



Evidence to inform Professor Sir Adrian Smith's review: Future frameworks for international collaboration on research and innovation

Response from Wellcome

23 May 2019

Summary

- Securing associated country status to Horizon Europe should be the priority and default option. There are no quick and cheap ways to create an alternative with the same level of cost-efficiency, ambition and prestige.
- However, an alternative framework for international collaboration could be necessary in some extreme scenarios. Any new framework should:
 - Focus on supplementing, rather than substituting, existing collaborative relationships, and recognise that new relationships will take time to establish;
 - Recognise that redeploying current levels of Horizon 2020 membership 'fees' via a new framework will not deliver the same level of impact;
 - Establish a set of ambitious objectives with a long-term funding commitment to provide stability and predictability;
 - Provide an easily-navigable platform for researchers from across academia and industry to work together;
 - Ensure that policy decisions are joined up across all Departments to serve the Government's goals for international research collaboration; and
 - Provide stability in the short term while new systems are introduced.

Introduction

1. Wellcome is a global charitable foundation based in the UK which supports over 14,000 researchers in more than 100 countries, all working to improve health. We welcome this opportunity to submit evidence to Professor Sir Adrian Smith's review of future frameworks for international collaboration on research and innovation.¹
2. Our response is informed by our Future Partnership Project with the Royal Society, through which we heard from over 200 organisations and individuals from across Europe. As part of that project we produced an evidence synthesis, organised discussions in Brussels and London, and held a conference with senior European and UK experts. Our response reflects the conclusions we drew from this process in our Brexit and Beyond report,² which contains additional relevant statistics and analysis that support our arguments.

¹ assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795319/Adrian_Smith_call_for_written_evidence.pdf

² <https://wellcome.ac.uk/reports/building-strong-future-european-science-brexit-and-beyond>

3. Given the benefits that EU Framework Programmes have delivered to the UK,³ securing associated country status to Horizon Europe should be the priority and default option.⁴ The challenge of replicating these benefits through a new system should not be underestimated. Stepping away from a collaborative framework that the UK had a central role in designing is also a reputational risk that could undermine attempts to build new relationships elsewhere. Put simply, there are no quick and cheap ways to replace Horizon Europe.
4. Nevertheless, it is prudent to consider some extreme scenarios under which an alternative framework would be needed. For example, the final rules for Horizon Europe might conceivably prevent the UK from taking part, or the proposals could be altered so much that participation would be at odds with the culture and ambitions of UK research. Our submission lays out a set of principles for an alternative framework which could be introduced in such circumstances. The same principles could also be used to develop structures in addition to association to Horizon Europe, if desired.

Principle 1: Focus on supplementing, rather than substituting, existing collaborative relationships, and allow substantial lead-in times for new schemes

5. Any future framework should build on existing relationships rather than aim to replace them. After several decades of strengthening collaborative ties, the EU is the UK's most important research partner. Over half of the UK's collaborative papers are with EU partners,⁵ and countries that are geographically close are more likely to collaborate.⁶ Any new framework should celebrate, and invest in, this mutually beneficial relationship.
6. A decision not to associate to Horizon Europe is likely to be interpreted as a decision to de-prioritise existing relationships. With the UK Government seeking to dramatically increase investment in research as a proportion of GDP, the focus should be on expanding the UK's collaborative networks rather than replacing them.
7. Productive research collaborations take time to construct. Implementing a new framework at short notice will likely mean compromising on ambition, efficiency, and scale. Building new collaborations will mean aligning with partners' timelines, and the UK is likely to find more willing international partners if substantial lead-in times are available.

Principle 2: Recognise that redeploying current levels of Horizon 2020 membership 'fees' via a new framework will not deliver equivalent cost-efficiency, ambition or prestige

8. Building international collaborations and running a prestigious peer review process requires significant investment, and after many years as a net beneficiary of EU research funding the UK will need to adjust to the true cost of collaboration. It would be unwise for the UK to create its own framework simply to provide 'a cheaper alternative' to participation in Horizon Europe; instead, the UK would need to increase its investment to create something truly ambitious.

³ Case studies illustrating the tangible and intangible benefits of the UK's participation in EU Framework Programmes are available at <https://wellcome.ac.uk/sites/default/files/brexit-and-beyond-impact-case-studies-201810.pdf>

⁴ [Brexit & Beyond briefing \(2018\) Wellcome](#)

⁵ Royal Society (2015), UK Research and the European Union: The Role of the EU in International research Collaboration and Researcher Mobility, www.royalsociety.org/-/media/policy/projects/eu-uk-funding/phase-2/EU-role-in-international-researchcollaboration-and-researcher-mobility.pdf

⁶ Department for Business, Energy and Industrial Strategy and Elsevier (2017), International Comparative Performance of the UK Research Base, www.gov.uk/government/uploads/system/uploads/attachment_data/file/660855/uk-research-base-internationalcomparison-2016.pdf

9. Other countries already recognise that collaboration costs money, and that the intangible benefits of collaboration make this investment worthwhile. As an associate country, Norway is a major net contributor to Horizon 2020, and yet Research Council Norway describes it as their country's "most important international partnership" for research.⁷
10. A new framework should adopt a "common pot" approach, as used in EU Framework Programmes. By pooling resources and mutually respecting decisions, the common pot system avoids the risk of "double jeopardy", where multiple funding agencies must all independently approve a collaborative application for it to proceed.

