify the accuracy of the data.

(ii) the consideration given to the effect of changes in underwriting practices, claims handling, data processing, accounting procedures and known or potential changes in the legal and social environment.

1.11 Where a report covers the position net of reinsurance, the actuary should consider the nature and spread of the reinsurance arrangements and the advisability of setting up a bad debt reserve for non-paying reinsurers.

2. OUTSTANDING CLAIM RESERVES

2.1 These reserves should embrace:-

- known (i.e. reported) outstanding claims
- claims incurred but not reported (IBNR)
- reopened claims
- future claims handling expenses.

2.2 The actuary should give due consideration to the categorisation of the business into homogeneous groups. Any report should explicitly state the basis used for classifying claims and comment on the limitations imposed by lack of homogeneity.

2.3 The reserves may be established:-

- separately for gross reserves and for reinsurance recoveries, or
- as net reserves

Especially where the gross account is protected by excess of loss reinsurance the actuary may feel more confident about the net position than the gross. This confidence may be attached to the gross position provided that there is a caveat on the dependence on reinsurance.

2.4 The actuary must recognise in reporting on net reserves that the contract of reinsurance may contain a clause which permits part of the liability to be transferred to the reinsurer on terms which differ from the calculation principles. The actuary should ensure consistency between gross and net reserves.

2.5 The reported and IBNR reserves may be established:-

(a) on a case by case basis for the reported claims and (normally) a statistical estimate for IBNR. The case estimates would be the responsiblity of a claims expert.

(b) as (a), but with some of the estimates for reported claims being on a statistical basis, e.g. an adjusted average of previous settled amounts (less payments to date)

(c) either separately or jointly on a statistical basis. If a joint reserve for reported and IBNR claims is calculated, but it is necessary to show a separate reserve for IBNR; the latter would need to be calculated on a statistical basis and the reserve for reported claims would be obtained as a balance item.

2.6 The re-opened claim reserve may be calculated as an explicit item. The actuary should consider whether the methods used to calculate the reported and IBNR claim reserves already contain an allowance for reopened claims.

2.7 The reserve for future claims handling expenses should be consistent with the reporting objectives. For reporting on the business as a going concern, these reserves should cover only the variable and overhead costs of the claims department.

2.8 The results produced by statistical methods will be dependent on the methods and assumptions used. The actuary must state the sources of significant error in these assumptions and methods. Where appropriate the actuary should demonstrate the size and probability of the potential error. Even if this is not appropriate, the report should state whether the assumptions made are reasonable and in line with the current state of knowledge.

2.9 There are a number of methods available to the actuary for the statistical estimation of claims. The choice depends on the class of business, data available and the judgement of the actuary. Particular points to consider are:

(i) homogeneity or changing mix of data.

(ii) effect of large claims including catastrophe claims from a single event.

(iii) cyclical or temporal trends.

(iv) handling and administration procedures etc.

2.10 In particular, thought should be given to the basis of projection and the effect of actual experience varying from that expected. For example, if the actual experience is worse than expected, the actuary must consider whether the method assumes that:

(i) the future claims will be proportionately worse.

(ii) the future claims are unaffected by the bad experience to date.

(iii) the future claims will be better than expected as the original estimate of total claims remains unchanged.

These reflect different underlying philosophies.

2.11 In arriving at the estimates of future claims, the actuary must consider the impact of future inflation. A 'full undiscounted claim reserve' must contain an allowance for future inflation at a rate considered appropriate for the claims in question. Where no explicit allowance is made for inflation, the actuary must be satisfied that the implicit allowance is sufficiently prudent.

2.12 There must be an explicit statement of whether or not the reserves have been discounted.

2.13 If a view is given on the sufficiency or adequacy of the reserves, recognition must be given to the concept of prudence. A reserve based on "best estimate" would, if this means a 50% chance of being deficient, be regarded as inadequate and a "best estimate" is itself dependent onthe method chosen.

2.14 Where separate gross and reinsurance recovery reserves are being calculated, the actuary should state whether similar principles are being used for both these reserves. If not, then there must be comment on the appropriateness of the different principles.

3. Unexpired Risk Reserve

3.1 These reserves should embrace:

- the unearned premium reserve (UPR)
- an additional amount for unexpired risks not covered by the UPR.

3.2 The UPR may be a reserve net of an allowance for deferred acquisition costs, or it may be gross with these deferred costs shown as an asset.

3.3 The calculation of unearned premiums should normally be a standard accounting calculation. The actuary should consider the appropriateness of the approximations made in these calculations.. In particular those relating to:

(i) the incidence of risk over the policy duration.

(ii) the grouping of policy dates, e.g. daily, monthly, quarterly or at mid-year.

(iii) the choice of policy date (debit,. inception).

(iv) the treatment of non-annual premiums.

