

Institute of Actuaries of Australia

Association Report
for the International Congress of Actuaries
Cancun 2002

Australian Actuaries: Meeting Future Challenges

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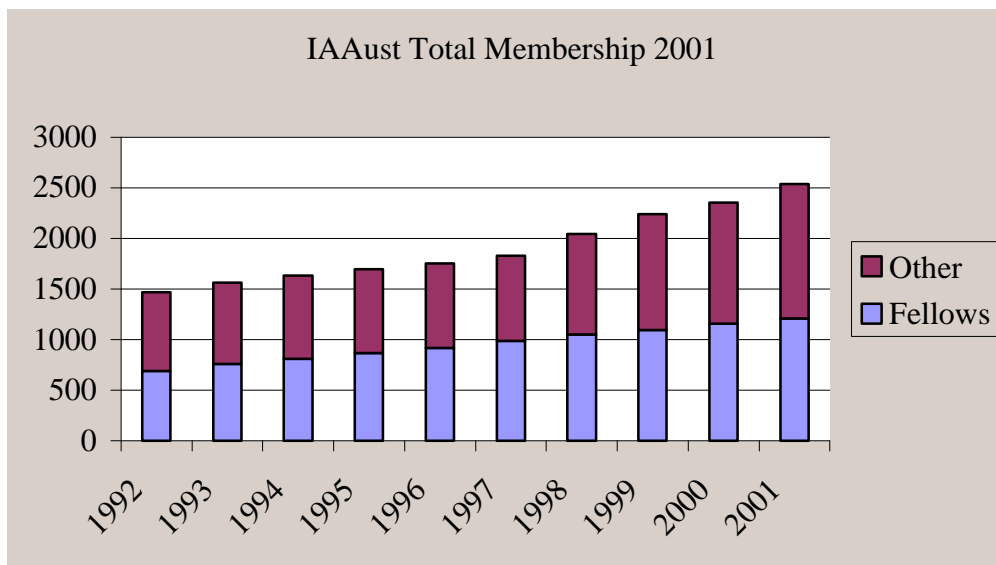
Overview

The Vision of the Institute of Actuaries of Australia (IAAust) is to position the profession so that wherever there is uncertainty of future financial outcomes, actuaries are sought after for their valued advice and authoritative comment.

The IAAust:

- 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 the debate on public policy.

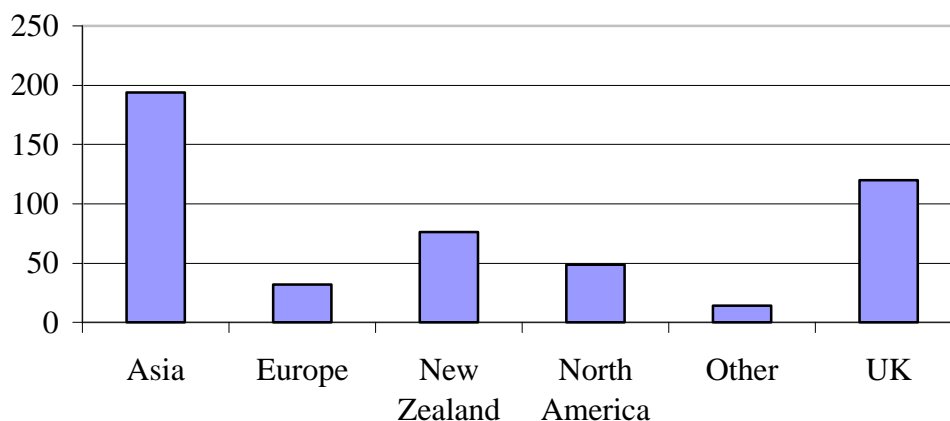
Formed in 1897, the IAAust today represents over 1,200 actuaries qualified as Fellows of the IAAust and another 1,300 members of whom 530 are Associates. Membership has grown steadily over the past decade, nearly doubling in size, and each year there are around fifty new Fellows of the Institute of Actuaries of Australia (FIAA).



Expanding Internationally

Demand for actuaries in Australia and the Asia /Pacific region continues to expand with some 20% of the IAAust membership based overseas. The IAAust has responded to the increased opportunities for Australian actuaries in Asia (and in particular Hong Kong and Singapore) by developing an Asian education strategy to promote the FIAA qualification and provide support for students within these countries.

IAAust Members Overseas (2001)



The IAAust is active within the International Actuarial Association (IAA) with Australian representatives on most of the IAA committees. Australian members also contribute strongly to the work of the international research bodies, ASTIN and AFIR. In 2000 an Australian actuary was President of the IAA and currently an Australian actuary is the President of the IACA. In May 2003, the IAAust will host the IAA meetings in Sydney.

