



POLICY REVIEW

IMMIGRATION

SUMMARY

Leaving the European Union provides a reset point for UK immigration policy. There is an opportunity to develop a new UK immigration system that contributes to the UK being a global hub for science and engineering and reaping the economic and social benefits that brings.

The UK has benefitted from free movement of scientists and engineers across the EU and recruitment from beyond the EU. Now, the government must take the opportunity to create an immigration system that allows science and engineering to thrive.

The UK must rebuild its reputation internationally as a nation open for business and welcoming to scientists and engineers from around the world. The immigration system must be an asset to the UK, supporting organisations' productivity and helping the UK to compete for globally-mobile international talent.

CaSE calls on the Government to:

1 REBUILD CONFIDENCE IN THE SHORT TERM

The Government should amend visa rules, improve immigration messaging and provide confidence during Brexit transition.

2 CREATE A STREAMLINED SYSTEM IN THE LONG TERM

An immigration system that supports research and innovation will facilitate frictionless movement, have proportionate system rules, be founded on robust evidence and fit for the future.

WHY DOES IMMIGRATION MATTER?

Science and engineering support a strong economy, high value jobs and healthier happier lives

5.8 million

People employed in science & technology industries in the UK. (1)

£32 - 36 billion

Contribution of the innovation, research and technology sector to the UK economy in 2012-13, and growing. (2)

142,000

Jobs to be created in science, research, engineering and technology between now and 2023, double the rate of other occupations. (3)

Mobility of people and ideas fuels research and innovation

Recent cross-party support to increase public investment in research and development (R&D) demonstrates that our political leaders understand the importance of research and innovation to the UK's future. To ensure the full benefits of such support are realised, and to meet the economic, health, security and environmental challenges facing our society, the coordinated efforts of Government are required. As research and innovation is a global endeavour, this includes immigration policy. The UK's immigration system must contribute to the UK's attractiveness as a global hub for research and innovation.

Research is international and intrinsically collaborative. It is built upon the creation of ideas, sharing of expertise and the development of partnerships to expand the boundaries of knowledge, tackle global challenges and improve quality of life. This vibrant research and innovation environment is fuelled by mobility of people.

72% of UK-based scientists spent time at non-UK institutions from 1996 to 2015

"About 10% of our workforce is of non-U.K. origin. Being able to recruit the very best talent wherever it is from is going to be what makes us globally competitive."

Mene Pangalos
Executive Vice-President of
Innovative Medicines and Early
Development Biotech Unit,
AstraZeneca

Scientific breakthroughs are not developed in isolation – mobility is a key contributor to the highest standards of performance. It is therefore unsurprising that international movement is a feature of academic researchers' careers - 72% of UK-based scientists spent time at non-UK institutions between 1996 and 2015. (4)

The opportunity for the UK to take part in, and host, globally-collaborative science has allowed domestic scientists to gain knowledge, and enhance their own research. Easy movement of researchers, innovators and specialist technicians gives UK-based businesses a competitive advantage by opening up access to skills and international networks.

28% of academics in the UK are non-UK nationals

Scientists in academia and industry are motivated by the desire to work with great researchers in highly respected institutions where the science is of the highest quality. (5) That 28% of academics in the UK are non-UK nationals is a mark of, and contributor to, the UK's research strength. (6)

"Any restrictions on EU researchers coming to the UK post-Brexit would damage the quality and impact of research at UCL and other universities."

Professor David Price
Vice-Provost (Research)
University College London

Migrants drive high growth science and engineering businesses

Attracting those with expertise from beyond the UK's borders is vital to support rapidly expanding sectors and leading-edge technologies. For instance, the UK is a digital technology success story with London attracting more tech investment than Paris, Berlin and Amsterdam combined. (7)

This growth has been supported by foreign nationals choosing to set up their business here, 30% of London-based digital technology start-up founders were born overseas. (8) Similarly, 45% of Oxford University spinout companies - companies with university intellectual property at their core - have foreign founders or cofounders. (9)

"We are a very much integrated company, and the smooth movement of people, goods and services is really important for us, across Europe and around the rest of the world."

Katherine Bennett, Senior VP, Airbus

30% of London-based digital technology start-up founders were born overseas

These entrepreneurial founders create jobs, products, services, training opportunities and economic returns that benefit UK residents. Foreign workers can also open up new markets for the companies they work for, either through their international links or language skills.

