THE EVOLUTION OF THE PROFESSION

PRESIDENTIAL ADDRESS

2006

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Institute of Actuaries of Australia

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2006 Presidential Address
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President of the Institute of Actuaries of Australia 2006

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1. Introduction and Summary

1.1 Introduction

It is an exceptional privilege and responsibility to be elected as President of the Institute of Actuaries of Australia.

It is a privilege because the presidency confers the role of speaking for and representing an outstanding group of highly talented committed professionals.

It is a responsibility because the role demands that the past heritage be preserved and that the future of the profession be enhanced. A presidency is not a discrete event in itself; it is part of the profession's long journey.

> *To travel hopefully is a better thing than to arrive, and the true success is to labour.* (R. L. Stevenson).

Change is inevitable; the rate of change in society generally is increasing. Change for the actuarial profession can be revolutionary through external event shocks or through visionary thought leaders.

However this Presidential Address is about evolutionary change. Specifically it is about the immediate past and the future developments of:

- maintaining our leadership in traditional actuarial areas and expansion into further fields (attaining the vision); and
- raising the level of our professional standards, increasing our accountability and transparency, and deepening our commitment to serving our clients, employers and third parties in the public interest (professional governance).

The main messages in the Address are summarised in the remainder of this Section one. Time poor readers need not continue beyond this summary!

1.2 Vision & Mission Statements

Our vision statement is:

> *To position the profession so that whenever there is uncertainty about future financial outcomes, actuaries are sought after for their valued advice and authoritative comment.*

This vision statement serves us well and provides clear guidance for future directions.

However it is an appropriate time to review our mission statement. As outlined in section 2 the mission statement could be strengthened in respect of serving our clients, employers and third parties in the public interest, providing services of the highest quality and enforcing professional standards (professional governance) and increasing the public's recognition of the actuarial profession's value (attaining the vision).

1.3 Our Membership and Practices

A review of recent membership statistics is encouraging. Overall the level of our membership is increasing, albeit recently the rate of growth is lower than five to ten years ago. When we look at recent membership trends by practice, the trends are precisely in line with our vision – with broad maintenance of our numbers in traditional areas and with growth in new fields. The current statistics reveal a long anticipated milestone: General Insurance has become our second largest practice, passing Superannuation.

A brief overview of each of our practices in section 8 shows a consistent theme: in every practice there is an abundance of opportunities for members of our profession. Anecdotally this is confirmed by greater difficulty currently being experienced by employers to recruit actuarial staff, compared to a few years ago.

There is, of course, no room for complacency: individually and collectively we must continuously demonstrate value to our clients and/or employers.

1.4 Pre-Qualification Education

A fundamental function of the Institute is to provide education. The recent past initiatives in education and future plans are all about providing a solid platform for our traditional areas and providing opportunities and support for actuaries in wider fields. They are directly relevant to attaining the vision.

2005 was a year of significant change in pre-qualification education.

The new Part III Course was introduced with the goals of assisting students to pass in a shorter time period (whilst maintaining standards), to equip students with more relevant skills for the commercial employment environment and to deliver education with less reliance on volunteers. Whilst there have been some teething problems in the first year, I am confident that our goals will be achieved.

An independent review was conducted in 2005 into the low pass rates in Part III. The review confirmed Council’s view that current pass rates are unacceptably low. A number of recommendations have been made that include setting the aims and objectives of all courses in terms of performance objectives, greater guidance to students and more assistance to educators. The recommendations will be implemented over the next two years.

Important changes that should be implemented in the near future include deepening the content of our Finance course so that actuaries can more effectively operate in Banking and Finance, introducing a Health course to support our practitioners in their statutory roles in Private Health Insurance and broaden our opportunities in Health Financing generally, and the introduction of a Risk course to both enhance our current roles in risk management and extend our roles to exciting new frontiers.

In Australia we reserve the title "actuary" for members who have passed all subjects including specialist subject(s). There is an alternative: we could reserve the term actuary for someone who has mastered all the key components of actuarial science, but who has not yet started to offer actuarial advice. Thereafter an "actuary" would need to successfully complete the relevant specialist course to begin offering actuarial advice in a particular industry.

This change would clearly enhance our prospects of attaining the vision, and is worthy of serious consideration.

A particular priority of mine is for the Institute to identify students who commence actuarial studies and are particularly suited to become actuaries, but who are lured away to careers in Finance where the actuarial qualification is not recognised as relevant. The more difficult task then is to devise meaningful strategies to retain some of them in the actuarial fold – a likely direction is to provide support and facilitation for penetration of new markets.

1.5 Professional Governance

We must be realistic: over the past few years actuaries in Australia and (more particularly) overseas have received adverse publicity. An essential asset of any profession is to receive and be worthy of a deep and abiding trust from the public.

This has generally been the case with actuaries, but we must always be conscious that trust takes many years to be gained, and can be destroyed in an instant.

I am certain that the vast majority of actuaries act with integrity; in the words of Justice Owen (Commissioner of the HIH Royal Commission) they will ask: "is this right?" However the public demands, and the actuarial profession should enthusiastically embrace raising the level of our professional standards, increasing our accountability and transparency, and deepening our commitment to serving the public interest (professional governance).

The statement on Internal and External Peer Review and the Professional Standard (External Peer Review – General Insurance and Life Insurance) will be finalised this year; the revised Code of Professional Conduct and the revised Disciplinary Scheme should be in place in early 2006, as should a revised Professional Standard on Continuing Professional Development.

These are "value add" rather than irksome "compliance" documents. Our profession becomes stronger when we lift the bar in respect of our professional governance.

These changes to our professional governance are highly significant. As they become available, all members must read the new Code of Professional Conduct, the statement on Internal and External Peer Review, the Professional Standard on Continuing Professional Development and the Disciplinary Scheme. All actuaries practicing in General Insurance and Life Insurance must read the Professional Standard (External Peer Review – General Insurance and Life Insurance).

I have long considered “Senior Actuaries” to be an under-utilised resource within the Institute. The changes in our professional governance provide abundant opportunities for Senior Actuaries to show leadership and to:

- Instill a culture of consideration of the public interest whilst serving clients, employers and third parties.
- Make members aware of their potential “whistle-blowing” responsibilities.
- Ensure that all members are aware of the new requirements under the Code of Professional Conduct in respect of actuarial reports.
- Analyse the work undertaken by his or her firm (beyond that covered by the Professional Standard: External Peer Review – General Insurance and Life Insurance) to determine where it is appropriate to recommend External Peer Review.
- Become familiar with the new Disciplinary Scheme so that he or she is in a position to support other actuaries in the firm.
- Ensure that proper recording systems are in place for CPD and assist in monitoring the activities of members.

1.6 International Developments

The global actuarial profession is small and there are pockets of extreme shortages of actuaries, particularly in developing countries.

There are material advantages in the various actuarial professions in different countries pooling and harmonising resources, particularly in education. At the very least I can see no merit in different countries having different Part 1 syllabi. Potentially, greater global co-operation could provide Australia with the opportunity of becoming a Regional Centre of Excellence in Asia Pacific in respect of education.

Australia has a heritage of being involved in Asia and New Zealand, but developments have tended to be ad hoc rather than planned. It is necessary and important to review our relationship with our near neighbours.

1.7 Financial Modelling

Section 7 of this Address is simply a reminder of the importance of financial modelling to actuarial work.

Financial modelling has been the foundation of many actuarial endeavours, and is highly prevalent in the day-to-day work of many actuaries. We should actively seek ways to improve our financial modelling skills.

1.8 Corporate Governance

Over recent years the span of actuarial science and practice in Australia has grown enormously in breadth, depth and complexity. It is increasingly difficult for the President to cover all aspects of the task in one year. Should we move to a two year term for the President?

We live in a world of increased accountability and transparency. Would it make sense for one member of Council to be a non-actuary?

1.9 The Evolving Actuary

Both to attain our vision and to strengthen our professional governance, I predict and hope that actuaries will evolve in the following way; to:

- become more consummate communicators;
- develop a more global outlook;
- place a greater emphasis on skills rather than practice;
- work within a more explicit and transparent professional governance framework;
- have a significant presence in Risk Management; and
- become more involved in partnering with members of other professions.

2. Vision and Mission Statements

2.1 Vision Statement

Our vision statement is:

> *To position the profession so that whenever there is uncertainty about future financial outcomes, actuaries are sought after for their valued advice and authoritative comment.*

The vision statement of the American Academy of Actuaries is not dissimilar:

> *The vision for the actuarial profession, "The public recognises actuaries as the architects of financial security," is realised.*

The Actuarial Profession in the UK has a similar approach, albeit its vision is more wordy and detailed and is focused on 2020:

> *Actuaries in 2020 will work in a much wider range of businesses than at present. The actuarial training will be highly attractive as the basis for a career in finance with its distinctive emphasis on questions of financial and other uncertainty. The profession will be known for its objective and responsible views on current issues.*

The visions of all these actuarial bodies are similar – it is envisaged that the actuarial profession will be a dominant profession in financial services in the widest sense. The vision dictates expansion rather than remaining in our core competencies of Life Insurance, Superannuation and General Insurance.

