



Department
for Business
Innovation & Skills

*Review of the
Balance of Competences*

**REVIEW OF THE BALANCE OF
COMPETENCES BETWEEN THE
UNITED KINGDOM AND THE
EUROPEAN UNION**

Research and Development

MAY 2013

Contents

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| Contents | 2 |
| Introduction | 3 |
| A brief history of the EU Treaties | 4 |
| How to respond..... | 4 |
| What is competence | 5 |
| The Importance of Research and Innovation | 6 |
| UK policy and programmms | 7 |
| Interaction between UK and EU policy and programmes | 8 |
| The Evolution of EU policy and programmes | 9 |
| Scope of the Research and Development Review | 12 |
| Call for evidence questions | 15 |
| Legal Annex..... | 16 |

CALL FOR EVIDENCE ON THE GOVERNMENT'S REVIEW OF THE BALANCE OF COMPETENCES BETWEEN THE UNITED KINGDOM AND THE EUROPEAN UNION

Research and Development

Closing date: 6 August 2013

Introduction

1. The Foreign Secretary launched the Balance of Competences Review in Parliament on 12 July 2012. This takes forward the Coalition commitment to examine the balance of competences between the UK and the European Union. The review will provide an analysis of what the UK's membership of the EU means for the UK national interest. It will not be tasked with producing specific recommendations, and will not prejudge future policy or look at alternative models for Britain's overall relationship with the EU. It aims to deepen public and Parliamentary understanding of the nature of our EU membership and provide a constructive and serious contribution to the national and wider European debate about modernising, reforming and improving the EU in the face of collective challenges.
2. As the Foreign Secretary further announced in Parliament on 23 October, the overall review will be broken down into a series of reports on specific areas of EU competence, spread over four semesters between autumn 2012 and autumn 2014. The review is led by the Government, but will also involve non-governmental experts, organisations and other individuals who wish to feed in their views. Foreign governments, including our EU partners, and the EU institutions, are also invited to contribute. The process will be comprehensive, evidence-based and analytical. The progress of the review will be transparent, including in respect of the contributions submitted to it.
3. Full details of the review programme as a whole can be found on the GOV.UK website, via <https://www.gov.uk/review-of-the-balance-of-competences>.
4. The Department for Business, Innovation and Skills (BIS) is leading the review of competence in the area of 'research and development' which also covers aspects of space, and innovation. Responses to this call for evidence will be used to inform the report along with other sources of evidence.

A brief history of the EU Treaties

The Treaty on the European Economic Community (EEC) was signed in Rome on 25 March 1957 and entered into force on 1 January 1958. The EEC Treaty had a number of economic objectives, including establishing a European common market. Since 1957 a series of treaties has extended the objectives of what is now the European Union beyond the economic sphere. The amending treaties (with the dates on which they came into force) are: the Single European Act (1 July 1987), which provided for the completion of the Internal Market by 1992; the Treaty on European Union – the Maastricht Treaty (1 November 1993), which covered matters such as justice and home affairs, foreign and security policy, and economic and monetary union; and the Treaty of Amsterdam (1 May 1999), the Treaty of Nice (1 February 2003) and the Treaty of Lisbon (1 December 2009), which made a number of changes to the institutional structure of the EU.

Following these changes, there are now two main treaties, known as the consolidated Treaties, which together set out the competences of the European Union:

- The Treaty on European Union (TEU);
- The Treaty on the Functioning of the European Union (TFEU)

How to respond

5. We are looking for input from anyone with relevant knowledge, expertise or experience in the fields of research, technological development, space and innovation. We welcome contributions from individuals, companies, civil society organisations, think-tanks, governments and governmental bodies. We welcome input from those within the UK or beyond our borders.
6. Your evidence should respond to the questions posed at the end of this document and be information and judgements about the impact or effect of the EU's competence in your area of expertise. Where your evidence is relevant to other Balance of Competences reviews, we will pass your evidence over to the relevant review teams.
7. In responding, it would be helpful if you could indicate whether you are responding as an individual, or on behalf of an organisation (and if so, which organisation).
8. We will publish your response and the name of your organisation unless you ask us not to (but please note that even if you ask us to keep your contribution confidential we might have to release it in response to a request under the Freedom of Information Act). We will not publish your name unless you wish it to be included.
9. Please send your evidence to balanceofcompetences@bis.gsi.gov.uk by 6 August 2013 or submit your responses via our online form <https://www.surveymonkey.com/s/researchdevelopment>. We will also be hosting two stakeholder events in London on 3 July (for the research community) and 8 July (for business, innovation and space stakeholders). Please email the above address if you would like more information or to register.

