IMPACT OF AUSTRALIA'S TEMPORARY WORK VISA PROGRAMS

Engineers Australia's Submission to Senate Education and Employment References Committee

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EXECUTIVE SUMMARY

Engineers Australia is the peak body responsible for accreditation of engineering education in Australia, responsible for standards of engineering practice in Australia and is the link between the engineering profession in Australia and globally. Engineers Australia is not involved in industrial matters or the business interests of engineering enterprises whether large or small.

In the recent past there have been severe shortages of engineers and both permanent and temporary migration programs have been important mechanisms to ease these pressures. The labour market situation has now changed, but temporary migration of engineers remains unusually high.

Engineers Australia believes skilled migration programs, whether for permanent or temporary migrants, should apply selection criteria consistent with their objectives. Engineers Australia supports policy that aims to increase the overall standard of the Australian labour force, but views this policy as distinct from policy that aims to augment engineering in Australia.

Permant migration policies are consistent with circumstances that apply to new Australian engineering graduates, but are well short of standards required for competent practicing engineers. Temporary migration policies require no formal assessment of engineering qualifications and experience and present serious risks for the standards of engineering in Australia.

Temporary 457 visas are not subject to labour market testing and are designed to be a safety valve for employers when there is excess demand for engineers. There is no general shortage of engineers in Australia and the number of 457 visa approved last year are far higher than one would expect if some employers experienced difficulties recruiting an engineer practicing in a particular area of engineering, especially in view of there being no skills assessment.

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Introductory Remarks

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Much of the Committee's terms of reference relate to industrial and occupational health and safety matters which are not part of Engineers Australia's remit. Accordingly, this submission deals primarily with those elements of the terms of reference that relate to the education of engineers and the professional practice of engineering. In particular, our concerns cover the lack of skills assessments for temporary migrant engineers, the exemption of engineers from labour market testing and the implications flowing from excessive numbers of temporary migrant engineers for new Australian citizens and permanent resident graduate engineers to find opportunities to undertake professional formation as fully competent practicing engineers.

Background

Engineers Australia draws its members from the engineering team which comprises three groups; professional engineers required to hold at least the equivalent of a four year full time degree in engineering; engineering technologists required to hold at least the equivalent to a three year full time degree in engineering, and associate engineers required to hold at least the equivalent of a two year full time associate degree or advanced diploma in engineering. As is the case in other professions, completing an accredited qualification in engineering is merely the first step to becoming an engineer. To become fully competent, practicing engineers, new graduates need to successfully complete a period of professional formation of up to five years. In statistical terms this distinction is measured by differentiating between the supply of people with engineering qualifications and the proportion of supply employed in engineering occupations.

During the last fifteen years, Australia experienced an unprecedented explosion in the demand for engineers that has now almost totally collapsed. Supply was increased through a small but steady increase in the annual output of Australian universities and TAFE colleges, through an extraordinary increase in the number of engineers granted permanent migration visas and through an almost as large intake of engineers on temporary visas. These presures have altered the structure of Australia's engineering profession.

Table 1: Changes in Australia's Engineering Labour Market

Variable	Labour Supply		Labour Demand		Employment in
Period	Team	Degree	Team	Degree	Engineering (Team)
2001 to 2014	4.7	5.0	4.6	4.9	5.3*
2001 to 2008	5.6	6.2	5.8	6.4	na
GFC (2009)	0.1	-4.6	-1.9	-6.1	-4.6
Since GFC	4.5	5.3	4.3	4.8	5.3
2014	2.2	5.3	0.3	2.4	4.0

*** 2007 to 2014**

Table 1 shows the extraordinary demand and supply conditions that prevailled in the engineering labour market for much of the past decade and a half[1]. The global financial crisis (GFC) was responsible for a pause in 2009, but conditions recovered quickly. More recently, as the resources sector construction boom has come to an end, the demand for engineers has eased. What is important to observe in Table 1 is that the demand for qualified engineers to work in engineering occupations has typically been higher than the demand for people with engineering qualifications.

There is a widespread presumption that most people with engineering qualifications are employed in engineering. Research by Engineers Australia[2] distinguished between employment of people with engineering qualifications in 51 occupations closely associated with engineering and occupations more generally. It was found that in 2006, 60.9% of the supply of people with engineering qualifications were employed in engineering occupations, rising to 62.1% in 2011. In other words, one of the factors in the shortage of engineers at the time was was that the supply of people with engineering qualifications was distributed between high demand in engineering occupations and very strong demand in non-engineering skilled occupations. Engineering training is ideal for occupations that require analytical and problem solving skills.

