July 2018

Commons Home Affairs Select Committee

Call for written evidence: Post-Brexit migration policy

Written submission on behalf of the Engineering Professors' Council

Introduction

- The Engineering Professors' Council (epc.ac.uk) represents the academic engineers in the UK, with 83 university engineering faculties as members comprising over 7,000 academic staff. All branches of engineering are represented within the membership.
- Our primary purpose is to provide an influential voice and authoritative conduit through which engineering departments' interests can be represented to key audiences such as funders, influencers, employers, professional bodies and Government.

What are the implications of the net migration target?

- The EPC has serious concerns about the impact of migration policy on the future of engineering in Higher Education and the wider impact on society through research, innovation, skills shortages and economic impact.
- 4. Engineering is critical and central to the UK's Industrial Strategy. However, there are massive labour skills shortages in Engineering.
- 5. The Royal Academy of Engineering cite that, of the 32 standard occupations listed in the Home Office Shortage Occupation List, half are either in engineering sectors such as civil, mechanical and electrical, or in allied professions.¹
- In particular, a shortfall of engineering graduates is well documented, with EngineeringUK quoting a conservative estimated shortfall of 20,000 engineering graduates each year in the UK².

¹ <u>http://www.raeng.org.uk/publications/reports/engineering-a-future-outside-the-eu</u>

² https://www.engineeringuk.com/research/

- 7. The UK HE system partly counters this shortage for the wider economy by attracting students who have desirable skills from other countries. This is particularly relevant for research projects addressing global issues, for which science and engineering are major contributors and where international partnerships are critical to the effectiveness and impact of the work.
- Engineering economic activity is therefore dependent on the UK's highly regarded higher education system, highly productive research base and long history of innovation. International students play a crucial role in meeting industry engineering graduate demand.
- 9. The excellence of the UK's higher education sector plays a critical role in filling key roles across engineering sectors. Higher education is the gold standard in the delivery of engineering skills in the UK and has a strong international standing and reputation. The UK's Higher Education sector is one of the UK's most important export industries and despite high costs, the UK remains a destination of choice for international students, particularly for engineering subjects. In 2015/16, 1 in 3 Engineering students were international in 2015/16.³ Furthermore, 1 in 8 international students at UK universities were studying Engineering and technology.⁴
- 10. Higher education relies on international mobility more than most sectors of society in terms of attracting experts from all over the world to research and teach in the UK and attracting international students. Moreover, engineering relies on international mobility more than most other academic disciplines.
- 11. International students are also essential to the UK labour market in terms of attracting engineers and allowing them to do post-study work starting businesses and working for engineering firms, bringing huge economic benefits in short and long term.
- 12. In 2014/15, 40% of engineering and technology academic staff in the UK were non-UK nationals, compared to 28% across all subjects.
- 13. The ability of the UK to attract the best researchers in a field is critical to the maintenance of the UK's excellence in research and higher education. The evidence demonstrates that the primary driver of research excellence is exceptional researchers, with high-performing institutions having more staff who are from, or have worked, overseas.

³ HESA 'Introduction - Students 2015-16' Table F

⁴ Higher Education Statistics Agency HEIDI data

- 14. The significance of international mobility and engagement is reflected in the international outlook indicator underpinning the Times Higher Education World University Rankings. It is also reflected in other international HE rankings such as QS Top Universities and the 'International Focus' dimension of U-Multirank.
- 15. We note that the contribution of international students, researchers and staff is also widely acknowledged by business. UK university engineering departments have higher proportions of international researchers than the average for all subjects.
- 16. Supporters of the current net migration target arrangements have argued that, since the target is a net figure, the policy of setting a target and the practices adopting in trying to meet that target should not unduly affect the mobility of students as few students remain in the UK in the long term after study. This argument completely overlooks the real impacts:
 - a. As has been outlined, the need for international student mobility is only part of the picture. The ability of the UK to attract teaching and research staff requires the ability to recruit internationally in accordance with the UK's excellent global reputation in higher education.
 - b. Part of the reason for students to study in the UK is not merely the opportunity to study in our excellent universities, but also to gain work experience afterwards in businesses operating in the UK, many of which are global leaders. It is precisely this element of the attractiveness of UK higher education which is most likely to assist the UK in meeting skills shortages.
 - c. In order to meet any migration target net or absolute the easiest route is to target the most easily tracked parts of the immigrant population and those parts where simple measure will have the greatest effect. Refugees are perhaps the section of the immigrant population where it is hardest both practically and politically to turn away those in dire need. Students on the other hand are a relatively soft target because the numbers are easier to control through tighter control of study visas and post-study work visas. As a result, despite the economic benefit of international students, any blanket migration target is always likely to lead to poor targeting of the measures. (This should not be seen as an endorsement for tighter control of other kinds of immigration, but rather the futility of migration targets as a means to control supposedly unwanted immigration.)

d. The focus on migration targets – net or absolute – and the measure taken to achieve them create a "hostile environment" to those seeking to come to the UK to help support our economy, our higher education system or simply to further their own education or career. It is now commonplace in foreign media (especially in Far East countries) to describe the UK as unwelcoming to international students. This is damaging and self-defeating when the Government should be looking to ways to support the UK's attractiveness to international students and academics and, indeed, encouraging the permanent migration of those who will help meet long-term skills shortages that we will not be able to meet in the UK within at least a generation (see below).

How should the UK address skills shortages which are currently met by EU migration?

- 17. The UK desperately needs to safeguard and grow the supply of engineering graduates to address the existing massive skills shortages and to plug the talent pipeline shortage in Engineering.
- 18. The shortfalls cannot be met for the foreseeable future by increasing the skills base of UK nationals. There is not a large surplus of domestic student applicants with suitable qualifications applying to engineering courses. To increase the number of applicants would involve major changes throughout the entire education system.
- 19. Even if effective, these would take many years to feed through the pipeline to address the skills shortages. Furthermore, there is no evidence they would be effective: initiatives that have already been operating for many years either have shown limited impact or the effect has merely been to avoid a drop in applications to engineering.
- 20. If the skills shortfall were to be met by increasing the UK talent pipeline and reducing international student migration, that would have significant impact on the financial sustainability of engineering courses which, in many cases, are modelled on average tuition costs that are higher than the available funding for UK students and are supplemented by international student fees.
- 21. We strongly believe that international students should be removed from immigration targets.
- 22. We also call for academic staff to be treated the same as doctors and nurses in terms of tier 2 visas.

Should a post-Brexit immigration policy seek to reflect regional variations?

- 23. In addition to our comments herein, the EPC refers MAC to the recent Higher Education Policy Institute and Kaplan International Pathways cost and benefits analysis⁵, which identifies an average net impact on the UK economy per international student £68,000 (EU student) and £95,000 (non-EU student). This represents a 10:1 ratio of economic benefits compared to the costs to the country of each international student.
- 24. The EPC would the Home Affairs Committee to consider the variations by region included in the report, which demonstrate that every single parliamentary constituency in the UK enjoys a net economic gain from international students.
- 25. We note that these represent underestimations of the economic impact of international students, due to the omissions of data on: tax and national insurance contributions; the resultant international business and trade links.

⁵ http://www.hepi.ac.uk/2018/01/11/costs-benefits-international-students-including-parliamentary-constituency/