What is competence?

10. For the purposes of this review, we are using a broad definition of competence. Put simply, competence in this context is about everything deriving from EU law that affects what happens in the UK. That means examining all the areas where the Treaties give the EU competence to act, including the provisions giving the EU institutions¹ the power to legislate, to adopt non-legislative acts, or to take any other sort of action. But it also means examining areas where the Treaties apply directly to the Member States, without needing any further action by the EU institutions.
11. The EU's competences (i.e. its powers) are set out in the EU Treaties. These provide the basis for any actions the EU institutions take. The EU can only act within the limits of the competences conferred on it by the Treaties. Where the Treaties do not confer competences on the EU, they remain with the Member States.
12. There are different types of competence, notably those known as "exclusive", "shared" or "supporting". Only the EU can act in areas where it has exclusive competence, such as the customs union and common commercial policy. In areas of shared competence, such as the single market, environment and energy, either the EU or Member States may act, but Member States may be prevented from acting once the EU has done so. In areas of supporting competence, such as culture, tourism and education, both the EU and the Member States may act, but action by the EU must be to support, coordinate or supplement Member State activities and does not prevent the Member States from taking action of their own.
13. The EU must act in accordance with fundamental rights as set out in the Charter of Fundamental Rights (such as freedom of expression and non-discrimination) and the principles of subsidiarity and proportionality. Under the principle of subsidiarity, where the EU does not have exclusive competence, it can only act if it is better placed than the Member States to do so because of the scale or effects of the proposed action. Under the principle of proportionality, the content and form of EU action must not exceed what is necessary to achieve the objectives of the EU treaties.

Shared, supporting or hybrid competence?

According to Article 4 of the TFEU, the EU and Member States have **shared competence** in the field of research, technological development and space. However, contrary to the general rule governing shared competence, paragraph 3 of article 4 states that the exercise of the EU's competence in this area does not limit the competence of the Member States, which may therefore take action on their own account regardless of whether the EU has acted in the same field. This is an almost unique arrangement (only development cooperation and humanitarian aid are afforded a similar but slightly different hybrid competence).

It seems clear the EU is not intended to have the same extent of powers as over other shared competence policy areas. As these fields do not fall neatly under supporting

¹ Council of Ministers, European Parliament and European Commission

competence either, the logical conclusion might be drawn that they are subject to a hybrid between these two standard types of competence (shared and supporting). However it is unclear where the dividing line is drawn.

The articles which provide the legal basis for action in research and technological development (179-188), do not explicitly rule out the harmonisation of national laws, which is a key distinction between supporting and shared competence. On the other hand, Union action cannot act as a limit on Member State competence. This competence is yet to be exercised and it is hard to imagine a proposal which would go so far as to impose certain binding obligations upon Member States (harmonisation) without limiting the Member State's own regulatory powers.

As a further complication, the TFEU (Article 189 (2)) *does* explicitly rule out the harmonisation of national laws in the field of space. It is therefore hard to identify any practical difference between the EU's competence for space and the generally defined "supporting" competence.

The Importance of Research and Innovation

14. Science and innovation are critical to promoting prosperity and sustainable growth, and in tackling major global challenges, from climate change and energy security to cyber crime and pandemic disease. Every country that aspires to be a knowledge economy needs an excellent research base to create new knowledge, the right infrastructure to convert this into new products, processes and services and skilled people to make effective use of innovations.
15. The UK is amongst the lowest funders in the OECD of research and development as a percentage of GDP and at 1.79%² was below the EU average of 2% in 2011³. Nevertheless, we perform strongly against comparator countries. We are the most productive and efficient country for research in the G8⁴, in per capita terms, and rank second in the world for both scientific excellence and for university-industry collaboration⁵, after the US and Switzerland respectively.
16. This can be explained by a number of factors, including the UK's open and competitive system for allocating research funding. The European Commission has noted that "The UK economy has several distinctive characteristics that represent actual or potential sources of competitive advantage in the innovation sphere: a world-leading science base and information infrastructure; a prominent financial sector (although this could be better incentivised to support the creation and growth of firms); a rich supply of high-level skills plus a proven attractiveness to globally mobile talents; strong