Australian educational institutions now produce more new graduates in engineering than ever before. Since about 2006, annual completions have steadily grown, but this source of new supply of engineers was not been sufficient to satisfy demand. The main supply response has been from skilled migration, both permanent and temporary migration. The reliance of engineering on overseas recruitment was already high and well established in 2006, but between census years Australia's supply of engineers switched from being predominantly Australian born to predominantly overseas born. In 2006, 48.4% of the supply of engineers was born overseas and by 2011, it had increased to 53.9%. These figures are much higher than for skills generally (33.2% in 2006 and 37.7% in 2011) and for the overall Australian labour force (24.3% in 2006 and 27.1% in 2011).

Australia has become over-dependent on skilled migration of engineers and this poses future risks. As global economic recovery occurs, the demand for engineers will increase in source countries for our skilled engineer intake. This will reduce the pool migration programs draw upon with implications both for supply and the quality of the supply.

Skilled migration has been a comparatively inefficient way to augment the number of engineers employed in engineering occupations. This was because retention in engineering has been lower among overseas born than Australian born individuals. In 2006, 68.6% of the Australian born supply of engineers was retained in engineering compared to 52.8% of the overseas born supply. By 2011, these figures were 69.9% and 55.5%, respectively. Demand was highest in engineering occupations, but low retention in engineering has meant that two migrant engineers were needed to fill one position in an engineering occupation.

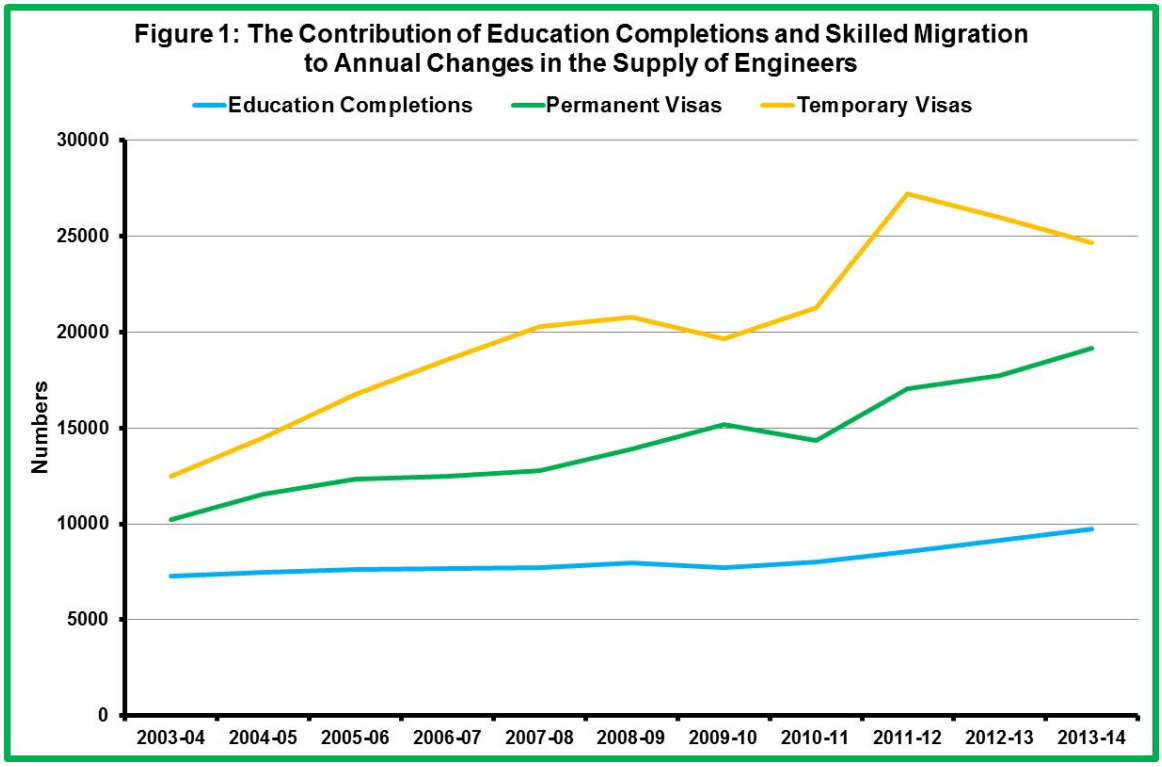
The Role of 457 Temporary Visas

The policy objective for temporary 457 visas is to enable employers to quickly recruit skilled personnel when there are skill shortages. The program is demand driven by employer sponsorship of applicants into specific vacant positions in their business organisations for durations up to four years.

