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The Clearer Communication Working Party

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Report of the working party

The working party was set up at the 2002 Paris GISG meeting.

There are two strands to improving communications. First, there is the need for clarity in technical jargon. Second there is the need to improve our skill at putting across ideas.

Just as Darwin discovered discrete populations of snails or songbirds evolve different adaptations to their surroundings, so different group of isolated insurance people take words and adapt their usage. Actuaries, perhaps one of the most introverted and isolated groups, seem to go further than most in evolving technical meanings. So that two different groups of insurance people use the same words to mean different things. Evolutionary physical adaptation is normally self-evident but the evolution of the meanings of words is hidden and thus can snare communication between different groups of actuaries or insurance professionals. A London market actuary may well refer to the ratio of expected claims to premiums net of commissions as an ultimate loss ratio, an American PC actuary or a personal lines expert might expect an ultimate loss ratio to reflect the expected claims to the 100% premiums (gross of commission).

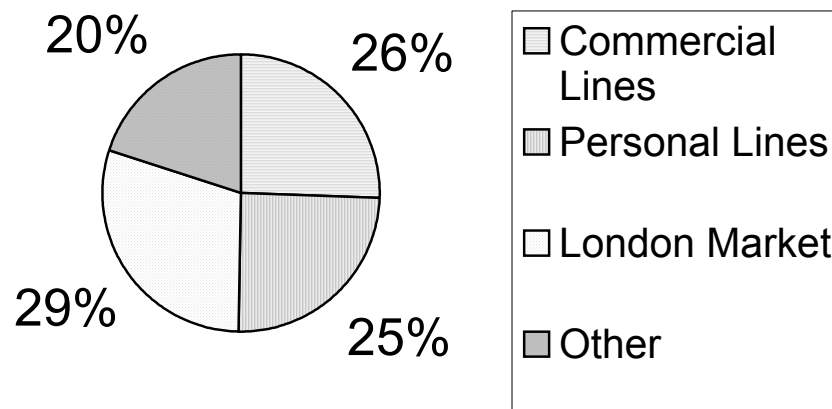
This is an interim report of the working party. It reports the results of a survey we carried out reviewing the use of actuarial terminology.

The Clearer Communication Working Party Survey

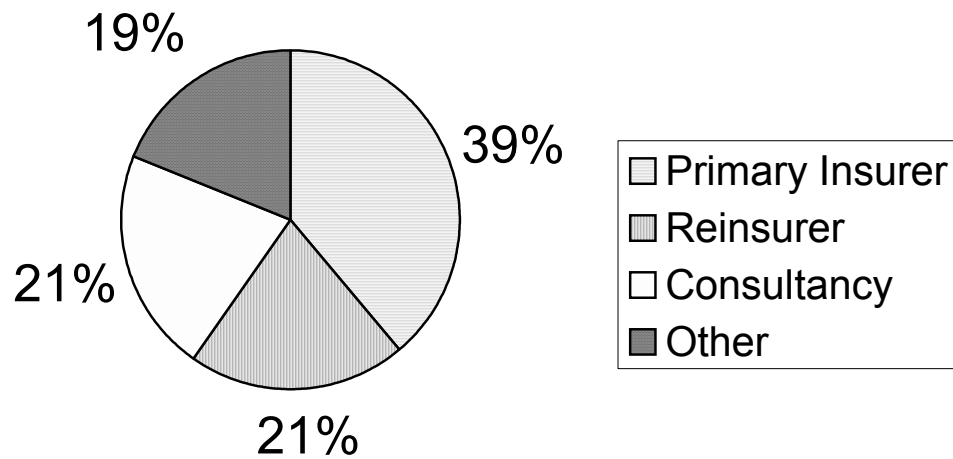
Overview

- We received a total of 149 responses to our survey which was sent out to the GIRO mailing list and a small sample of European and North American actuaries.
- The charts below show the breakdown of the survey population.
- We have highlighted the main findings in the next few pages followed by the survey itself and the full survey results.

