

**Annual Report by the  
Engineering Associates Registration Board  
For the Period from 1 April 2005 to 31 March 2006**



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**Legislative Context**

The Engineering Associates Registration Board (the Board) is appointed under the Engineering Associates Act 1961 (the Act). The Board's objectives are to encourage, support and promote excellence in technical engineering in New Zealand.

Registration as an Engineering Associate (Registered Engineering Associate - REA) is a quality mark providing evidence that the person has met standards for registration and training. REAs are generally senior technical engineers, usually employed in infrastructure and engineering management roles in New Zealand.

The Act is administered by the Department of Building and Housing (the Department) on behalf of the Minister for Building Issues.

**Comment from the Chair**

The impact of the promotional activities undertaken by the Board in the last two years has not yet seen a halt to the drop in new REA registrations. Total REAs registered as at 31 March 2006 was 2027.

During the period the Board has introduced a voluntary competency assessment scheme (REAcap) to provide evidence for the Board to confirm that an individual REA continues to be competent. REAcap has received good acceptance from REAs with about 50% declaring they would apply for reassessment. This process has only just begun, with an initial batch of 65 REAs provided with REAcap certification by 31 March 2006.

The Board ended the year with a deficit of \$3,287 for the period, and total assets dropped to \$39,112. This was below the Board's comfort level, and was the driver for an application for an increase in fees. The new fee levels were gazetted on 3 March 2006, and come into effect on 1 April 2006. These should return the Board's reserves to a more acceptable level in the coming year.

The annual audit by Audit NZ was completed during June 2006 and identified no matters of concern.

The Board met three times during the year.

## Introduction

The Engineering Associates Registration Board operates under the Engineering Associates Act 1961, plus amendments (the Act). The purpose of the Act is to encourage, support and promote excellence in technical engineering in New Zealand.

The Act authorizes the registration of persons with an academic-plus-practical-experience qualification, equivalent to New Zealand Certificate in Engineering (NZCE) and who have also completed a significant period of “responsible experience” in the engineering environment. The Registered Engineering Associate (REA) credential indicates that a person is a senior technical engineer. Most REAs are employed in infrastructure design and implementation and engineering management roles in New Zealand. There are many REAs located in the international engineering market.

Administration of the Engineering Associates Act was transferred from Ministry of Economic Development to the Department of Building and Housing (DBH) on 1 November 2004. On that date the Board’s accountability was transferred from the Minister of Commerce to the Minister for Building Issues (the Minister).

Structural changes to engineering training during the restructure of government departments in the 1990’s has resulted in a steady drop in numbers of new REA registrations each year. With older REAs retiring and the “10 years experience” period for new REA applicants, specified in the Act potentially providing a barrier for new or intending applicants, the total number of registered persons has dropped over recent years.

Recent changes to technical engineering education qualifications have resulted in the replacement of the New Zealand Certificate of Engineering (NZCE) with a new National Diploma in Engineering (NDE). The new NDE qualification does not include the same requirements for completion of practical experience, and this has caused the Board to reassess the experience needed to ensure that new REAs meet the “equivalent to NZCE” criteria in the Act.

Lack of funding for ITOs to support the practical training components of NZQA Level 5-and-above qualifications, has also resulted in a drop in candidates being available for technical engineering careers, and subsequently for REA registration. In recent years there has been a significant change in the attitudes of the employment market, and government and industry support for technical engineering training initiatives has increased. However the shortage of experienced technical engineers will continue for many years.

The Board recognises that the Act is dated and needs revision, and in particular any review will need to include provisions that will assure the public that individual REAs continue to meet the competency standards at least equivalent to those required for initial registration.

Ongoing competency requirements were included in the Chartered Professional Engineers Act 2002, and the more recent Architects Act 2005. After advice from officials, that a review of the Act would not gain time on the Government’s legislative programme for some years, the Board decided to introduce a voluntary assessment process that would provide assurance of ongoing competency of REAs. Information on the REA competency assessed practitioner (REAcap) scheme is provided later in this report.

The Act requires regulations to be gazetted to specify the level of fees for registration services. The levels of fees charged to REAs during the period of this report were as last gazetted in 2002 (effective from 1 April 2003). Increased fees for the 2006/07 year were gazetted on 02 March 2006, and come into effect on 1 April 2006. See the financial section for more details.

## Board Business

The Engineering Associates Registration Board continued normal operations during the year.

### Members of the Board

Following a process in which the Associations and Institutes named in the Act nominate suitable individuals, the Minister appoints a Board with a range of relevant knowledge and experience. Board Members' terms of appointment are for a nominal 2 years, or at the discretion of the Minister.