Mutual Recognition

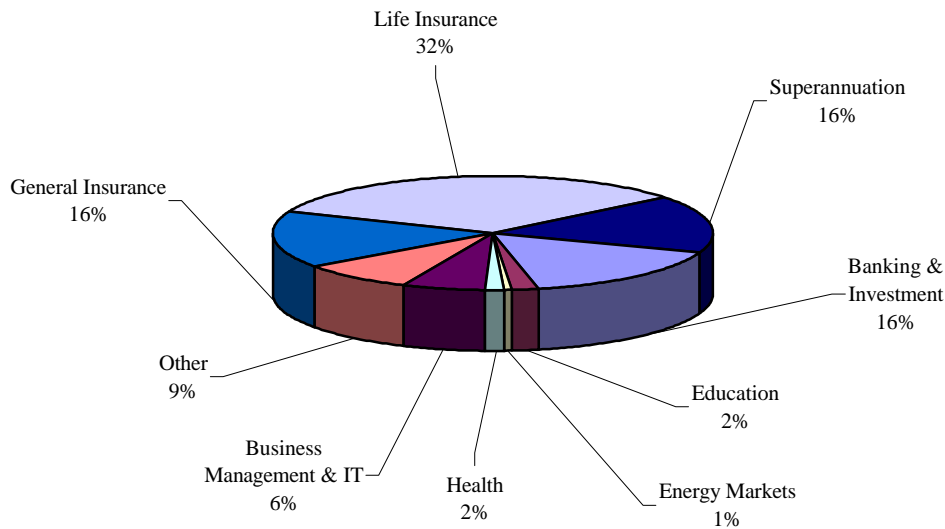
The IAAust has concluded a number of bilateral agreements for mutual recognition of Fellows with the Faculty and Institute of Actuaries (UK), the Society of Actuaries, the Canadian Institute of Actuaries and the Society of Actuaries of Ireland. Mutual Recognition Agreements are also being developed between the IAAust and the Actuarial Society of India, and at the level of Affiliate with the Institute of Actuaries of Japan.

These agreements enable actuaries to practice professionally in other territories subject to meeting the requirements of the local actuarial association. Each agreement is predicated on equivalent educational and professional conduct standards. In addition, a period of professional practice and residency within Australia is required prior to overseas actuaries being eligible to attain full Fellowship status of the IAAust.

Developing Areas of Actuarial Practice

Developing areas of actuarial practice include health, the environment, energy markets, banking and information technology. The balance of actuaries working across various practice areas has shifted significantly over the last 10 years. In the 2001 membership data survey 35% identified that they were working in non-traditional areas (ie. outside of Superannuation, Life and General Insurance). The IAAust Biennial Convention in 2001 was entitled “Beyond Uncertainty ... managing the future better!” and focused on new work being undertaken by actuaries.

IAAust Members Primary Practice Areas



Review of Actuarial Education

To keep pace with the degree of change within the profession and to incorporate developments within the international actuarial community, the IAAust has conducted a review of its Part II education program and is presently in the process of assessing its Part III program. Part II comprises the “Actuarial Control Cycle”, a program specifically developed as part of the Australian actuarial education program to promote the practical application of actuarial techniques. Issues of best practice for post-graduate professional education and equipping graduates for the demands of the changing environment for actuarial skills are the main concern of the review of Part III. The section on education later in this paper covers these matters in greater detail.

Contribution to Public Policy

In recent years, major corporate collapses and international crises, have increased the need for independent advice on public and industry policy within the insurance and financial services sectors. The IAAust has been a significant contributor to the process of reform. During 2001 new government legislation was enacted with the Financial Services Reform Act and the General Insurance Reform Act. Presently, there are reviews of the Life Insurance Act and prudential regulation requirements for Superannuation and new Prudential Standards have been introduced for the health Insurance industry. The IAAust’s active public policy program is outlined later in this paper.

Review of Professional Conduct Standards

In line with changing demands in actuarial education and the need to keep abreast of legislative changes, the IAAust has recently completed a thorough review of its professional conduct standards. Consequently, from 2002 there is a new Code of Conduct, a revised Disciplinary Scheme, and a Professional Standard relating to requirements for Continuing Professional Development (CPD). A key aspect of this process of review was the adoption of

a revised Constitution for the IAAust at its annual general meeting in December 2001 to reflect changes to corporations law and these other professional requirements.