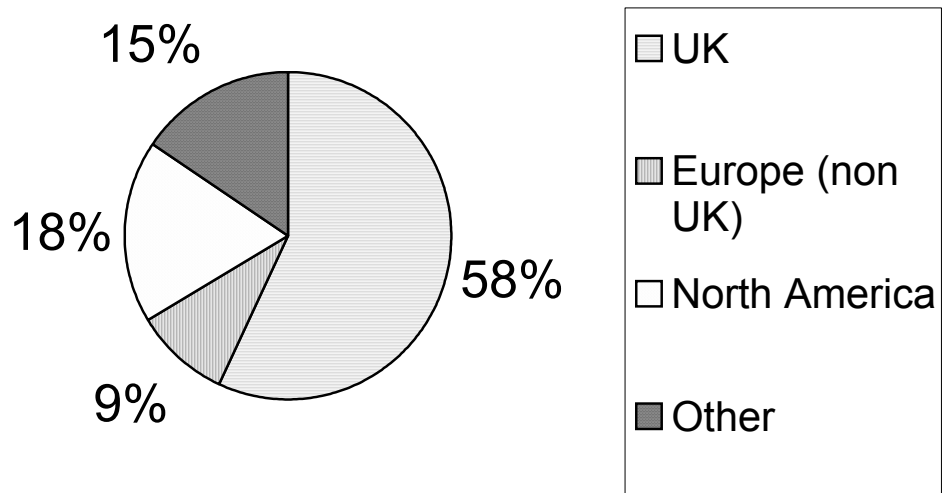
Main Area of Work



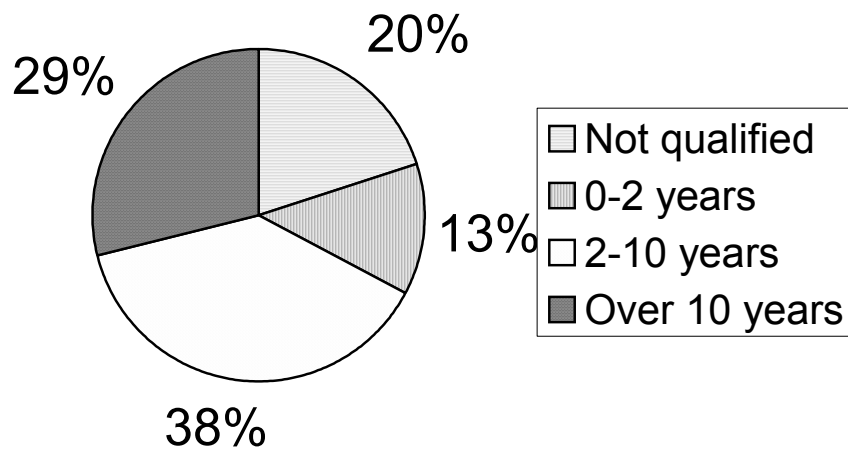
Type of Employer



Geographic Region of Employment



Years of Post Qualification Experience



The questioned asked were:

Question 1: What do you understand by the term Incurred Claims ?

- Nearly two thirds selected “Paid and Case estimates”.
- The second most popular choice at 19% was “Paid and Case estimates + Pure IBNR + IBNER”.
- There were differences between Personal Lines actuaries and other actuaries. Personal Line actuaries were more likely to select “Paid and Case estimates + Pure IBNR + IBNER”.

- Non-UK actuaries were also more likely to go for “Paid and Case estimates + Pure IBNR + IBNER” compared to UK actuaries.

Question 2: What do you understand by the term IBNR claims?

- 62% selected Pure IBNR and IBNER.
- The second most popular option was Pure IBNR with 22% of the vote.
- Again, there were some differences by area of practise. A greater proportion of Personal Line actuaries opted for “Pure IBNR” compared to the average whereas Commercial Line and London Market actuaries tended to prefer “Pure IBNR and IBNER”.

Question 3: You have been asked to investigate if a data set is credible, what do you understand by the meaning of credible?

- 50% chose “data statistically reliable for purpose”.
- The next most popular choice was “believable, sufficiently error free” at 19%.
- There was no significant variation in the responses between the different sub-groups.

Question 4 What do you understand by the term Surplus ?

- This appeared to be the term which was found to be the most ambiguous in the survey.
- 45% chose “Capital” and 35% chose “Type of proportional reinsurance”.

