

Universities Scotland's response to Professor Sir Adrian Smith's call for evidence on future frameworks for international collaboration on research and innovation.

Introduction

This response to Adrian Smith's call for evidence has been prepared by Universities Scotland, which is the membership body representing the interests of all 19 of Scotland's Higher Education institutions (HEIs). We welcome the opportunity to contribute to this call for evidence and would be willing to further discuss our position should this be of interest to Professor Smith.

Although Higher Education is largely a devolved issue, Universities Scotland works closely with our colleagues at Universities UK and our response should therefore be considered in conjunction with their submission. Our HEIs have a strong international reputation for world class research and have been successful in securing research funding from the European Union (EU) programmes to date.

Scotland is a global collaborator with highly mobile researchers which, combined, demonstrate increased research outputs and higher citation impacts.¹ Research conducted by Elsevier for the Scottish Science Advisory Council found:

- Over 89% of active researchers based in Scotland published at least one article under a non-Scottish affiliation during 1997-2016 (includes UK & International addresses)
- 49.4% of Scotland's publications have an international co-author during 2007-2016, illustrating a highly international approach
- Collaboration involving EU countries resulted in an even higher citation impact (FWCI of 2.7 in Period 2) and Scotland has a higher share of collaboration with EU countries compared to England and Wales.

Scotland's HEIs perform very well in Horizon 2020. Scotland benefits from a world-class research base that performs very well in a competitive, excellence-driven funding system. Horizon 2020 is almost €80Bn of funding available from 2014 to 2020; a long-term programme of significant value.

The most recent UK level data publication² (as of 29 November 2018) shows:

- The latest data showed that the UK performed very well in the 'excellent science' pillar of Horizon 2020 securing 19.4% of all funding from the start of the programme to September 2018; and,

¹ Elsevier & Scottish Science Advisory Council, <http://www.scottishscience.org.uk/publications> (January 2019)

² UK Government, <https://www.gov.uk/government/statistics/uk-participation-in-horizon-2020-september-2018> (November 2018)

- Looking at Horizon 2020 participations within the UK, seven Scottish HEIs were in the top 50 in the UK institutions securing €390M from the start of the programme to March 2018

It is our belief that the benefits of current EU research and innovation funding cannot be easily replicated. To remain as influential actors both locally, nationally and internationally, the strongest post-Brexit outcomes for the sector will be achieved by the UK securing full involvement in the Horizon Europe programme (and any future Framework Programmes) as an Associate country.

Introductory questions

1. What is your name?

David Lott

2. What is your email address?

david@universities-scotland.ac.uk

3. Are you responding as an individual or on behalf of an organisation?

On behalf of an organisation

4. If responding on behalf of an organisation,

a. What is your organisation?

Universities Scotland

b. What type of organisation are you?

Other (membership body representing Scotland's 19 higher education institutions)

5. What region of the UK are you predominantly based in?

Scotland

6. We have obligations under freedom of information laws and there is more information on this below. For the purposes of these laws, would you like your response to be confidential?

No

1. Methods by which new funding arrangements can:

- **support research discovery of outstanding quality in all disciplines through international partnerships**
- **attract to the UK researchers of outstanding capability from around the world**
- **attract further R&D investment to the UK, thereby contributing to the Government's 2.4% agenda**

Regardless of whether new funding arrangements are a replacement for, or run in parallel to, Horizon Europe funding, it will be critical to maintain a funding foundation which supports Scotland's HEIs to remain globally competitive. Some EU funding programmes offer opportunities in particular for those HEIs who have not historically been research intensive, providing access to high quality funding in greater proportions than through UKRI projects and in turn building capacity and strength both in these institutions and in the broader sector. There is significant added value beyond the financially quantifiable, including the positive benefit of having a consistent approach to funding across national boundaries but without requiring academics and HEIs to navigate multiple funding systems. Any new funding construction should be sustainable, clear to navigate and driven with an inclusive approach which maximises the contribution that each institution can make to the sector's overall performance and to tackling issues of worldwide concern.

Freedom of movement in the EU has been critical to the growth of the highly-skilled UK research base and maintaining the perception of the UK as a globally attractive destination for talent is essential for the future success of research and innovation. The close relationship between Scottish HEIs and the EU-wide system has reaped rewards greater than the sum of their parts, which have included enabling the nurturing of internationally linked and experienced researchers at all career levels, this must be preserved moving forward if Scotland and the UK are to remain attractive destinations for talented individuals, their teams and their families to locate here. Universities Scotland has provided a response to the Migration Advisory Committee on EEA workers in the UK, and produced a briefing for a Scottish Parliament debate on a migration system that meets the needs of Scotland. Links to both of these documents can be found under Q5. In order to attract researchers of outstanding capability from around the world to our world class HEIs, the UK Government must adopt an immigration policy which is welcoming of such individuals and appreciative of their willingness to live and research here.

