

A CHANGE AGENDA FOR RESERVING

REPORT OF THE GENERAL INSURANCE RESERVING ISSUES TASKFORCE (GRIT)

**BY A. R. JONES, P. J. COPEMAN, E. R. GIBSON, N. J. S. LINE,
J. A. LOWE, P. MARTIN, P. N. MATTHEWS AND D. S. POWELL**

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ABSTRACT

Reserving is important to our profession as it is a core activity for actuaries. The members of the General Insurance Reserving Issues Taskforce (GRIT) have been considering how actuaries can improve the way in which we do reserving in general insurance. We gathered our thoughts and recommendations together in a Consultation Paper which has been discussed widely in the profession. We are very grateful to everyone who shared their views and comments with us, particularly those who gave us written feedback. We have considered carefully all the feedback we received and adapted our final report in response to this.

Given the scope and importance of our remit, it is perhaps not surprising that this is not a short paper. We hope that Section 1 provides a reasonable summary.

Generally, our view is that there are many things on which our profession should focus. However, it is also important to remind ourselves of the positive items of feedback which we heard from our stakeholders. In addition to many suggestions for things to do better, we consistently heard the message that actuaries play an extremely valuable role in general insurance.

This is a major testimony to the progress which the actuarial profession has made in recent years in its ability to contribute to the general insurance industry. Perhaps it is because of this progress that now is an appropriate time for us, as a profession, to take a hard look at what we do in reserving, and ask ourselves whether there are any things which we could do differently. We hope that GRIT's report will facilitate this debate.

GRIT's recommendations fall under the following key themes:

- Providing more transparency to our reserving methods and helping our stakeholders have more insight into the key reserving assumptions and decisions.
- Providing more information on uncertainty in our reserve estimates. In particular, we recommend that actuaries provide a quantitative indication of the range of outcomes for future claim payments, and that our profession defines a common vocabulary for communicating uncertainty.
- Understanding better the business we are reserving. We suggest a range of analyses and activities for doing this.
- Applying our standard actuarial reserving methods more consistently. We identify a list of specific areas where we believe that there is scope for improvement. Also, we believe that the actuarial training syllabus should be extended, and this leads to consideration of whether a more specialised general insurance actuarial qualification is needed.
- Understanding the implications of the underwriting cycle, which, we believe, influences the behaviour of claims development in a way that our reserving models do not currently capture. We suggest what we believe may be the foundations of a potentially more cycle proof methodology, but this is an area which we believe will require much more research.

- Helping actuaries understand how behaviour can affect the reserve estimation process, particularly in the face of uncertainty. We make various suggestions in this area, including helping actuaries manage pressure from third parties.

We are convinced that for our profession to implement these suggestions, it will require a concerted change management strategy and set of actions to embed changes into the way actuaries work. We believe that this will include:

- increasing the level of debate and research in the profession on claims reserving;
- a broader communication programme with the general insurance industry, covering, amongst other things, uncertainty and data quality;
- a sub-group of the GI Board with a specific focus on reserving, responsible for implementing GRIT's recommendations and dealing with new issues as they arise; and
- our profession resolving the conflicting pressures which will arise out of the extra work required for reserving by the GRIT recommendations.

There is one specific item where we have not made a recommendation. It has been suggested to us that many of the standard reserving methods in common use, such as the chain ladder, are not sophisticated, and that more sophisticated mathematical and statistical methods should be a priority. We do not agree with this. Whereas, in the longer term, this might be an important issue for our profession, we believe that the current focus for actuaries should be in the areas set out in this paper, such as understanding the business better.

GRIT believes that the issues which we have identified are important for the future of our profession and the contribution which we can make to the general insurance industry.

KEYWORDS

General Insurance; Reserves; Best Estimate; Ranges; Communicating Uncertainty; Understanding the Business; Improving our Methods; Reserving Cycle; Behavioural Issues

CONTACT ADDRESS

A. R. Jones, M.A., F.I.A., KPMG LLP, 1 Canada Square, London E14 5AG, U.K. Tel: +44(0)20-7311-5698; E-mail: tony.jones@kpmg.co.uk

1. OVERVIEW AND SUMMARY OF RECOMMENDATIONS

1.1 *Introduction*

1.1.1 GRIT is the General Insurance Reserving Issues Taskforce of the Institute of Actuaries. GRIT's terms of reference are both wide-ranging and specific.