- However, the results were very different by Region. Nearly all of the North American actuaries opted for “Capital” (where an answer was selected) whereas UK actuaries were split between the other responses with “Type of proportional reinsurance” being the most popular.
- Noticeably, more Commercial lines actuaries chose “Capital” compared to other type of actuaries.
- Those with less experience post-qualification were less likely to choose “Capital” as their definition but were more likely to choose “Profit on a portfolio” than more experienced actuaries.
- Unsurprisingly, 70% said the term was context sensitive.

Question 5: A colleague has made the comment that there is a trend in the data for a pricing exercise. What do you understand by the term trend?

- Two thirds of respondents opted for “Pattern going up/down”.
- Most of the remainder chose “Statistically significant pattern going up/down”. The European actuaries were nearly twice as likely to choose this option compared to North American actuaries.

Question 6: An insurance company has been described as solvent, what do you understand by the meaning of this term?

- Nearly 50% chose “Net assets > statutory solvency margin”.
- The popularity of the choice “Net assets > regulators’ minimum expectations” was considerably higher amongst European actuaries compared to UK actuaries. Only 15% of UK actuaries selected this option

whereas it was chosen by 43% of European actuaries. North American actuaries voted in a similar way to UK ones.

Q7: What is an outlier?

- For the vast majority, the best fit was an “isolated data point”; though there was considerable support for “an event to be disregarded from the analysis”.
- This seemed to be a universal opinion, whether one looked geographically, by area of working practice.
- There was little support for a variance approach, nor one based on probabilities of occurrence.

Q8: What is URR?

- Here the winning answer was a “reserve held in excess of the unearned premium reserve for any expectation that the UPR will be insufficient to cover the claims arising from unearned exposures”. Just under half took this view.
- More than a third of respondents felt however that this was not sufficient. They went for a shorter but more encompassing view: “that covering claims from an unexpired period of cover”.
- Commercial lines actuaries preferred the latter definition outright. As did the majority of our non-UK practitioners.
- Most of the consultants who responded picked the shorter definition as well as those who were yet to qualify.

Q9: What are Company Reserves?

- A narrow majority suggested “Liability for future claims outgo”.
- Some liked “retained profit and revaluation reserves”.
- A similar spectrum of response was obtained from the different geographical areas and from actuaries in different lines.
- Nearly one third of consultants indicated that they were not happy with any of the suggested definitions.

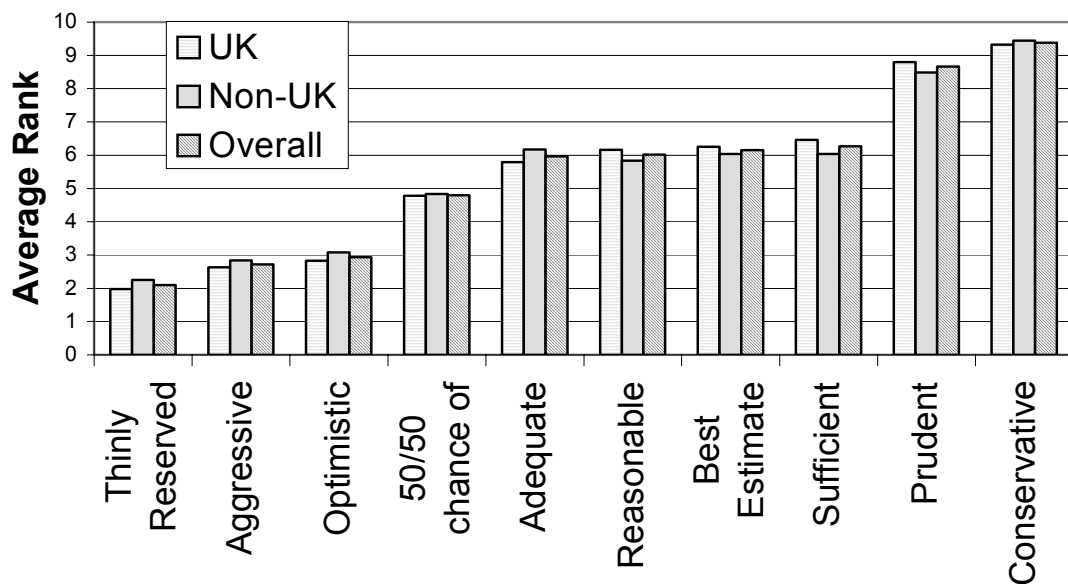
Q10: What are losses?