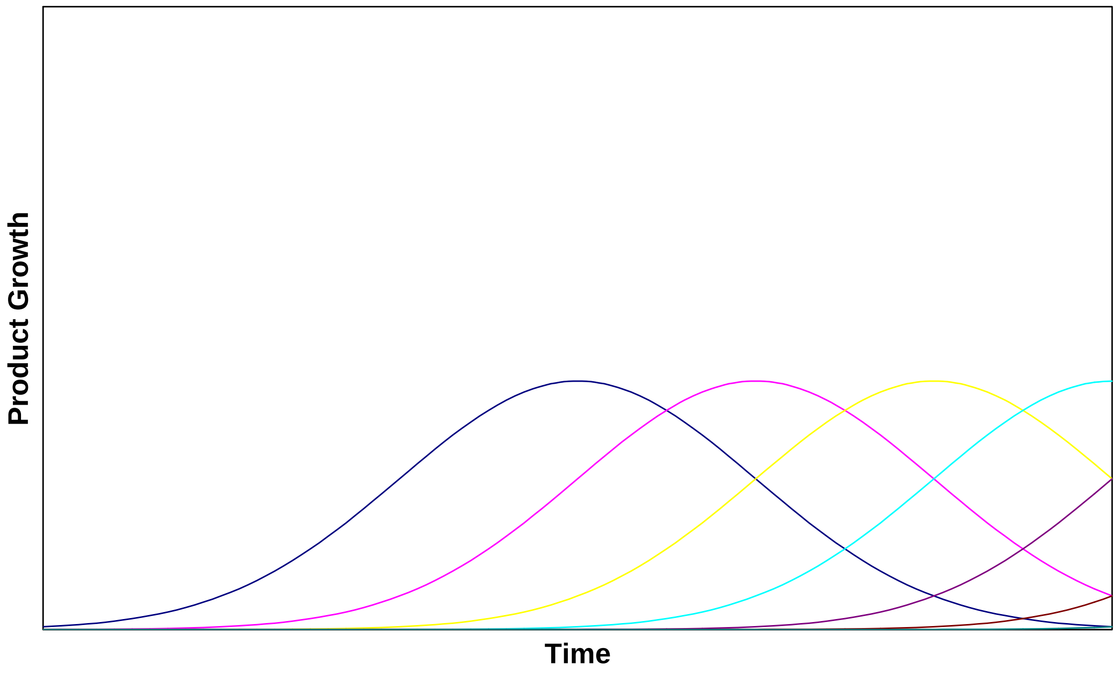
Is there an alternative? Of course there is, and the choice is set out eloquently by Sir Derek Morris in his "Morris Review of the Actuarial Profession: Final Report," where he is referring to the UK Profession.

> *The Profession is, in my view, at something of a crossroads. It has for a variety of reasons come under quite intense scrutiny, not least in this review, and will inevitably face change. There is a danger that this might involve retrenchment, a narrowing of focus onto its traditional areas of strength, bolstered by reserved roles, with relatively little innovation in its training, methods or breath of application.*
>
> *With strong leadership, however, I believe that the Profession can move forward, on the basis of reforms proposed in this review, to fulfill a wider remit in the field of financial risk analysis, bringing expertise, robust technical standards and the benefits of professional conduct standards to both traditional and new sectors.*

The quote above captures the essence of our profession's justification for aspiring to be a dominant player in financial services: our education (both initial and continuing) and our professional standards. These are the foundations of our profession and we must always maintain them to the highest standards and we must always be prepared to evolve them in response to an ever changing environment.

There is another reason for an aspirational outlook: survival. There is a universal truth in business survival that sees expression in such phrases as: "As soon as we stop growing, we start dying" or "there is a constant imperative to reinvent ourselves."

The following graph:



is simply stating that each product or service of an organisation has a natural cycle of growth, maturation and decline. An organisation can achieve sustainability by constant innovation and launching of new products and services.

2.2 Mission Statement

Our mission statement is:

The Institute of Actuaries of Australia (Institute) represents the actuarial profession by creating, expanding and maintaining an environment where the skills of actuaries are widely used and valued.

The Institute

- *establishes and maintains professional standards for the protection of the public*
- *provides pre-qualification and continuing professional education*
- *creates forums for discussion about contemporary and relevant issues*
- *promotes research and the development of actuarial science, and*
- *contributes to and informs debate on public policy.*

A review of the mission statements of other actuarial organisations reveals similar goals, but there are some differences that could be worthy of inclusion in Australia:

- Is there enough emphasis on the public interest? We talk about *protecting* the public interest, but would not a better sentiment be to *serve* our clients, employers and third parties in the public interest?
- There is no mention of our expectations to the provision of services to *the highest quality*. Whilst it is implicit in all our thoughts and actions, would not it be appropriate to incorporate the concept of highest quality explicitly in our mission statement?
- I consider that the first dot point in the mission statement would be improved by amendment as follows. "…establishes, maintains and *enforces* professional standards….".
- A further point should be introduced along the lines of *increasing the public's recognition of the actuarial profession's value.* One of the pleasures of the last two years has been my attendance at a number of President's lunches held for members of the Institute. One of the pervasive themes of these lunches, particularly in the Banking, Finance and Investment areas, has been the need for the Institute to increase the public recognition of actuaries, especially amongst employers.

It is an appropriate time to review our mission statement.

3. Our Membership

3.1 Overall Membership

In reading past Presidential Addresses, I have always been interested in statistics about our membership. Hence, I have included the past and present membership statistics here.

The following table shows overall membership:

Table 3.1

Year	Fellows	Year on Year increase (%)	Other Members	Total	Year on Year increase (%)
1992	728		742	1470	
1993	789	8.4	776	1565	6.5
1994	848	7.5	786	1634	4.4
1995	905	6.7	792	1697	3.9
1996	958	5.9	792	1750	3.1
1997	1025	7.0	803	1828	4.5
1998	1082	5.6	963	2045	11.9
1999	1122	3.7	1117	2239	9.5
2000	1177	4.9	1179	2356	5.2
2001	1227	4.2	1308	2535	7.6
2002	1258	2.5	1396	2654	4.7
2003	1296	3.0	1475	2771	4.4
2004	1351	4.2	1534	2885	4.1
2005	1393	3.1	1595	2988	3.6

Thus our numbers continue to grow but the rate of growth has slowed quite appreciatively.

3.2 Distribution by Country

Our distribution by country is:

Table 3.2

Country	Fellows	Total
Australia	1,076	2,353
New Zealand	51	97
United Kingdom	83	143
Hong Kong	59	145
Rest of Asia	59	170
Balance	50	80
Total	1,398	2,988

Fellows in table 3.1 include Accredited but exclude Accredited in table 3.2. A high percentage (22%) of our Fellows work overseas.

The following table gives a comparative breakdown of the type of areas where our Fellows (again excluding Accredited members) work.

Table 3.3

Principal Activity	1992	1997	2002	2005
Life Insurance	224	317	314	357
Superannuation	178	218	154	193
General Insurance	31	94	140	196
Investment	32	73	98	118
Banking and Finance	3	31	43	63
Health Insurance	3	5	13	18
Software	5	5	18	18
Education	10	13	14	19
Management	63	67	45	37
Energy Markets			4	5
Other	58	47	26	56
Not Known			204	145
Total non-retired	607	870	1,073	1,225

The 1992 and 1997 details have been taken from a table in John Trowbridge's Presidential Address. The 2002 and 2005 results have been collated from information requested from members on a voluntary basis. Hence the two sets are not strictly comparable.

It is encouraging to see the 'not known' (ie non completion of forms) members have declined materially between 2002 and 2005.

3.3 Observations

Observations from the above table include:

- There has been an increase in the numbers in Life Insurance, after a period of being level.
- The rise in numbers in Superannuation between 2002 and 2005 is counter-intuitive, given the decline in stand alone defined benefit funds. There was also an increase in Fellows between 2004 (186 in Superannuation) and 2005 (193).
- General Insurance is confirmed as the growth engine of our profession, and this is the first time where it is shown as our second largest practice.
- It is very pleasing to see the strong growth in Banking and Finance and in Investments.
- Health Insurance is growing from a small base and there is certainly the opportunity for strong growth – provided that actuaries can work in Health Finance generally.

4. Pre-Qualification Education

4.1 Actuarial Education

One of the major pillars of a profession is its pre-qualification education program. The education program must ensure that the new members of the profession are adequately trained in the particular skill set of the profession to meet the needs and expectations of the users of the profession's services and to meet the expectations of the general public.

If the education system fails then the profession will not survive.

In this section three aspects of our education system are considered:

- The new Part III Education Program;
- The review of Part III Education;
- Future directions.