1.1.2 The terms of reference are wide-ranging in that they ask us what the actuarial profession should do to reduce the chances of reserve run-off surpluses and deficiencies in the future. Also, they ask us to consider how the profession should react to the press debate on how well actuaries have done at reserving. So, as well as asking how actuaries could make reserving more accurate, they also raise the question of how actuaries can give the rest of the world a better perception of what we do.

1.1.3 Discharging this part of our Terms of Reference means considering how well actuaries execute reserving methodology, but other things influence the ‘accuracy’ of the reserves calculated by actuaries, such as how well actuaries understand the business being reserved, how this understanding can be enhanced, and the pressures which actuaries experience, particularly in the soft cycle. We have therefore also considered these issues in this paper. In addition, we have considered the fact that companies do not always book actuarial estimates, so that published reserves may not be comparable to the actuarial ones.

1.1.4 Moreover, reserves are uncertain, which means that there will always be run-off surpluses and deficiencies. We believe that in some cases the actuary has been blamed for run-off deficiencies which have arisen because of the uncertainty inherent in the business, which is there no matter how good a job the actuary does. However, although the actuary may have done a perfectly competent job in calculating the reserve point estimate, we do wonder whether actuaries, management and shareholders focus enough on uncertainty in reserving. If our stakeholders do not understand the uncertainty in the reserves, then it is not surprising that they are unhappy when the adverse run-off is more than they expect. So, uncertainty has been a significant area of attention for GRIT.

1.1.5 Taking all these points into consideration, GRIT has interpreted its brief as one of stepping back and taking a strategic view on what we, as actuaries, need to change to be better at reserving, and what we need to do to improve the communication of the reserves we calculate.

1.1.6 Our terms of reference are also very specific, as they ask GRIT how the profession should respond to the observations of the Reserve Cycle Working Party.

1.1.7 One of the key findings of the research done by that Working Party suggests that the claim development profile lengthens in the soft part of the underwriting cycle. Most actuarial methods, indeed virtually all of those in common use, do not allow for this. If true, it means that our existing inventory of methods will underestimate reserves during the trough of the underwriting cycle. This is clearly a critical issue for the actuarial profession, and we have devoted a considerable part of GRIT’s activities to this specific and important technical item.

1.1.8 There are three important points we want to make here at the start of our paper.

1.1.9 The first is that reserving is a core product for actuaries. However, our perception is that in recent years reserving has become the poor relation and considered less exciting than other work which actuaries do, such as pricing and capital.

1.1.10 This is misguided. Reserving is the key process whereby the financial health and profitability of an underwriting organisation are determined. It is also an important component of the pricing process.

Reserving should be seen as exciting, rewarding and ‘the place to be’ for actuaries. The list of issues which GRIT has identified which need to be addressed by the profession are substantial and stimulating. They require significant resources from our profession; they need to be tackled with vigour and enthusiasm and to be championed at the highest levels in our profession. We believe that every actuary who focuses time and effort in reserving will find the rewards exciting, challenging and commercially extremely relevant.

1.1.11 The second point is as follows. In the rest of this paper is a catalogue of things which GRIT thinks actuaries should do differently and a list of things which our stakeholders think we should do differently; but, lest actuaries become despondent at these lists for change, we want to include here one piece of feedback which we heard from our stakeholders and which does not appear elsewhere in this report. Despite everything, we consistently heard our stakeholders say that actuaries play an extremely valuable role in general insurance. Two memorable comments were:

- ‘actuaries are indispensable’; and
- ‘if actuaries did not exist we would have to invent them’.

The challenge for our profession is to help our stakeholders and strengthen our brand even more by addressing the issues which follow in this paper.

1.1.12 The third point is that this paper sets out GRIT’s views on various issues facing the actuarial profession in the field of reserving, and how GRIT believes that the profession should respond to these. It should not be regarded as a statement of best practice at the current time for actuaries in non-life insurance.