² <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-300392>

³ http://ec.europa.eu/research/innovation-union/pdf/state-of-the-union/2012/countries/united_kingdom_2013.pdf#view=fit&pagemode=none

⁴ International comparative performance of the UK Research Base, Elsevier for BIS, 2011

⁵ World Economic Forum Global Competitiveness Report, 2011-12

performance by business in creating intangible assets; and a relatively large role of the service sector for industry and export performance.”⁶

17. Innovation and research are increasingly international endeavours: most innovations now originate from multiple countries. International collaboration provides opportunities to work with the best in the world, exchange students and researchers, and gain access to and share the costs of large scale international facilities. It encourages new ideas, fostering new opportunities for innovation in support of growth.
18. The UK supports an international approach to research and innovation through its Science and Innovation Network, based in our Embassies, High Commissions and Consulates. It pro-actively builds opportunities for the UK scientific community to enter into valuable partnerships with policy, business and academic counterparts around the world. Collaboration and cooperation with the EU and other EU countries, both on a policy level and at the project level of collaboration between businesses or researchers, is an important part of our international engagement. European programmes can arguably provide the opportunity to carry out additional research and innovation activities that might not be possible with purely national budgets.

UK policy and programmes

19. Science and Research activity in the UK is underpinned by a system of higher education institutions and Public Sector Research Establishments funded to a substantial degree, but not exclusively, through the Science and Research Budget. It creates knowledge and builds capability, disseminates that knowledge to students and the wider public, charitable and private sectors, develops technologies, solves problems and, through all of this, creates and improves businesses. It delivers the skilled work force needed in the business sector to convert ideas into innovative, commercial products and processes. As such, the research base is a key source of knowledge, new ideas and skills.
20. Universities, research councils and business are national assets that form the foundation of the UK’s future competitiveness. Research funding is administered by the UK Research Councils and the Higher Education Funding Councils for England (HEFCE) and for Wales (HEFCW), the Scottish Funding Council and the Department for Education and Learning in Northern Ireland (DELNI).
21. Currently a total of around £4.6bn per annum is invested in research conducted at UK universities, Research Council Institutes, and in securing access to international facilities for UK researchers; £2.6 billion via the Research Councils and £1.7 billion through the Higher Education Funding Council for England. The remainder is split among other smaller budgets like the UK Space Agency or the Academies. The devolved administrations of Scotland, Wales and Northern Ireland invest an additional £0.5bn bringing the grand total for the UK to at least £5bn. Spending in capital assets is counted separately.⁷

⁶ http://ec.europa.eu/research/innovation-union/pdf/state-of-the-union/2012/countries/united_kingdom_2013.pdf#view=fit&pagemode=none

⁷ The Allocation of Science and Research Funding 2011/12 to 2014/15, <http://www.bis.gov.uk/assets/BISCore/science/docs/A/10-1356-allocation-of-science-and-research-funding-2011-2015.pdf>

22. The UK Space Agency is at the heart of UK efforts to explore and benefit from space. The UK Space Agency Civil Space Strategy 2012-2016⁸ key goal is to foster the growth of the space sector and maximise the benefit of space activities for science, commerce, government and society. The central goal is to create a £40 billion space industry by 2030. The Agency works closely with its partners in industry, the Research Councils, the Technology Strategy Board, and a number of other partners to deliver economic growth and social benefits for the UK. The total contribution of the space sector to the UK economy was £9.1 billion in 2010/11, with an average annual growth rate of 7.5%⁹. A large proportion of the Agency's budget is invested in the European Space Agency programmes, from which UK industry benefits proportionately.
23. The Innovation and Research Strategy for Growth¹⁰ sets out how the UK government is creating conditions to support innovation and research recognising that this involves a wide range of organisations and measures from direct funding, tax improvements and government procurement of innovative products and services to supporting international collaboration. At the heart of this, and working with research councils, the Technology Strategy Board (TSB), the UK's national innovation agency), supports and stimulates business-led innovation. The TSB achieves this through a range of programmes including collaborative R&D competitions, catapult centres, Smart grants, knowledge transfer partnerships, and knowledge partnership networks. More information is available at www.innovateuk.org
24. According to the EU's 2013 State of the Innovation Union report¹¹, the UK Government finances around 32% of R&D with business enterprise financing 45%. It also highlights the unusually high levels of R&D investment financed from abroad — some 17% (8% EU average) — and from the non-profit sector — about 5%.