The Members of the Board at 31 March 2006 were:

Board Member	Position	Nomination Body
Mr I C Shearer FIPENZ	Chair	Ministerial appointment
Mr O R A Burgess REA	Deputy Chair	Design Association of NZ Inc
Mr A G Cuthbert REA	Member	NZ Electrical Institute Inc
Mr J F Ericson REA	Member	NZ Institute of Engineering Sciences Inc
Mr G J Gallaher	Member	NZ Institute of Welding Inc
Mr R W Grant	Member	NZ Institute of Marine & Power Engineers Inc
Ms F B L Johnstone	Member	Ministerial appointment
Mr D W Leask REA	Member	Institute of Measurement & Control Inc
Mr J Logan REA	Member	NZ Institute of Health Estate & Engineering Management Inc
Mr G G Shaw REA	Member	NZ Institute of Refrigeration, Heating & Air Conditioning Engineers Inc
Mr K R Smith REA	Member	NZ Electronics Institute Inc

The following Board Member resigned during the year, and had not been replaced by 31 March 2006.

Mr K B Morgan MIPENZ	Member	Ministerial appointment
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### Responsibilities and Operation of the Board

The Members of the Board are accountable to the Minister for the performance of their duties including direction, oversight and implementation of the Act. The Board oversees the operations of the Registrar.

Following the transfer of monitoring of the Act from Ministry of Economic Development (MED) to the Department of Building and Housing (the Department), the Chair and the Registrar met with the officials to establish effective working relationships. The Department is also responsible for administration of the Chartered Professional Engineers Act 2002, the Architects Act 2005 and the Building Act 2004. The transition has resulted in a consistency in administration of building related employment registration aspects. This is also expected to lead to a working relationship with the Chartered Professional Engineers Council.

The Board has a Staff Committee that meets for annual review of the Registrar's conditions of employment.

## Technical Engineering Institutions Recognised in the Act

Technical Engineering Associations currently recognized under the EA Act are:

- Design Association of New Zealand Inc
- New Zealand Electrical Institute Inc
- New Zealand Institute of Engineering Sciences Inc
- New Zealand Institute of Welding Inc\*
- New Zealand Institute of Marine & Power Engineers Inc
- Institute of Measurement & Control Inc
- New Zealand Inst of Health Estate & Engineering Management Inc
- New Zealand Institute of Refrigeration, Heating & Air Conditioning Engineers Inc
- New Zealand Electronics Institute Inc
- Institute of Automotive Mechanical Engineers of New Zealand Inc
- New Zealand Institution of Gas Engineers Inc
- Society of Licensed Aircraft Engineers & Technologies Inc
- Society of automotive Engineers (Australasia) Inc\*

The Board has an ongoing responsibility to keep the recognized associations informed of its activities and to encourage the advancement of technical engineering issues and standards.

*\*Note: In May 2004, the New Zealand Institute of Welding closed down operations as a separate association and later deregistered itself as an Incorporated Society. The Welding Institute's activities have been absorbed into the Heavy Engineering Research Association (HERA). A gazette notice was published on 27 April 2006 deleting both the NZ Institute of Welding and the Society of Automotive Engineers, which was deregistered in 2003, from the list of institutes under the Act. The respective EARB Board Members will not be replaced.*

## Registration Statistics

Registration categories under the Act:

- R(a) Technical engineers who have not completed a recognized technical engineering education qualification but have completed basic engineering training, and have at least 12 years of engineering experience, including 6 years in a responsible position and were born before 1 January 1936.
- R(b) Technical engineers who have completed NZ Certificate of Engineering or First Class Marine Engineer's Certificate (or an equivalent qualification), plus a basic engineering training and at least 6 years of engineering experience, including 1 year in a position of responsibility.
- R(c) Technical engineers who have not completed a recognized technical engineering education qualification but have completed a basic engineering training, and have at least 12 years of engineering experience, including 6 years in a responsible position, and are older than 40 years of age. This (c) group submits a 4,000 word written statement on an approved engineering topic in lieu of the education qualification.

Category	31 March 2004	31 March 2005	31 March 2006
<b>R(a)</b>	206	187	159
<b>R(b)</b>	1837	1789	1756
<b>R(c)</b>	119	115	112
<b>Total</b>	2162	2091	2027

The Act requires the establishment of an Investigations Committee (effectively a tribunal) if there are appeals against decisions of the Board. The Board is still in discussion with the Department about the potential appointment of the Committee, as it is required under the Act, but has not been required to date. There were no appeals during the year.

### **Board Meetings**

The Board held three meetings during the year - April, July and November 2005. The Registrar attended all Board meetings.

Apart from the routine overview and approval for the registration of REAs, the Board approved the publication and promotion of a new Code of Ethics for REAs, and the establishment of the competency assessment scheme for REAs.

### **Technical Engineering Education and Training Standards**

Structural changes to engineering training during restructuring of government departments in the 1990s resulted in a drop in numbers of technical engineering trainees entering Polytechs.