1.2 *What GRIT has done*

Here we describe briefly how the GRIT Taskforce went about its job. GRIT’s key activities have been the following:

- (1) *Consulted with stakeholders.* We have met with users of actuarial reserving services to understand what they think of what actuaries do. We met with CEOs and FDs of insurance operations, rating agencies, investment analysts, and regulators both in the United Kingdom and abroad.
- (2) *Brainstormed issues.* In our early meetings, we invested time thinking creatively to identify the things that could help actuaries produce ‘better’ estimates of reserves, and also to identify the things which would help our stakeholders understand better the issues being dealt with in the reserving process.
- (3) *Communicated with our membership.* We appreciate the importance to our profession of the issues GRIT is considering and the recommendations we make. We have attached a high priority to obtaining information from our membership, and communicating and consulting. Our consultation process included the following:

- questionnaire: e-questionnaire issued to all non-life actuaries in autumn 2004;
- GIRO (2004) presentation, and workshop feedback sessions;
- GRIT session at Current Issues update seminar in June 2005;
- consultation meeting at Staple Inn on 18 July 2005;
- consultation GIRO paper available on website from July 2005;
- GIRO (2005) presentation and workshop feedback sessions; and
- final paper — GRIT's final report is this sessional paper.

Also, GRIT has reported to the General Insurance Board (GIB) on a regular basis throughout.

- (4) *Worked via separate workstreams.* In view of the spread of issues which we have covered in GRIT, we organised ourselves into separate workstreams, with one GRIT member being responsible for each. These workstreams were:
- consulting our stakeholders;
 - consulting with our membership;
 - applying existing methods more consistently;
 - understanding the business better;
 - helping actuaries manage and communicate uncertainty better;
 - improving our methods;
 - behavioural issues and third party influence; and
 - measuring the past.

Although GRIT members individually led specific workstreams, this final draft paper represents our collective views, and is broadly supported by all members of the Taskforce.

1.3 *Scope of GRIT's Thinking*

1.3.1 When carrying out our work, we found it useful to make a distinction between:

- the work which an actuary does to form his or her view on the actuarial reserves — we call this the 'actuarial assessment'; and
- the particular figure which the actuary selects as the appropriate estimate given the specifics of the particular project — we call this the 'selection for purpose'. The 'selection for purpose' will depend, amongst other things, on the purpose for which the estimate is being used and the materiality threshold which is appropriate.

1.3.2 GRIT considered only the 'actuarial assessment'. So we have focused on the core underlying process without getting bogged down in the specific criteria which determine the estimate selected in any particular project.

1.3.3 Also, we should probably include here a definition of what GRIT means by ‘reserves’. We hesitate to be too precise on this, as, given the complexity of the wide spectrum of general insurance contracts, we run the risk of creating a definition which breaks down somewhere in some particular set of complex circumstances. However, generally by reserves we mean estimates of unpaid claims, including allowance for other associated items such as future premiums.

1.3.4 References to GN12 in this paper are the version in force as at 30 June 2005.

1.3.5 In March 2005 the Final Report of the Morris Review of the Actuarial Profession was published, and the question arises of how much GRIT has been influenced by the conclusions and the recommendations contained therein. GRIT constructed its work programme before the conclusions from Morris (either draft or final) were available, but we did review this against the Morris conclusions as they emerged. Some of the issues identified by Morris, such as regulation of the actuarial profession, are outside the scope of GRIT. However two themes of Morris are relevant to GRIT, namely that actuaries:

- may have over focused on seeing the world just through their eyes, and not those of their stakeholders; and
- need to focus on clear communication which conveys the information and advice users typically need.

Many of the issues we considered come under these headings. We did review our agenda and action plan following Morris, but did not see the need to change what we planned to do. We hope that we were not complacent in making this judgement.

1.3.6 The following sections of the paper set out the work and conclusions of each workstream. In some areas the workstreams overlap, but we have not sought to remove these areas of overlap, as to have done so would have made the individual sections incomplete. Also, we have generally attached appendices relevant to a workstream as an appendix to that section of our report. This is with the exception of the ‘Understanding the Business Better’ workstream, where some of the material has been presented as an appendix to our entire report.

1.3.7 Our overall conclusions and recommendations are summarised below in the rest of this Executive Summary. To avoid repetition in this Overview they are not structured by workstream, but are gathered together under the following headings:

- What can we learn from the past?
- Communicating reality in an unambiguous way.
- Understanding the business better.
- More consistency in the application of existing methods.
- Identifying where our reserving methods need to be enhanced.

- Behavioural issues and third party influences.
- Implementation.

1.4 *Our Conclusions: what can we Learn from the Past?*

1.4.1 The results of our membership-wide survey suggest that most of our members believe that the reserving performance of actuaries has been at least adequate, which differs from the views of our stakeholders and the press. GRIT debated whether the run off of actuarial best estimates could in future be tracked to enable us to be better informed about actuarial performance. However, we could not agree on a mechanism which overcame issues of client confidentiality and potential disclosure in a litigation scenario. This issue could be reconsidered by the GIB in future, in order to look at ways which might assist in understanding actuarial performance and educating stakeholders and the public with regard to the uncertainty in reserve estimates.