- Favourite overall was non-zero claims, although claim events and (simply) claims came in for considerable support.
- This seemed to be fairly unanimous, though commercial lines actuaries and those qualified over ten years reckoned that the three definitions (claims, claim events and non-zero claims) were all of about equal weight.

Question 11: In a reserving exercise, how would you rank the following terms starting from the lowest reserves to the highest (rank 1-10)?

- The survey showed that at the extremes of the ranges there was a general consensus of how each of the terms compared to each other. However, the rankings of the terms “Adequate”, “Reasonable”, “Sufficient” and “Best Estimate” were less clear-cut.
- The graph below shows the average rankings (moving from lowest to highest reserves) for UK actuaries, non-UK actuaries and overall.

- There were no major differences in the result although non-UK actuaries marginally thought that an “Adequate” level of reserves would be higher than a “Reasonable” level.
- By Type of Employer, there were no significant differences in the ranking of the terms between actuaries from Consultancies and those from Insurers (Primary and Reinsurers). However, it was interesting to note that the actuaries from Consultancies tended to have wider opinions on the relative ranking of each term, resulting in their average ranking results being less disperse between terms than for the actuaries from Insurers.



Q12: What is probable maximum loss?

- Here the actuary's best friend was "maximum loss from reasonably foreseeable event".
- A somewhat distant second came "maximum loss anticipated from our model/analysis of exposure".
- Few would advocate any other definition.
- There was little variation by geographic area or nature of work or experience.

Q13: What is a "range of reasonable estimates"?

- Here the vote was 60% in favour of estimates derived from reasonable methods and assumptions.
- There was a sizeable (but secondary) vote for "fairly likely outcomes".
- Other suggestions didn't register significantly.
- The North Americans didn't seem to care much for the second suggestion and selected reasonable methods and assumptions.
- However those claiming to operate the London Market were much more sympathetic to the "fairly likely" definition, as were the unqualifieds.

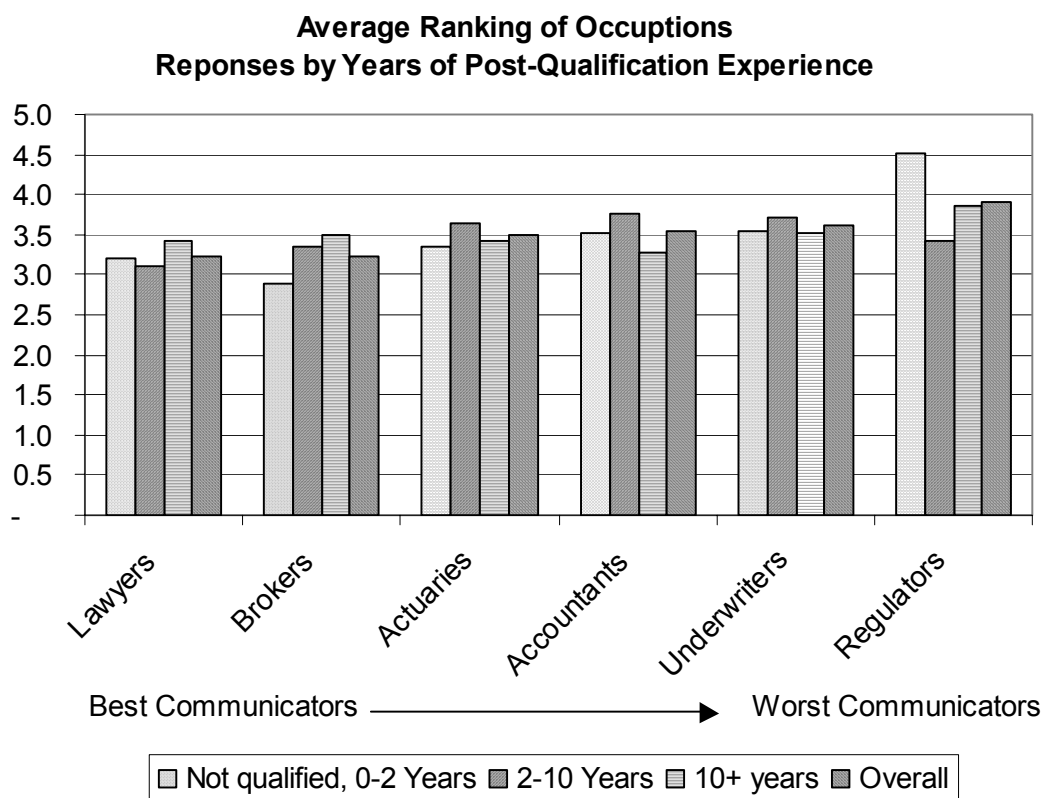
Q14: What is underwriting profit?