Interaction between UK and EU policy and programmes

25. As outlined in the box below, the UK is a strong player in the EU's current Framework Programme (FP7). Funding received from EU institutions represents 11.25% of the income which UK Higher Education Institutions receive in research grants and contracts¹². This percentage has steadily increased from 7.5% in 2007 and for some institutions is understood to be as much as 20%.
26. Whilst the thematic priorities for EU research funding strongly reflect national funding priorities and are borne in mind by UK research councils and the Technology Strategy Board (TSB) when developing their own programmes, there is no active coordination by Government. In the case of research councils this is in part an intentional result of the Government's adherence to the **Haldane principle**. This is the belief that decisions on individual research proposals are best taken by researchers themselves through peer review. This involves evaluating the quality, excellence and likely impact of science and research programmes. In practice some projects do attract both

⁸ <http://www.bis.gov.uk/ukspaceagency>

⁹ <http://www.bis.gov.uk/ukspaceagency>

¹⁰ <http://www.bis.gov.uk/assets/BISCore/innovation/docs/11-1387-innovation-and-research-strategy-for-growth.pdf>

¹¹ http://ec.europa.eu/research/innovation-union/pdf/state-of-the-union/2012/countries/united_kingdom_2013.pdf#view=fit&pagemode=none

¹² http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2712&Itemid=161

national and EU funding but this is based purely on the merits of the proposal against the criteria and other applicants. The fact that it has, or may secure, EU funding in itself should have no bearing on whether a proposal secures national funding and vice versa.

27. Outside of the Framework Programme, there are a number of other EU actions, both those with a research or innovation objective and those with entirely different aims, which have an impact on the ways in which researchers and innovators work in the UK. Of course, the nature of operating within a union of 26 other countries is such that EU programmes and laws will not always be designed exactly as the UK would wish and in ways which are optimal for our stakeholder communities. The question that this review will seek to answer is whether, on balance, the advantages outweigh the disadvantages.

Framework Programme 7 (2006-2013)

UK receives €4,918m, equivalent to 15.1% of the total FP7 funding; only Germany receives more (€5,287m or 16.2%). France receives €3.742m, equivalent to 11.5%.

UK is involved in more successful projects than any other country, 41% of all grant agreements in FP7 to date including at least one UK participant.

UK academia represents 60.7% of all UK participations and receives 10.7 % of all FP7 funding.

24% of UK participations in FP7 are by Private Commercial organisations.

UK SMEs account for 17% of UK participations and 12.6% of UK funding.¹³

The Evolution of EU policy and programmes

Research and Innovation

28. The EU's main contribution to the promotion of Research and Development thus far has been through funding programmes. Research activities have been funded under the European Treaties since the European Coal and Steel Community in 1955 and the Commission set up its own in-house research facility, the Joint Research Centre, in 1957. The first EU Framework Programme, the main source of EU funding in this area, was launched in 1984 with a budget equivalent to €3.75bn and it remained a relatively minor area of activity until 1994 when the fourth Framework Programme had a budget of €13.2 bn.
29. The current, **Seventh Framework Programme (FP7, 2007-2013)**¹⁴ has distributed some €50.5 billion allocated under four strands: cooperation, ideas, people and

¹³ FP7 stats from the latest update to the eCORDA database, released 1 March 2013

¹⁴ http://cordis.europa.eu/fp7/home_en.html

capacities. **Horizon 2020 (2014-2020)** will be the EU's new programme for funding research and innovation from 2014 to 2020. February 2013 European Council conclusions on the next Multiannual Financial Framework (MFF) stated that "the funding for Horizon 2020...will represent a real growth compared to 2013 level", which would represent around €70bn (2011 prices) in the period 2014-2020. However, the MFF negotiation is not yet concluded; the European Parliament must consent to the overall deal and individual regulations for each programme must be finalised. The final allocation for Horizon 2020 is therefore not yet decided.

