



ANNUAL REPORT

BY THE

CHARTERED PROFESSIONAL ENGINEERS COUNCIL

ON THE

PERFORMANCE OF THE REGISTRATION AUTHORITY

FOR THE PERIOD

1 JANUARY 2019 TO 31 DECEMBER 2019

CPEC

Chartered Professional Engineers Council
Kāhui Kaiwetepanga Ngaio Whaimana

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1 INTRODUCTION

This report is the assessment by the Chartered Professional Engineers Council (the Council) of the Registration Authority's (RA) performance and exercise of its functions and powers pursuant to Section 53 of the Chartered Professional Engineers of New Zealand Act 2002 ('the Act'), for the period 1 January to 31 December 2019.

The RA is the Institution of Professional Engineers New Zealand Incorporated, trading as Engineering New Zealand (EngNZ).

The RA's functions are set down in S39 of the Act and include to:

- (a) make, and always have, rules relating to chartered professional engineers, prepared and approved in accordance with the Act;
- (b) register persons, issue registration certificates, assess continued registration;
- (c) keep and maintain the register of chartered professional engineers;
- (d) receive, investigate and hear complaints about, inquire into the conduct of, and discipline chartered professional engineers in accordance with the Act.

Section 52 of the Act requires the RA to report to the Council on the operations of the RA and the chartered professional engineer register for a 12-month period ending on the preceding 31 December.

As part of its review and appeal functions under S45 of the Act, the Council continues to invite the RA to each quarterly Council meeting to:

- present and discuss reports on assessments and complaints,
- monitor the time taken for the hearing of complaints,
- consider the outcomes of appeals,
- maintain dialogue on the Act and Rules, regarding their efficiency, appropriateness and scope for amendment.

2 REGISTRATION AUTHORITY'S ANNUAL REPORT

The RA has provided the Council with its annual report for the period 1 January to 31 December 2019. The report provides both quantitative and qualitative information on activities performed by the RA and records the work undertaken by the RA in fulfilling its obligations under the Act.

A copy of the RA's 2019 annual report is submitted to the Minister with this report.

The RA's report provides commentary and information on the following topics:

- **Professional Standards:** Advocacy and assistance to MBIE relating to the design of a future licensing model for safety-critical engineering work; CPEng Process Review, including options for incorporating Bodies of Knowledge and Skills (BOKS) developed by EngNZ's technical societies, into the registration assessment process; and a new customer relationship management system as a top priority for 2020.
- **Assessment process and competence assessment:** An increase in CPEng registrants; addition of Mechatronics, Software and Water practice fields; assessor recruitment; registration candidate satisfaction survey findings; assessment statistics and targets; appeals against

registration decisions; Competence Assessment Board membership; numbers of assessors and assessment expectations for 2020.

- **Register trends:** Year on year registration statistics, age and gender breakdown; engineering practice field data and geographical distribution of registrants – drawn from the RA's existing CRM system which is currently being redeveloped.
- **Complaints and disciplinary activity:** Continued improvement in the profession's capability for resolving complaints; development of decision maker capability – particularly Investigating Committee and Disciplinary Committee Chairs; inclusion of lawyer members on disciplinary committees and application of lessons learned from complaints.
- **Complaints snapshot:** Statistics on concerns and complaints received and closed; themes and trends including continued success of early resolution initiatives; commentary on Greater Christchurch Claims Resolution Service (GCCRS) and Canterbury Earthquakes Insurance Tribunal (CEIT) and an update on the RA's own motion inquiry and systems report.
- **Case studies:** Three case studies showing how complaints are being processed, including early resolution by mediation, a case upheld by a disciplinary committee and a case dismissed by an investigating committee.
- **Financials:** Commentary on an increased net deficit, summary of fees for 2019 which have remained unchanged since 2015 (Appendix 1) and summary of fee income and costs incurred (Appendix 2).

3 REPORTING REQUIRED BY THE ACT

The RA's reporting requirements are set out in S52(2) of the Act and the responses are summarised below.