4.2 The New Part III Education Program

2005 witnessed the introduction of a new Part III Education Program. Features of the new Program include:

- Completion of four courses instead of two subjects. This is intended to assist students to pass in a shorter period of time, and prevent the "all or nothing" approach of the previous six hour papers.
- Examinations held twice a year. Again, this should assist students to pass in a shorter period of time.
- A compulsory Investments course. Actuaries need to be able to provide relevant and objective advice on both assets and liabilities and to understand the interaction between the two.
- Only one specialist liability subject. This is consistent with international developments in the actuarial profession and is consistent with modern trends generally of ever increasing specialisation.
- A compulsory Commercial Actuarial Practice (CAP) course. This module trains actuaries to combine actuarial skills, actuarial knowledge and judgment to simulated commercial problems. One of the reasons for its introduction is that a fairly widespread criticism of newly qualified actuaries by employers has been that they are too theoretical – they do not "hit the ground running" as employees.
- For the first time assignments were brought into the assessment program, comprising 20% of the overall mark. This change is consistent with modern education trends and enables certain skills and knowledge of students to be assessed that could not be considered within the confines of a three hour examination.
- On-line delivery of part of course 1 (Investments) to provide students with learning support in a new flexible format and to assist distance education.
- Inauguration of paid Course Leaders to relieve volunteer members of the significantly increased demand of the new Part III format.
- Out-sourcing part of Part III to an external provider (ANU).

In the event, a magnificent effort was made by the secretariat, Course Leaders, our external providers and most especially by the 250 or so volunteers who took part in the year's education program. In particular the Board of Examiners ensured that the examinations proceeded as planned, despite a doubling of the workload and a sharp reduction in timeframes. Admittedly there were some initial teething problems, but this is virtually inevitable when such major changes are made.

4.3 Review of Part III Education

The pass rates in Part III have been declining in recent years to unacceptably low levels. In December 2004 Council determined that an independent review of Part III Education should be undertaken.

The Institute was fortunate to have the review undertaken by Professor Tony Baker. Tony is Professor of Chemistry and Chair, Academic Board, UTS; Member, NSW Board of Studies; Member, NSW Department of Education and Training Higher Education Advising Committee; Chair, Committee of Chairs of Academic Boards/Senates in NSW and the ACT.

Tony certainly agreed that the low pass rates were a matter of serious concern:

> *The low pass rates are not consistent with current expectations and performance in university subjects or with pass rates for other professional associations who conduct qualifying examinations (eg Accountants, Company Directors, Chartered Secretaries, Barristers' and Solicitors' Admission Boards, Psychiatrists and other mental health professionals: information supplied in confidence). The pass rates for Part III subjects are highly indicative of an education program where the expectations of neither the students nor the assessors are being met. Yet there seems to be a level of comfort amongst senior actuaries associated with the course that pass rates should be low. Frankly, it is not enough to contend that professional education is very different from university education or that the level of judgment required goes far beyond simple technical skills. If the education program is working successfully then students should be properly assisted in the development of the appropriate professional skills through the course.*

and

> *Having grown, substantially, the actuarial profession needs a considerable supply of new professionals to sustain growth and balance retirements. The current situation of pass rates trending down to the low twenties (and beyond) is not sustainable in the mid to long term and is entirely at odds with other professional education and university education. There is an urgent need to address this problem.*

At the broadest level he considered that Part III scored well in respect of content (that is, newly qualified actuaries are highly competent in the technical skill in the specialty that they have studied) and in the examination process which he considered as being at or near world's best practice. It is in the area of pedagogy (ie the teaching process) where deficiencies are perceived.

The Report included 29 recommendations. These recommendations can be grouped as follows:

(1) *The aims and objectives of all courses should be written in terms of performance objectives.* This involves precise statements of the expectation that the course writer has of the student, including some reference to the background knowledge that must be employed. This proposal is extremely challenging to meet, but as stated in the report, the rewards are high:

> *the skills of a professional actuary will be defined in terms of specific performance objectives, assignments and exam setting will be more straightforward and the students will have extremely clear statements of expectations.*

(2) *Greater guidance to students.* Students should be given more insights into the extent (and difficulty) of the courses, clearer road maps of the courses and more transparency on the expectation of examiners.

(3) *More assistance to the educators.* Specifics include workshops for Course Leaders and a sharper focus on the nature of discussion forums.

(4) *Greater integration of the examination and assignment processes.* Essentially this involves bringing the rigor of our long established examination systems to the newly fledged assessment of assignments.

(5) *Reduce the time pressure on students in examinations*. There is a need to enforce the intention that a good student can comfortably complete the examination within the allotted time.

(6) *Provide for three year experience qualification*. The intent of this recommendation is to remove pressure on examiners to fail students because they lack judgment based on experience.

(7) *Include educational activities in CPD credits.* Although the volunteer effort made by Institute members is outstanding, there is always a shortage of volunteers in education. CPD credits for education activities both rewards those who are involved and encourages participation by those currently not involved.

Council considered Tony Baker’s report at the October 2005 meeting, and approved in principle its provisions and passed it back to the Education Council Committee for review in detail. Implementation will be carried out by the Secretariat.

4.4 Future Directions

In the paper at the Cairns Convention “Banking, Finance and Investment Taskforce Draft Positioning Strategy 2005-8”, the Taskforce identified an issue:

> *Resolve whether the profession wishes to position itself as quants or practitioners. In the finance sector we presently fall between the cracks – neither seen as business savvy nor at the leading edge.*
> *Elsewhere in the Report the Taskforce indicated its preference to move to the leading edge: “Deepen the technical content of the Finance module to bring actuaries to the level of other practitioners (econometricians).”*

I endorse this direction for the Finance course.

We have the situation in Australia where actuaries have statutory responsibilities in Health Insurance, but we have no formal education course for Health Insurance actuaries. We did conduct two 3 day CPD programs in Private Health Insurance in 1998 and 2000 but there is still an exposure here for the profession which must be eliminated as soon as possible.

The Education Council Committee and the Health Practice Committee are aware of this need, but past progress has been slow because there is a large demand for actuarial services in Health and a relatively limited supply of actuaries with the requisite skills and knowledge.

Nevertheless we must commit to action, and part of the solution is that we are presenting an up-dated Private Health Insurance Course in 2006.

I believe that we need a formal Health course in 2007. Alternative models that could be considered include:

(1) Some form of Institute certificate course focused on the statutory responsibility of actuaries in Health Insurance. This would be the most straight-forward route, but is not consistent with our normal education framework;

(2) A Part III course with one module (focusing on Private Health Insurance) provided by the Institute and the other module (dealing with wider aspects of Health Financing) provided by a University. The success of this strategy would depend upon finding an appropriate University course; or

(3) A Part III course with both modules provided by the Institute. The question arises in this alternative as to whether we have sufficient resources.

After Health Financing, a Part III course on Risk Management is likely to be investigated. Many models are possible, but any program adopted by the Institute is likely to involve an ERMII accredited University.

(As readers of *Actuary Australia* are aware, ERMII is the Enterprise Risk Management Institute International and is "a non-profit educational and research organisation, initiated by an international group of universities and professional organisations [including the Institute of Actuaries of Australia] with a focus on education, research and training within an Enterprise Risk Management conceptual framework quantitative methods and tools, and best practices.")

Relevantly, ERMII intends to accredit universities that satisfy its curriculum, research and teaching standards. It is intended that students completing an ERMII accredited university program will have the opportunity (upon meeting certain requirements) to receive the certification Chartered Risk Analyst (CRA).

4.5 When is an Actuary an Actuary?

Until recently, actuaries in Australia qualified with two specialist subjects. In future years actuaries will qualify with one specialist two course subject. However, the intrinsic statement to the community is the same: if you utilise the services of an actuary, then not only do you obtain a person skilled in basic techniques who can provide reliable professional advice, but you also obtain a specialist, equipped with the necessary knowledge to work in your industry.

There is an alternative: we could reserve the term actuary for someone who has mastered all the key components of actuarial science, but who has not yet started to provide actuarial advice. These key components would include:

- Our current Part I (ie the technical foundation);
- The Actuarial Control Cycle, but with less emphasis on examples from the traditional specialties but greater coverage of the broad financial regulatory background;
- The Professionalism Course; and
- Course 1 (Investments).

Thereafter an "actuary" would need to successfully complete the relevant specialist course (including CAP) to practise as an actuary in a particular industry.

This model is similar to my understanding of the framework of some other professions and of some overseas actuarial bodies.

Advantages of this approach include:

- Actuaries will be equipped to work in wider segments of industry generally. One would expect the number of "actuaries" to increase, and hence the recognition factor for actuaries would increase. (Indeed this direction for the profession is the key recommendation of the Banking, Finance & Investment Taskforce.)
- It is consistent with the likely direction of the international profession (see section 6).
- It would encourage members of the profession to consider themselves more as "actuaries" rather than "industry specialists" (e.g. Superannuation consultant).

4.6 The Lost Sheep

Excluding the University of NSW (where students are only now entering Part III) approximately 400 students commence actuarial studies through the accredited universities each year. In addition a number of students do Part I examinations outside the university system. Approximately 50 to 60 students qualify through the Institute as actuaries each year. Hence there is an enormous leakage between initial entrants and eventual success in qualifying as an actuary.

Many of those who drop out would not have the ability to become actuaries; many who drop out would have found alternative careers more suited to their aspirations and far from the nature of actuarial science and many are foreign students who return home and join their home actuarial organisation.

However, some of those who drop out of the actuarial course are almost certainly amongst the best and the brightest of our students, but who are lured away to careers elsewhere in Finance where the actuarial qualification is not seen as relevant – even though the core technical training received in their university actuarial course may prove invaluable in their career, and may be the very thing that distinguishes them from other employees.

