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Education Committee

The impact of exiting the European Union on higher education inquiry

Submission on behalf of the Engineering Professors' Council

The Engineering Professors' Council (<http://epc.ac.uk>) represents the academic engineers in the UK, with 81 university engineering faculties as members comprising over 6,500 academic staff. It is a "nominating institution" for the purposes of the Research Excellence Framework (REF) and four panellists from REF2014 sit on its governing Committee, which also numbers a Vice President of the Royal Academy of Engineering, a President of the Institute of Measurement and Control and an immediate past President of the Institution of Civil Engineers, as well as four universities' pro Vice-Chancellors.

We enclose our written evidence to the inquiry, citing issues already faced by our members and expressing concerns about the future of Engineering in Higher Education and the wider impact on society through research, innovation, skills shortages and economic impact.

We would be pleased to elaborate on any on our response if invited to do so.

Yours sincerely

Professor Stephanie Haywood

President

A handwritten signature in black ink, appearing to read 'S. Haywood', with a stylized flourish at the end.

Submission

Executive summary

1. The Engineering Professors' Council and its members have expressed deep concerns about the impacts of Brexit on higher education, and particularly on engineering higher education and its unique contribution to the UK's research base, innovation, skills pipeline and economic well being.
2. Higher education relies on international mobility more than most sectors of society, and engineering relies on international mobility more than most other academic disciplines. The EPC therefore believes that the effect of restricting freedom of movement will be to undermine the UK's ability to attract the best international academic staff and students and so compromise the critical contribution we make to the economy and jobs.
3. The EPC believes that the impacts experienced even before the UK leaves the EU, may already be damaging to the UK's world-leading status in higher education in engineering – and damaging in turn to the UK's industrial strategy that depends in part on academic engineering for innovation. Those impacts may threaten the viability of large parts of the sector if Brexit takes place without putting in place specific measures to protect UK engineering in higher education.
4. In its future negotiations with European partners, the Government should be clear that it is committed to maintaining the UK's status in Europe's Higher Education, and finding ways to ensure the continued free movement of academic staff and students in the UK's best interests (through similar arrangements to those with some other countries outside the EU, such as Norway and Switzerland).

The likely impact of the UK exiting the EU on EU students studying in England

5. EPC members have reported concerns about European and international research staff and students. For such individuals, there are the same issues that are being experienced by all non-UK nationals residing in the UK in terms of whether they will be entitled to remain and continue to work or study in the UK under the same conditions after Brexit.
6. In the context of academic engineering, there are particular additional concerns. There is a significant and recognised shortage of engineering skills in the UKⁱ and the UK HE system ameliorates this shortage for the wider economy by attracting students and staff 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.
7. We note the recent media reports that data shows international students are far less likely to outstay their permitted leave to remain the UK than previous Government estimates have suggested (see *The Times*, 12th October 2016ⁱⁱ). Although these reports relate to non-EU students, until there is concrete evidence to the contrary regarding a future when EU students might need visas or other special leave to study or remain in the UK, we contend that the risk of allowing greater mobility is far outweighed by the benefits. As the Universities and Science Minister Jo Johnson said recently "International students make an important contribution to our world-class universities, and we want that to

continue.”ⁱⁱ The contribution of international students, researchers and staff is also widely acknowledged by business.ⁱⁱⁱ

8. The consequences of the Brexit referendum have been to make the UK less welcoming to international staff and students. Some of our members have reported both staff and students turning down the offer of places. For instance, at Aston University, non-EU candidates have been put off from applying for research positions in the UK (such as Chinese research candidates applying to become Marie Curie Fellows) because they have not received adequate reassurance that the UK can still act as a potential and competitive host. There is also increasing evidence that uncertainty is already having a damaging effect on the recruitment of high-quality international students and staff.^{iv} For instance, according to a survey from a student recruitment consultancy, 30 per cent said they were not likely to choose Britain as a study destination as a result of the EU referendum.^v
9. In the longer term, the UK may not merely *appear* to be less welcoming, but if visa regulations and the free movement of staff and students become more restrictive, as announced recently by the Government,^{vi} then the UK is likely to experience a ‘brain drain’ and jeopardise UK’s leading position in the higher education international sector, particularly in engineering where a high proportion of students and staff are foreign nationals (for example, at the Imperial College London – a global leader in engineering – roughly a third of staff are non-UK EU nationals)^{vii} choosing to bring their skills here because they are attracted by the self-same reputation of UK higher education that may be undermined by unjustified visa restrictions.