- (a) the number of chartered professional engineers at the end of the 12-month period (**3,879**); and
- (b) the number of persons whom the RA registered (**247**)¹ and the number whom the RA declined to register (**6**) during the 12-month period; and
- (c) the number of persons whose registration was removed (**153**), suspended (**133**) or placed in abeyance (**48**) during the 12-month period; and
- (d) the number of persons against whom the RA made a disciplinary order (**3**) during the 12-month period; and
- (e) the amount of the charge or charges payable in relation to registration or the issue of a registration certificate (**No change**) during the 12-month period; and
- (f) any other information that the Council reasonably requires.

The RA's report addresses the requirements of S52(2) (a) to (c) under Register Trends, (d) under Complaints Snapshot and (e) in Appendix 1 & 2.

4 RULES FOR CPEng STANDARDS

No changes were made to the Chartered Professional Engineers Rules in 2019.

¹ First registered

5 THE COMPETENCE ASSESSMENT PROCESS

The RA's 2018 report predicted 1100 total assessments for 2019, 350 first time assessments and 750 re-assessments. The total number of assessments (791)² processed in 2019 was significantly lower than the number predicted.

Initial Registrations. During the year, 253 initial registrations were processed, 247 approved and 6 declined. At the end of the period, 199 applications had been submitted for initial verification or assessment. The average time for initial assessments has increased to around 120 days (99 days in 2018), even though priority was given to initial registration applications ahead of reassessment, taking into account the limited assessor resources.

Mutual recognition. 31 successful applications for CPEng were assessed under mutual recognition schemes, 5 via the Trans-Tasman Mutual Recognition Act and 26 through mutual recognition with other jurisdictions.

Continuing Registrations. During the year, 507 applications for assessment for continuing registration were processed, 505 were approved and 2 declined. The year closed with 490 continuing registration applications in the verification/submission stage and 147 in the assessment stage. The average time for re-assessment was 160 days, significantly higher than the 2018 period (87 days) mainly due to a shortage of voluntary assessors. 61 registrants failed to submit a portfolio of evidence on time and had their registration suspended, a lower number than previous years.

The total number of practice and lead assessors at the end of 2019 was 466³.

The year ahead. The RA predicts 1550 total assessments for 2020, 350 for first time assessment and 1200 Continued Registration Assessments. The RA has stated that priorities for 2020 include:

- recruitment and training of more assessors,
- the reintroduction of assessment rounds for initial assessments and
- improvement of the administrative efficiency of the assessment process.

The Council acknowledges the RA's efforts in continually identifying and addressing shortfalls in the assessment process and given the ongoing backlog continues to maintain dialogue with the RA towards improvements in the situation.

The Council remains confident the RA is maintaining a credible and robust competency assessment system that fulfils its obligations under the Act.

6 REGISTER TRENDS

The RA's report provides quantitative information and qualitative commentary on the trending number of CPEng, age distribution, gender breakdown, fields of engineering practice and geographical distribution of registrants.

The number of CPEng registrants continues to steadily increase.

The 2018 diversity drive by the RA, resulted in an increase in females applying for first time assessment in 2018 (14% of successful first-time assessments) and the percentage of CPEng females at the end of 2018 increased from 8.9 to 9.2%. At the end of 2019, there were 376 women on the register (9.7%), well on the way to the target of 400 by the end of 2021, that was set in 2018.

² Included 31 applications under mutual recognition schemes

³ Assessors include contract and EngNZ staff lead assessors

The top four fields of engineering practice continue to be civil, structural, management and environmental. The fields of Water Engineering, Mechatronics and Software were added in 2019 and the latter two fields are expected to appear in future reporting.

The geographical distribution of CPEngs continues to be dominated by Auckland at 35.8%, followed by Canterbury at 16.6% and Wellington at 11.1%. 14.7 % of members are either overseas or not affiliated to a New Zealand Branch.

7 COMPLAINTS & DISCIPLINARY ACTIVITY

The RA continued to build on changes it made in 2016 to the complaint resolution process.

With regard to the profession's capability for resolving complaints, the RA has continued to utilise its 2017 toolkit resource to educate engineers on the importance of complaints and how best to resolve them.

Specific actions taken in 2019 have included presentations on ethics, complaints and professionalism to University of Canterbury students and to several EngNZ branches.

EngNZ's expert panel also has provided services to GCCRS and CEIT and they rightly note the success of the contribution to resolving outstanding quake-related damage claims that have been held up for engineering reasons. Effectively this has provided a service to Christchurch homeowners that the complaints process has not.