Principle 3: Establish a set of ambitious objectives with a long-term funding commitment to provide stability and predictability

11. Collaborations can take several years to establish, and any new framework must therefore be able to offer stability on the same timescale. The multi-lateral nature of EU Framework Programmes means that funding is largely insulated from the cycle of elections and wider political dynamics. Long-term funding cycles drive collaborative, ambitious research, and any new framework should reflect this.
12. The objectives and governance of any new framework should also be established with cross-party support, so that Parliamentarians and potential research partners can be confident that the UK is a reliable long-term international partner.

Principle 4: Prioritise support for researcher careers and mobility

13. Any new framework should put researcher careers and mobility at its heart, learning from the success and prestige of programmes such as the EU's Marie Skłodowska-Curie Actions (MSCA). The UK has been a significant beneficiary of these awards in the past, and was the top destination for MSCA fellows under Framework Programme 7 (2007-2013).⁸ Many collaborations originate from the connections made during an international career, and any new framework should support the mobility of researchers and the exchange of ideas this brings. Forming networks through mobility is particularly important for early career researchers, and a new framework should reflect this.

Principle 5: Provide an easily-navigable platform for researchers from across academia and industry to work together

14. To encourage participation, any new framework must be easily-navigable by both academia and industry. Indeed, a UK system could have a competitive advantage if it was seen to be easier to engage with than other systems. Collaboration occurs across nations, sectors and disciplines, and any new framework should be open to a broad range of participants. A layer of bespoke bi-lateral collaborations could add further complexity to the UK's funding system, so creating a simple platform should be a priority. During Wellcome's Future Partnership Project consultation, GlaxoSmithKline highlighted the Innovative Medicines Initiative as a leading example of a platform in which academia and industry could participate equally.⁹

Principle 6: Ensure that policy decisions are joined up across all Departments to serve the Government's goals for international research collaboration.

⁷ <https://wellcome.ac.uk/sites/default/files/consultation-on-future-eu-uk-relationship-on-research-and-innovation.pdf>

⁸ https://www.cancerresearchuk.org/sites/default/files/uk_and_eu_research_full_report_v6.pdf

⁹ <https://wellcome.ac.uk/sites/default/files/consultation-on-future-eu-uk-relationship-on-research-and-innovation.pdf>

15. Funding is necessary but not sufficient for international research collaborations to thrive—the UK must also be seen by others as welcoming. For the UK to be the partner of choice, any funding for collaborations must be matched by a consistent and aligned set of policies in relevant areas such as migration, regulation, higher education, intellectual property and overseas development assistance. For example, there have been high-profile cases of visitor visa applications for foreign academics attending conferences in the UK being refused,¹⁰ and Wellcome continues to collect examples of this. Problems such as these need to be fully resolved between Departments for the UK to be able to send a clear message about the importance of international research collaboration.

Principle 7: Provide stability in the short term while new systems are introduced.

16. Designing and implementing a suitably ambitious new framework for international collaboration will take time, but stability is needed in the near-term. Prestige in particular cannot be created overnight. This means that the transition from the status quo to an ambitious new framework would need to be managed carefully, ensuring that the UK does not lose ground in the short term.

17. The Swiss experience of trying to quickly replace access to Horizon 2020 in 2014 shows the importance of managing such a transition carefully. Universities UK reported in 2017 that when an interim system was introduced “many researchers and institutions outside Switzerland were reluctant to include a Swiss partner in their research consortia until they knew for certain the interim systems would work”.¹¹ A similar dip in confidence in the UK as a collaborator would be very damaging.

18. The simplest way to minimise short-term damage and allow the optimal long-term option to be found would be to seek UK participation in Horizon Europe as an associate country, even if establishing a new framework is preferred as the longer-term ambition.

Outstanding questions

19. We hope the Review will also consider a range of other important issues:

- How should any future framework connect with other roles played by EU R&D funding, such as the role of Structural Funds in supporting R&D infrastructure?
- Should control and direction be retained centrally (i.e. by a funding body), or devolved to nearer those participating in collaborations (i.e. institutions and individual researchers)? Similarly, should funding be aligned specifically with the UK’s industrial strategy, or mainly investigator-led?
- What should the measures of success be for any new system? How should these be embedded from the start, to ensure the evidence base is strengthened?
- How would any new framework interact with ‘organic’ collaborations, which occur outside any existing formal funding programmes? How can the significance of these be measured and supported?

24 May 2019

¹⁰ <https://www.theguardian.com/uk-news/2018/oct/22/uk-science-reputation-at-risk-if-foreign-academics-visa-issues-not-resolved>

¹¹ <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/International/Swiss-delegation-i-note.pdf>