

The Smith Review, July 2019

Background

Changes and Choices: Advice on future frameworks for international collaboration on research and innovation, also known as the Smith Review, was commissioned specifically to focus on the UK agenda in the event of a decision not to associate with Horizon Europe beyond 2020. While the UK Government has consistently and repeatedly made clear that it would like the option to associate to Horizon Europe, it is also exploring credible and ambitious alternatives in the event that the UK does not associate.

The authors estimate the current UK contributions to EU research programmes to be around £1.5bn pa. If the Government decides not to associate with Horizon Europe because the terms of association are not of sufficient benefit to the UK, the authors do not find compelling arguments to replicate EU research and innovation arrangements in the UK. Instead, the report presumes the level of investment in UK research and innovation will be maintained and investigates the opportunities to optimise this investment around the interests of the UK, rather than the collective interests of the EU (p.32). In reality, more nuanced opportunities to partner with EU research programmes may be available, such as participation as a so-called 'third country' (i.e. a country outside of the EU) (p.32).

The UK in a European Research Landscape (pp.8-13)

After providing an overview of the review process (p.7) the report situates the UK's current position, first in the European, then the global research landscape. The overview of the European research landscape highlights that R&D funding makes up about 18% of EU awards coming to the UK and is second only to agriculture in terms of EU funding coming into the UK. EU government research income also represented 11% of the collective research grant income to Russell Group universities in 2017/18. In reference to Horizon 2020 in particular, the UK has the second highest number of project participations in Horizon 2020 and has secured 13.5% of the total funding available from Horizon 2020, around €5.9bn. Intangible benefits are also noted, though not discussed.

The UK in a Global Research Landscape (pp.14-18).

Reflecting on the global research landscape, the report notes that the UK is ranked as the second most collaborative country (after France) among similarly research-intensive comparator countries. Five of the UK's top ten collaborators were from outside the EU, though three of the top four collaborators are EU members (Germany, France, and Italy). The report shows that almost 1/3 academic staff in UK universities are from outside the UK; almost 1/5 of all academic staff are from the EU.

The report also covers Foreign Direct Investment (FDI)¹ in UK R&D. By this measure, the UK has a higher level of foreign direct investment in R&D than any other G7 nation. Future trends in FDI will have a significant impact on overall R&D levels in the UK. However, UK-owned business spending on R&D remained the largest source of R&D expenditure, accounting for around half the total, though it is also the area of least growth.

Public expenditure on R&D comes from BEIS, who spend roughly £440m a year on its Official Development Assistance (ODA), focused on research and innovation and around £230m on other international research

¹ The report defines this as multinational enterprises investing in the UK with ownership and control of the firm in question lying outside the UK.

and innovation programmes. The UK Government also contributes to the cost of international EU Research and Innovation programmes, which is estimated to be just over £1.5bn a year.

Key Themes from the Evidence

The report also presents key themes gathered from a wide range of organisations based in the UK, collecting evidence from in person meetings and written responses (pp.19-29). These included:

- the importance of international working, in particular European collaboration
- need for short-term stability as part of a transition period, to protect capabilities built up from EU R&D investment
- UK funding for excellence focused blue-skies research
- the reliance of particular sectors and disciplines on ERC funding, with a corresponding need for more multidisciplinary and interdisciplinary funds
- delivery of future funding initiatives
- the industrial strategy and the 2.4% agenda
- the need to attract and retain talent in the UK, especially in order to achieve the 2.4% agenda, linking to UK immigration policies
- frameworks that support spontaneous international collaboration and a need to access collaborative networks facilitated by the EU
- regional and devolved issues within the UK, including a balance between addressing regional differences and the benefits of a coherent UK policy in developing policy and funding instruments

Recommendations and Conclusions

The authors recommendations form around three funding priorities: stabilisation, protection, and wider forms of international collaboration (pp.35-42). They advise against the disruption of existing research and innovation activities, which would destabilise the UK's highly successful research and innovation ecosystem just when it faces uncertainty and change. This is predicted to have a negative impact on businesses and charities contemplating new investments in UK R&D.

It is argued that Brexit should be used as a stimulus for an exciting new vision for UK research, whether or not it chooses to associate with Horizon Europe. This vision would focus on the Government's commitments to raise levels of R&D investment to 2.4% GDP; to reduce regional disparities in wealth and opportunity; and new funding streams to capture fast-moving and unexpected opportunities. The authors also make recommendations on principles of governance for new funding bodies, as international collaboration on this scale will require distinctive administrative structures.

Read the full report:

[Changes and Choices: advice on future framework for international collaboration on research and innovation](#)