1.4.2 The view of the smaller sample of actuaries polled by GRIT (in the ‘Measuring the Past’ workstream) is that companies can and do book amounts in their accounts which are different from the actuarial best estimate. So, we cannot look at industry-wide reserve movements — or even movements in reported reserves for an individual company — and assume that they represent movements in actuarial best estimates.

1.4.3 Statistical analysis of the relationship between profitability and reserve strengthening suggests that there is indeed a link, with companies strengthening reserves in profitable times, and vice versa. However, it is not clear whether this reserve strengthening is due to:

- companies being forced to strengthen reserves because they were established at too low a level during the previous soft market; or
- companies taking the opportunity of profitable times to put money aside and increase the prudence in the reserves.

GRIT’s view is that there is probably an element of both. Probably the important point to note is that industry reserve ‘deterioration’ may not always be due to previous under reserving, and vice versa.

1.4.4 The views of the smaller sample of actuaries polled by GRIT differed on the causes of reserve deterioration:

- ‘Company’ actuaries thought that the most important reasons were companies deliberately booking amounts different from the actuarial best estimates, and external factors such as Ogden subsequently affecting claim payout.
- ‘London Market’ actuaries saw the main reasons for reserve movements as actuarial best estimates being ‘insufficiently robust’, for example being overly influenced by underwriters. Some, but not all, of this group thought that systematic estimation errors have also contributed to reserve movements.

1.5 *Our Conclusions: Communicating Reality in an Unambiguous Way*

1.5.1 Actuaries should understand and accept that the purpose of an actuarial reserve assessment includes constructing a framework for evaluating reserves which enables non-actuaries (e.g. directors, management and underwriters) to form their own views on both the key assumptions and the level of reserves. Although not the main reason for this recommendation, this would be consistent with the regulatory regime for life insurance, under which the responsibility for setting the balance sheet provisions lies with the board and senior management on the basis of proper advice (usually from an actuary). The implications of this are wide ranging; for example, the criteria for what is a ‘good’ method of estimating reserves includes the ease with which it can be communicated to and understood by other insurance professionals.

1.5.2 An actuary should be required to show a numerical measure of uncertainty in any formal report wherever a point estimate of reserves is supplied. This must describe the uncertainty in outcome rather than a range for the best estimate (although there is no reason why an actuary cannot also communicate a range of best estimates if he or she feels it is appropriate). This requirement should be introduced via GN12. We recommend that the profession targets 2007 for the implementation of this.

1.5.3 The ways in which uncertainty can be disclosed, given the current state of actuarial techniques, are discussed in Section 6. GRIT commissioned a GIRO working party to investigate the methods currently available to quantify reserve uncertainty, which submitted its paper to the 2005 GIRO conference. More research needs to be done on the topic of quantifying uncertainty, and we recommend that the profession commissions research in this area.

1.5.4 Actuarial reports need to disclose more information on the key drivers of uncertainty, to help communicate to non-actuaries both the uncertainty itself and why it exists.

1.5.5 The profession urgently needs to agree on a common vocabulary for uncertainty, including, for example, a definition of the phrase ‘best estimate’. Some suggestions are included in our paper. This terminology needs to be communicated to other insurance professionals. Although we think it unlikely that our profession will want to depart from the objective of estimating a mean, we believe that it might be worth investigating alternatives, such as a median. Assuming that the mean is the measure which is agreed on, we believe that there is a need to create a consensus view in our profession on the adjustments (if any) required, in practice, to the standard methods to meet this objective.

1.5.6 In addition to the issue of uncertainty, our stakeholders believe that, as a profession, we need to improve our communication generally. This is not a new issue for our profession, and we believe that it is outside the scope of GRIT to make specific recommendations in this area. However, we

do recommend the recent paper on communicating in pensions — ‘Mind the Gap’ by Laura Brown & Neil Warmby — which discusses in an appealing way some of the basics of clear communication.

1.5.7 The profession should consider undertaking a broader communication programme within the general insurance industry:

- to encourage a common understanding of uncertainty within the industry; and
- to facilitate a debate on how to improve data quality available to support reserving, both claims data and pricing information. Many actuaries, and many of our stakeholders, think that this is weak.