30. Horizon 2020 will encompass the programmes from FP7, the innovation elements of the Competitiveness and Innovation Programme (CIP) and the European Institute of Innovation and Technology (EIT). It aims to add value to Member States' own policies and programmes and will be structured round three main priorities: excellent science; key enabling technologies to support industrial leadership; and a limited number of European and global societal challenges (for example energy security, food security and climate change).
31. The profile of research, development, innovation and space has gradually increased as the EU has evolved and as the focus of EU activity has shifted more towards attaining a successful, globally competitive economic union. This has intensified during the recent economic downturn, when the need for growth has taken centre stage. The EU, like the UK, has recognised that developing new technologies and innovative products and services is vital to retaining the competitiveness of EU economies in the global market. This is encapsulated in the Commission's Europe 2020 initiative (see box below).
32. In addition to the Framework Programme, the Lisbon Treaty tasks the European Union with achieving a "European research area in which researchers, scientific knowledge and technology circulate freely". The Treaty does not define what this means but talks about encouraging businesses and research institutions to achieve high quality work, supporting their cooperation and ability to exploit the internal market, "in particular through the opening-up of national public contracts, the definition of common standards and the removal of legal and fiscal obstacles to that cooperation."
33. Although only included as a Treaty objective after the 2009 Lisbon Treaty, the concept of a European Research Area (ERA) dates back to a 2000 Commission Communication¹⁵. It was further elaborated in a 2012 Communication¹⁶. The European Commission has, thus far, chosen a non-legislative approach to implementation, encouraging cooperation and collaboration rather than a highly regulated structure. The ERA encompasses, amongst other things, Joint Programming Initiatives (JPIs), research infrastructures (including European Research Infrastructure Consortia (ERICs)), removal of barriers to researcher mobility, gender equality and open access to scientific research. It has called for more effective national research systems with open national-level competition.

Europe 2020¹⁷

¹⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2000:0006:FIN:EN:PDF>

¹⁶ http://ec.europa.eu/research/era/pdf/era-communication/era-communication_en.pdf

¹⁷ Europe 2020: Europe's Growth Strategy -

http://ec.europa.eu/europe2020/pdf/europe_2020_explained.pdf

The European Union launched this ten year growth strategy in 2010. It aims to make structural reforms and create the conditions for a smarter, more sustainable and more inclusive growth. Research and innovation are fundamental to this strategy, as shown by the fact that one of the five top level targets is for 3% of the EU's GDP to be invested in research and development. Europe 2020 is being implemented via seven flagship initiatives, of which four (innovation, digital economy, industrial policy and resource efficiency) have strong links to research and innovation. "Innovation Union"¹⁸, is the most relevant of these and has as its aim to improve conditions and access to finance for research and innovation, so that innovative ideas can ultimately be turned into products and services and thereby create growth and jobs

34. The Commission has also set up the following institutions:

- The Joint Research Centre (JRC) is the European Commission's in-house scientific and technical support service. In addition to having offices in Brussels, it has a network of seven research institutes across the EU. This is funded by FP7.
- The European Research Council (ERC) supports 'frontier research' encouraging the best scientists, scholars and engineers to go beyond established frontiers of knowledge and the boundaries of disciplines. This is funded by FP7.
- The European Institute of Innovation and Technology aims to translate research results into commercial applications through thematic 'Knowledge and Innovation Communities (KICs)'. This has its own budget line but is proposed to be brought under the next framework programme (Horizon 2020)

35. A recent development is the establishment of the President of the European Commission's Science and Technology Advisory Council, chaired by Professor Anne Glover, the Commission's Chief Scientific Adviser¹⁹. Its purpose is to provide advice directly to the President on how to create the proper environment for innovation by shaping a European society that embraces science, technology and engineering. In particular, the Council will advise on the opportunities and risks stemming from scientific and technological progress.

