



# **SUBMISSION:**

## **WORKFORCE DEVELOPMENT COUNCIL - ORDERS IN COUNCIL**

Engineering New Zealand (formerly IPENZ) is New Zealand’s professional home for engineers. We are New Zealand’s strongest and most influential voice on engineering issues, with more than 22,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

This submission provides feedback on the Order in Council proposals that will establish Workforce Development Councils (WDCs) as part of the Reform of Vocational Education (RoVE).

We welcome the opportunity to provide comment on the WDC proposals as they relate to the engineering profession in general and the NZ Diploma of Engineering (NZDE) in particular. We see the current RoVE reforms as having the potential to help address the present engineering skills shortage and secure the financial sustainability of vocational engineering education. However, for this to be achieved we need to leverage unique features of the current vocational engineering education model, as outlined in this submission.

### **SUMMARY**

In this submission we provide background on vocational training within the engineering profession, notably the training of engineering technicians through the NZDE. We support continuation of the work of the New Zealand Board for Engineering Diplomas (NZBED), outlining their role in the current system and our considerations of their role supporting the newly established WDCs.

We recommend changes to the wording of each WDC Order in Council so that they all reflect wording in the Waihanga Ara Rau Construction and Infrastructure WDC Order in Council to “establish appropriate engagement models with those other Workforce Development Councils and specified industries to ensure that the industry training needs of those industries are met”.

Finally, we request that oversight for the engineering diploma sit within the Waihanga Ara Rau Construction and Infrastructure WDC and that the word 'engineering' be removed from the title of the 'Manufacturing, Engineering and Logistics' WDC.

## BACKGROUND

NZDE is a national qualification with the same programme of study being currently delivered across 13 New Zealand Institute of Skills and Technology (NZIST) subsidiaries. This two-year, Level 6 Diploma is delivered across five engineering disciplines (Civil, Mechanical, Electrical, Electronics and Fire) as a unified Diploma that meets the needs of industries across all these disciplines. There has been significant industry involvement in the development of the NZDE qualification and on-going industry input at both a governance and operational level. NZBED has a Memorandum of Understanding with the New Zealand Qualifications Authority to manage this programme from a quality control point of view and to review the qualification regularly to ensure industry needs are met. Engineering New Zealand manages the accreditation of this qualification against the Dublin Accord, which provides international recognition of the qualification. The qualification satisfies the academic requirements for Chartered Membership of Engineering New Zealand as an Engineering Technician.

The NZDE has strong synergies with a Bachelor of Engineering Technology (BEngTech) programme that is also currently delivered by six of the larger NZIST subsidiaries and is likely to expand to other subsidiaries over the next few years. BEngTech is delivered over the same disciplines as the NZBED and is governed by the subsidiaries that currently deliver it. Engineering New Zealand manages the accreditation of this qualification and provides international recognition against the Sydney Accord. The BEngTech satisfies the academic requirements for Chartered Membership of Engineering New Zealand as an Engineering Technologist.

The NZBED and the Degree Management Group (representatives of the relevant NZIST subsidiaries) have worked together over the last few years to better align the two qualifications to ensure ease of transition from one qualification to the other and improve the viability of delivery of the programmes (several second-year papers in both qualifications are co-taught). It is common for students to enrol in NZDE and then progress to BEngTech (often as part-time students). There are also cases where the reverse happens, that is they will start the Degree and for various reasons drop back to the Diploma.

## OUR RESPONSE

Engineering skills are critical to a range of industry sectors and do not sit neatly within the coverage of a single WDC. Indeed, engineering elements can be found within the proposed scope coverage of each of the WDCs being established through the RoVE process. To preserve the unified, national qualification structures that have been developed over the last decade, it will be essential that collaborative arrangements are established to provide for appropriate input from multiple WDCs, particularly the 'Waihanga Ara Rau Construction and Infrastructure WDC' and the 'Manufacturing, Engineering and Logistics WDC'.

### **We recommend changes to the wording of the Order in Councils**

The Waihanga Ara Rau Construction and Infrastructure WDC's Order in Council has a requirement for collaboration with other WDCs to "establish appropriate engagement models with those other Workforce Development Councils and specified industries to ensure that the industry training needs of those industries are met." We recommend that similar collaboration requirements be placed on each of the other WDCs.

### *How this impacts engineering*

We interpret this as providing for the retention of the current model of qualification oversight, through a refreshed, and ideally extended, NZBED structure. We see this as essential if we are to retain the unified Diploma/Degree model, which provides a broadly based preparation for roles across the spectrum of industry sectors in Aotearoa. Disaggregation into industry-specific engineering qualifications would not serve students, the profession or Aotearoa well. There is, however, the opportunity to link micro credentials or other industry-based training packages to support and facilitate industry specialisation, as needed.

A collaborative engagement and quality oversight framework that builds on the current NZBED model would ensure:

- Engineering is viewed as a sector/profession and not disaggregated into small industries that would be difficult to manage at the Diploma level
- Ease of transition between Diploma and Degree
- Broadly skilled graduates able to work across industry sectors
- Ongoing viability of engineering qualifications.

We are not looking for just a retention of the existing arrangements but rather a similar model which will reflect the new reality under RoVE. It is essential that all key stakeholders are represented in this model and work collaboratively to build on the gains that have been made to engineering technician and technologist education over the last decade.

### **Engineering should be within the Waihanga Ara Rau Construction and Infrastructure WDC**

Our understanding is that, within the new WDC model, ownership of the NZDE will need to rest with an individual WDC. Our preference is that primary coverage of engineering-related industries (and ownership of the NZDE) reside with the Waihanga Ara Rau Construction and Infrastructure WDC as most graduates from the programme currently move into industry sectors covered by this WDC. With this move, we recommend the title of the 'Manufacturing, Engineering and Logistics' be amended, and the word 'engineering' removed from the title of that WDC.

## **CONCLUSION**

Thank you for the opportunity to provide comment on the WDC proposals. We look forward to continuing to work with the Tertiary Education Commission on its ROVE work and the establishment of the WDC. We are available at your convenience to discuss the contents of this submission, or any other matters of relevance.

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