1.6 *Our Conclusions: Understanding the Business Better*

1.6.1 GRIT believes that considerable improvements can be readily made to the reserve estimation process through actuaries understanding better the constitution and commercial issues surrounding the business making up each reserving class. We make some significant and specific suggestions for diagnostics and techniques which actuaries could use as part of their standard procedures for reserving work. However, we do appreciate that a balance will need to be struck between the value of the enhanced understanding generated vrs the extra work involved in carrying them out.

1.6.2 The suggestions focus on improving the homogeneity of the classes to be reserved, by seeking to identify sub-groups of policies with similar development characteristics, but with sufficient mass to form a credible reserving class in their own right. Having more classes consisting of policies with more uniform characteristics should allow the actuary to observe more consistent origin year (underwriting year, accident year) development factors. The enhanced consistency of the historical development factors should enable better curve fitting and estimation techniques for selecting development factors, tail factors and initial expected loss ratios when projecting each origin year to ultimate.

1.6.3 Section 5 also discusses methods for identifying outlying and atypical policies which should be removed from the main database and reserved separately. The section focuses only on what we consider to be the high priority ‘Key’ drivers, whilst leaving, in descending order of importance, the ‘Helpful’ and ‘Handy to have’ drivers to be discussed in Appendix B. We hope that all three lists will be useful checklists for actuaries of matters which could be pertinent during the reserving process.

1.6.4 Section 5 discusses London Market (LM) business separately from Personal Lines (PL) business, and covers issues common to both sectors wherever possible. The U.K. Commercial Lines section discusses only those issues which are distinct to itself and are different from either LM or PL business.

1.6.5 The London Market section covers:

- policy database diagnostics.

- claims database diagnostics;
- major open risks;
- underwriting;
- claims management;
- reinsurance; and
- processing and data integrity.

1.6.6 The Personal Lines section follows a similar theme in respect of the following classes:

- motor;
- household;
- creditor and warranty; and
- travel.

1.6.7 The terms and conditions of the business are important for understanding what has been written; but keeping track of changes to terms and conditions is always difficult. Wherever possible in the list of points given we have appended the rubric [T&C] to highlight where changes in terms and conditions, for example changes to policy periods, can be observed and measured. Changes to other influential policy clauses cannot be readily observed unless specifically coded within the policy header database.

1.6.8 As some changes in coverage can be significant, such as moving from occurrence to claims made policies, we recommend that the profession, if possible in conjunction with other market bodies, commissions an inventory of terms and conditions for selected lines of business. These can then be tracked and monitored against changes in market practice and made available to all interested actuaries. This will help actuaries be aware of changes in terms and conditions and their potential impact on reserves.

1.7 Our Conclusions: More Consistency in the Application of Existing Methods

1.7.1 GRIT believes that there is room for improvement and a need for greater consistency in the way actuaries apply common reserving methods. These are described in detail in our report. In summary the key points are:

- Less mechanical application of chain ladder methods, and more use of judgement in the selection of development factors.
- In the Bornhuetter-Ferguson (BF) methodology:
 - more rigour in the selection of initial expected loss ratios and justifying the basis of that selection in formal reports;
 - more discipline in the timing of when the BF methodology gets dropped for earlier years; and
 - making sure rate indices fully capture the impact of a softening market.

- More discipline on the selection of tail factors by reference to various measures, such as the overall shape of the development pattern, and, where relevant, external benchmarks.
- The importance of the selection of appropriate data grouping (possibly including by type of claim) for reserve projection, and not just using the data groupings which are readily available. In some situations it can also help to separate the consideration of new claims notifications from the development of previously notified claims.
- Using paid and incurred projections to identify changes in the underlying business and/or claims process, rather than automatically taking an average of the two results.
- Beware of excluding exceptional events, but then making no allowance for larger than expected large losses in the reserves. This applies both in the projections generally and also when deriving initial expected loss ratios.
- More focus on diagnostics and/or hindsight testing for assessing the quality of fit and/or appropriateness of the reserving model, rather than blindly using a particular model when the underlying assumptions of the model might be incorrect.
- More use of simple diagnostic measures to aid the understanding of the underlying business and the assessment of the reasonableness of reserve estimates.
- The importance of considering whether any aspects of past and likely future claims inflation mean that the methods used are inappropriate or need an explicit adjustment for inflation.
- The importance of understanding the underlying claims handling and case reserving process and the effect that these may have on the validity and consistency of data.
- The methodology for estimating reinsurance recoveries needs to be sufficiently sophisticated. Simple gross to net ratios are often not appropriate.
- More is not necessarily better. Conducting reserve exercises on a more frequent basis than annually can be very useful, or even essential. However, when there are many segmentations of the business, projections using (for example) quarterly development factors can sometimes make it more difficult to identify bigger picture trends, and, with anchoring bias, can make it more difficult for the actuary to respond to a deteriorating underwriting environment. The actuary should consider whether, in addition to (say) quarterly projections, it is also useful to review projections based on longer (e.g. annual) reporting periods.