36. The Commission is keen to encourage international co-operation and collaboration and has published a general proposed framework for strengthening and refocusing the EU's international co-operation activities²⁰. This proposes the development of a set of common principles to support international co-operation across the EU and the framework is dependent on a closer alignment of international research priorities across the EU. The EU has also concluded bi-lateral Science and Technology (S&T) agreements with a number of individual countries. These aim to identify common interests, priorities, policy dialogue, and the necessary tools for S&T collaboration²¹.

¹⁸ http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf

¹⁹ http://europa.eu/rapid/press-release_IP-13-168_en.htm

²⁰

http://ec.europa.eu/research/iscp/pdf/com_2012_497_communication_from_commission_to_inst_en.pdf

²¹ <http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=countries>

Space

37. Article 189 of the TFEU requires the Union to draw up a European space policy to promote scientific and technical progress, industrial competitiveness and the implementation of its policies. Article 189 also requires the Union to establish any appropriate relations with the European Space Agency. Member States can also pursue their own space programmes and any EU activity cannot go so far as to harmonise national laws.
38. On the 28 February 2013 the Commission published a Communication on the “EU Space Industrial Policy: Releasing the Potential for Growth in the Space Sector”. The Communication proposes a number of actions which are aimed at supporting the competitiveness of the European space industry. The Commission has also proposed a Decision of the Council and the Parliament to establish a European space surveillance and tracking support programme.²²
39. The European Space Agency (ESA) is an independent, intergovernmental organisation entirely outside the European Union. The United Kingdom was a founding member of ESA in 1975. ESA also acts as a technical delivery agent for EU programmes whereby the EU delegates funding and work to ESA. Galileo and Copernicus (formerly GMES) operate on this basis. Copernicus and Galileo are flagship programmes for the EU.
40. In November 2012, following the introduction of explicit references to space policy set out in the Lisbon Treaty, the European Commission published a Communication²³ that set out initial ideas on the future relationship between ESA and the EU. The Communication outlines initial ideas for the development of EU relations with ESA. These range from better coordination mechanisms between ESA and the EU to transforming ESA into an EU Agency.

Scope of the Research and Development Review

41. The legal basis for EU action in the areas of research and development policy is set out in Title XIX (Articles 179-190) TFEU²⁴, which:
 - sets the overall objective of strengthening the EU’s scientific and technological bases by achieving free circulation of researchers, scientific knowledge and technology and encouraging competitiveness and describes the type of activities the EU can undertake to this end (Articles 179, 180 and 181).
 - sets the rules for the Framework Programme for research funding (Articles 182-186) empowers the EU to set up structures to deliver its objectives (article 187).

²² http://ec.europa.eu/enterprise/policies/space/index_en.htm

²³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012DC0671:EN:NOT>

²⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF> page 82

- empowers the EU to draw up a space policy to promote, support and coordinate efforts for the exploration and exploitation of space and to establish appropriate relations with the European Space Agency (a non-EU body). This is also the legal base for Copernicus (an EU remote sensing programme formerly known as GMES) (Article 189).

42. This review will also consider:

- The Galileo space programme, which derives from Article 172 which deals with Trans-European Networks (TENs). Although TENS (borderless networks within the EU for transport, telecommunications and energy) more generally will be covered under the Cohesion Report (Articles 170-178 TFEU) in semester 3.
- Innovation, which derives from an Article 173 provision for EU activity to encourage the industrial potential of innovation, research and technological development. The Competitiveness and Innovation Framework programme (2007 to 2013) and its successor, COSME (2014-2020), come under this treaty base.

43. Additionally it will consider the impact of wider EU policies on research and innovation. The Treaty articles described above are those designed to provide the legal basis for enabling the best possible environment for researchers and innovators to work in. However, there are myriad other parts of the Treaty which have been used as the basis for EU legislation and other actions which inhibit or facilitate work in this area, whether intentionally or otherwise.

44. For example an objective of the REACH Regulation of the chemicals sector was to stimulate the search for alternative, less hazardous substances. Various alternatives have been found, although it is arguable the degree to which REACH was the cause. Similarly, some argue that the EU Emissions Trading Scheme accelerated the search for new fuel types and aircraft designs. More broadly, EU involvement in regulating Intellectual Property, data protection, State Aid, the treatment of animals and humans in scientific research and many other issues all affect the research environment.

