



UK access to EU research Framework Programmes

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Summary

As a member of the EU, the UK has full access to EU research framework programmes, which provides important access to funding, networks, collaborations and infrastructure. This briefing summarises key background information and analysis, including a comparison of Associated Country and Industrialised (high-income) Third Country status in the table below:

- The UK should secure Associated Country status in an excellence-focused Horizon Europe (Framework Programme 9), as this would be the best way to participate in European research.
- To achieve this, the UK should be pragmatic about the cost of a good deal to access Horizon Europe, and the EU should be pragmatic about the terms of Horizon Europe association for the UK.
- There are concerns that the pressure of negotiations could lead to science being sacrificed for benefits elsewhere. The UK and EU must work towards a quick and clear political agreement to create a path towards UK Associated Country status, to reduce damaging uncertainty for UK researchers and their European collaborators.

Background

Benefits of multilateral funding partnerships and the EU Framework Programmes

Multilateral, pooled, funding schemes funding pots are an efficient and effective way to support international research. Compared to national schemes, multilateral funding schemes where researchers seek funding from a wider pool creates more prestigious awards and ensures that research is internationally competitive. Compared to multiple schemes agreed with individual countries, multilateral schemes are more efficient to administer and reduce the number of applications researchers need to make.

EU Framework Programmes are the most successful multilateral funding scheme in the world, with prestigious individual grants and strong collaborative and industry funding mechanisms. There are no opportunities elsewhere in the world that provide the same scale and impact.

Norway has focused more effort on EU, over domestic, funding to raise the quality of health research, paying in significantly more than it receives because of the wider benefits include an increasing national competitiveness.

“Think about football, and think about if there was only national leagues and there was no Champions League, then we would never be able to see Manchester United playing against Real Madrid, and we would never get to see how playing with and against each other makes European football fantastic”

Prof Matteo Carandini, GlaxoSmithKline/ Fight for Sight Professor of Visual Neuroscience,
University College London

Options for participating in EU Framework Programmes: Associated Country v. Industrialise Third Country

After Brexit, the UK could participate in the EU Framework Programmes as:

- An Industrialised Third Country only working together in specific areas, with domestic grants maintaining the range of funding options.
- An Associated Country, which provides the same access as a Member State. In [her speech on May 21st](#), the Prime Minister spelt out the UK’s commitment to full association.

The differences between these options are summarised below. Taking into account the importance of multilateral funding mechanisms and the costs and benefits of each option, we believe that Associated Country status would be the best outcome for both the EU and UK.

Costs

Based on current associated country contribution models and excluding the UK's current rebate, we estimate that associating to Horizon Europe would place the UK somewhere between being a small net beneficiary, to a small net contributor. When taking in account the non-financial benefits and administrative costs, this range represents a good deal. The EU should also use the existing variety in association agreements, and be pragmatic about the terms of the UK's participation as an Associated Country, as this would deliver financial and non-financial benefits for the EU.

Facts and statistics

- Over several decades, EU Programmes have grown to become an integral part of the UK research funding system, accounting for 11% of UK universities' research income in 2015/16ⁱ.
- The UK has more joint publications with the EU27 than it does with the USAⁱⁱ.
- Under FP7, the UK received €8.8bn of direct EU funding for researchⁱⁱⁱ, which was an excellent return on an estimated contribution of €5.4bn^{iv}.
- Certainty is needed urgently: there has already been a fall in Horizon 2020 participation rates from UK-based researchers since the referendum^v

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UK as Associated Country in EU Framework Programme

UK as Industrialised Third Country in EU Framework Programme, plus UK domestic investment

According to Horizon 2020 rules, which may change in Horizon Europe legislation

Access	<p>UK researchers can access all funding streams from the Framework Programme in the same way as those from Member States.</p>	<p>UK researchers can only access EU funding from restricted themes agreed in advance.</p>
Talented Individuals	<p>UK-based researchers from anywhere in the world can access prestigious funding such as European Research Council or Marie Skłodowska-Curie actions, and lead projects.</p> <ul style="list-style-type: none"> • 22% of ERC grant holders choose to work in the UK. • The UK is the top destination for Marie Skłodowska-Curie Actions^{vi}. 	<p>UK-based researchers cannot apply for ERC or MSCA funding. British researchers could only apply if they move to the EU or an Associated Country. Researchers from overseas wanting to base in the UK would have to rely on UK funding sources. To continue to attract international talent to the UK, domestic schemes to replicate ERC and MSCA would need to be open to researchers based in the UK from anywhere in the world.</p> <p>UK researchers could not lead projects funded through the Framework Programme.</p>
Infrastructure	<p>Gives comprehensive access to EU joint infrastructure, which the UK cannot provide alone. The UK would have input to infrastructure planning, and like Norway could continue to lead infrastructure. The UK could be involved in the ESFRI executive board for infrastructure planning.</p>	<p>No access to EU joint infrastructure. There may be the potential for researchers to negotiate ad-hoc access for a fee. EU researchers already face long queues to access some infrastructure, it is likely UK researchers would be a lower priority.</p>
Programme Cost	<p>However, the EU's roadmap for research infrastructure will dictate where funding is spent.</p> <p>The method for calculating costs are dictated by the rules of association, laid out in the relevant Framework Programme regulation. The final sum is negotiated and agreed bilaterally with the EU^{vii}. Costs fluctuate in relation to GDP and changes to the EU budget. There may be small annual changes, and significant increases with each Multiannual Financial Framework, every seven years.</p> <ul style="list-style-type: none"> • Our modelling suggests that if Britain's returns are similar to Horizon 2020, the UK will become a small net beneficiary or small net contributor. 	<p>The UK could invest more in non-EU infrastructure like CERN or other partnerships, assuming money not spent on EU research was still available.</p> <p>Funds are allocated in advance to specific themes, guaranteeing outgoings.</p> <ul style="list-style-type: none"> • Canadian participants cooperate in Health, Computer Technology and Food, Agriculture and Fisheries, and Biotech.
Financial Returns	<p>Funds go into a common pot for the whole programme, and are awarded by application quality. This means that the potential returns are unknown and variable.</p> <ul style="list-style-type: none"> • The UK has received €4bn from Horizon 2020 so far, 14.8% of the total. Only Germany has done better^{viii}. 	<p>As costs are agreed in advance, they can be linked directly to expected (or capped) financial returns.</p> <ul style="list-style-type: none"> • Canadian law only allows them to pay into international multilateral schemes where returns are higher than expenditure. They can fund domestically in parallel to support collaboration.