1.7.2 There is overwhelming pressure towards improved controls over, and documentation of, the reserving process, from sources such as the

Sarbanes-Oxley section 404 legislation in the United States of America. The topic of documentation of reserving work is being covered in more detail by the U.K. actuarial profession's Guidance Notes Working Party.

1.7.3 The actuary should always take steps to test the reasonableness of the data supplied. We have referred in the report to a U.S. Standard of Practice on Data Quality. This contains guidance material on the responsibilities of the actuary which may be useful for the U.K. profession to consider.

1.7.4 The actuarial training syllabus (and possibly CPD programme and material) should be extended to include more on:

- practical issues associated with applying common reserving methods;
- the underlying insurance contracts and different types of insurance; and
- how terms and conditions can change and affect the liabilities of the insurance contracts (note that we also suggest that the profession needs to carry out the research to identify and monitor changes in terms and conditions).

1.7.5 This extension of the demands on general insurance actuarial training could lead to consideration of whether a more specialised general insurance actuarial qualification is needed.

1.7.6 For exposure modelling, we recommend that the profession should set up a process for keeping an inventory of all those areas where exposure-based reserving is being applied for market level issues, to provide a base level of consistent information for actuaries working with these issues.

1.7.7 GN12 should be clarified on how much of a calculation trail should be included in an actuarial report. We note that an attempt has been made to address this issue in the exposure draft of the revised guidance note.

1.8 *Our Conclusions: Identifying where our Reserving Methods need to be Enhanced*

1.8.1 More sophisticated mathematical and statistical methodology need not be a priority for actuaries at this stage. Rather, the focus for enhancement and research should be in the following areas:

- better business understanding and adapting the actuarial methodology in the light of what has been learnt;
- allowing for the underwriting cycle;
- more focus on analysing and investigating the historic fit of the reserving model used and more use of diagnostics;
- whether extreme value theory has a role to play in reserving;
- practically, which methods do well in which circumstances;
- more focus on data quality; and
- reserving methodologies better linked into the underlying exposures written and also external events or trends such as stock market movements

or weather events. However, this will be limited by the industry's understanding of its exposures.

1.8.2 The underwriting cycle is associated with features and instabilities on which actuaries may not have focused sufficiently. These are:

- lengthening of the claim development profile in the soft market; and
- rate indices failing to capture the degree of rate softening.

In combination these can cause a 'perfect storm' of a disaster. Worsening experience is hidden by the longer tail, compounded by inadequate initial loss ratios, with the consequence that actual loss ratios can deteriorate drastically in consecutive years, but be undetected by the reserving process.

1.8.3 The claim development profile appears to be correlated to the premium profile.

1.8.4 The overall actuarial reserving approach needs to take into account the features associated with the underwriting cycle:

- We could not find any research currently being carried out on the effects of the underwriting cycle on traditional reserving methods or how to deal with them.
- We suggest what we believe may be the foundations of a potentially more cycle robust methodology, based on potential 'cycle invariance' of curve fitting methodology.
- More research needs to be carried out to enhance our understanding of the drivers of the reserving cycle and actuarial methods for dealing with the underwriting cycle. The profession should facilitate this.

1.8.5 We suggest that GN12 should be extended to include a requirement that formal reserve reports comment on how the effects of the cycle have been addressed.

1.8.6 We recommend that consideration be given to researching techniques which would enable reserving to be based on classes which are not fully credible, and also the benefits and issues of basing reserving on data broken down by type of claim rather than by policy type (e.g. segmenting by personal injury and property damage claims rather than by third party and comprehensive coverage).