Public support immigration of scientists and engineers

Nine in ten people think that scientists (90%) and engineers (88%) make a valuable contribution to society. (10) This approval rating appears to apply equally to migrant scientists and engineers, 86% of the British public want to increase or maintain levels of immigration of scientists and engineers. (11) Only 18% of Leave-voters want migration of scientists and engineers to decrease. (12)

Migrants help meet STEM skills needs

Two thirds of roles on the Shortage Occupation List are in Science, Technology, Engineering, Maths and Medicine professions (STEMM). (13) Despite recent increases in those choosing engineering degrees and apprenticeships, domestic demand for engineers is set to outstrip supply in some areas, with skills mismatch hampering others. (14) Increased R&D and infrastructure investment will grow demand further.

Productivity will suffer if firms can't access the talent they need when they need it. There is rightly a focus on education and training of UK nationals which requires highly-skilled teachers in 5-19 education, higher and further education. Here too, foreign nationals make a significant contribution through sharing experience and skills as well as through formal training and teaching roles.

Migrant scientists and engineers directly benefit UK residents

Scientists and engineers are precisely those who will be working in key sectors to bring benefit to UK citizens. Whether working in the NHS, designing and building transport systems, housing and infrastructure, or teaching science and maths to our young people in schools and universities, migrant scientists and engineers contribute hugely to improving the quality of life for UK residents. Research and new technologies are preventing deaths, providing cleaner energy, enabling us to be more connected and improving quality of life. It is difficult to see how enacting policies to reduce the number of scientists and engineers, and their families, who can enter and choose to stay here would be in the interests of the UK.

International students beginning their studies in 2015 will contribute over £20 billion to the UK economy

Similarly, international students contribute more to the economy than they take out. There are over 160,000 international STEM students in the UK. (15) International students beginning their studies in 2015 will contribute over £20bn to the UK economy while here, with the benefits felt in every UK constituency. (16)

Due to the geographic spread of universities across the UK, foreign students are particularly valuable to regional economies. They also enrich and expand the education opportunities for UK residents. Some courses at UK universities, particularly postgraduate engineering courses, would struggle to be viable without international students.

RECOMMENDATIONS

1 REBUILD CONFIDENCE IN THE SHORT TERM

Amend current visa rules

Abolish the Tier 2 (General) cap

Businesses need a predictable immigration system. The Tier 2 cap increases uncertainty. In 2017-18 due to the cap being reached, hundreds of business-critical engineering roles are going unfilled, damaging productivity. These refusals send a damaging message that the UK is not open to the 'brightest and best' across the world. All the while, the UK public support immigration of skilled workers, and scientists and engineers in particular. In the short term, the Government should revise the current policy and exempt roles on the Shortage Occupation List and PhD level roles from the Tier 2 cap. No such arbitrary cap on skilled workers should be implemented in any new system.

Permit research activity overseas in Indefinite Leave to Remain rules

Some UK-based research projects require long periods overseas. Further, the Government is promoting international research collaboration and international development through science, for instance through the Newton fund. Rules preventing researchers wishing to obtain Indefinite Leave to Remain (ILR) in the UK from spending more than 180 days overseas in any 12-month period in the course of their work could undermine the success of these initiatives and fails to take into account the nature of our sector.

One researcher refused ILR on this basis said, as tropical ecologists "our research is strongly field data-driven, this job required me to spend >50% of my first two years leading field work and building research collaborations in SE Asia... I have the expertise to contribute to UK science and see a good academic career future here...yet have been denied the right to settle". This could be easily resolved by amending ILR rules to permit research activity overseas.

Improve immigration messaging

Promote the UK as a place to learn, earn and contribute, working to combat the unwelcoming environment towards migrants

Government net migration targets, migration caps and high costs associated with migration serve to tarnish the attractiveness of the UK as a go-to nation. A family of four moving to the UK from outside the EU face paying over £10,000 in fees, while risking rejection from the UK because of arbitrary numerical caps. Government must work across departments to promote the UK as a global research and innovation hub through trade missions, international strategy, Brexit negotiating positions and ministerial speeches.

Provide confidence in Brexit transition

Maintain current migration rules for EEA nationals throughout a transition period

Major change in immigration systems is always disruptive and expensive. Our members are clear that immigration rules should only change once following a Brexit transition period, allowing reasonable lead-in time accompanied by clear guidance and support to employers and individuals. Early confirmation from the UK Government that they will maintain current migration rules and rights throughout transition and until a new system can be effectively delivered would provide much needed certainty and confidence for employers and individuals.

