



What will 'No Deal' mean for science and innovation?

January 2019

A response from the Royal Society of Chemistry to the House of Commons Science & Technology Select Committee.

About the Royal Society of Chemistry

With over 50,000 members and a knowledge business that spans the globe, the Royal Society of Chemistry is the UK's professional body for chemical scientists, supporting and representing our members and bringing together chemical scientists from all over the world. Our members include those working in large multinational companies and small to medium enterprises, researchers and students in universities, teachers and regulators.

Summary

The Royal Society of Chemistry is pleased to have the opportunity to contribute to the House of Commons Science & Technology Select Committee's call for evidence on 'What will 'No Deal' mean for science and innovation?' Drawing on previously released evidence, we are concerned with three main issues and our response will focus on these: collaboration and participation in EU funding programmes, mobility of scientists, and chemicals regulation for the UK. These three issues are all interlinked and have all played an important part in building and maintaining the UK's status as a global leader in science and innovation. We are clear that 'no deal' is not in the interests of chemical sciences¹. We believe that it would undermine this reputation as well as damage our influence and status as a world leader.

Collaboration and participation in EU funding programmes

1. There are significant reciprocal benefits to both UK and EU science and society of UK participation in the EU Framework Programmes for Research and Innovation, as we set out in our recent report² and in our response³ to the House of Lords EU Home Affairs Sub-Committee inquiry *Brexit: EU student exchanges and funding for university research*. **Access to the international networks, facilities and collaborations that the framework programmes offer are at least as important as the funding they bring, and are very difficult to replicate.** For example, bringing together people with specialist skills not found in any one country and accessing EU-wide collaborative networks was particularly important for PharmaSea.⁴ This international collaboration led from the University of Aberdeen is advancing treatments for conditions such as Alzheimer's disease and epilepsy and informing global policy on marine biodiversity.
2. **An immediate impact of leaving the EU without a deal would be loss of access to the current framework programme, Horizon 2020, from which the UK has benefitted to the tune of €5.1bn so far. Science and engineering are major beneficiaries:** 23% of research funding for UK university chemistry departments came from EU sources in 2014-15, amounting to £55m. Whilst the Government's commitment to underwrite competitive bids awarded through the current framework programme Horizon 2020 in this scenario is welcome,⁵ the guarantee will not cover prestigious funding schemes such as the European Research Council grants or Marie Skłodowska-Curie Actions once the UK is no longer a Member State after March 29 2019. In addition, after this date UK researchers and institutions would not be able to continue taking a leading role in Horizon 2020 consortia. With 1 in 5 projects being led by UK researchers between 2014 and 2016, this will represent a significant loss for both the UK and the EU.

¹ <http://www.rsc.org/news-events/opinions/2019/jan/why-no-deal-is-bad-for-science/>, January 2019

² http://www.rsc.org/campaigning-outreach/policy/international_collaborations_create_chemistry/, October 2018

³ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/eu-home-affairs-subcommittee/brexit-eu-student-exchanges-and-funding-for-university-research/written/92643.html>, November 2018

⁴ http://www.rsc.org/globalassets/04-campaigning-outreach/policy/international-collaborations-create-chemistry/rsc_pharmasea_casestudy_2018.pdf, November 2018

⁵ [UK Participation in Horizon 2020: UK government overview](#), Department for Business, Energy and Industrial Strategy, December 2018

3. **A longer-term impact is that in a 'no-deal' scenario, associating to the next EU framework programme, Horizon Europe, would become difficult, if not impossible.** Whilst non-member states can associate to the Framework Programmes, in practice this seems highly unlikely in the event of a 'no deal' Brexit.

