

SUBMISSION

REVIEW OF THE NEW ZEALAND QUALIFICATIONS FRAMEWORK

Engineering New Zealand (formerly IPENZ) is New Zealand’s peak professional body for engineers. We are New Zealand’s strongest and most influential voice on engineering issues, with more than 21,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

Engineering New Zealand is also the Registration Authority under the Chartered Professional Engineers of New Zealand Act (2002).

OVERVIEW

This submission encompasses Engineering New Zealand’s view on the New Zealand Qualifications Authority (NZQA) consultation to change the New Zealand Qualifications Framework.

We have restricted our response to proposals in the consultation that are of direct relevance to the engineering profession. This submission pertains to consultation **proposals 4, 5 and 6**, as outlined in the July 2019 consultation document.

Of paramount concern to Engineering New Zealand is the proposal to rename Bachelor Honours Degrees. This would have a significant and detrimental impact in two ways:

- **from an entry into practice qualification for professional engineers in New Zealand; and**
- **the recognition of the Bachelor of Engineering (Hons) qualification overseas.**

BACKGROUND

Engineering New Zealand is the Registration Authority administering New Zealand’s Register of Chartered Professional Engineers. Our programme of professional accreditation sets standards for “entry to practice” engineering education programmes and underpins the Chartered process. Our accreditation programme is competence based and benchmarked internationally through a series of international accords. For further

information see the International Engineering Alliance’s website (www.ieagreements.org). The relationship between New Zealand engineering qualifications, International Accords and professional recognition is summarised in Table 1.

Table1: Summary of engineering qualifications and quality marks

Engineering Role	NZ Qualification	International Accord	NZ statutory register/membership-based quality mark
Professional Engineer	Bachelor of Engineering (Honours) – Level 8	Washington Accord	Chartered Professional Engineer (CPEng) Chartered Member (CMEngNZ)
Engineering Technologist	Bachelor of Engineering Technology – Level 7	Sydney Accord	Chartered Member (Engineering Technologist) (CMEngNZ – Eng. Technologist)
Engineering Technician	New Zealand Diploma of Engineering – level 6	Dublin Accord	Chartered Member (Engineering Technician) (CMEngNZ – Eng. Technician)

WE SUPPORT EXTENDING THE REGULATORY FRAMEWORK FOR NEW ZEALAND QUALIFICATIONS AT LEVELS 1-6 TO INCLUDE LEVEL 7 DIPLOMAS

Proposal 4

We agree with NZQA that there are persistent and on-going concerns with level 7 diplomas. There are a small number of level 7 diplomas in engineering, primarily developed to target the international student market. We do not think there is a need for this qualification in the New Zealand market, but understand that if the qualification is offered, there is a need to ensure the quality and relevance of the qualification. That being the case, we consider the most logical approach would be to extend the regulatory framework for New Zealand qualifications at levels 1 – 6 to include level 7 Diplomas. We understand this would facilitate targeted reviews of level 7 Diplomas currently on the NZQF.

WE DO NOT SUPPORT NZQA ADDRESSING LEVEL 8 BACHELOR HONOURS DEGREE ISSUES BY ANY OF THE OPTIONS PROPOSED

Proposal 5

As the consultation paper acknowledges, the Bachelor of Engineering (Honours) - BE(Hons) is the entry to practice qualification for professional engineers in New Zealand. The qualification is also widely recognised overseas as a result of our membership of the Washington Accord. Changes to this qualification type would have the potential to create significant confusion within the profession in New Zealand and adversely impact the standing of New Zealand engineering qualifications overseas.

The information presented in Appendix 5 of the consultation document indicates that nearly 14,000 students are enrolled in honours degrees in NZ. While there are 177 Bachelor Honours degrees identified, we estimate that over 50 percent of Bachelor Honours students are currently enrolled in a BE (Hons) programme. This makes engineering the group most directly impacted by any change to the Bachelor Honours degree.

In our view, the current 4-year BE (Hons) degree is well aligned with the definition of the Bachelor Honours degree and is appropriately recognised at level 8 on the NZQF. This provides an important and appropriate differentiation relative to 3-year Bachelor degrees (including the Bachelor of Engineering Technology) at level 7.