RECOMMENDATIONS

2 CREATE A STREAMLINED SYSTEM IN THE LONG TERM

An immigration system that supports research and innovation

Create a streamlined immigration system encompassing the types of people and types of movement required to support UK science and engineering (see box below)

Operating and navigating two migration systems would likely increase cost and complexity for government, employers and individuals. However, there is strong agreement that a single system with the level of burden and bureaucracy of the current non-EEA system would pose significant problems to research and innovation organisations and should not be expanded to cover all migration. A future streamlined system should retain the ease of movement currently afforded to scientists and engineers from the EEA, while reducing barriers to movement for scientists and engineers from outside the EEA.

A future immigration system must support the retention, access and movement of those who lead, undertake and support research and innovation including:

- Highly skilled people – e.g. researchers, engineers, academics, business founders (characteristics include PhD level roles, Chartered Engineer status)
- Specialist technicians – e.g. data analysts, cell culture specialists, AI experts
- Students – including undergraduate, postgraduate taught and PhD students
- Dependants of these individuals

Research and innovation requires mobility for excellence, skills, education and collaboration. To support science and innovation in all its settings, an immigration system should support the following types of movement:

Long-term migration

- Recruitment to advertised posts - initiated by the employer. The strongest candidate is selected, irrespective of nationality
- Relocation of research and innovation talent to the UK - initiated by the individual e.g. named holders of research grants or recognised fellowships, investors, business founders, those with skills in short supply

Temporary migration after which the individual will leave the UK

- Short visits (up to 6 months) e.g. visit a collaborator, give a lecture, sit on an interview panel
- Temporary work (up to 2 years) e.g. secondments, placements, training, co-location for collaboration, use of a UK-based facility, staff exchange, addressing an urgent research issue (e.g. disease outbreak)
- Intracompany transfers
- Formal study in approved education establishments with options for remaining in the UK

A streamlined immigration system that works for science and engineering should also:

Support frictionless movement of science and engineering professionals

- Design visa-less options for visits, training and work, which could also form part of trade deals and research agreements
- Allow trusted employers to certify visits for low-risk researchers

Ensure system rules are proportionate to risk, benefit and labour market demands

- Ensure the system is flexible to meet the UK's skills needs and research priorities, avoiding arbitrary numerical caps on skilled migrants
- Provide reasonable opportunity to switch between visa routes in-country

Be founded on robust evidence

- Report annually on migration flows and the economic contribution of migration to inform policy and public debate
- Maintain the employer skills survey and use findings to inform immigration policy

Be fit for the future

- Create a user-friendly online interface for the migration system drawing on UK design and technological expertise
- Improve processes and increase policy options by developing world-leading passport, visa and security technologies.



The Campaign for Science and Engineering (CaSE) is the leading independent advocate for science and engineering in the UK. Our mission is to ensure the UK has the skills, funding and policies to enable science and engineering to thrive.



References

1. Employees and workplaces in Science and Technology in Local Authorities of the UK, ONS, 2016
2. The impact of the innovation, research and technology sector on the UK economy, Oxford Economics, 2014
3. Jobs for the Future, EDF Energy, 2017
4. International Comparative Performance of UK Research Base 2016, Elsevier and BEIS, 2017
5. DEMOS, Knowledge nomads: why science needs migration, 2009, and Chiara Franzoni, Giuseppe Scellato, and Paula Stephan, Foreign-born scientists: mobility patterns for 16 countries, 2012
6. The role of the EU in international research collaboration and researcher mobility, Royal Society 2016
7. TechNation, Tech City UK, 2017
8. Immigration and Brexit, Fragomen, 2017
9. Innovation knows no borders, Oxford University, 2017
10. Public Attitudes to Science Survey, British Science Association, 2014
11. Time to get it right British Future, 2017
12. Ibid
13. Shortage Occupation List, gov.uk, 2018
14. The state of Engineering 2017, Engineering UK
15. HE student enrolments by subject of study and domicile 2016/17, HESA, 2018
16. The costs and benefits of international students by parliamentary constituency, HEPI, Kaplan, London Economics, 2018

To view the above reports go to:

www.sciencecampaign.org.uk/engaging-with-policy/evidence-base/evidence-base-immigration.html

To view an online version of this briefing please go to: www.sciencecampaign.org.uk/resource/immigration2018.html

Published March 2018