What protections should be in place for existing EU students and staff

10. EPC members report that plans for Brexit mean that the UK is being regarded by colleagues and prospective students from outside the UK – both EU and non-EU – as less tolerant and welcoming than previously or than other countries. The UK Government must ensure that there is sufficient free movement of academic staff and students within Europe continues to attract the brightest and best to come to the UK to study, teach, research and work. That will, of course, require flexible, non-bureaucratic procedures to allow their right to remain.
11. For now, nationals from the European Economic Area (EEA) can obtain permanent residency status if they have lived in the UK for a continuous period of 5 years. *This timeframe should be reduced for qualified staff already resident in the UK, particularly those with permanent contracts and undertaking ongoing research projects.* EU staff need to be reassured that their jobs are safe in order to help them provide the best teaching and research.
12. Students should be allowed to complete their studies. Terms and conditions of their funding, and study loans, should not be changed during their studies. The EPC welcomes the Government’s assurance that EU students embarking on undergraduate courses in England in 2017-18 will continue to be eligible for funding for their whole course, but urges the Government to go further in its assurances to ensure that the message is received internationally that the UK still encourages international students (from the EU and elsewhere) to come to the UK to study.
13. *The EPC urges that all EU nationals in work or study in UK higher education institutions now – or starting employment or a course before the UK formally leaves the EU – should immediately, or at the earliest possible opportunity, be reassured that they will have the right to remain in the UK as long as their employment or study arrangements remain unchanged.*

The future of the Erasmus+ programme following the withdrawal of the UK from the EU

14. There is no immediate change to the UK's participation in the Erasmus+ scheme, with guaranteed funds for applications in 2016 and 2017. After that, however, a British exclusion from the scheme is, for the moment, highly likely.
15. We note the response of Jo Johnson to a Parliamentary question claiming that the UK Government "offers the same support for study abroad under other schemes as for Erasmus" and stating that "access to the programme after we leave the EU is a matter for the forthcoming negotiations".^{viii} The EPC would like to point out that Erasmus offers not merely an opportunity for UK students to study abroad, but also for EU students (and those from other participating countries) to come to the UK to study.
16. *The EPC regards Erasmus+ as a well-recognised gold standard initiative in international student mobility and urges the Government to make continued access to the programme a high priority in Brexit negotiations and consider options to remain in the scheme (such as the arrangements enjoyed by Norway and Switzerland).*

Risks and opportunities for UK students

17. Unless specifically protected in the Brexit arrangements, UK students would be excluded from European initiatives, such as Erasmus+ programme, offering diverse academic, scientific and cultural experiences.
18. In other European countries (such as Germany, the Netherlands and Denmark), tuition fees are, generally, extremely low relative to UK universities (sometimes they are even free) and many of these courses are taught in English. If Brexit means UK students face higher fees to study abroad, they may be put off from so doing. The consequences will be that they are deprived of having a wider international experience and developing highly valued skills by studying in a European institution. The vast majority of those students return to the UK and so those experiences become a valuable asset to the UK labour market and economy^{ix}. Furthermore, the cultural, professional and personal connections that students make when studying abroad strengthen the UK business's export capabilities.
19. These disadvantages to the UK's interests must be set against the possibility that discouraging UK students from studying abroad and restricting opportunities for highly able international students to take up places on UK engineering courses may mean that UK students are more likely to remain in the country and acquire the skills needed to meet UK skill shortages. However, we are concerned that this will have been made possible by an unwelcome lowering of standards.

How changes to freedom of movement rules may affect students and academics in English higher education institutions

20. If freedom of movement is not protected after Brexit, as Government indications seem to suggest, students and academics in UK HE institutions will be negatively affected.

21. A significant drop in EU students' recruitment is expected if they need a visa to study in the UK in future.
22. For EU nationals who have been in the UK for less than 5 years, and thus are not eligible for permanent residency, there are no guarantees that they will have the right to remain.
23. Universities are, by definition, global contexts of interaction and collaboration in developing knowledge and skills impacting on wider society. Restrictions to freedom of movement will affect the UK higher education sector in its ability to attract the best academic staff and, consequently, impact on the quality of research and teaching. This will impair UK universities opportunities to compete with more inclusive and diverse global universities.
24. The EPC members are worried about the impact of restrictions in the freedom of movement of students and academics. The following testimony from one member exemplifies many similar experiences regarding the the negative impact on research and teaching: *"I currently supervise 11 PhD students of which 2 are non-EU nationals and 3 are EU non-UK nationals, so restrictions on movement of PhD students could have a dramatic impact on my research group which is supported through EPSRC, Horizon 2020, Airbus, NNL and the USAF. Over my 30-year career about 40% of my PhD students have become academics and since returning to the UK in 2011, two out of two of my PhD students have taken up posts as lecturers in the UK, neither of them UK citizens – so we risk restricting the pipeline for academic staff if restrictions are imposed on movement of PhD students."*

