ALL PARTY PARLIAMENTARY GROUP (APPG) FOR EXCELLENCE IN THE BUILT ENVIRONMENT:

CALL FOR EVIDENCE

THE IMPACT OF BREXIT ON FUTURE SKILLS NEEDS IN THE CONSTRUCTION INDUSTRY AND THE BUILT ENVIRONMENT PROFESSIONS

EVIDENCE TO THE APPG, 24 JANUARY 2017

BACKGROUND

1. **The Institution of Professional Engineers New Zealand (IPENZ)** is the lead national professional body representing the engineering profession in New Zealand. It has approximately 16,000 Members, including a cross-section from engineering students, to practicing engineers, to senior Members in positions of responsibility in business. IPENZ is non-aligned and seeks to contribute to the community in matters of national interest giving a learned view on important issues, independent of any commercial interest.

2. **The United Kingdom Branch of IPENZ** provides services to IPENZ Members residing in, or visiting, the United Kingdom (UK). It provides a common point of contact for New Zealand engineers residing in the United Kingdom. The UK Branch arranges site visits and technical presentations, provides professional peer support and arranges for IPENZ competence assessments in the UK.

INTRODUCTION

3. Brexit provides the opportunity to re-establish a very strong and mutually beneficial relationship between the UK and New Zealand. That relationship had already existed prior to the UK aligning itself with the European Union at the expense of Commonwealth countries, including New Zealand.

4. New Zealand shares a common language with the UK. New Zealand shares the same, or a very similar, system of education as the UK. At tertiary level, university degrees in New Zealand enjoy equal recognition in the UK. Workplace values and professional codes of ethics and conduct have strong parallels with the UK.

5. With regard to engineering, New Zealand qualifications, skills, and experience are readily “exportable” and widely recognised. These have the added dimension of a knowledge of earthquake design and analysis, which has application, in particular, to key items of construction in the UK in the infrastructure, defence, and power sectors.

SKILLS SHORTAGE

6. IPENZ is not alone in recognising that the UK has a considerable engineering skill shortage. This shortage will continue in the medium to long-term. As a result of Brexit the UK will need to compete globally for these skills and will also need, therefore, to encourage and welcome engineers to work in the UK.

7. In a submission to the Migration Advisory Committee in September 2015 [Reference 1], IPENZ noted that "Solutions [to the engineering skill shortage in the UK] are important for the growth of the economy generally, and for implementing, in particular, the UK Plan for Growth in the science and innovation economies.".

8. Brexit has provided a wholly unexpected and very welcome solution to the shortage by potentially creating the same work opportunities in the UK for engineers from New Zealand as had previously been enjoyed only by those from the EU.

MOBILITY AGREEMENTS AND ENTRY REQUIREMENTS

9. International mobility agreements have been mutually beneficial for the UK and New Zealand and have already played an important part in addressing engineering skill shortages in both countries. Unfortunately, in recent years, the UK Government has made it increasingly difficult and less-attractive for New Zealand engineers to come to the UK and, once here, to sustain their presence should they wish to remain for more than a short period of time.

10. Employers are impacted by this situation. In a position paper submitted to the APPG and dated December 2016 [Reference 2], Balfour Beatty, one of the UK's leading construction companies, states that: "Only 0.2% of our 2016 recruits come from outside the EU due to the complexity, cost, administrative burden and time delays required in managing the current points based sponsor licence system.".

11. This is a situation which, in a Post-Brexit World, has to be prevented from continuing.

12. Minimum salary requirements for entry to the UK also fight against the arrival of young, very-talented, enthusiastic engineers who are a recognised hall-mark of New Zealand. Such engineers are much sought-after by the Small and Medium-size Enterprises (SMEs) who provide a significant proportion of the UK's support services.

13. Such salary requirements also have to be reconsidered as a result of Brexit in order to provide the UK with a truly global catchment of engineers of all ages.

14. From 2001 to 2012 there was a net gain of engineers to New Zealand, and this was comprised of non-NZ citizens; i.e. there were more non-New Zealand engineers arriving in New Zealand than were leaving. While the data for source country for engineer arrivals is not available, the UK has been in the top five source countries for all immigrants to New Zealand from 2001 to 2015, and has been the number one country for nine of those 14 years. Therefore, it can reasonably be assumed that many, if not most, of the immigrant engineers to New Zealand were from the UK. This demonstrates that international mobility agreements are mutually beneficial and play an important part in addressing engineering skill shortages in both countries.