It is an exciting challenge to identify these "lost sheep" and attempt to devise meaningful strategies to retain some of them in the actuarial fold. If we could graduate as many as ten additional new actuaries per annum, in the course of time our profession would be transformed.

5. Professional Governance

5.1 Governance and Regulatory Review

An outstanding activity of the Institute in 2005 has been developments on professional governance.

The Institute has been extraordinarily well served by numerous volunteers and by the secretariat. Particular credit must be afforded to Catherine Baldwin who has been actively involved in all the individual components and who has coordinated the entire project.

There are a number of very significant professional governance documents to be completed over the next few months. The release of these standards is a major step – but equally important is for all members to be aware of their existence and to live up to the new professional expectations. The process will not stop there; over the next one to two years there will be a complete overhaul of our Professional Standards and Guidance Notes.

In this section, the various activities are documented. Whilst this material is available elsewhere, I believe that it is useful to summarise the various parts together. The next steps in the process are then outlined.

Particular events and milestones that led to the wholesale revision of our professional governance structure include:

- the collapse of HIH in Australia;
- the failure of Equitable in the UK;
- a series of corporate collapses generally – which whilst not related directly to the actuarial profession, created a heightened consciousness of the importance of good corporate governance;
- the under funding of the Medical Research and Compensation Foundation for the Compensation of people with asbestos related diseases;
- the Penrose Enquiry and the Morris Review in the UK.

A feature of the Institute's response to these events has been, in all cases, a very strong and pro-active stance. In those events that occurred in Australia, not only were the specific problems solved, but more importantly the systemic causes were analysed and procedures put in place to produce lasting solutions that will strengthen the profession going forward. In those events that occurred overseas, the Institute did not adopt the attitude of "it is someone else's problem" but rather the situations were again thoroughly analysed and where relevant the overseas lessons were used to formulate preventative measures in Australia.

5.2 Code of Professional Conduct

In December 2004, the Institute's Council appointed a taskforce to conduct a comprehensive review of the Institute's Code of Professional Conduct. At the time of writing, a second exposure draft had been issued to members; and following feedback should be finalised by December 2005.

Some of the important issues addressed by the Code of Professional Conduct will be:

(a) a member's duty in the public interest extends to third parties. This is a practical provision, being a balance between a blinkered position of care for the member's Principal only and some ill defined duty to the public good;

(b) there are circumstances where the member's duty to third parties may lead to extreme action such as terminating service and/or breaking confidentiality agreements (within the constraints of law);

(c) actuarial reports must adequately address any uncertainties inherent in the use of assumptions and actuarial methodologies; and

(d) rigorous procedures are required between summaries and reports, and between original and revised reports, and in respect of out-dated reports.

5.3 External Peer Review

In June 2002, the Council of the Institute established a high level taskforce to examine and recommend actions necessary to support the independence and accountability of the actuarial profession. Among the recommendations made by the taskforce was one proposing Independent Peer Review as best practice for significant actuarial work.

The Institute set up its Independent Peer Review Implementation Taskforce to supervise the drafting of a policy statement and a Professional Standard. There has been extensive consultation with the membership and with the Council of the Institute from that date to the current time.

The current position is that, subject to members' approval the Institute will issue a statement (Statement on Internal and External Peer Review) and a Professional Standard (External Peer Review – General Insurance and Life Insurance). If External Peer Review is undertaken by an actuary then adherence to the Professional Standard is mandatory.

The Institute's policy is to encourage internal peer review of actuarial work generally, and External Peer Review of actuarial work where the advice has implications for good corporate governance, eg where the advice has material implications for employees, customers and/or shareholders of the client.

The Institute's position is that External Peer Review is appropriate for all material statutory actuarial advice in all practice areas. The Institute also encourages the use of External Peer Review for key actuarial advice which is complex, high profile, politically sensitive or contentious, or is advice that impacts many stakeholders.

External Peer Review is soon to be mandated by the regulator for General Insurance for specific statutory actuarial advice; the regulator has also signaled the intention to extend this requirement to Life Insurance.

Where an actuary is involved in the audit of actuarial work, that actuary may also take on the role of External Peer Reviewer. This will assist in keeping overall costs to a reasonable level.

The purpose of External Peer Review is to review and provide a conclusion on the reasonableness of the Primary Actuary's actuarial advice. Additionally, the Reviewing Actuary must consider whether key risks and uncertainties have been adequately identified by the Primary Actuary.

The External Peer Review must recognise that actuarial practice does vary and that the amount, and detail, of work undertaken by the Primary Actuary will vary depending upon the materiality of a particular portfolio.

The responsibility for the Primary Actuary's actuarial advice remains with the Primary Actuary. The External Peer Review does not provide a guarantee of the Primary Actuary's actuarial advice.

The External Peer Reviewer is required to consider the following issues:

- the appropriateness of the scope of the work undertaken;
- the sources and quality of data;
- the valuation methodology adopted;
- whether assumptions are consistent with experience investigations, industry trends and reasonable judgment;
- whether appropriate quality reviews and controls are in place;
- the extent to which the results of the current investigation can be reconciled back to the results of the previous investigation;
- the results should be clearly stated; the key risks sensitivities and uncertainties and their implications should be identified, any limitations should be clearly stated;
- applicable legislation and Professional Standards should be taken into account.

5.4 Disciplinary Scheme

The current Disciplinary Scheme came into existence in December 2001. It remained relatively untested until April 2003 when a number of cases were referred to the Professional Conduct Committee. These cases arose out of the failure of the general insurer HIH.

Our Disciplinary Scheme was thereby stress tested in real time. There is no doubt that the members of the various Disciplinary bodies (the Professional Conduct Committee, Investigation Sub-Committees, the Professional Conduct Tribunal and the Appeal Board) performed their duties assiduously and with distinction. Nevertheless the actual operation of the current Scheme was widely perceived as being deficient in a number of key areas:

- too lengthy - that is, the time taken to reach the conclusion of each hearing was too long;
- not transparent enough - that is, only in very limited circumstances was there sufficient publicity; and
- out of synchronisation with the regulator - that is, there were instances of the regulator acting decisively in respect of members, and the Institute appeared to be less decisive or inactive.

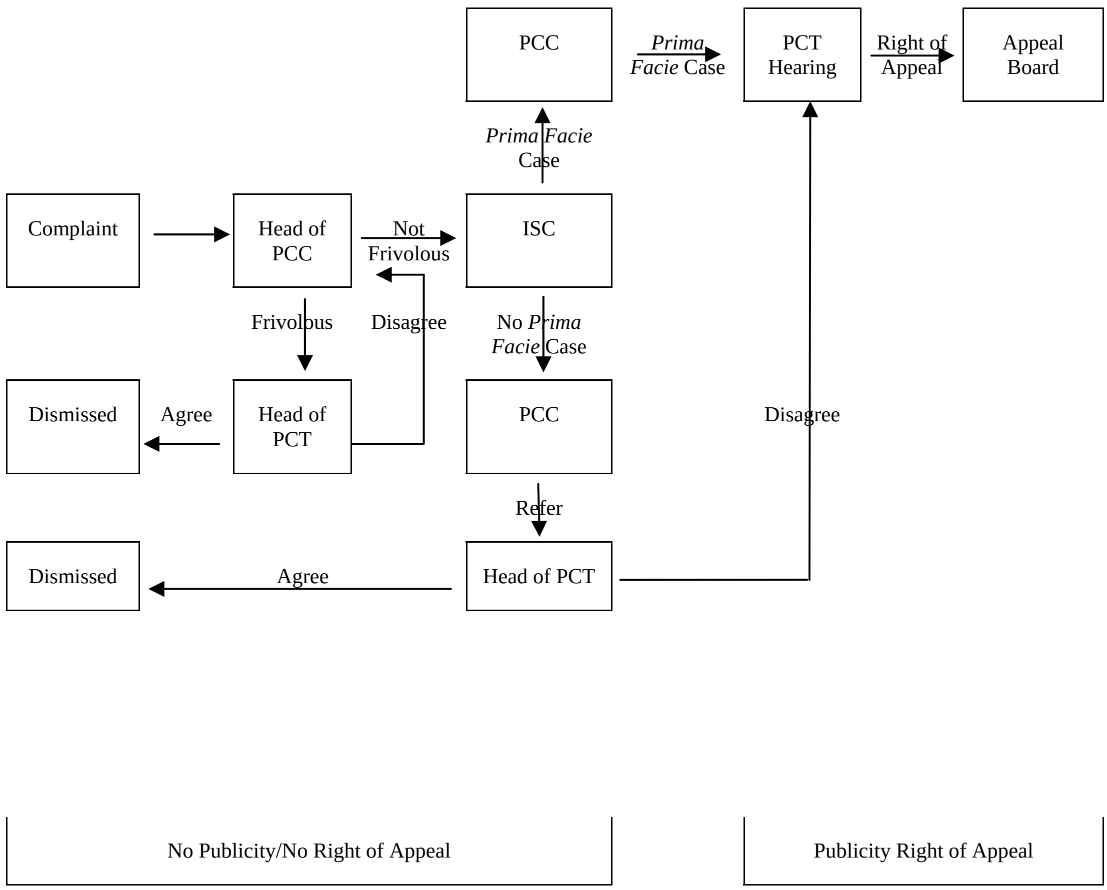
Under the Disciplinary Scheme, the critical test is whether a member has committed "Actionable Conduct". The definition of Actionable Conduct covers:

(i) professional misconduct;
(ii) unsatisfactory professional conduct; and
(iii) conduct likely to bring discredit upon the Institute or the profession of actuary.