Communications Strategy

Communication, both internal and external, continues to be an important priority for the IAAust. A new website was launched in October 2001 and has provided greater access to information and dialogue within the profession. The IAAust's publications are being enhanced, and the concerns and achievements of the actuarial profession more widely promulgated. With the new Constitution comes an initiative to establish Affiliate membership of the IAAust and garner interest from other professionals seeking to maintain a close association with the IAAust. Many other communication initiatives have been established or are being developed, and these are outlined later in this paper.

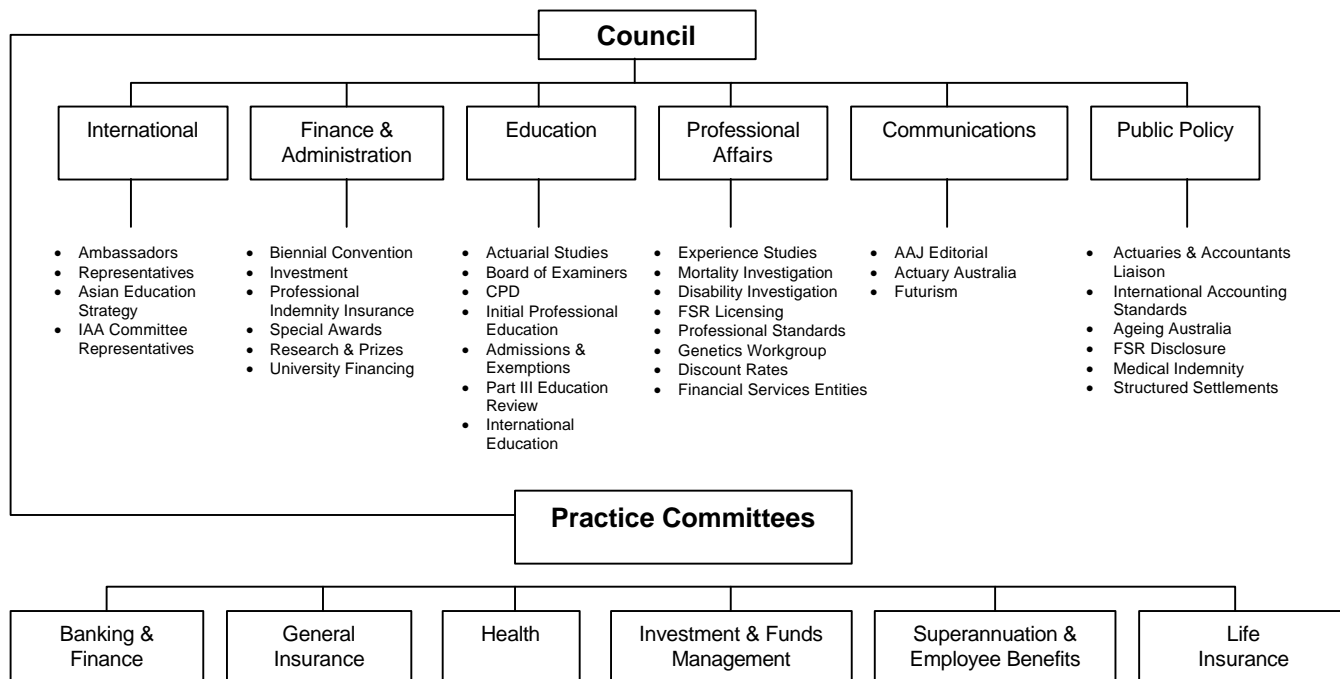
IAAust Governance Structure

The IAAust is governed by a Council of fifteen to eighteen Fellows elected by members for three year terms. Council has overall responsibility for corporate governance and the strategic direction of the IAAust.

The President and two Vice Presidents, elected from within the Council, have two years as a Vice President and then hold office as President for twelve months. The Immediate Past President continues to serve for a further twelve months as the IAAust Delegate to the International Actuarial Association (IAA). The Presidential group together with the senior staff form an Executive Committee that monitors the strategic plan, allocates resources and establishes priorities.

Six major committees reporting directly to Council cover the range of IAAust programs:

- Communications – marketing and promotion of the IAAust, its activities and the achievements of actuaries and managing IAAust publications.
- Education – overseeing the development and delivery of actuarial education either through accreditation of universities or the delivery of IAAust courses.
- Finance & Administration – handling the management, financial reporting and investment issues for the IAAust.
- International – participating in the international actuarial community and responsible for communications between the IAAust and its overseas ambassadors and representatives, and providing the link with the International Actuarial Association.
- Professional Affairs – facilitating the development of professional standards for actuaries, and provision of relevant research.
- Public Policy – co-ordinating the IAAust response to a wide range of social policy, legislative reforms and industry regulation issues.