With regard to decision maker capability, the RA had 10 Investigating Committee Chairs and Two Disciplinary Committee Chairs at the end of 2019 and they have noted recruitment of a third Disciplinary Committee Chair as a priority for 2020 to cope with anticipated disciplinary hearing workload. In addition, the RA is now regularly recruiting lawyers experienced in professional regulation, as Disciplinary Committee members.

The mechanism for coding of complaints, introduced in 2017 has been further developed to ensure the capture of themes and lessons.

The complaints resolution team continues to include a column in every issue of EngNZ's quarterly *EG* magazine, based on case studies and the team regularly contributes to EngNZ's email newsletter *Discover*.

While the RA has presented three case studies in the context of rebuilding trust and confidence in the profession, the Council notes that a key element should also be the impact on competence. i.e. professional growth.

8 COMPLAINTS STATISTICS AND TRENDS

There was a slight decrease in the number of concerns (41) received by the RA in 2019 from the prior year (43), with the number closed (33) being similar to 2018 (36).

One disciplinary hearing took place in 2019. That complaint was upheld and then appealed to CPEC. In addition, another complaint was upheld by a disciplinary committee in 2019 following a hearing held in late 2018. Three other complaints were heard by disciplinary committees "on the papers". One was upheld and decisions on the other two were pending at 31 December 2019.

The Council notes that including the case mentioned above, four RA decisions were in front of the Council in 2019. (Three related to decisions on complaints and one to a decision to decline registration.) One related to a 2017 decision, one to 2018 and the remaining two were from the 2019 period. In 2019

the Council declined one appeal. One further appeal was declined and one upheld subsequent to 2019 and one is still in progress at time of writing.

The Council considers the complaint process is working well, although, as noted in previous reports, the process is complex and has multiple stages. This can lead to a lengthy period from when complaints are received until they are resolved. This is further extended if the outcome is appealed at any of the stages.

Of the 33 concerns closed, 57% (18) were resolved via the early resolution process, 23% (8) were dismissed by an adjudicator, 6% (2) were dismissed by an investigating committee and 8% (3) were upheld by a disciplinary committee. The closure of concerns by the early resolution process was a significant success compared to 2018 and the average time for resolution by this method was 10 months shorter than the other methods.

The categorisation of complaints indicates design competence (56%) and ethics (44%) as the two primary factors, with structural engineering (67%) being the main field of practice involved in concerns or complaints.

In 2016 EngNZ embarked on an Own Motion Inquiry into engineering design of six buildings in Masterton and this has continued during this reporting period, with expected completion in 2020. The inquiry is investigating the individuals, and the system which they are a part of. Whilst the RA's responsibility under the Act is limited to investigating matters relating to individual CPEng's, the Council agrees and supports this broader system and sector review recognising the potential to reduce risk and raise public satisfaction and confidence with the engineering profession.

9 RELATED ACTIVITIES WHICH MAY RELATE TO CPEng

9.1 CPEng / Chartered Member

Previously there has been discussion about possible confusion that could arise between the status of an EngNZ "Chartered Member" and a "Chartered Professional Engineer". This arose in relation to the implementation of a new membership pathway by EngNZ.

The RA reports that the registration candidate survey conducted in 2019 with 233 respondents has shown that 65% of respondents understand the similarities and differences between an EngNZ Chartered Member and a Chartered Professional Engineer, with a further 29% having some understanding of the similarities and differences.

The Council still has some concern over the possible confusion, not only within the Engineering sector but within the greater community. The Council will continue to engage with EngNZ on this matter, recognising that any confusion that does exist may have an effect until such time as a new regulatory framework is in place. The current indications are that this process could take 3 – 5 years.

9.2 Greater Christchurch Claims Resolution Service (GCCRS) and Canterbury Earthquakes Insurance Tribunal (CEIT):

The establishment of an expert engineering panel consisting of CPEng's to assist the GCCRS initially with claims resolutions has clearly been successful. In addition, EngNZ established a facilitation service for situations where there are differing opinions between engineers on earthquake damage and reinstatement issues. Since June 2019, the panel has also provided services to CEIT. To the end of 2019 there have been 150 referrals to the panel and feedback continues to be positive.