How to ensure UK universities remain competitive after the withdrawal of the UK from the EU

25. While assurances from the Treasury regarding continued support for research projects that might lose fundings^x a result of Brexit are welcome, they do not address the issue that UK engineering research now enters any competition for funding with a significant handicap. Furthermore, it is hard to understand exactly what funding might in practice be protected by the Treasury assurance, as research projects are subject to the protection of contractual terms anyway and, if they are in receipt of European funding, the contract will be made with an international consortium of which UK partners are a part.
26. The current low value of the pound will make salaries paid in sterling less attractive to top researchers and teachers. This may lead to a 'brain drain' of the best academics, regardless of their nationality status.

What the Government's priorities should be during negotiations for the UK to exit the EU with regard to students and staff at higher education institutions

27. In its future negotiations with European partners, the Government should be clear that it is committed to maintaining and raising the UK's status in Europe's science, engineering and research programmes. This may entail separate arrangements to ensure participation in funding programmes such as any successor to Horizon 2020. It is critical to the impact of research – particularly in engineering – that it is conducted on a transnational basis and therefore even an equivalent investment of UK funds in UK research would not be as costs-effective.
28. The Government should be clear that it is committed to sufficient free movement of academic staff and students in the country's best interests.

29. The Government should make appropriate arrangements to maintain participation in the Erasmus+ programme, in order to ensure that HE institutions in the UK are still able to benefit from the academic, scientific and cultural exchange with other European institutions.
30. Student and staff visas should be less restrictive to ensure they are keen to come to study and work in the UK.
31. If students – particularly those in engineering and related disciplines – have an offer of a job or a study place, they should have an opportunity to stay afterwards.

What steps the Government should take to mitigate any possible risks and take advantage of any opportunities

32. The Government announced guaranteed funding for EU students starting courses in England next year. Current funding and fee levels shall apply for the duration of 2017-18 courses even if the UK leaves EU. This funding should be long-term and sustainable in order to minimise the decline in EU student recruitment.
33. With the pound dropping, UK HE Institutions could be more attractive for EU and international students. However, for any advantage to be realised, it will be important to ensure immigration rules allow students to come. To avoid confusion, we would argue strongly that students should be removed from net migration data for the duration of their studies.

ⁱ For example “Engineering UK 2016 – The state of engineering”

http://www.engineeringuk.com/_resources/documents/EngineeringUK-Report-2016-Full-Report_live.pdf

ⁱⁱ See *Times Higher Education*, 11/10/2016, <https://www.timeshighereducation.com/news/england-guarantees-funding-eu-students-starting-courses-next-year>

ⁱⁱⁱ For example, see *Times Higher Education* 13/10/2016, <https://www.timeshighereducation.com/news/cbi-president-uk-must-be-open-foreign-researchers-post-brexite>

^{iv} For example, see *The Guardian*, 25/09/2016

<https://www.theguardian.com/commentisfree/2016/sep/25/britain-universities-depend-openness-dont-let-brexite-destroy-it>

^v See *International Student Survey 2016* <http://www.internationalstudentsurvey.com/2016>

^{vi} Amber Rudd, Home Secretary, speaking at Conservative Party Conference on 4 October 2016

<http://press.conservatives.com/post/151334637685/rudd-speech-to-conservative-party-conference-2016>

^{vii} See *Financial Times*, 15/10/2016, <https://www.ft.com/content/9296c358-923b-11e6-8df8-d3778b55a923>

^{viii} See ERASMUS: UK Withdrawal from EU: Written question – 47487

(<http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2016-10-07/47487>)

^{ix} For example, *Gone International Report* (2015), highlights the benefits of mobility for both the individual and the economy

<http://www.go.international.ac.uk/sites/default/files/Gone%20International%20mobile%20students%20and%20their%20outcomes.pdf>

^x ‘Chancellor Philip Hammond guarantees EU funding beyond date UK leaves the UK’,

<https://www.gov.uk/government/news/chancellor-philip-hammond-guarantees-eu-funding-beyond-date-uk-leaves-the-eu>