The consultation paper indicates that issues with the Bachelor Honours degree have meant that all level 8 qualifications are unmatched under European and Hong Kong referencing arrangements. In an engineering context, Hong Kong and several European countries, including the United Kingdom, Ireland, Russia and Turkey, are signatories to the Washington Accord and therefore recognise the BE (Hons) for entry to practice in the profession. We are not aware of any issues being faced by BE (Hons) graduates in these (or other) jurisdictions.

As the paper points out, Level 8 on the NZQF references to the Australian Qualifications Framework, where undergraduate engineering qualifications are also recognised as BE (Hons) degrees at level 8. Downgrading the New Zealand engineering qualification has the potential to impact on the standing of our degree across the Tasman.

The paper indicates that “No data is collected on the impact of this issue but there is some anecdotal information about the impact of this on individuals.” Given the significance of potential impacts on the engineering profession and the recognition of engineering qualifications overseas, we believe that a much stronger evidential basis would be required to justify the significant change considered.

The paper considers four options regarding Bachelor Honours degrees. We are not able to support any of the options put forward and advocate strongly for the status quo.

Option 1: In our view, renaming the qualification would create major confusion in the profession and amongst students. We would suddenly have two equivalent qualifications in the workplace with different names. As the paper indicates, Bachelor Honours degrees (and BE (Hons) degrees in particular) have strong brand recognition within New Zealand and we have been unable to identify a different name for the qualification type which would accurately convey its purpose.

Option 2: This option refers to changing the research requirement to align with the Committee on University Academic Programmes' (CUAP)'s (recently revised) definition. Aligning the NZQA and CUAP definitions of Honours degree research appears to be a logical step, and may assist in differentiating Honours degrees from Level 7 Bachelor degrees. However, we are concerned that CUAP's level 9 research requirement is difficult to satisfy in practice within a professional qualification and imposes a requirement beyond our Washington Accord/entry to practice benchmark. An undue emphasis on academic research risks a reduced emphasis on integrating design activities, which are central to the applied nature of the engineering profession.

Options 3 and 4: Both of these options (removing the qualification type entirely or re-classifying the 480 credit Bachelor Honours degree to level 7) would have the same result for the engineering profession and both are unacceptable from our perspective. The Washington Accord has specific requirements around

engagement with research at the forefront of the discipline, which clearly align with a level 8 academic level. Re-classifying the BE (Hons) as a Bachelor degree at level 7 would mean that the academic level of the qualification was no longer accurately reflected by its position on the NZQF. This could raise significant credibility challenges within the Washington Accord.

The current matrix of engineering qualifications (refer Table 1 above) provides for clear differentiation and progression between qualifications aligned with the three engineering roles. The fundamental differentiation between the BEngTech (level 7) and BE (Hons) level 8 is a deepening (rather than a broadening) of academic knowledge, so having two qualifications at the same NZQF level would be both misleading and confusing.

A topical discussion currently within the Washington Accord is the recognition of Bachelor degree qualifications awarded in a number of Accord jurisdictions against the academic requirement for professional recognition in the UK, which has recently been re-defined as a Masters level of academic study. The current designation of the BE (Hons) at level 8 supports our arguments for equivalence to that Masters standard in the UK (an important destination for NZ engineers) and any change would weaken our position.

WE AGREE THAT NO CHANGES ARE NEEDED TO DEGREE APPRENTICESHIPS PERTAINING TO THE BACHELOR OF ENGINEERING TECHNOLOGY

Proposal 6

Initial degree apprenticeship proposals have been developed at the Bachelor of Engineering Technology level and we agree that no changes are needed to the NZQF, as this is just an alternative way to deliver and assess within existing degrees.

NEXT STEPS

We would value the opportunity to meet with you to discuss these proposals further, and their potential impact on the engineering profession and engineering in New Zealand and overseas. Our contact for this work is Brett Williams, General Manager Professional Standards, and you can contact him at: brett.williams@engineeringnz.org.