45. These impacts can be both positive and negative and could even be due to the absence of suitable regulation to allow new technologies to be exploited for market. It is unclear whether the EU has an overarching strategy to ensure these cumulative and potentially conflicting actions are seen through the prism of encouraging innovation. The Department for Business, Innovation and Skills would welcome any evidence of such barriers to or facilitators of innovation resulting from EU action. We will use for them review or pass on to the relevant review teams as appropriate.

46. Specific examples of impacts will be considered in relevant other reports throughout this Balance of Competences Review and you are welcome to contribute to their evidence gathering. Relevant reports might be: the EU Budget, Energy (which includes EURATOM), Health, Animal Health and Welfare and Food Safety, Environment and Climate Change (which includes eco-innovation), and Free Movement of Goods (which includes intellectual property rights), the Cohesion report (which will cross-reference both innovation and space). The table below gives information about timelines for each of these reports.

| Semester 1 Autumn '12 – Summer '13 | Semester 2 Spring '13 – Winter ' 13 | Semester 3 Autumn '13 – Summer '14 | Semester 4 Spring '14 – Autumn '14 |
|--|--|--|---|
| <ul style="list-style-type: none"> • Internal Market: Synopsis • Foreign policy • Development Cooperation and Humanitarian Aid • Taxation • Health • Animal Health & Welfare & Food Safety | <ul style="list-style-type: none"> • Internal Market: free movement of goods • Internal Market: free movement of persons • Asylum and Immigration • Trade & Investment, • Environment and Climate Change • Transport • Research & Development • Tourism, Culture, Sport • Civil Justice | <ul style="list-style-type: none"> • Internal Market: Services • Internal Market: Capital • EU Budget • Cohesion • Social and Employment • Agriculture • Fisheries • Competition • Energy • Fundamental Rights | <ul style="list-style-type: none"> • Economic and Monetary Union • Workplace health and safety and consumer protection • Police & criminal justice • Education • Enlargement • Cross cutting areas of EU competence • Subsidiarity & proportionality |

Call for evidence questions

Impact on the national interest

1. Where has EU action had a **positive impact** for the UK on research, technological development, innovation or space? What evidence is there for this? Has EU action encouraged national action in any areas?
2. Where has EU action had a **negative impact** for the UK in these fields? What evidence is there for this? Has EU action prevented potentially useful national action in any areas?
3. How and where has UK engagement with partner countries or international bodies, both within and outside the EU, been helped or hindered by EU involvement?
4. What benefits or difficulties has the objective of a European research area (ERA)²⁵ delivered for the UK?
5. How has the EU sought to coordinate the policy instruments at its disposal across different policy areas to create an enabling environment for researchers and innovators? How successful has this been?

Future opportunities and challenges

6. What could the EU most helpfully do to promote scientific and technological progress and innovation (including in the space sector)?
 - How could the EU use its existing competence differently to deliver more in your area?
 - How might a greater or lesser degree of EU competence deliver more in your area?
 - How could improvements to existing EU activities make them more effective and efficient?
7. Where might future EU level action be detrimental to your work in this area?
8. Where might action at national rather than EU level be more appropriate / effective?
9. How could EU and national policies and funding streams interact better?
10. What impact would any future enlargement of the EU have on this area of competence?
11. Are there any other points you wish to make which are not captured above?

²⁵ http://ec.europa.eu/euraxess/pdf/research_policies/era-communication_en.pdf

Legal annex

COMPETENCE IN RESEARCH AND DEVELOPMENT

The area of innovation is one where the EU has supporting competence, as it falls under the “Industry” section of the Treaty (Title XVII). Article 2(5) TFEU provides:

In certain areas and under the conditions laid down in the Treaties, the Union shall have competence to carry out actions to support, coordinate or supplement the actions of the Member States, without thereby superseding their competence in these areas.

Legally binding acts of the Union adopted on the basis of the provisions of the Treaties relating to these areas shall not entail harmonisation of Member States’ laws or regulations.