Areas where the proposed definition of Actionable Conduct varies from the current definition include:

- to be consistent with our new Code of Professional Conduct, there is reference to "the provision of professional services" rather than to "actuarial practice" and to "a member" rather than "an actuary";
- *prima facie* evidence for Actuarial Conduct is being made the subject of an adverse determination by a regulatory body in Australia or elsewhere;
- non-disclosure of any prior convictions, disciplinary determinations etc. will constitute *prima facie* evidence of Actionable Conduct.

The new Disciplinary Scheme Framework is as follows:



where:
PCC is the Professional Conduct Committee;
PCT is the Professional Conduct Tribunal;
ISC is the Investigative Sub-Committee.

The rationale of the framework is to move quickly to the point where there is publicity i.e. after establishment that there exists a *prima facie* case. Under the current Scheme there is no publicity until after a final determination.

In addition to streamlining the process through changes to the scheme framework, improved timelines will be achieved with clear process guidelines (expanding on those currently in force). Also, the time within which a Complainant or Respondent is required to do something has been defined. Indicative or desired time periods for the operation of the Scheme have also been specified.

It is believed that the announcement of the existence of a complaint will provide an incentive for the Respondent to co-operate fully and urgently with the investigators. Hence publicity statements are made at both the Tribunal and Appeal stages.

The range of penalties that may be exercised has been increased by the following provisions:

- Direction to undertake specific action including education, retraining or supervised practice.
- The capacity to have more than one penalty imposed on a Respondent (eg a period of suspension and a retraining order).
- The period over which a member can be suspended has been amended by removing the maximum of two years.

The revised scheme also provides that a Tribunal may require the Respondent, as a condition of any determination, to enter into an enforceable undertaking.

In circumstances where a regulator's determination becomes known at either the Tribunal or Appeal Board stages, there is now provision to stay the process in order for this information to be included and the charge amended.

5.5 Continuing Professional Development

One of the recommendations of the Corporate Governance Taskforce was to review the Institute's Professional Standard on Continuing Professional Development (CPD).

CPD is one of the pillars of a profession. Properly constructed it ensures that members maintain, improve and broaden their professional knowledge and skill, and that members continue to develop their professional standards. Recent events have certainly heightened the community's expectations as to the extent that professions will ensure that members maintain sufficient CPD.

A revised Professional Standard on Continuing Professional Development was recently issued as an exposure draft to members. It is intended that the revised Standard will be implemented in early 2006.

A major short-coming of the current Standard is the non-rigor in recording and verifying CPD. This has been rectified in the exposure draft by the specification of a standard for recording CPD and by new provisions relating to the audit or verification of members' CPD records.

Members will be required to furnish their completed CPD records to the Institute within 14 days of a written request or such other time as agreed by the Institute and the member. It is anticipated that members' records would be verified about every three years.

5.6 Revised Drafting Standards

Considerable comment has been made in respect of the drafting of Professional Standards in the Institute's Corporate Governance Taskforce and the HIH Royal Commission Taskforce and Asbestos Inquiry Taskforce in reports to Council; as well as the Penrose Report of the Equitable Life Enquiry and the Morris Review in the UK.

Accordingly, and on instructions from Council and in consultation with a number of the professional governance taskforces, the secretariat has prepared a Working Draft "Guide to Drafting Standards."

The Working Draft is being thoroughly road-tested by the Professional Standards being drafted in respect of the Code of Professional Conduct, External Peer Review, Continuing Professional Development, Financial Condition Reports in General Insurance, and technical reviews of PS 200 and GN 250. The Guide will be re-evaluated early in 2006 as a result of this road testing.

The two key issues for the Institute were:

- Some confusion as to what constitutes a "Professional Standard", "Guidance Note" and "a Mandatory Guidance Note". A particular feature of the current structure is that "mandatory" is used where an external organisation has requested that members be issued with instructions as to methods in providing an actuarial certificate. This is surely a unique meaning of the term "mandatory"!
- Widespread use of imprecise terminology such as "should" and "may". The danger of these words, if used too liberally, is that the extent of the applicability of the standards is too diluted and hence enforcement of the provisions became difficult.

Under the draft Guide, the Institute will issue a Professional Standard or Guidance Note for particular aspects of actuarial practice:

> *A Professional Standard details mandatory practice requirements and is usually issued to cover an established field of actuarial work. A Professional Standard is usually issued:*
>
> - *where there is consensus within the profession gained via the Institute's Due Process for the developments of standards;*
> - *where actuarial duties, work or practice are provided for by legislation or by official standards or policies of a government agency or regulation; or*
> - *where a government agency or regulator has asked the Institute to issue instructions to members as to how certain actuarial duties or work are to be performed.*
>
> *Non compliance with a Professional Standard is considered to be Actionable Conduct.*
>
> *A Guidance Note details competent professional practice and is issued in circumstances where:*
>
> - *a trial period is required to establish professional practice before a Professional Standard is produced; or*
> - *a statement of professional practice is developed to capture evolving technical practice.*

The current draft guidelines for terminology in Professional Standards and Guidance Notes are:

- *Actuarial practice standards and requirements under a Professional Standard are mandatory and must be denoted by the word "must".*
- *To avoid confusion, the words "should" and "shall" must not be used in a Professional Standard or Guidance Note.*
- *Professional Standards set out mandatory requirements for actuarial practice. To avoid confusion, guidance to interpretation and implementation must form part of the Professional Standard.*
- *Guidance Notes are non-mandatory, and must only use the word "may" in relation to actuarial practice.*

5.7 Next Steps

2006 will be a year of redrafting our Professional Standards and Guidance Notes. Note that the "Actionable Conduct" provisions of the new Code of Professional Conduct and the Disciplinary Scheme only apply to Professional Standards issued under the new Guide to Drafting Standards.

As they become available, all members must read the new Code of Professional Conduct, the statement on Internal and External Peer Review, the Professional Standard on Continuing Professional Development and the Disciplinary Scheme. All actuaries practicing in General Insurance and Life Insurance must read the Professional Standard (External Peer Review – General Insurance and Life Insurance).

Under the Code of Professional Conduct:

> *Although the Senior Actuary is not personally responsible for the conduct of another Member, he or she must ensure that all Members of his or her Firm are aware of their responsibilities under this Code and that the Firm is aware that Members have such responsibilities.*

Senior Actuaries must take their responsibilities seriously. Here are some actions that Senior Actuaries are encouraged to take in respect of members, to:

- Instill a culture of consideration of the public interest whilst serving clients, employers and third parties.
- Make members aware of their potential "whistle-blowing" responsibilities.
- Ensure that all members are aware of the new requirements under the Code of Professional Conduct in respect of actuarial reports.
- Analyse the work undertaken by his or her firm (beyond that covered by the Professional Standard: External Peer Review – General Insurance and Life Insurance) to determine where it is appropriate to recommend External Peer Review.
- Become familiar with the new Disciplinary Scheme so that he or she is in a position to support other actuaries in the firm.
- Ensure that proper recording systems are in place for CPD and assist in monitoring the activities of members.

I have long considered Senior Actuaries to be an under-utilised resource within the Institute. It would be appropriate to make greater use of Senior Actuaries in communication (both ways) between the Institute's governance structure (Council, the Executive Committee and the Secretariat) and general membership.

6. International Developments

6.1 Perspectives

The actuarial profession is small. Globally, there are less than 40,000 actuaries around the world. In comparison the worldwide membership of other professions is of the order:

Doctors	9.4 million
Accountants	5.5 million
Engineers	6.5 million

(These numbers are approximate – but the order of magnitude is correct.)

There are shortages of actuaries in many developing countries. Moreover there are no short term solutions to educating actuaries in these areas. This is a problem recognised by the World Bank.

The global body representing the actuarial profession is the International Actuarial Association (IAA). Formerly individual actuaries were members of the IAA, but now it is an "association of association"; ie members of the IAA are now actuarial bodies such as the Institute of Actuaries of Australia.

The objectives of the IAA are to:

- develop the role and reputation of the profession;
- promote high standards of professionalism to ensure that the public interest is served;
- advance the body of knowledge of actuarial science;
- further the personal professional development of actuaries;
- promote mutual esteem and respect amongst actuaries;
- provide a discussion forum for actuaries and associations;
- represent the profession with international bodies.

6.2 International Education

The IAA is in the process of accrediting its members in respect of their core education courses (Parts 1 and II in the Australian context). Member associations cannot be Full members of the IAA without accreditation of their education system. The purpose of the accreditation program is to demonstrate uniform technical competence by member associations, and under-pin Mutual Recognition Agreements. The process will also be helpful for actuarial bodies with existing educational programs to review their systems, and will be invaluable for actuarial associations who wish to introduce new educational systems.