Mobility of scientists and researchers

4. As laid out in our response to the Government's Immigration White paper, mobility enables exchange of knowledge that advances technology and furthers the career of UK scientists⁶. That the fee for EU settlement scheme for EU citizens currently in the UK will be abolished is welcome, and it is also welcome that it will be rolled by out 29 March, with or without a deal. **However, there is no clarity on what the immigration system will be on 30 March in the event of 'no deal'**⁷. Expanding the existing system to cover EEA nationals is not in the interests of UK chemical sciences.
5. It is essential for UK science and innovation that the UK's future immigration system be flexible, light-touch in regulation and low cost. **The current non-EEA immigration system is none of those things and expanding the system to cover all non-UK nationals will make it extremely difficult to attract key talent.**
6. Many firms will be not be familiar with the visa system – 96% of all chemical science companies are SMEs and thus unlikely to have the capacity to become a licenced visa sponsor in terms of both resources and costs – and therefore they will be faced with a choice: get to grips with a visa system so they can hire the recruit with the specific skill they need or lose the opportunity to innovate. Many may choose the latter because of lack of capacity or because the fast-paced nature of innovation means the opportunity will be lost.
7. The current visa system is time consuming, complicated and expensive for both employers and employees. This is particularly the case for SMEs, as the Migration Advisory Committee suggests⁸. Using this system to cover EU/EEA nationals will certainly clog up the system. For example, around a third of staff in the UK university chemistry departments are non-UK nationals, 18% are non-UK EU nationals. A similar intake in the event of no deal would more than double the visa application workload for employers. **It will also likely limit access to the necessary talent as scientists and researchers from overseas look elsewhere to further their careers. This would result in a loss for UK science and its global reputation.**
8. It is likely that whatever visa system operates for EU/EEA nationals in the UK, UK nationals will have to do similar to study or work in the EU, where much reputable funding and projects are run. **If UK scientists require visas to work or study abroad, there is risk of a reduced role in an increasingly collaborative international community, meaning reduced access to scientific peers, mentors and state-of-the-art facilities abroad, as well as less knowledge flowing back to the UK science community.** Science is a global pursuit and it is vital that Governments' policies enable easy mobility for scientists, so they can do great science that benefits current and future generations.
9. Welcoming language and attitude is also crucial. Currently, the UK is a global leader in science and innovation and this has in part been built on welcoming talent from across the world to establish a career in one of the UK's science hubs. But this is not a given. Under a 'no deal' scenario it would be very concerning if the current non-EEA visa system were expanded to cover EEA citizens until a new immigration system could be implementing.. The non-EEA system is time-consuming and costly, and we are concerned it doesn't present a welcoming atmosphere. **Scientists and researchers are highly mobile people; if the barriers to working in the UK are too high, they have the option to look elsewhere.**

⁶ <http://www.rsc.org/news-events/opinions/2018/dec/brexit-immigration-white-paper/>, December, 2018

⁷ <http://www.rsc.org/news-events/opinions/2019/jan/why-no-deal-is-bad-for-science/>, January 2019

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF, September 2018

Chemicals Regulations

10. **No collaboration and no data sharing:** in the event of 'no deal', UK & EU decision-makers would immediately lose access to each other's scientific networks and databases that provide data and information into regulatory decision-making. Scientific collaboration around common data packages is at the heart of effective and harmonised chemicals regulation, which delivers a critical facilitation mechanism for frictionless trade in the chemicals sector. Scientists work to provide decision-makers with the best information on the risks and impacts of chemicals on health and the environment, which the decision-makers can then balance with economic and other factors. Collaboration is also the best way to achieve a pragmatic balance between fostering innovation and trade whilst protecting the environment and public health.
11. **Loss of influence:** even in the Withdrawal Agreement as it stands, the UK is to lose influence and become rule-takers in terms of chemicals regulations. However, our view is that for the benefit of frictionless trade, the UK must keep as close as possible to the EU regulatory system and maintain a deep relationship with EU scientific bodies such as the European Chemicals Agency, so it can continue to share and discuss the underpinning science and its consequences. In a 'no deal' situation, this is all but impossible to achieve.
12. **Uncertainty around decision-making and scientific advice structures:** as we highlighted in our letter to the House of Lords EU Energy & Environment Sub-Committee⁹, it is clear from the 'no deal' technical notes that "The Health and Safety Executive (HSE) would act as the lead UK regulatory authority, from the day the UK leaves the EU, building on its existing capacity and capability". The HSE would operate a new UK REACH system and take over responsibility for biocides and plant protection products regulations in Great Britain. To date, we do not have a definitive framework from government as to how regulatory decisions will be made, exactly by whom and on what basis; nor any indication of how scientific data and evidence will feed impartially into decision-making.
13. **Adverse impact on SMEs:** It is clear that there will be significant impact of 'no deal' on businesses in the chemicals sector, in particular small and medium enterprises, if they are not sufficiently prepared for no deal. It is essential that in the coming weeks the government is effective in disseminating the changes that will impact SMEs in order that they remain compliant with chemicals law. At the Royal Society of Chemistry, we will aim to share any government guidance that is provided with our communities, but we remain concerned that the SME community may not be fully aware and prepared for what is to come as it is highly technical and detailed. Many SMEs do not have regulatory expertise in-house and may require support from government post-Brexit.

Contact

The Royal Society of Chemistry would be happy to discuss any of the points raised in our response in more detail. Any questions should be directed to Ciaran Myles, Policy Advisor, Mobility.mylesc@rsc.org, 01223 432674.

⁹ <http://www.rsc.org/globalassets/04-campaigning-outreach/policy/rsc-chemicals-regulation-letter-2-to-hol-october-2018.pdf>, October 2018