In addition to freedom of movement, the pooling of expertise and data into research which seeks to address global challenges is a key benefit of the Horizon 2020 programme which should be recognised and protected.

Research excellence funded by EU, UK and other sources acts as a magnet for both the attraction of Foreign Direct Investment (FDI) whilst simultaneously stimulating investment by local companies into Research and Development (R&D). Scotland – on

the basis of its research excellence – has the strongest record of R&D-based FDI in the UK³.

2. The optimum balance of emphasis for any new funding arrangements in each of the following dimensions:

- **European collaboration, Overseas Development Assistance and global collaboration;**
- **support for: outstanding individuals; blue-skies research; business innovation and research impact; and research facilities and infrastructure**
- **research and innovation domains (research disciplines, business sectors etc).**

Universities Scotland would advocate for a careful balanced approach which invests in, and explores synergies between, these three dimensions, rather than attempting to ‘balance’ emphasis.

Universities Scotland members have reinforced the importance of the Global Challenge Research Fund (GCRF) and the Newton Fund, and the need to continue and enhance this fund in order to underpin developing research relationships in an international context.

3. Methods and timescales for introducing any new funding arrangements for international collaboration, including those that

- **reflect the ambitions of small and large business**
- **foster new systems of international peer review and funding**

It must be a significant consideration in the design of any new arrangements that the current uncertainty over Brexit will cause caution and a more risk-averse approach from HEIs.

A commonly-heard criticism of EU programmes is that the scope and scale, and resulting bureaucracy, can result in an inflexible and complex approach which is opaque and which has contradictory guidance on reporting and scrutiny. For an economy such as Scotland’s, where 99.3% of private sector businesses are small and medium enterprises (SMEs)⁴ such administrative burdens can be a significant barrier to participation. There may be an opportunity in developing any new framework to maintain robust peer review and evaluation procedures whilst reducing the bureaucratic burden on applicants and recipients of funding.

It may be appropriate to include a place-based approach to any new funding methodology, which takes into consideration the very different needs of regions, for example the remote and rural environment in which the University of the Highlands and Islands (UHI) is situated versus a city institution like the University of Strathclyde.

³ Ernst & Young, <https://www.ey.com/uk/en/issues/business-environment/ey-scotland-attractiveness-survey-2018> (June 2018)

⁴ Scottish Government <https://www2.gov.scot/Topics/Statistics/Browse/Business/Corporate/KeyFacts>, (November 2018)

4. The roles of Government, UKRI, National Academies and other organisations in defining the agenda for European and international collaboration and administering any new funding arrangements for such activities.

As elements of research funding are areas of policy which are devolved to the Scottish Government, it will be crucial that the devolved administrations and their agencies are involved in setting priorities and developing the structure, administration and audit processes for new funding arrangements to ensure a cohesive, relevant and considerate scheme across all four nations.

5. Existing evidence on the efficiency and effectiveness of funding for international collaborations.

In compiling our response to this call for evidence, Universities Scotland has been mindful of the request for brevity. However, following the EU referendum we have produced a number of briefings and responses on issues raised by the UK's impending exit from the EU, which may provide more detail should this be of interest.

- Universities Scotland's Brexit Priorities - <https://www.universities-scotland.ac.uk/publications/brexit-priorities/> (February 2017)
- Response to the Migration Advisory Committee call for evidence on EEA workers in the UK - <https://www.universities-scotland.ac.uk/briefing-evidence/universities-scotland-response-migration-advisory-committee-call-evidence-eea-workers-uk/> (October 2017)
- Briefing: A migration system that meets the needs of Scotland - <https://www.universities-scotland.ac.uk/briefing-evidence/briefing-scottish-government-debate-migration-system-meets-needs-scotland/> (February 2018)
- Response to the consultation on the development of the EU's Framework Programme 9 - <https://www.universities-scotland.ac.uk/briefing-evidence/universities-scotlands-position-development-framework-programme-9/> (March 2018)
- Submission to the Scottish Parliament's Economy, Jobs and Fair Work Committee - <https://www.universities-scotland.ac.uk/briefing-evidence/economy-jobs-fair-work-committee-european-structural-investment-funds-inquiry/> (April 2018)