Members contribute to the work of these committee and initiate programs in policy development, education and CPD for the benefit of actuaries in particular practice areas through six practice committees:

- Banking & Finance
- General Insurance
- Health
- Investment & Funds Management
- Life Insurance
- Superannuation & Employee Benefits

Over 350 members (nearly one third of FIAAs) are actively involved in conducting the education and policy development work of the IAAust. The IAAust until quite recently relied almost entirely on this voluntary involvement by members. However, since 1997 there has been a shift towards the engagement of professional staff to meet the increasing demands placed on the IAAust.

Secretariat

The IAAust now employs a professional staff of fourteen, one of whom is based at Macquarie University undertaking research for the Mortality Investigation Project. Recently there has been a move to engage an actuary in the role of Manager Public Policy, to provide expertise in the development of government submissions and professional standards from within the Secretariat. The organisation is managed by the Chief Executive with the support of a Director, Professional Development and two other education staff, two working on CPD programs and events, two in memberships managing the database & publications and three in finance & administration. The IAAust offices are in the historic Challis House in Martin Place, in the heart of Sydney. The IAAust is also a partner in the Joint Hong Kong Actuaries Office.

As members come under increased pressure within their own work environments, and as a by-product of the rapidly changing business environment, the number of volunteer hours available for IAAust work is reducing over time. This shift has altered the organisational culture of the IAAust. What has been a closely knit, learned profession reliant on a high degree of camaraderie is evolving into a professional business competing in the wider market for recognition and support.

The positive outcomes of greater reliance on a professional Secretariat are evidenced in the media profile enjoyed by the IAAust, the development of alliances with other associations servicing affiliated professionals, and the international acknowledgment of the educational achievements of the Australian profession.

Services to Members

Recently, there has been discussion amongst members about what it means to be part of a profession and what motivates actuaries to be associated with the actuarial profession through membership and participation in the IAAust. The key to strengthening the IAAust is the provision of effective and meaningful services to members. Whilst the majority of members are based in Sydney, one of the main challenges facing the IAAust is to deliver meaningful services to its members in other centres. To some extent the electronic media enables easy communication at a distance, but the reliance on this needs to be offset by the value and importance of personal contact amongst members and between members and the IAAust.

EDUCATION

Actuarial education in Australia is well regarded internationally. The educational process includes four parts and takes on average five to six years to complete. Presentation and delivery of Australian actuarial education involves a combination of university programs and courses conducted by practising actuaries through the IAAust. To ensure the appropriateness of the education process for professionally qualifying as an actuary, the IAAust has responsibility for the continuous review and improvement of the syllabus and delivery of all programs.

Fellowship Education Program

Part I is undertaken through a university undergraduate degree or by correspondence from the UK Institute of Actuaries. The IAAust currently accredits and supports the actuarial departments of four Australian universities offering Part I subjects.

Part II of actuarial education is the Actuarial Control Cycle, which is an innovative means for learning how to apply actuarial skills to business situations across a wide range of traditional and non-traditional practice areas. Developed by the IAAust, this course is taught by four universities in Australia. After completing Parts I and II, members achieve Associateship of the IAAust (AIAA).

The process of the Actuarial Control Cycle underpins the five specialist subjects, which comprise Part III and are offered by the IAAust. Students are currently required to complete two of the following subjects: Life Insurance, General Insurance, Superannuation & Other Employee Benefits, Finance, and Investment Management.

To finalise Fellowship studies, students are required to attend the IAAust Professionalism Course (Part IV) and meet a one-year Practical Experience Requirement, after which they receive their accreditation as Fellows (FIAA).