PROFESSIONAL RECOGNITION

15. IPENZ is a member of the International Engineering Alliance. IPENZ supports and promotes mechanisms that facilitate the international mobility of engineers. IPENZ is a signatory to three agreements covering mutual recognition in respect of tertiary-level qualifications in engineering:

16. The Washington Accord (1989) is an agreement for recognition of professional engineers' qualifications. The Sydney Accord (2001) is an agreement for recognition of engineering technologists' / incorporated engineers' qualifications. The Dublin Accord (2002) is an agreement for recognition of engineering technician's qualifications.

17. The United Kingdom, represented by the Engineering Council UK, is also a signatory of all three agreements.

18. IPENZ and the Engineering Council UK are also signatories to the International Professional Engineers Agreement which establishes international registers for professional engineers. Registrants may receive credit when seeking registration or licensure in the jurisdiction of another member country. Both organisations are also signatories to the International Engineering Technologist Agreement and the Agreement for International Engineering Technicians.

19. New Zealand engineers have taken advantage of the opportunity to practice internationally. Research shows that seven years after graduation 35 per cent of engineering graduates are overseas. Although supporting data in not available, the majority of these graduates are expected to be domiciled in the UK. The "overseas experience" (OE) phenomenon of New Zealand engineers is not new or exclusive to engineers - it is common for a number of professional occupations.

20. Of all the non-EU labour available, New Zealanders fit in well in the UK due to the common language, culture, similar academic and professional training, and the similarities in engineering design and construction practice.

21. Although professional recognition is important, and facilitates the movement of engineers from one country to another, it does not in itself confer any special privileges in terms of immigration. Other matters, which are of a restrictive nature and not of a beneficial nature in terms of employment opportunities, require far closer attention.

22. IPENZ is a multi-discipline engineering Institution. The UK Branch of IPENZ has found that the single-discipline nature of the various Institutions in the UK, with whom it enjoys professional recognition, becomes a disadvantage when wishing to engage with the UK Government. Fortunately, attempts to follow up on the 2015 submission to the Migration Advisory Committee [Reference 1], and to engage with the consequences of Brexit, eventually resulted in an introduction to the activity of the Construction Industry Council in connection with Brexit.

THE UK'S SKILL-BASE

23. While the UK has initiated and funded science, technology, engineering and mathematics (STEM) focused education policies, meeting the shortfall of engineers will not be satisfied by mobility agreements and education policies alone. Even if such policies meet with exceptional success, there is no evidence that the predicted shortfall in the numbers needed to contribute to engineering in the UK can be satisfied from within the UK's "native" population.

24. With a programme of technical talks and site visits, that are open to all and not just to New Zealand Engineers, the UK Branch of IPENZ is contributing to the training and professional development of engineers in the UK. The current Chairman of the UK Branch Committee is an active STEM Ambassador and is encouraging those at school in the UK to follow a career in engineering.

FINAL REMARK

25. It is a necessity for the UK to seek, encourage, and secure engineering talent from overseas. Whereas the evidence presented here is intended to focus attention towards New Zealand, the UK Branch of IPENZ enjoys close relationships with Engineers Australia (EA) and the Hong Kong Institution of Engineers (HKIE), both of whom are multi-discipline institutions. It would be wrong, therefore, not to extol the virtues of engineers from other countries beyond the EU and for the UK Government to encourage them also to contribute to reducing the engineering skills shortage in the UK.

This evidence was prepared on behalf of the UK Branch of IPENZ and does not necessarily reflect the view of the National Office of IPENZ in Wellington, New Zealand.

Prepared by:

Jonathan R A Gammon BSc(Hons) MSc DIC CEng CGeol MICE FGS FIPENZ MASCE MHKIE EurIng

Chairman, UK Branch Committee, IPENZ

REFERENCES

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2. Balfour Beatty “Position Paper: The impact of the EU Referendum outcome on the infrastructure industry”. December 2016