This is a start, but it does not address the issues of the smallness of the actuarial profession and the pockets of scarcity of resources.

Another factor (and this one is favourable) is that the actuarial syllabi of many of the individual associations are converging.

The conjunction of the above features suggests the following way forward:

- A common global actuarial syllabus covering the core technical aspects of actuarial education, core application and professionalism. In the Australian context this would be Part 1, Part II and the Professionalism Course, and ideally Course 1 (Investments);
- Specialist subjects taught locally or regionally, to incorporate deep knowledge of a specific practice in a particular country;
- Emphasis on university and on-line education;
- Regional centres of excellence.

The Institute needs to consider whether there is an opportunity here for Australia to extend our education reach further into Asia Pacific.

6.3 Other Global Aspirations

Past Presidents and the CEO of our Institute have been vocal advocates of other global initiatives that could see the actuarial profession at the forefront of globalisation, and at the same time pool scarce resources:

- Undertake a global assessment of the main risks attaching to the actuarial profession (such as superannuation fund deficits).
- Greater global co-ordination of research (the virtual Global Actuarial Library on the IAA website is a good start. I searched on the topic ‘Longevity’ and obtained 1,228 references).
- Align corporate governance, professionalism standards and CPD activities to the extent that they are not dependent on local conditions. International Accounting Standards provide a major opportunity in this are.
- Create more opportunities for interaction between members of the global actuarial community.

There are, of course, prices to pay for moving in this direction. Resources of the IAA would need to be considerably enhanced, which in turn means greater financial contributions from members. At the moment the financial burden is not overly significant: individual members’ fees increased recently from C$10.00 to C$12.50 per annum.

Also, local actuarial bodies would need to be prepared to devolve some of their processes to the IAA.

6.4 Asia and New Zealand

Our relationship with Asia and New Zealand is like pieces of a jigsaw puzzle lying haphazardly on the ground:

- 12% of our Fellows work in Asia and New Zealand.
- Given the size of the professional associations in Australia and New Zealand, the magnitude of the challenges facing all professions in the modern world, the pace of change, our common cultural, political and legislative heritages, and the number of corporations operating in both countries, there is an imperative for the New Zealand and Australian actuarial professions to work more closely together. In the organisation that I work for, we discovered that closer working relationships between Australia and New Zealand translated into tangible and significant commercial benefit.
- We provide our Part III Education Program in Asia – but the pass rates are appallingly low. More generally can we compete with the larger actuarial bodies of the USA and the UK?
- We subsidise our Part III Asian education courses– can this be justified?
- Our expertise in General Insurance is particularly admired in Asia. How can we leverage this expertise?
- We have provided successful seminars in China – but the dominant external education provider is the Society of Actuaries (US). What is our goal with respect to China?

On the one hand, Australia is rich in resources that could assist many of our regional neighbours; and in many instances Australia has a geographical and cultural affinity with countries in our region. On the other hand our resources are limited and are quite stretched at the current time. A review of our relationship with our near neighbours is necessary and important.

7. Financial Modelling

7.1 Financial Modelling

Financial modelling is a core component of the work that actuaries do. It is my observation that many of the major consulting firms were initially built around ground breaking financial models; and day to day work carried out by actuaries is often dominated by financial modelling work.

Actuaries bring enormous strengths to financial modelling:

- Our educational course virtually guarantees that actuaries have logical and analytical minds and hence are well placed to construct the models in the first place.
- Experienced actuaries are able to synthesise what are the important components to model and what may safely be treated with a ‘broadbrush’.
- Actuaries can bring judgment to bear on whether the answers being produced by the models ‘make sense’. Actuaries can interact with the models so that the actuary’s own understanding and insight can be deepened.

- Actuaries are well trained to ask the models the right ‘what if’ questions and hence ensure that the models correctly encapsulate the uncertainties of the real world.

However, there is scope for improvement.

There are widely accepted principles for building models. These include keeping data, inputs, calculations and outputs separate, testing for accuracy and sensitivity, documentation, presentation of results etc. These are also the skills required to use specific software such as Excel or SPSS.

Actuarial expertise in financial modelling could be enhanced by any or all of the following:

- a greater emphasis on financial modelling in our pre qualification education – particularly at the university level;
- formation of special interest groups in respect of financial modelling – at the workplace or through the Institute;
- specific financial modelling opportunities in respect of Continuing Professional Development.

One area of financial modelling where actuaries have been successful in recent years has been project financing. Actuaries are involved in the development and review of the complex models underlying the evaluation of project financing opportunities.

The importance of the financial model to project financing cannot be overstated. It is the primary tool for evaluating and assessing the benefit of project financing and is continually used during negotiations to quantify the impact on the project’s cash flows of changes to the underlying contractual arrangements. Potential lenders to project financing will use the financial model as a necessary tool to complete their credit risk analysis; running various scenarios through and noting the impact on key financial ratios.

Globally, project finance decisions determined the investment of around 10,000 billion US dollars in 2004.

8. The Practices

8.1 Actuarial Practice

Members of our Institute relate to their specific practice more than to the profession as a whole. This is natural because their particular practice is relevant to their eight, nine or ten hour working day.

Moreover the practices ensure the commercial relevance of our profession. Whilst clients and employers undoubtedly value the core technicalities of our profession, our expertise in these areas is useless unless we are well versed in knowledge of our client’s or employer’s industry.

8.2 Life Insurance

Over virtually my entire working lifetime, actuaries in Life Insurance have sounded like farmers confronting the vagaries of weather: "we'll all be rooned!". In the case of Life Insurance, the two supposed scourges of the industry are the decline in the number of life offices and the general trend to product simplification.

It is a tribute to our practitioners in Life Insurance that they have managed to adapt to the changing environment and have continued to thrive.

Areas of current focus for Life Insurance actuaries include:

- proposals in respect of the Resilience Reserves used in the determination of statutory solvency and capital adequacy requirements for Life Insurance companies in Australia;
- implementation of International Financial Reporting Standards (IFRS);
- implementation of the new External Peer Review Professional Standard from 1 January 2006;
- valuation of Life Insurance and Wealth Management entities;
- effect of the newly established Choice of Fund regime on insurance products;
- the tax differential in certain circumstances between Life Insurance companies and other Wealth Management corporations;
- product design issues surrounding longevity risk; and
- the need to obtain up-to-date experience analyses on death and disability experience.

In theory actuaries in Life Insurance companies should be well placed to be involved as Risk Managers in Life Insurance companies in the broadest sense – not just in respect of liabilities. In particular, operational risk management is attracting the attention of some of our leading life practitioners.

In practice it appears that there is some "push back" from life office management to a greater involvement by actuaries in Risk Management. This is partly due to the view that managing the risk/return trade off in the organisation is the prerogative of managers rather than actuaries; and partly because Risk Management is perceived as multi-disciplinary (which it is) rather than the preserve of one profession.

As a profession we need to heed these messages, as we seek to expand generally into the Risk domain.

However there is one aspect of Risk that must always be paramount for our life actuaries – with our training and insights we are particularly well placed to communicate the risks of alternative courses of action. The role of risk communication is particularly important.

8.3 General Insurance

Over my working lifetime, actuaries have evolved from a few individuals doing the odd General Insurance job as an adjunct to their main activities to General Insurance becoming the second largest practice within the Institute and where actuaries are a core component of the regulatory and operational environment of General Insurance companies.

Necessarily, Financial Condition Reports (FCRs) will be a major area of activity for General Insurance actuaries. The scope of the FCR is very broad (as set out in section 4.1.1 of draft Professional Standard 305):

- business overview;
- recent experience;
- Insurance Liability Valuation;
- adequacy of past estimates for insurance liabilities;
- asset and liability management;
- profitability, including premium adequacy;
- capital management and capital adequacy;
- reinsurance arrangements; and
- risk management.

The genesis of FCRs was a recommendation made by Justice Owen arising out of the HIH Royal Commission. Hence FCRs have compliance and regulatory demands. However the real challenge for actuaries is to ensure that the document is a "value add" for General Insurers. The case for adding value is eloquently set out in the synopsis of a paper by David Finnis, Stewart McCarthy and Vicki Younis, "Financial Condition Reporting for General Insurers – A Case Study" presented at the recent General Insurance Seminar:

> *…. we demonstrate that an FCR can deliver value in two main ways:*
>
> *Firstly, by providing a forum for existing reporting processes to "talk to each other" and hence gain the benefits from a coordinated view of the financial condition of the organisation; and*
>
> *Secondly, by providing the impetus for a process of continual improvement to become part of the culture of the organisation. This process, encapsulated in the concepts of (a) provide the available and relevant information; (b) identify the issues by this information and (c) monitor and, where necessary, prompt actions implied by recognition of the issues.*
>
> *The FCR that emerges from this reporting structure is a living, working document that becomes part of the ongoing financial management of the organisation. It is focused on business issues rather than the constituent insurance entities within the organisation. It attempts to define the value, not only as represented by the organisation's current balance sheet, but also inherent in future balance sheets, by examining operational influences on financial outcomes over the short to medium term*

It also provides a capital planning tool by examining current and future expected solvency levels, with particular focus on comparison with statutory Minimum Capital Requirement (MCR).