Delivery of Fellowship Program

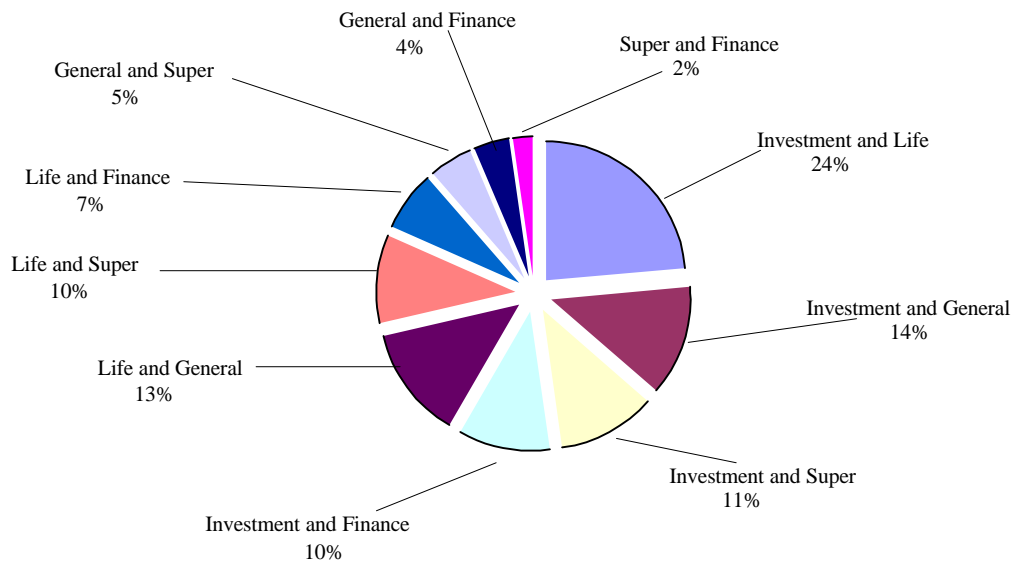
A great deal of consideration and professional expertise has gone into the development and refinement of the specialist Part III subjects in recent years. Australian Fellowship studies are highly regarded due to the quality of their syllabi and structure, with a strong focus on learning outcomes. The Part III program is based on students working, often in a designated practice area, whilst undertaking the Part III subjects. Each subject is currently delivered predominantly in a distance education mode consisting of printed material, texts, assignments, plus two 3-hour examination papers. The IAAust is planning to utilize electronic delivery for course management and materials.

The considerable resources of members in the development and delivery of the Part III subjects should not be underestimated, with over 250 members generously giving their time each year as examiners, markers, scrutineers, tutors, course writers and reviewers, and education committee members. With the exception of the Finance subject which is available through external providers, IAAust members support students located in Sydney and Melbourne with tutorials for Part III subjects. Tutorials are commencing in Singapore during 2002 and other students are able to make contact with nominated members who act as subject Chief Tutors.

Part III examinations summary (1998-2001)

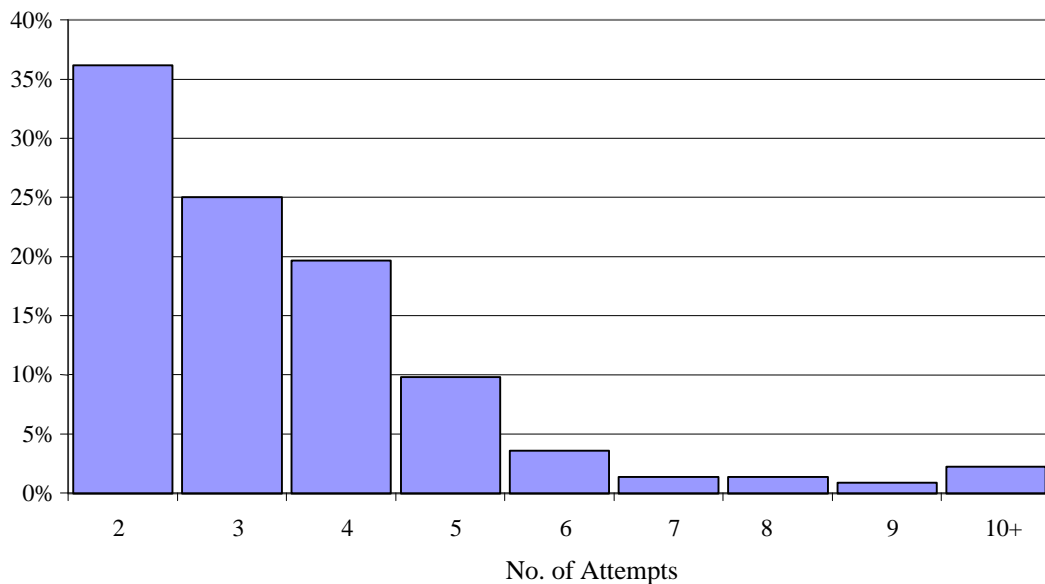
Subject	Sat '01	Pass '01	%	Sat '00	Pass '00	%	Sat '99	Pass '99	%	Sat '98	Pass '98	%
Investment Management	92	30	33	102	28	27	109	51	47	99	39	39
Life Insurance	79	30	38	82	37	45	71	29	41	66	23	35
General Insurance	59	20	34	55	17	31	43	17	50	54	13	24
Superannuation	23	8	35	25	11	44	21	12	57	21	10	48
Finance	47	18	38	45	14	31	42	16	38	34	15	44
Total	300	106	35	309	107	35	286	125	44	274	100	36

A recent analysis of the study path of Part III specialist subjects taken by 231 actuaries was undertaken to assist the education review process. The analysis showed that the average duration taken to successfully complete the two Part III examinations required was 3.7 years (in addition to the time taken to pass the prerequisite Part I and Part II examinations). In order to complete the Part III examinations, candidates must pass two subjects chosen from five possible specialist courses, and there are no restrictions on the combination that a candidate may select. The diagram below shows the combinations for Part III subjects studied.