1.9 *Our Conclusions: Behavioural Issues and Third Party Influences*

1.9.1 Research shows that overconfidence is greatest for difficult tasks with low predictability which lack fast clear feedback — reserving! Actuaries need to be more aware of the fallibility in human behaviour of anchoring, prospect theory, framing and overconfidence. The profession should consider developing a wider study on how individual behaviour can affect the reserve estimation process. Consideration should be given to introducing this into the profession's education or professionalism course.

1.9.2 The profession should consider support systems available to actuaries facing pressure, for example ‘buddy systems’.

1.9.3 Actuaries should have a discussion with the accounting profession to enhance each profession’s understanding of the issues involved in estimating reserves and selecting a figure for the financial statements. (This is the one exception we have allowed ourselves to the rule that GRIT is focusing on ‘actuarial assessment’ rather than on ‘selection for purpose’.)

1.9.4 The actuarial training should be expanded to cover more detail on the key insurance processes — underwriting, wordings, loss adjustment, claims handling, etc. (including better understanding of the underlying business processes, e.g. broker production chain). This could lead to consideration of whether a more specialised non-life actuarial qualification is needed.

1.9.5 The professionalism course should be reviewed and extended to cover dealing with pressure from non-actuaries, possibly through role playing.

1.9.6 The Morris report has highlighted the need for the profession to share the experience of dealing with ethical issues through ‘real life’ case studies. There appears to be a lack of readiness to share experiences, and the profession needs to identify ways of overcoming this.

1.9.7 During any reserve review, the actuary should discuss the key issues with relevant individuals, wherever possible. It is likely that claims issues are better discussed with the claims director and underwriting issues with senior underwriters, rather than relying on one individual for the company view on all matters. Often individuals in a company hold different views or have different interests regarding the likely outturn of an issue, and it is extremely important for the actuary to get a balanced view.

1.9.8 Where significant judgements have to be made, the actuary should usually look for evidence beyond discussion with underwriters, particularly where these are reducing reserves in a soft market.

1.9.9 As required by GN12, all significant changes between current and prior estimates should be clearly communicated. An explanation should also be provided detailing how the current methodology and assumptions have been adjusted to reflect these issues.

1.9.10 There needs, in any case, to be a greater focus in actuarial work on the reporting and analysis of surpluses and deficits arising from prior years’ reserves.

1.9.11 We believe that it can be instructive to appreciate how far out reserve estimates can be compared with the ultimate outturn. This understanding should be helpful when considering the variability of reserve estimates, since, in our experience, there is in reality significantly greater variability than is often indicated by statistical techniques based solely on the observed historical data at the time of estimating reserves. Irrespective of whether some formal system of monitoring the run-off of reserves proves to

be practicable, we encourage all actuaries to make efforts to monitor privately, for their own purposes, the run-off of their own reserve estimates.

1.10 Our Conclusions: Implementation

1.10.1 Implementation of GRIT's recommendations will require more than just agreement by the GIB to the GRIT report. It will require a change in management strategy and concerted actions to embed changes into the ways actuaries work. In particular, we believe that this will include:

- (1) strengthening the training and educational material as regards claims reserving; and
- (2) increasing the level of debate and research in the profession on claims reserving. This should be supported by a strategically focused research agenda sponsored by the profession.

1.10.2 GRIT's recommendations will lead to more work being done by actuaries when carrying out reserving. This will have resource implications for both our profession and the insurance industry. It therefore needs to be managed and possibly phased.

1.10.3 There needs to be a continued focus on reserving. Reserving is critically important to GI actuaries. In order to provide a focus and impetus for implementing GRIT's recommendations, and dealing with new issues as they arise, we recommend that consideration be given to creating a continuing subgroup of the GIB with the responsibility of overseeing all reserving issues on behalf of the GIB. This could be some new form of committee, for example a General Insurance Reserving Board, or possibly a continuation of GRIT.

1.10.4 The Casualty Actuarial Society (CAS) is also looking at the issues which GRIT has been considering, and it is important that the profession and CAS keep in touch and coordinate as actuaries have a global brand.

2. CREATING GRIT'S WORK PROGRAMME

2.1 Introduction

2.1.1 GRIT's terms of reference are set out in Appendix C. They ask us to consider:

- (1) Any improvements that could be made to reserving techniques or best practices to reduce the possibility of material run-off surpluses or deficits.
- (2) What issues are raised for the U.K. profession by the ongoing debate raised by S&P?
- (3) The actions which the Profession should take in relation to the observations made in the Reserving Cycle Working Party paper presented at GIRO 2003.