3.4. The amount of acquisition costs deferred will depend upon the philosophy underlying the accounting principles used. The actuary must identify these principles before commenting on the appropriateness of any quantification of the deferred amount.

3.5 The unexpired risk reserve may be considered to be the amount necessary to cover the future outgo arising on the exposure to risk still existing at the accounting date. This amount may be considered as the product of the unearned premium and an appropriate claim ratio. This claim ratio should allow for claims handling expenses. Where based on historic ratios, exceptional influences should be removed, suitable adjustment made for rate changes and the ratios projected forward. The projected ratio should then be adjusted to allow for known events between the accounting date and the computation date.

3.6 Where a measure of exposure such as vehicle years is available, the unexpired risk reserve may be calculated as the product of the outstanding exposure, projected claim frequency and projected claim amount, including handling costs.

3.7 The additional amount for unexpired risks should be the excess, if any, of the unexpired risk reserve over the unearned premium reserve (net of deferred acquisition costs). This amount may be further reduced in accordance with the guiding accounting principles by anticipating future investment income (to the extent that it has not already been anticipated) in the outstanding claim and unearned premium reserves.

4. Combined Reserves

4.1. In view of the various types of funded accounting methods which exist, the actuary must ensure that he/she recognises the accounting concept involved. In particular the actuary needs to consider:

(i) The definition of the cohort and

(ii) The duration at which a profit is first allowed to emerge, i.e. the point of first closure.

4.2. The calculation of the estimated outstanding amount at the point of closure would cover not only outstanding claims, which may or may not have been notified, but also handling expenses, premiums and commission. The actuary should consider whether each of these items requires a separate calculation or whether one aggregate figure will suffice. The terminology IBNR may be used but it should be recognised that it may be essentially different in character from that used in one year accounts.

4.3. The guidance given for reserves for outstanding claims and unexpired risks is equally applicable for combined reserve.

4.4. The basis for the calculation of open year funds is a cash accumulation amount augmented by the additional amount considered necessary to ensure the sufficiency of the reserves. The very nature of the funded business often means that information is not available on which a satisfactory estimate may be made. The actuary however can

(i) Establish a model of an expected emergence of premiums, claims, commission and expenses in the open years.

(ii) Take adverse divergences from this model as the additional amount required to support the open year fund.

The model may be based on past experience and on views on current levels of profitability.

5. Security and Solvency

5.1. An actuary may be called on to report on the solvency of a company. Where this relates to a past accounting date, then the report would relate to an assessment of the technical reserves and a check on whether the shareholders' capital and reserves are sufficient to comply with the regulations in force.

5.2. Where the actuary is concerned in reporting on the continuing solvency of an insurer over a period, due consideration must be given to

(i) expected profitability of new/renewed business.
(ii) fluctuations of all types relating to claims experience and
(iii) fluctuations in asset values
(iv) suitability of the reinsurance arrangements

in projecting the experience over the period to establish whether or not the shareholders' capital satisfies regulatory standards.

5.3. When asked to comment on the security offered by an insurer, an actuary must recognise that there may be aspects of a subjective nature which are not necessarily within his/her competence. Any report should identify wider issues considered. These may include

(i) departures from expected profit margins through bad management, etc..
(ii) security of reinsurance arrangements
(iii) possibilities of fraud

In addition, and within the competance of the actuary, is the possible discovery of deficiencies in the technical reserves. Any report by the actuary should recognise these issues and describe the vulnerability of the insurer to these risks. The report should consider ways of managing the risks involved. In particular the actuary may be willing to indicate the amount of shareholders capital considered commensurate with acceptance of the risks. This may recognise the availability of fresh capital as required.

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APPENDIX I

PROPOSED GUIDELINES FOR REFERENCES TO ACTUARIAL ADVICE

If a provision adopted is the amount recommended by an actuary, in a written report, it may be described in terms such as "actuarially determined".

If the provision is within a range which an actuary, in a written report, has stated to be acceptable, it may be described in terms such as "determined having regard to actuarial advice".

If the provision is not less than the amount recommended by an actuary, in a written report, it may be described "adequate having regard to actuarial advice".

If the provision is less than the minimum which an actuary, in a written report, has stated to be acceptable, it may be described in terms such as "inadequate according to actuarial advice" or without any reference to actuaries or actuarial methods. If two actuarial reports give different acceptable minima, the lower may be used.

If one of the above conditions applies, in aggregate, to a group of provisions, but not to all the individual provisions in the group, the appropriate desription above may be used with the addition of words such as "in aggregate".

If there is no written report, signed by a Fellow of the Institute of Acturaries of Australia, or some other person approved by the Council of the Institute for this purpose, the words "actuary" and "actuarial" may not be used.

(This is an extract from "The Role of the Actuary in General Insurance" by Buchanan and Gould presented to the Second General Insurance Seminar of the Institute of Actuaries of Australia in 1980).