As students are full-time professionals seeking to juggle work and study, it is not unusual for students to repeat Part III subjects. Students showed a variation between those at one extreme who pass both subjects on their first attempt to the other extreme where students persist at great length. This obviously has an impact on the time taken to qualify once a student commences Part III. Students make, on average, 3.5 attempts to obtain their necessary two passes.

No. of Examinations Attempted to Qualify



Education Reviews

The IAAust places strong emphasis on ensuring education remains current and relevant. Many members have strong views about the function of the Part II & Part III courses in preparing actuaries for professional practice. Issues include the balance between technical and strategic business skills development, specialist versus more general studies, and undertaking a mix of subjects covering assets and liabilities rather than one or the other.

An extensive review of the Part II (Actuarial Control Cycle) syllabus was undertaken in 2001 and focused on the 'depth of learning' required to determine an appropriate level of understanding expected from an actuarial student who successfully passes the course. The review adopted an 'outcome' oriented approach, focusing on the 'use of tools' rather than the 'tools' themselves. The new Part II syllabus will be introduced in Australian universities in 2003. During 2001, the IAAust commenced development of a textbook and CD-ROM for the Actuarial Control Cycle, to be used as core material for the teaching of the Part II syllabus from 2003. There will be further review over the next 2 years to reflect international developments in actuarial education.

A review of the Part III specialist courses has also commenced with an aim to review the structure, content and delivery of the Part III program. The primary focus of this review is to ensure the continued relevance of the profession in a changing market place and provide the necessary skill sets to newly qualified actuaries, as well as supporting the increasing trend for actuaries to work in non-traditional areas. It will also address the need to continue to attract strong undergraduates to the profession, to rectify perceived gaps between the level of study and examination of Part II and of Part III, and to provide greater support in the areas of communication skills and business acumen. Issues of accessible distance delivery will also be covered. The first stage of the review is planned for completion in mid 2002.

The IAAust has also developed a set of Capability Statements for actuarial practice, in consultation with a wide range of members, which provide a framework for considering how actuarial education provision and work experience can best meet the expected levels of performance for an AIAA and FIAA. These Capability Statements have been particularly significant for the IAAust in the current reviews of actuarial education provision.

Partnership with Universities

An important partnership exists between the IAAust and the university actuarial centres. The academics engaged in these actuarial centres are members of the IAAust and have often been practising professionals prior to taking up academic appointments. The IAAust provides funding to these centres where they meet established criteria for Centres of Excellence (CoE). Financial support is provided to a Foundation established for each approved CoE, with a Trustee board comprising a majority of trustees appointed by the IAAust and the balance appointed by the relevant university.

Part I and II courses conducted by the universities are subject to accreditation by the IAAust as a pre-requisite for Fellowship. A strong and rigorous policy framework for accreditation is in place to the benefit of all parties. The membership of the accreditation panels assessing university courses includes members of relevant IAAust committees, former appropriate academics and international experts. Currently four Australian universities have been granted

full accreditation for Parts I and II: Australian National University, Macquarie University, University of Melbourne and University of New South Wales.

Students from non-actuarial courses are currently able to seek exemptions for four of the nine Part I subjects. With the recent amendments to the Part I syllabus there is a need to undertake a review of the possible extension of this exemptions process to cover other Part I subjects. If this process were in place there may be greater incentive for top students from other disciplines to cross over into actuarial studies, thus assisting the IAAust's aims for broadening the application of actuarial skills, opening up the membership and extending our influence.

International Education Developments

The Australian actuarial education program has continued to gain international attention, through our involvement with the IAA Joint International Education Taskforce, and also with the IoA and SoA education working parties. The IAAust has been active in supporting the developments towards compatible education approaches for 2005, together with the IoA, the SoA and CAS.

In 2001, the IAAust initiated a strategic plan to promote and expand Australian actuarial education, particularly in the Asian Region, and to increase recognition of the FIAA throughout Asian countries and more broadly. Positive discussions have been held concerning the recognition of FIAA in China, and education committees in some Asian countries now provide support to members through the provision of tutorial and mentoring systems to actuarial students. The IAAust has also increased its representation at major forums and education events in Asia.