With the “10 years experience” lag period for new REA applicants the total number of registered persons has dropped for several years.

Changes to technical education qualifications and the replacement of NZCE with a new National Diploma in Engineering (NDE) – which does not include the same requirement for practical experience in the qualification - has raised another challenge to ensure that REAs meet the “equivalent to NZCE” criteria in the Act. Funding has not been provided to ITOs to replace the practical components of NZCE into new qualifications.

### **Code of Ethics**

Following investigation and discussion, the Board approved the issue of a new Code of Ethics for Registered Engineering Associates. The code was derived from the principles embodied in the Act, and much of the wording was directly from the Act.

The opportunity was taken to present the Ethics in a formal Code of Practice which also contains the principal provisions of the Act pertaining to REAs. The Code of Ethics is published on the Board's website and is included in the information sent out to prospective applicants for registration.

### **Output Agreement**

Preliminary discussions have been held with Department officials, and an output agreement will be negotiated when the new Board is appointed in 2006.

### **Current Competency Assurance – REAcap**

REAcap (Registered Engineering Associates competency assessed practitioner scheme) was implemented to ensure the Board could assure the public and potential engineering employers that a currently registered REA remains competent.

Discussions with Department officials confirmed that an amendment to the Act was necessary before the Board could provide compulsory formal recognition of continuing competency.

The Board decided that, in the current engineering market, this disadvantaged the REA credential compared with other recent occupational registration legislation. The Board made the decision to develop a voluntary REAcap scheme so that any REA could apply for a competency reassessment every four years.

The Act does not specifically provide the Board with authority to introduce such a scheme, however a legal opinion provided by the Department confirmed that the Board could introduce and administer the proposed voluntary scheme as long as all funding and costs were identified and kept separate from the Board's traditional registration activities.

The Board decided that the competency principles embedded in the Act for initial registration competency assessment would also be the standard used for review of the REA's ongoing knowledge development, experience and responsibility performance.

REAcap was implemented by distribution to REAs with the April 2005 annual fees notice. The indications of support from REAs has been strong with about 50% of REAs requesting application documentation. Sixty five REAs were given REAcap validation by 31 March 2006. The applications continue to flow in and the website list of REAs is regularly updated to indicate successful REAcap validations.

### **Promotional & Communication Activities**

The Board continued to distribute a brochure promoting the values of the REA credential, modified the website, and revised the REA applicant's information packs to help promote registration and the REAcap scheme in an effort to arrest the drop in REA registration numbers. The impact from this promotion project will be seen in future years.

The Board ran listings in public directories, and made press releases announcing the improvements such as the List of REAs which had been added to the website. This activity created a significantly higher response of website hits and more registration packs were issued to prospective REA candidates.

Communication with REAs continued through the annual circular delivered with the annual fees renewal notice. This method is cost effective, but it restricts the communication to once per year. In preparation for a more electronic future, the email addresses of REAs are now being added to the Register database for future communication purposes.

### **Website**

The Engineering Associates website, <http://www.engineering-associates.org.nz>, continued to receive a monthly average of about 6,000 'hits' with a peak of 18 thousand hits in one month.

During the year, the 'List of REAs' was introduced to the website. This provides web access to the list names of currently registered Engineering Associates. Listing details include surname and initials, regional location (with non residents listed as overseas), registered engineering discipline, certificate of registration number, and commencement year for continuous registration.

The list of REAs on the web is updated following each Board meeting. Feedback indicates that this list has been well received by REAs and use by employers is starting to increase. The Board is looking to develop this aspect of communications further.

### **Registrar**

The position of Registrar, held by Mr John V. Edgar REA, continued unchanged during the year. The EARB office remains staffed for 3 days per week.

## Financial Aspects

### Auditors

The Board has contracted Audit New Zealand as its audit agent. During the year the auditors also provided advice on GST taxation issues. The annual audit by Audit NZ was completed during June 2006. The audit identified no matters of concern.

### Fees for Registration Services

Fees charged for registration during the period to 31 March 2006 were as gazetted in the Engineering Associates Act Regulations 2002.

Revenue was 2% less than budgeted due to a drop in overall numbers of REAs registered, however revenue and expenditure from REAcap activities was not included in the budget, and total income including REAcap fees was actually 9% ahead of budget. Operating expenditure, without REAcap expenses, was 4% below budget. REAcap income exceeded REAcap expenses. Board Member meeting fees and expenses were 27% below budget compensating for an 18% increase in office and website expenses.

The overall deficit of \$3,287 resulted in a drop in Total Net Assets that ended the year at \$39,112. This level of assets was as budgeted, and the Board's concern that this was too low led to the application for an increase in fees – which have now been gazetted to take effect from 1 April 2006. The new fee levels should ensure the Board's level of reserves go back up to an acceptable level over the next two years.



I C Shearer  
Chair, Engineering Associates Registration Board.