<p>Administrative Burden</p>	<p>The UK may need to contribute to administrative costs for the Framework Programme, but in general these costs are lower in multilateral than bilateral systems. Having a 'common pot' reduces avoids duplication of work and 'double jeopardy' for researchers – where multiple funders must each independently agree to back a project for it to receive any support.</p> <ul style="list-style-type: none"> • The Framework Programmes are relatively cost efficient with administrative costs for Horizon 2020 below 5%^{ix}. 	<p>UK-only schemes would also incur administrative costs. To maintain the depth of international collaboration currently provided by Framework Programmes the UK would need to sign further bilateral deals to support collaboration, with administrative costs likely to grow with the number and complexity of schemes.</p> <ul style="list-style-type: none"> • The costs for schemes such as the UK's Newton Fund are around 10%^x. • Many EU countries concentrate their international funding in framework programmes, and may not have the resource for bilateral agreements.
<p>Industrial Collaborations</p>	<p>Business in Associate Countries participate on the same basis as those in Member States. This means full access for UK firms to funding for industrial partnerships and research. In our recent consultation GlaxoSmithKline told us that UK pharmaceutical companies value their involvement in the Innovative Medicines Initiative, which helps develop innovative treatments for patients.</p> <ul style="list-style-type: none"> • UK businesses have received over €780m from Horizon 2020– this works out at just over €260m a year. Innovate UK's budget is £770m for 2017/18^{xi}. 	<p>No access to funding for industrial partnerships or research.</p> <ul style="list-style-type: none"> • The EU is likely to increase funding for industry collaborations in Framework Programme 9, through the new European Innovation Council.
<p>Influence</p>	<p>The UK could attend and put forward views through Programme committees or the European Research and Innovation Area Committee, but with no vote. The UK would have no role in Council discussions on research. Wellcome's report 'Building a Strong Future for European Research: Brexit and Beyond' provides a potential roadmap to more inclusive governance for Associated Countries, for example a mixed committee where non-Member States participate in Council discussions on research policy.</p>	<p>No role in the development of European research, through Programme committees or the European Research and Innovation Area Committee. No long-term route to influence; governance may be through a joint EU-UK science and technology committee reviewing priorities on a regular basis, as with the US-EU agreement. This will likely reduce future influence due to a perception of the UK as an uncommitted partner.</p>

ⁱ Universities UK (2017), Patterns and Trends in UK Higher Education, www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Documents/patterns-and-trends-2017.pdf

ⁱⁱ Universities UK (2017), International Research Collaboration after the UK Leaves the European Union www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2017/international-collaboration-uk-post-exit.pdf

ⁱⁱⁱ European Commission (2015), EU expenditure and revenue 2007 – 2013, ec.europa.eu/budget/figures/2007-2013/index_en.cfm European Commission (2015), EU expenditure and revenue 2007 – 2013, ec.europa.eu/budget/figures/2007-2013/index_en.cfm

^{iv} UK Office for National Statistics (2013), UK Government Expenditure on Science, Engineering and Technology www.ons.gov.uk/ons/rel/rdit1/science-engineering-and-technology-statistics/2013/stbset-2013.html.

^v The Observer (2017) Fears Grow Over EU University Funding as Grants Decline even before Brexit, www.theguardian.com/education/2017/dec/03/eu-university-funding-grants-decline-brex-it-horizon-2020

^{vi} http://www.cancerresearchuk.org/sites/default/files/uk_and_eu_research_full_report_v6.pdf

^{vii} Article 7 https://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/fp/h2020-eu-establact_en.pdf

^{viii} <http://h2020viz.vinnova.se/#/country?countryNames=%5B%22United%20Kingdom%22%5D>

^{ix} https://ec.europa.eu/research/evaluations/pdf/book_interim_evaluation_horizon_2020.pdf#view=fit&pagemode=none

^x British Academy (2016), Annual Report, 2015-16 www.britac.ac.uk/sites/default/files/British%20Academy%20Annual%20Report%202015-16.pdf

^{xi} https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/686810/Horizon_2020_Core_lines.pdf