Additionally, a trial of the Actuarial Control Cycle, in partnership with Macquarie University and AMP, has been undertaken in China through the delivery of short courses at the Chengdu Southwest University of Finance and Economics and Shanghai University of Finance and Economics, China. The new Actuarial Control Cycle textbook and CD Rom, to be produced in 2002, has already received considerable interest internationally.

Continuing Professional Development

The function of continuing professional development (CPD) for members is important as a means for maintaining professional standards, enhancing career opportunities and meeting the needs for life-long learning by actuaries. The IAAust conducts an extensive CPD program which consists of forums, seminars, study programs, 'hot topics' sessions, and a major biennial Convention. Most practice areas hold an annual or biennial forum for debating current practice, industry issues, changes to regulations and government initiatives.

The monthly Horizon series meetings, held in Sydney and Melbourne are designed for discussion of a research paper or a current topic for debate across the profession. Other workshops and seminars are generally held in response to changes in legislation or perceived needs for particular skills development. CPD programs are also run in conjunction with universities and other organisations in the financial services sector. A combination of video, audio tapes and CD Rom recordings of CPD events are made available to members throughout Australia and overseas.

During 2000, the IAAust Council reviewed its professional standard for CPD. This resulted in recommendations to move towards greater compliance, improved self-regulation and for the IAAust to provide more activities so that members can meet their CPD needs. A newly constituted CPD committee together with the staff appointment of a Director, Professional Development and the creation of an in-house event management capability has given a boost to planning and development of the CPD program.

Extending the Education and Professional Development Program

There is growing evidence of the need to develop new Part III specialist courses to cater for the demand by and for actuaries to work in new industries such as Health Finance and Banking. This is an exciting time for actuaries in gaining recognition beyond the traditional areas of employment. Much of the work of professionals in these 'new areas' is pioneering. CPD courses and ultimately new specialist courses are designed to meet these needs.

Actuaries working in health financing have pioneered the application of actuarial methodology in this industry. To build their influence, the Health Practice Committee of the IAAust has developed a CPD course comprising pre-reading, written work and a practical workshop. This process provides a benchmark for the development of new courses in the future. In 2002 the IAAust will launch a Health Financing Course offering actuaries and health professional six units covering subjects covering Health Care Expenditure and Performance, Capital Works, Contracting, and Savings Results from Health Care System Investments.

Publications

The IAAust produces a number of publications including a range of texts, the Australian Actuarial Journal on a quarterly basis, and the Actuary Australia monthly magazine. In 2001, 'Genetics in Society, 2001' was produced by the IAAust Genetics Workgroup as a current text on the social, medial and actuarial issues related to genetic advances. One IAAust publication 'Actuarial Practice in General Insurance' is now into its 6th edition. In 2002, the IAAust will produce an Actuarial Control Cycle textbook and CD-ROM as a key resource for students undertaking Part II of the actuarial education program.

REGULATION

The actuarial profession operates in an increasingly dynamic environment. The industries and emerging areas of opportunity for actuaries are being reshaped by major forces of change such as technology developments, the ageing of the population, globalisation, industry convergence, legislative change, privatization and prudential regulation. Where once the actuarial profession could be mostly identified with life insurance and superannuation, there are no longer identifiable boundaries to the applications of actuarial skills. This is borne out by the increasing demand for actuaries in general insurance, health financing, banking, investment, funds management, infrastructure funding, telecommunications, power markets, environmental industries and management consulting.

Public Policy

The IAAust is active in its contribution to public policy. Over the past twelve months the Australian Federal Government has enacted new legislation in Financial Services Reform and General Insurance Reform, both fundamentally affecting actuarial practice. With the introduction in March 2002 of the Financial Services Reform Act actuaries will need to be licensed for any advice provided to retail customers, including advice that may be passed onto others and eventually become public or accessible for retail purposes. The IAAust is actively working towards accreditation of its education program to ensure recognition of the qualification in meeting the education and training standards imposed under the new regime.

General Insurance Reform

The General Insurance Reform Act 2001 established new requirements for companies in relation to financial reporting and capital adequacy requirements. Australian actuaries have been working in general insurance for over a decade, but with the introduction of new prudential regulations actuaries have increased reporting responsibilities and the new role of Approved Actuary.