[1] Engineers Australia, The Status of Engineering 2015, 30 March 2015, www.engineersaustralia.org.au

[2] Engineers Australia, The Engineering Profession in Australia, A Profile from the 2006 Population Census, September 2010, www.engineersaustralia.org.au

In 2003-04, there were 2,946 permanent visas granted to engineers at a time when education completions were 7,269. An additional 2,260 temporary 457 visas were granted, bringing the year's increase in supply to 12,475. Last year, education completions for the engineering team were 9,734[3]; 9,424 permanent visas were granted and 5,501 temporary visas were granted, adding 24,659, to supply. The cumulative effect of trends in the intervening years are illistrated in Figure 1.



The number of 457 visas approved should rise and fall with excess demand for engineers and Figure 1 shows that throughout the years when the demand for engineers was high, the number of 457 visas increased and that there were falls in the number during the GFC and in 2013-14 when demand conditions changed. However, given the dramatic change in the engineering labour, Engineers Australia is astonished that the 457 visa intake was as high as 5,501.

When temporary migrant engineers are used in adverse demand circumstances, there are likely to be impacts on employment opportunities for new Australian engineering graduates. Statistics show that unemployment among new engineering graduates has increased[4] which is a problem in its own right. However, professional formation for new graduates is undertaken on the job and when positions are occupied by temporary migrants, opportunities for professional formation for new graduates are restricted.

457 Visas and Competent Practising Engineers

Engineers Australia argues that, so far as engineering is concerned, the objective for skilled migration programs should be to augment the Australian engineering profession. We have no objection to policy

[3] This was an estimate calculated by projecting forward the growth in the previous three years.

[4] Engineers Australia, the Labour Market Experience of Recent Engineering Graduates, Policy Note, 1 August 2014, www.engineersaustralia.org.au

that aims to increase the standards of the Australian labour force through skilled migration more generally. However, this is an entirely different objective and the more specific objective to augment engineering should apply selection standards that are relevant to engineering.

Applicants for permanent visas as engineers are required to have their engineering qualifications assessed by an assessment authority approved by the Department of Immigration and Border Protection (DIBP). Engineers Australia is an approved assessment authority for most engineering occupations and conducts these assessments in line with the competencies used to accredit Australian engineering qualifications. In addition since 2010, applicants for permanent visas can acquire additional credit for the selection points test through assessment of their work experience. While work experience is important, the arrangements applied bear no relationship to the standards expected from a competent practicing engineer.

Applicants for 457 temporary visas are not required to have their qualifications assessed in any way. Providing an applicant satisfies an employer as to their engineering capacity, they are deemed good enough to be an engineer. Engineers Australia argues that that these arrangements are unsatisfactory and risk compromising the standards of engineering work in Australia. The procedures for permanent migration at least compare to standards expected from new Australian engineering graduates, but procedures for temporary visas require even less.

Competent practising engineers are capable of independent practice of engineering skills and expertise. To become a competent practicing engineer, graduates need to satisfy Engineers Australia that they meet the following parameters:

- They hold accredited qualifications in engineering consistent with the engineering team.
- They have undertaken a period of up to five years professional formation under the supervision of a competent practising engineers.
- They adhere to an approved code of ethics for the practice of engineering.
- They undertake regular and continuous professional development in their field of practice to ensure the currency of their engineering knowledge.
- Professional formation has been undertaken in a risk management environment that satisfies relevant Australian risk management standards and that they are conversent with these standards and how they apply to their practice.
- They fully appeciate the need for and importance of consumer protection and that their practice is covered by one of six options for consumer protection.

Highly experienced engineers are recognised through the conferring of Chartered Status. To become a Chartered Engineer, competent practicing engineers must additionally demonstrate that they satisfy sixteen competencies recognised and audited internally in their field of expertise.

Labour Market Testing

Engineers Australia understands the rationale for temporary 457 visas but believes that they should be subject to labour market testing in all cases. At present, there is no requirement for labour market testing and this may be why the number of 457 visas granted last year was so high.

Statistics show that pressures in the engineering labour market have eased dramatically in all States and Territories. Jurisdictions were differentiated essentially by when the decline commenced and the rate of deterioration. Engineers Australia sees no evidence of any general shortage of engineers.

As the development of the Australian economy has become more sophisticated, new areas of engineering specialisation have developed. Indeed, the breadth of specialisation is an important characteristic of modern engineering. It is entirely possible that somewhere in Australia an employer is

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experiencing difficulties recruiting an engineer that matches a particular specialisation. However, given that there are no formal assessments of qualifications and experience for 457 visas, Engineers Australia fails to understand how temporary recruitment assists this situation.

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