

## **Response to FRC Discussion Papers “Promoting Actuarial Quality” and “Monitoring and Scrutiny of Actuarial Work”**

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This is a response based on experience of teaching undergraduates in Actuarial Studies, the problems they face, and the discussions generated by those problems. It is not based on any practical experience of the actuarial profession.

### **Promoting Actuarial Quality**

Q2 (i) Do you agree that the use and interpretation of mathematical models to describe financial systems, portfolios and entities is an underlying feature of actuarial work?

Q2 (ii) What other features describe and distinguish the nature and scope of actuarial practice?

It is justifiably claimed that actuaries have developed a professional discipline around the development, use and interpretation of mathematical models, and that the traditionally deterministic approach has given way to increasing use of stochastic elements in the models. This is an area of rapid development, both in terms of the tools available, such as ever increasing computer power, and with respect to the development of mathematical techniques: whole new disciplines such as chaos theory and Bayesian MCMC algorithms have to be considered for actuarial applications.

The introduction of new techniques is an area that can reasonably be explored in an academic environment to provoke discussion and engage students. For practising actuaries it has to be carefully managed, to balance the gains in effectiveness of more sophisticated models against the risk of taking the profession into areas of modeling that have not been fully tested, or incorporating disciplines that may not be fully understood by some practitioners who would find it increasingly difficult to keep up with changing methodologies.

Q4 (i) Have we identified the key drivers of actuarial quality? How can they be added to, re-defined or re-structured?

Q4 (ii) Do other drivers apply in sectors apart from life insurance, general insurance, and pensions?

The set of key drivers identified in the paper appears to be comprehensive and well balanced, and is certainly an adequate structure with which to analyze issues of quality control in the profession.

In sections 5, 6 and 7, I do not have adequate practical experience to answer the questions fully, though I would say that the features, drivers and threats are generally correctly described.

With respect to life insurance it is perhaps unnecessary to point out that the task of assessing risk in this area is becoming more and more difficult because the risk is

dominated by changes in life expectancy, increased risk of pandemics, consequences of climate change, terrorism, etc. These presents great challenges to the profession, and it is hard to see how instruments of quality control can be designed to cope effectively with the changes.

To the list of unpredictable problems in life insurance, for general insurance we should now perhaps add catastrophic collapse of financial institutions and unpredictable interventions by governments, which are major issues only just beginning to be identified. Their effects are far-reaching and probably long-lasting, and will undoubtedly lead to more pressures on actuaries in areas such as reporting claims reserves.

The issue of unreliable data is another area that is being addressed in increasingly sophisticated ways, and the integrity of data is now routinely investigated using statistical models. As these develop, some degree of conformity to methodology needs to be imposed (without stifling change).

With regard to pensions, I would identify modeling methodology as a key issue, and particularly the need to include some form of stochastic investment modeling as a standard approach. Again, the perceived unreliability of financial institutions will have a large impact in this field, and effective communication skills will be essential to explain changes in the financial environment and their impact on pensions.

### **Monitoring and Scrutiny of Actuarial Work**

Q3(i) Do you agree that the effectiveness of monitoring and scrutiny arrangements in life assurance could be enhanced in the most proportionate manner through adopting Strategy 1? [3.33]

Yes.

Q3(ii) If not, why not?

Q3(iii) Do you support any of the options identified for additional regulatory support under Strategy 1? [3.34]

The main emphasis should be on education and CPD. It is more important to give practitioners the required skills than to monitor them. But the development of QA standards (incorporated into education and CPD) would also promote confidence.

Q3(iv) Do you have any further suggestions of how the Profession could promote effective and proportionate monitoring and scrutiny of actuarial work?

Only that QA should be as transparent as possible, perhaps by publication of research and statistics.

Q4(i) Do you agree that the effectiveness of monitoring and scrutiny arrangements in general insurance could be enhanced in the most proportionate manner through adopting Strategy 1? [4.23]

Yes.

Q4(ii) If not, why not?

Q4(iii) Do you support any of the options identified for additional regulatory support under Strategy 1? [4.24]

Again, the main emphasis should be on education and CPD, and the development of QA standards.

Q4(iv) Do you have any further suggestions of how the Profession could promote effective and proportionate monitoring and scrutiny of actuarial work?

No.

Q5(i) Do you agree that the Profession should build on existing strategies (under Strategy 1 and Strategy 2) to enhance the scope and application of GN48 and to develop additional tools for regulatory support in accordance with Strategy 2? [5.46]

Yes.

Q5(ii) If not, why not?

Q5(iii) Do you support any of the options identified for additional regulatory support under Strategy 1 and for additional professional requirements under Strategy 2? [5.47]

In this area, all four of the options under Strategy 1 would seem appropriate. Under Strategy 2, external peer review (Option 2B) would be the most desirable route to take, but not limited to schemes of 20 members or more. The confidentiality issues would have to be taken into account, but the benefits would outweigh the disadvantages. In conjunction with this, administrative monitoring of compliance with QA requirements (Option 2C) would create the formal framework to provide evidence of compliance.

Q5(iv) What would your view be on the regulation of firms that employ actuaries as against regulating actuaries only as individuals? [5.42/5.43]

I think regulation of firms should be an available option, but that firms should be permitted (perhaps encouraged) rather than required to be regulated. For some firms this would be advantageous, and would enhance the working environment.

Q5(v) In what circumstances should the Profession consider adopting Strategy 3 (active monitoring by the Profession, or independently, say through an Actuarial Inspection

Unit) for pensions? Which additional options should the Profession consider? [5.40]

Strategy 3 should be available as a last resort, when the lighter touch has failed. If it is available, and known to be available, it is likely that it will rarely need to be used. The profession has a good reputation and does not need to be over-monitored.

Q5(vi) Do you have any further suggestions of how the Profession could promote effective and proportionate monitoring and scrutiny of actuarial work?

The main strategy should be to promote the right culture through education and CPD, stressing the high standing of the profession and the need to maintain it.