These new General Insurance standards were introduced at the time of the collapse of the major general insurer, HIH, and the associated increased public and political scrutiny of the industry has led to intense pressure to speed up reform. In order to achieve a constructive outcome for general insurers and the actuarial profession, the IAAust jointly funded a research project with the regulator, APRA, to analyse data and develop technical guidance for actuaries. At the time of writing this paper. The IAAust is developing programs of CPD and networking opportunities to support General Insurance actuaries in meeting their obligations under this new regime.

Prudential Regulation

Other areas of regulatory work include:

- a review of Life Insurance Act
- the impact of tax reform on life insurance financial reporting
- a Federal Government initiated review of the prudential regulation of Superannuation
- a heated public debate on Public Liability Insurance
- concern about the solvency of Medical Defence Organisations providing medical indemnity insurance, and
- new International Accounting Standards for fair value accounting for insurance liabilities

Health Insurance

Over the last few years the IAAust has had significant input into the reform of private health insurance in Australia. This has included the development of unfunded lifetime community rating, which was introduced by the Federal Government as Lifetime Health Cover in 2000, and reform of health insurance reinsurance arrangements. The IAAust has also developed Solvency and Capital Adequacy Standards for the health insurance industry.

Genetics

The Australian Law Reform Commission has recently released a paper on its national investigation into genetics, including recommendations regarding the use of statistical data from genetic testing. The IAAust has made a substantial submission in response to this comprehensive report and has been a consistent contributor to this and other public policy considerations on genetic developments. The text "Genetics in Society 2001", outlining research developments in genetics, was published by the IAAust and has attracted national and international attention.

Futurism

There has been a small cohort of actuaries in Australia with an interest in environmental programs, including climate change, energy markets, weather derivatives and biodiversity. A Futurism Committee has been established to investigate initiatives across a range of areas of industry and public policy that may be of interest to actuaries. In particular, the IAAust has contributed to inquiries into Greenhouse Gas Emissions, presented to conferences on Socially Responsible Investments and Sustainability and has been represented on the United Nations Environmental Program's Finance Initiative.

COMMUNICATION

Over the past three years the IAAust has taken a more proactive approach to its obligation to represent the profession. The objects for which the IAAust was established included determining matters for public comment, conferring and collaborating with other organisations and even commenting on the actuarial aspects of legislation. However, these were not pursued in a public and vigorous way, and the IAAust was not structured to be outward looking and proactive.

Public Affairs

The IAAust is well positioned to prepare submissions to major inquiries and provide advice to governments and government organizations. There has been increased use of media releases to generate awareness of the actuaries' point of view on a range of relevant topics. To support this process, media training is conducted for those members and staff who are expected to speak on behalf of the IAAust.

Private lunches have been held for invited CEOs to discuss important current issues and provide a platform for key actuaries to demonstrate the contribution they can make at senior levels of business. A very successful initiative in March 2000 saw the bringing together of CEOs and CFOs of major corporations to discuss the future of funds management as presented by high profile actuaries and other professionals.

Regulators, government ministers, opposition spokespersons, government advisors and associated industry representatives have increasingly been invited to present or contribute to debate at IAAust forums and conferences. This trend of a more outward looking and politically astute profession will continue to be a high priority for the IAAust.

Marketing

A marketing plan was developed with the support of a professional consultant in 1999 to build on the work of the Marketing and PR Committee. Members had considerable buy-in to this document, which has served as an important platform for a number of initiatives over the last eighteen months.

The design of IAAust publications has been co-ordinated and a 'brand' established in the market place. Co-ordination of the Actuary Australia magazine has been brought into the IAAust office, which provides support for the editors who are members. The Australian Actuarial Journal has been re-designed and improved to meet the standards of international journals. And, a new web site has been developed to provide a powerful point of communication about the IAAust and the actuarial profession.

Membership Survey

A recent survey of members aimed to inform the IAAust on how best to improve services provided to members. Information on members' needs and expectations will assist the IAAust to prioritise and focus the IAAust's activities where they will provide greatest value for members. The final results are being collated, but early indications are that the majority of members rated professional accreditation, high professional and ethical standards, keeping up-to-date, CPD, actuarial education, and promotion of the profession as the most important aspects or benefits of IAAust membership. Over 50% of respondents rated these as being of high or very high importance.

The most common suggestions for additional benefits or services that the IAAust should provide related to provision of CPD, particularly for members in states other than NSW and for overseas members.

Conclusion

Looking forward, there are many opportunities for growth and development within the actuarial profession. There are also areas in which actuaries can provide a valuable contribution for the benefit of society. The IAAust has a tremendous responsibility to the profession in its representation and support for actuaries in meeting these challenges. Identifying and giving priority to the key areas for strategic initiatives will be the key to strengthening the profession and providing valued advice and authoritative comment.