- More than three actuaries in five plumped for premiums – ultimate claims – expenses.
- There was some support (15%) for those who would only include expenses relating to claims.
- And a significant minority (10%) would ignore expenses from the definition altogether.
- Only 7% would discount claims.
- And, 5% would include investment income.
- Actuaries working outside the UK (Europe and North America) were even more single minded in their choice of the top definition.

Q15. Whom would you trust to communicate effectively?

- The overall results suggested that actuaries and accountants were equally trusted in their abilities to communicate.
- Regulators, perhaps surprisingly, were almost universally deemed the worst communicators.
- Lawyers were considered the best communicators. This was certainly a unanimous appraisal.
- You also thought that brokers were good communicators, perhaps ranking second to our brothers in law.
- Reinsurers, for example, rated brokers on virtually the same plane of excellence as the lawyers.

- However, the North Americans were readier to trust a fellow actuary to communicate effectively, more so than brokers; but still they had the lawyers up as the clearest of clear communicators.



The survey results show that many terms in common actuarial use do not necessarily have the same meaning to those reading or hearing them as that the author intended to convey. Moreover, it appears particularly difficult to convey shades of meaning, as witnessed by the results from question 11.

Appendix A

Clearer Communication Working Party Survey

The Clearer Communication Working Party was set up at GIRO 2002 to look at how actuaries can communicate in a more effective way to other actuaries, financial professionals and the general public. Clarity of communication means using language that all those involved are familiar with and that there is no difference in interpretation between the communicator and the recipient.

We will be addressing both verbal and written communication and the area this survey is investigating is the difference of interpretation of common actuarial terms. The aim of the survey is to see if there is a 'market norm' in the interpretation of these terms and whether there are differences in interpretation between different groups within the profession. The results of the survey will be included in our paper.

The survey contains 14 actuarial terms and a choice of alternative definitions. We would like you to "colour- in" the definition that you think is most suitable. Some of the definitions may be context sensitive and if this is the case, please "colour –in" the context sensitive flag **in addition** to the most usual usage. Question 15 has been added to bring a bit more controversy to this survey!

Many thanks, in advance for sparing the time to complete our survey.

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Neil Hilary
Mark Malone
Jenny Wong

1. What do you understand by the term Incurred Claims?

- ☐ Paid + case estimates
- ☐ Paid + case estimates + Pure IBNR
- ☐ Paid + case estimates + Pure IBNR + IBNER
- ☐ Context sensitive

2. What do you understand by the term IBNR claims?

- ☐ Pure IBNR (unknown claims)

- ☐ Pure IBNR + IBNER (unknown and known)
- ☐ Context sensitive

3. You have been asked to investigate if a data set is credible, what do you understand by the meaning of credible?

- ☐ Data statistically reliable for purpose
- ☐ Sufficient volume of data
- ☐ Believable, sufficiently error free
- ☐ Can be used in isolation to set rates without need for external information
- ☐ Context sensitive

4. What do you understand by the term Surplus?

- ☐ Type of proportional reinsurance
- ☐ Profit on a portfolio
- ☐ Capital
- ☐ Context sensitive

5. A colleague has made the comment that there is a trend in the data for a pricing exercise. What do you understand by the term trend?