The RA notes that the panel's work is a direct response to what has been observed through complaints and has aided in the resolution of some long-standing disputes between homeowners and insurance companies.

The Council acknowledges that this is a very good example of the profession working collaboratively with stakeholders to overcome what have been long-standing issues. It also demonstrates how lessons learned from the complaints process can be applied to the benefit of the profession and the community.

10 THE COUNCIL'S PERSPECTIVE ON THE REGISTRATION AUTHORITY'S PERFORMANCE

The Council considers that the RA continues to perform well in the following areas:

- Maintaining a robust competency assessment and re-assessment process, where opportunities are being taken to maximise efficiency and effectiveness;
- Applying feedback, such as from the complaints process and registration candidate surveys, to improve processes;
- Recognising engineers practising in critical and/or emerging practice fields by the addition in 2019 of Water Engineering, Mechatronics and Software;
- The continuing increase in the total number of chartered professional engineers (**3879**), an increase of 2.6 % (99) since the last period;
- Continuing initiatives to achieve inclusion and diversity goals;
- Continuing to streamline the complaints process;
- Commitment to raising the standard of CPEng by the development and incorporation of the Bodies of Knowledge and Skills (BOKS) for Geotechnical and Structural practice fields, with further work being undertaken in the Fire Engineering practice field;
- The establishment of an expert engineering panel for GCCRS and for CEIT utilising CPEngs which is expediting resolution of these issues and has reduced the number of related complaints/concerns to the RA from 10 to 5 in the latest period.

The Council sees scope for attention to be paid to the following areas:

- Reducing processing times for CPEng assessments, supported by regular and effective forecasting of demand and availability of trained assessors and lead assessors. The Council and the RA discuss this regularly and with current rates of clearance / processing times and forecast assessment workload it is a priority for further improvement as a recurring issue. The Council will engage with the RA regarding appropriate actions, targets and timelines to support meaningful improvements. The Council recognises, however, the RA's dependence on volunteer inputs and acknowledges that it is a not a simple problem to solve.
- Building on work to date to maintain awareness and understanding of the membership pathways, minimising confusion between CPEng and EngNZ Chartered Member status.
- Planning to manage the significant financial deficit, prioritising and scheduling specific actions and tracking progress. This will be addressed at regular council meetings. The RA has reported a net deficit of \$195,724 for 2019 compared with a 2018 deficit of \$81,198. Contributing factors have included front-end investment in process improvements relating to complaints and competency assessments, increased uptake of CPEng initial assessments, reassessment requirements and measures required to address limitations of the current database, Midas. The current and cumulative deficit is effectively being carried by EngNZ. The RA has sought CPEC's support for the conversations the RA is having with MBIE about management of the deficit and the council has confirmed its willingness to engage on this matter.

- Reasons for member decisions to resign. Building on discussions at recent meetings, the Council sees merit in exploring reasons for members deciding to resign or not to reapply and will discuss this with the RA in 2020 with the focus on what is being done to encourage members to continue on the register.

11 SUMMARY

The Council acknowledges the RA's ongoing commitment to continued improvement as evidenced in the areas that the Council observes. In particular, the RA's accomplishments through panel services to the GCCRS and CEIT in Christchurch and its work with MBIE on the development of a new regulatory framework and licensing regime are noted. It is pleasing to see the continuing increases in CPEng's registered, and the increase in females both on the register and within the assessment process.

The Council will continue to engage with the RA on the matter of assessment capacity to meet demand from current and forecast candidate numbers and applauds the RA's initiatives with regard to delivering efficiencies through additional recruitment of assessors, reintroduction of assessment rounds and the development of a triage process to streamline resource allocation.

As mentioned above, the Council will be happy to engage with the RA on the matter of the RA's financial deficit. Amongst other matters, the Council's tax status and the rigid nature of the levy regulations under which the Council is funded should be explored.

The Council continues to value its strong relationship with the RA, where there is openness, mutual respect and the ability to have robust discussion when appropriate.

Dated: 12 June 2020



Chairperson: Chris J Harrison

Council members:

Manjit Devgun

Sandra Hardie (Deputy Chair)

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