Financial Condition Reports are a major opportunity for the profession, and successful implementation is a key imperative over the next few years.

Other major areas of activity for General Insurance actuaries include:

- implications of APRA Stage 2 (beyond FCRs);
- implementation of External Peer Review;
- implementation of IFRS;
- managing the extreme ends of the distribution, including terrorism and natural catastrophes;
- risk margins; and
- managing the insurance cycle.

8.4 Superannuation

As is well documented the traditional domains of actuaries – stand alone defined benefit funds – are rapidly declining. In international surveys, Australia is categorised as a 'defined contribution' country.

Through the influence of many individual actuaries, and through the work of the Institute, actuaries have a well respected and (still) well known brand name in the Superannuation industry.

The challenge is to leverage that brand name into the new environment, which is traditionally not associated with actuaries.

Current areas of actuarial involvement include:

- assisting companies to account for their liabilities under the new AASB 119 accounting standards;
- comply with new APRA standards in respect of self insurance;
- assist companies and funds in the ongoing implementation of Choice of Fund and new portability regulations;
- assessing the effects of different models of implementation of the Commonwealth Government's new 'transition to retirement' legislation;
- continuing to work in the fast growing SMSF environment, although recent changes to legislation eliminating new defined benefit pension plans will pose a challenge.

At the Institute level, we are seeking to increase the level of accuracy and professionalism of benefit projections in the community, which are typically provided through on-line calculators. The Institute has written to ASIC, suggesting methods of achieving standard default assumptions for calculations and offering to facilitate industry-wide adoption of a suitable standard.

The decline in the number of enrolments in the Superannuation Part III course is a matter of concern, and the Institute has a watching brief on the situation.

One 'solution' that should be explored is to investigate the possibility of combining some of the units of the Life Insurance and Superannuation courses. There is a definite convergence of these two practices which could be reflected in our education system, thereby conserving scarce resources.

Areas of opportunity for actuaries include:

- financial planning - the Institute is exploring a particular accreditation model; and
- advice to defined contribution funds in the areas of benefit projections, analysis of fees and charges, self insurance, reserves, unit pricing, product design, asset/liability matching, equitable management of capital and risk management. In providing Superannuation advice actuaries need to be aware that the entity that they are advising is transitioning from a small sideshow of a corporate sponsor to a large complex financial institution.

Superannuation – or the provision of adequate income support in old age – is a fertile area for actuarial involvement in public policy.

The Institute formed three taskforces to consider aspects of Retirement Income Policy – adequacy of benefits, the effects of our tax and Social Security system on ensuring desirable outcomes in respect of retirement incomes and the inter-generational effects of an ageing workforce.

The three taskforces have recently been combined into one, with the objective of producing a paper early in the New Year. At the same time another taskforce has been set up with a longer term focus, to provide an analysis of trends in longevity.

To my mind actuaries play a surprisingly small role in Social Security. I am not aware of the Department of Social Security consulting actuaries to any significant degree; a word search on the electronic version of the World Bank's recent book: "Old Age Income Support in the 21st Century" does not record one entry under "actuary" or "actuaries". Surely our profession can become more involved?

Similarly the actuarial profession is well placed to contribute meaningfully to the public debate on how to alleviate some of the adverse economic implications arising from Australia's ageing population.

One of the special interest groups in the IAA is the "Pensions Benefits and Social Security" section. Like all such sections it exists to organise seminars and to provide a platform for papers and notes on matters of interest to practitioners in the area. I encourage all Superannuation actuaries to consider joining the PBSS.

8.5 Banking & Finance

The membership numbers in table 3.3 show that the number of actuaries who describe themselves as working in Banking and Finance has grown from 3 in 1992 to 63 in 2005. Moreover there are some extraordinary success stories for actuaries within the sector: the Treasury Division of one major bank is effectively an actuarial department; and all pricing within another major bank must be signed off by an actuary.

However, the actuarial profession is not yet recognised per se in Banking and Finance in the same way that it is recognised in Life Insurance, General Insurance, Superannuation and Health Insurance. Moreover there is not the peer support for actuarial students and actuaries within Banks and general financial institutions that exists in the more traditional practices. Also, many actuaries and former actuarial students working in the area often regard the actuarial qualification as at best an irrelevance and at worst a hindrance to their careers.

To address these and other issues, a Banking, Finance and Investment Taskforce was set up. Some of the taskforce's longer term recommendations have been commented on elsewhere in this Address. In the short term, the taskforce has recommended:

- The formation of a Banking & Finance Practice Committee. In its August 2005 meeting, Council accepted this recommendation.
- From the Institute's perspective, Risk Management should be the central focus of actuarial involvement. The taskforce notes:

  …. the actuarial profession in Australia has an exceptional opportunity to be the leader in the field of Risk Management for the whole finance industry (and maybe beyond), while recognizing other disciplines already make valuable contributions in the field. There is an urgent need for these skills and a dearth of appropriately trained and experienced professionals. Actuarial skills, in their most generic sense, are the closest obvious fit available. If the profession were able to adapt itself fast enough, we could quickly establish a commanding position.

Particular areas where the taskforce perceives opportunities for actuaries in the short term include:

1. Enterprise wide risk analysis in financial institutions, including Basel 2 implementation.
2. Capital management and allocation in financial institutions.
3. Credit risk analysis and credit derivatives.
4. Derivatives structuring and sales (sell side) and buy side analysis and execution.
5. Structured finance (eg hybrids and securitization).

It is envisaged that if actuaries successfully enter Banking and Finance in these areas, then individual actuaries will take leadership roles and further enhance the development of our profession.

8.6 Health

For the Institute at the current time, Health presents a classic Catch 22 – there are enormous opportunities for actuaries to become involved, but our existing resources are relatively small, and are seriously over-stretched.

We have eighteen actuaries who state that they predominantly work in Health. And yet we have statutory roles around the Appointed Actuary position in Health Insurance companies, and responsibility for producing Financial Condition Reports. The premium income of Private Health Insurance funds is almost $10 billion per annum – nearly half of the premium income of the entire General Insurance market.

The most urgent priority for the Institute is in the provision of formal education (see section 4.13), and hence to increase both the quality of service and the supply of actuaries in the Health area.

Within the Private Health Insurance industry, there are major questions which would benefit from actuarial analysis, including:

- Are there sources of capital available other than price increases? What level of capital does the industry need?
- Is the risk pool becoming irretrievably segmented? What will this mean for consumers and the private health sector generally? And what needs to be done about the risk equalisation scheme?
- How can these institutions position themselves to fund the increasingly wide range of consumer choices offered by the health industry?
- What new financial products will be required to fund Australian's consumption of health services in future?
- Should there be more or less players? Should the industry remain mainly mutual?

Moving beyond Health Insurance into Health Financing generally, the potential opportunities continue to mount:

- Health expenditure is already a major item of Commonwealth costs, and is projected to significantly increase in real terms due to the twin effects of the aging population and increases in technology, compounded by higher community expectations of what it means to be healthy.
- Due in part to the shared responsibilities of State and Federal governments, there are major inefficiencies in the system.
- There is a need to 'incentivise" people to ration their expenditure on health rather than to regard free health provision as a right.
- At some stage a serious ethical debate must take place: at what point is the level of resources and expenditure too great to keep people who are severely incapacitated and/or terminally ill alive.

If the resources were available, then Health would be a fertile ground for actuarial research. Two topics that are particularly worthy of consideration are:

- Health expenditure has consistently been rising more rapidly than increases in the Consumer Price Index. What is driving the rapid rise in costs? Can this growth be contained? What financial options are available to meet the growing cost of healthcare?
- To what extent can Health expenditure be affected by preventative measures? What is an effective framework for measuring the cost benefit of preventative programs?

8.7 Other

During the recent NRL finals series, a TV commentator incurred the wrath of the North Queensland Cowboys' fans by referring to each of the other finalists by their respective names, and then referred to North Queensland as "the other mob".

In the same way I am likely to upset those members who work in practices that I refer to as 'Other'. However no disrespect is intended: the "other practices" do not sit in the same formal structure of the practices already considered.

Risk

The Institute's Risk Management Group is being reconstituted as a Practice Committee. This Committee is charged with developing risk as a separate discipline of actuarial science, and also to ensure consistent treatment of risk through our other practices – particularly in relation to asset/liability issues.

The reasons for the formation of our Risk Management Group are well known. The commercial sector has become very risk aware in recent years, and hence a "market" exists. Moreover one of the trends in Risk Management is towards quantitative techniques, and this clearly plays into the core competencies of actuaries. There is also a defensive element of our venture into Risk as a separate practice – we need to be wary of other professional organisations moving into our territory.

There are some challenges to the actuarial profession in respect of Risk Management.

The first challenge is to place more emphasis on the "management" part of Risk Management.

Through our training actuaries excel in the quantification of risk. However, management is much more than this - it extends to awareness of the risks in the first place, an ability to assess the significance of the risk in the business context and the effective communication of that risk and its consequences to the appropriate decision makers.

A good example is Sir Derek Morris' review of the actuarial profession in the UK. He concluded that whilst actuaries understood the risk of pension funding, in the main these risks had not been communicated to the actuaries' clients.