- ☐ Pattern going up/down
- ☐ Statistically significant going up/down
- ☐ Market opinion of future direction
- ☐ Cyclical pattern
- ☐ Context sensitive

6. An insurance company has been described as solvent, what do you understand by the meaning of this term?

- ☐ Net assets > zero
- ☐ Net assets > statutory solvency margin
- ☐ Net assets relatively large
- ☐ Net assets > regulators' minimum expectations
- ☐ Context sensitive

7. In a pricing exercise, there appears to be an outlier in the data. What do you understand by the meaning of this term?

- ☐ Something that arises 1 in 4 times
- ☐ Something that arises 1 in 10 times
- ☐ $|\text{Data}-\mu| > 2 \text{ sigma}$
- ☐ Unbelievable data point
- ☐ Event to be disregarded from analysis
- ☐ Isolated data point
- ☐ Context sensitive

8. What do you understand by the term Unexpired Risk Reserve (URR)?

- ☐ Premium deficiency reserve
- ☐ Reserve held in excess of the unearned premium reserve to allow for any expectation that the claims will be insufficient to cover the claims arising from unearned exposures.
- ☐ unearned premium reserve will be insufficient to cover the claims arising from unearned exposures.
- ☐ Reserve required to cover the claims from an unexpired period of cover.
- ☐ Other definition, please specify

9. What do you understand by the term company reserves?

- ☐ "Rainy day" margins
- ☐ Liability for future claims outgo
- ☐ Retained profit/revaluation reserves etc
- ☐ Other definition
- ☐ Context sensitive

10. What do you understand by the term losses in the phrase, the company has had 50 losses in the last year?

- ☐ Claims
- ☐ Claim events
- ☐ Non-zero claims
- ☐ Context sensitive

11. In a reserving exercise, how would you rank the following terms starting from the lowest reserves to the highest (rank 1-10)?

- ☐ Adequate
- ☐ Aggressive
- ☐ Best Estimate
- ☐ Conservative
- ☐ Optimistic
- ☐ Prudent
- ☐ Reasonable
- ☐ Sufficient
- ☐ Thinly reserved
- ☐ 50/50 chance of above/below Best estimate

12. What do you understand by the term Probable Maximum Loss?

- ☐ Loss expected to be exceeded only 1 in 100 years
- ☐ Maximum loss from reasonably foreseeable event
- ☐ Maximum loss anticipated from our model/analysis of exposure
- ☐ Maximum loss priced for
- ☐ Top of outwards reinsurance program

13. How would define the phrase “range of reasonable estimates”?

- ☐ Range of estimates derived from reasonable methods and assumptions
- ☐ Range of fairly likely outcomes
- ☐ +/- 1 standard deviation from the best estimate
- ☐ +/- 5% from estimate
- ☐ +/- 10% from estimate

14. What do you understand by the term Underwriting Profit?

- ☐ Premiums - ultimate claims
- ☐ Premiums - ultimate claims - expenses
- ☐ Premiums - ultimate claims - direct claims handling expenses
- ☐ Premiums - ultimate claims - expenses + investment income
- ☐ Premium - discounted ultimate claims - expenses

- ☐ Premiums - ultimate claims - expenses + investment income - increase in equalisation reserve
- ☐ Context sensitive

15. Please rank in order these occupations in terms of how effective you think their members are in communication (1 is the best)?

- ☐ Accountants
- ☐ Actuaries
- ☐ Brokers
- ☐ Lawyers
- ☐ Regulators
- ☐ Underwriters

Many thanks for completing this survey. We would like to analyse the results by sub-groups within the profession so please can you also complete the following questions by ticking the relevant option.

Years of experience post qualification:

- ☐ Not qualified
- ☐ 0-2 years
- ☐ 2-10 years
- ☐ Over 10 years

Type of employer:

- ☐ Primary Insurer
- ☐ Reinsurer
- ☐ Consultancy
- ☐ Other

Main area of work:

- ☐ Commercial lines
- ☐ Personal lines
- ☐ London market
- ☐ Other

Geographic region of employment:

- ☐ UK
- ☐ Europe (non UK)
- ☐ North America
- ☐ Other