The areas of research, technological development and space are areas where a hybrid version of shared competences exist.

Article 2(2) TFEU provides:

When the Treaties confer on the Union a competence shared with the Member States in a specific area, the Union and the Member States may legislate and adopt legally binding acts in that area. The Member States shall exercise their competence to the extent that the Union has not exercised its competence. The Member States shall again exercise their competence to the extent that the Union has decided to cease exercising its competence.

However Article 4(3) provides:

In the areas of research, technological development and space, the Union shall have competence to carry out activities, in particular to define and implement programmes; however, the exercise of that competence shall not result in Member States being prevented from exercising theirs.

Article 182 (5) provides:

...The European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, shall establish the measures necessary for the implementation of the European research area.

Article 189 (2) provides:

...the European Parliament and the Council, acting in accordance with the ordinary legislative procedure, shall establish the necessary measures, which may take the

form of a European space programme, excluding any harmonisation of the laws and regulations of the Member States.

Also of relevance is Declaration 34 on Article 179 TFEU associated with and attached to the Lisbon Treaty:

“The Conference agrees that the Union's action in the area of research and technological development will pay due respect to the fundamental orientations and choices of the research policies of the Member States.”

The forerunners of the provisions of Title XVI TFEU (Trans-European Networks, Articles 170 -172) which relate to European Networks for telecommunications, energy and transport have been used to adopt legislative instruments in relation to the Galileo global navigation satellite system (See for example Regulation no 683/2008).

Title XVII TFEU (Industry), which consists of a single Article (Article 173), provides that the Union and Member States are to ensure that conditions necessary for the competitiveness of the Union's Industry exist. This includes fostering better exploitation of the industrial potential of policies of innovation, research and technological development (See Art 173(1)). Article 173(2) provides for co-ordinated action by Member States and for the Commission to take initiatives to promote such co-ordination. Article 173(3) makes it clear that the objectives in section 173(1) can be achieved through policies and activities under other provisions of the TFEU. In addition the European Parliament and Council acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee may decide on specific measures to support action taken by Member States excluding any harmonisation of the laws and regulations of Member States.

Article 179 of the Treaty confers on the Community the objective of creating a European research area in which researchers, scientific knowledge and technology can circulate freely. Article 180 provides that the Union is to carry out the following activities:

- (a) implementation of research, technological development and demonstration programmes, by promoting cooperation with and between undertakings, research centres and universities;
- (b) promotion of cooperation in the field of Union research, technological development and demonstration with third countries and international organisations;
- (c) dissemination and optimisation of the results of activities in Union research, technological development and demonstration;
- (d) stimulation of the training and mobility of researchers in the Union.

Article 181 requires the Union and Member States to coordinate research and technological development activities. The Commission is empowered to take initiatives to promote this.

Article 182 makes provision for:

- the adoption, after consulting the Economic and Social Committee, by the Parliament and Council by the ordinary legislative procedure of multiannual framework programmes to set scientific objectives and to provide for a budget for these activities (for example the Seventh Framework Programme FP7 – see Decision No 1982/2006/EC of the European Parliament and of the Council of 18th December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013))
- the framework programme to be implemented through specific programmes adopted under the special legislative procedure by the Council after consultations with the Parliament and Economic and Social Committee.
- The European Parliament and the Council after consulting the Economic and Social Committee using the ordinary legislative procedure to establish measures to implement the European research area

Articles 183 to 186 make provision as to the content of the multiannual framework programme and related matters.

Article 187 and 188 enable adoption of legislation to set up joint undertakings and any other structures necessary for the efficient execution of Union research, technological development and demonstration programmes. Council Regulation (EC) No 723/2009 of 25th June 2009 on the Community Legal Framework for a European Infrastructure Consortium (ERIC) was adopted under the forerunners of Articles 187 and 188.

Article 189 makes provision for the adoption of a Union space policy. The European Parliament and the Council, acting in accordance with the ordinary legislative procedure, may give effect to the Space Policy by the adoption of measures including a European space programme. Measures cannot include any harmonisation of the laws and regulations of the Member States. The Union is required to establish any appropriate relations with the European Space Agency.

Article 190 makes provision for an annual report by the Commission to the Council and the Parliament.

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