The second challenge is to recognise the breadth of Risk Management. It is a truism that the main objective of investment management is to "maximise investment return subject to an acceptable level of Risk." Similarly one could state that the financial objective of a commercial entity is to "maximise profit subject to an acceptable level of Risk."

Expressed this way, it is apparent that Risk permeates everything – it is a core business of every entity. We cannot expect a senior manager of a large entity to consult an actuary on "Risk" – that is the manager's job.

What the actuarial profession can - and should – do is carve out particular niches in which to operate. Inevitably these will be areas where quantification can be applied and fortunately for actuaries these areas are ever expanding and are growing in importance – what gets measured gets managed. I would also expect actuarial input at high levels rather than detail; and actuaries should be in a good position to inject commercial reality into risk assessment.

Another implication of the breadth of Risk is the need to partner. Risk lends itself to a multi-disciplinary approach and actuaries must welcome the opportunity to work with other practitioners in this domain.

Investments

There are 118 Fellows of our Institute who maintain that their primary field of practice is Investments. This is a substantial number, representing about ten percent of the total number of Fellows.

Another indication of the "strength" of investments within the actuarial profession is that it is a compulsory topic in our new Part III syllabus.

However many actuarial practitioners in Investments see very little value in the actuarial brand. Employers in investment management rarely actively seek the actuarial qualifications – the CFA is the designation of choice (even though my sources, who admittedly are actuaries, inform me that the actuarial education is more rigorous and demanding than the CFA). The main actuarial niche within Investments is institutional asset consulting – but this is declining in line with the reduction in the number of non SMSF Superannuation funds.

The recommendation of Banking Finance & Investments Taskforce, accepted recently by Council, was to not set up a separate Investment Practice Committee. Instead it is the responsibility of other Practice Committees to incorporate Investments into their activities: Banking & Finance is to cover the "sell side" of Investments – product manufacturing etc; Risk is to incorporate asset-liability management issues; Life Insurance & Wealth Management is to cover investment research and product design for retail investors; and Superannuation & Employee Benefits is to continue to be involved in institutional asset consulting.

I encourage the respective Practice Committees to take this issue seriously: the problem with "everyone is responsible for Investments" is that "no-one is responsible for Investments." The Institute should keep a close watch on developments in this area.

If any member wishes to be actively involved in a leadership role for the Institute in respect of Investments then please contact me.

Energy and Environment

The issues that the Energy and Environment Committee and individual actuaries in this area become involved in are staggering in range and are of the utmost importance: climate change, renewable energy sources, energy trading, carbon trading, species extinction, natural disasters, urban zoning and energy pricing are some of the issues coming under the attention of actuaries.

Actuaries are extremely well placed to contribute to these issues – our tool kit of (financial) modelling, risk management and the actuarial control cycle are ideal analytics.

The subject is vast and whilst individual actuaries will, and should, practice in areas as the opportunity arises, at the Institute level we are likely to focus our activities on a relatively small number of key areas. The reason that I suggest focus is because, generally, stakeholders seek deep expertise; particularly clients looking to hire a consultant, or an employer hiring senior staff. A good example of focus is the actuarial involvement in climate change where there is increasing public awareness of the roles that actuaries can play, and where our involvement can be traced back to at least December 2000 in Tony Coleman's Presidential Address.

9. Corporate Governance

9.1 Governance of the Institute

At Andrew Gale's initiative, Council participated in two sessions on Corporate Governance, facilitated by Lynn Ralph (Cameron Ralph Pty Ltd). The sessions provided great insight, and are likely to lead to considerable improvements in the conduct of Council meetings, and to the interaction between Council, the Executive Committee, the Secretariat and Committees.

One pertinent observation arising from the process was that the turnover of the presidency was high – and we should consider the possibility of the presidential term being two years rather than one.

The current arrangement is that Council elects the Vice President; who then serves one year in that role, then one year as Senior Vice President, then one year as President.

In his 2002 Presidential Address, Chris Lewis set out the advantages of our current system. He pointed out that by the time a president takes office, he/she is fully up to speed on issues and processes, and also has the capacity to draw on the advice, assistance and counsel of three others (ie the Vice President, Senior Vice President and Chief Executive Officer).

I agree with Chris's observations but there are counter arguments. Over recent years the span of actuarial science and practice in Australia has grown enormously in breadth, depth and complexity. It is increasingly difficult for the President to cover all aspects of the task in one year.

Each president comes to the office with his or her particular background and his or her particular set of objectives for the future. One year presidencies can be disruptive for the profession as one particular year's primary focus may be relegated to secondary importance in the next year. Also, rapid turnover in presidents creates additional strains for the secretariat.

The major challenge in moving to two year presidential terms would be to find candidates willing to take on the role – because of the time commitments involved. Past Presidents estimate that the time commitment is 40 to 50% of "normal" working time.

Clearly any change in the term of the presidency would cause other aspects to be investigated, such as the Vice President/Senior Vice President/President progression, and the duties of the President.

We live in a world of increased accountability and transparency. Would it make sense for one member of Council to be a non-actuary? As well as assisting good corporate governance, such a person would bring a different perspective to Council deliberations.

10. The Evolving Actuary

10.1 A More Consummate Communicator

Actuaries have a bad reputation as communicators, although my personal experience is that there are some extraordinarily competent communicators amongst our membership.

Sir Derek Morris clearly perceived the communication issue to be of the utmost importance. One of his recommendations was that measures should be put in place so that users of actuarial advice were in a position to challenge and question actuarial advice. Moreover he recommended that the (UK) Actuarial Standards Board should develop a generic standard on communication covering the content of actuarial communications and the use of those communications by others. He further recommended that the substance of the new standard should, where applicable, be reflected in all professional standards going forward.

The "actuary as communicator" is particularly appropriate at the current time:

- it will simply not be possible to move into wider fields without effective communication;
- recent publicity about actuaries has been negative. Strong communication about the positive side of actuarial work is a necessary counter balance.

In a thoughtful paper to the Cairns Convention this year "The Eighth Habit of Highly Effective Actuaries", Andrew Brown sets out a possible way forward for our Institute:

- *Establish a communications committee to carry out research, set objectives around acceptable communication standards for the profession and implement initiatives to achieve these objectives. This committee would also monitor developments in the UK and US in relation to actuaries and communication.*
- *Greater focus on education and CPD requirements for business communication. Communicate with employers in potential new fields on how the institute is supporting the development of greater capability in this area.*

10.2 A More Global Outlook

The great majority of actuarial work is carried out for local entities operating within a local legislative, commercial and cultural environment. I doubt that this will greatly change in the foreseeable future.

However there are trends that suggest that global considerations will become increasingly important: international accounting and actuarial standards; an emerging global regulatory model; converging actuarial education syllabi around the world; emerging shortages of actuarial expertise in our region, and; the need for a small profession to conserve scarce resources.

The phrase "think globally, act locally" will be increasingly relevant to actuaries.

10.3 A Greater Emphasis on Skills Rather Than Practice Knowledge

If the profession is to move in the direction of attaining its vision of being the trusted adviser in respect of financial matters generally, then our emphasis must move towards the generic skill sets of actuaries rather than practice specific knowledge. As previously stated this does not mean abandoning the practice knowledge – which is a necessary pre-condition for employment. Skills are a pre-condition for professional performance whereas knowledge needs to be kept up to date during a person's career.

10.4 A More Explicit and Transparent Professional Governance Framework

In the main, actuaries have conducted themselves to the highest professional and ethical standards. However the modern world demands a high level of accountability and transparency. The outworkings of this demand requires prescriptive and more widespread standards, and a willingness to accept greater external scrutiny.

10.5 A Significant Presence in Risk Management

The level of uncertainty in the world appears to be growing. There is increased concentration of capital, increased mobility of capital and greater use of financial derivatives. Even natural events are possessing greater risks, with catastrophes increasing in severity in recent years.

Actuaries have the abilities and the skills to analyse the risks and provide value added advice in this environment. Do we have the will?

10.6 More Involvement in Partnering

If we are to attain the vision and work in wider fields, if we are to work in Risk Management beyond our traditional boundaries then we must be able to work harmoniously with other professionals since projects that we work on will demand multi-disciplinary skills. We should also be aware of the value of partnering with others in our traditional areas: to think that we can do everything is dangerous hubris.

Acknowledgements

Source material includes:

1. Morris Review of the Actuarial Profession : Final Report

2. Chris Lewis: "Shaping the Future : In a World of Uncertainty", 2003 Presidential Address

3. Part III Review Team : "Proposed Strategy for Future Part III Education", August 2002

4. Professor Anthony Baker : "Final Report Review of Part III Actuarial Education", August 2005

5. Banking Finance and Investments Taskforce : "Draft Positioning Strategy 2005-8", May 2005

6. Nick Crawley : "Model Behaviour", February 2005

7. David Finnis, Stewart McCarthy and Vicki Younis : "Financial Condition Reporting for General Insurers – A Case Study", October 2005

8. Andrew Brown: "The Eighth Habit of Highly Effective Actuaries", May 2005.

9. Tony Coleman: "Beyond Uncertainty – Turning Risk into Value", 2001 Presidential Address.

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Errors and opinion are my own responsibility.