

Inquiry into EU Reform and the EU referendum: implications for Scotland

The Institution of Engineering and Technology

This response has been compiled by the IET. It is based on the views of Members and Fellows within the organisation with expertise in engineering and technology.

The IET is happy to discuss the points raised with Ministers or with the committee.

The [Institution of Engineering and Technology](#) (IET) is an international organisation with over 160,000 members which acts as a voice for the engineering and technology professions. Our primary aim is to provide a global knowledge network between business, academia, governments and professional bodies, promoting ideas which enhance the positive role of science, engineering and technology for the society and the economy of the future.

With an active membership of 10,216 in Scotland, the IET has offices in Glasgow and a dedicated IET Engineering Policy Panel (composed of a panel of experts drawn from academia, professional bodies and industry). IET Scotland is one of 100 communities world-wide that deliver activities designed to share knowledge between engineers and technologists and promote science to young people.

Scottish Enterprise recognise that the technology and engineering sector is a key driver of the Scottish economy. Currently, engineering, electronics and information technology businesses employ nearly 150,000 people, contributing over £10 billion a year to Scotland's economy. That's almost 10% of national output.

Advanced engineering provides the infrastructure foundation for the success of key sectors such as energy, telecoms, construction and manufacturing where thousands more skilled engineers and technicians are employed. All businesses in all sectors have an ever increasing reliance on the products and skills of technologists and engineers.

Many Scottish technology and engineering companies have a strong international outlook, exporting around £6.5 billion of products and services to international markets each year.

What are your views on the implications of the EU Referendum Bill in relation to the timing of the referendum, the franchise for the referendum and the question to be put to the electorate?

The timing of the proposed EU Referendum is less than ideal. The [EU Referendum Bill](#) indicates that the Referendum must take place prior to 31 December 2017. This is a relatively tight timescale, which would preclude treaty changes within the 28 member states which would be necessary for substantive reform. The question itself: "Should the UK remain a member of the European Union or leave the European Union?" at first sight appears simple. But ideas of what the "Union" actually is and what it should be range from a loose trade association of member states which primarily functions as a customs union to visions of a much closer political federation. As this matter is a question of individual politics, IET in this submission primarily view the European Union as an entity which aspires to be a mechanism for co-operation; which aims to promote free trade and; tries to facilitate the exchange of ideas which will promote innovation and growth. It is recognised that in practice, free trade in services is more restricted than in goods.

Although the Bill covers all of the UK, voting is being conducted by region (one of which is Scotland) so individual differences between the nations/regions within the UK will be noted.

What does EU membership mean for Scotland's economy and its people? What are the implications for Scotland of the UK leaving the European Union?

The most obvious benefit of EU membership for both Scotland and for the UK is access to a Single Market of 500 million people. Although the process is incomplete, the aim is to promote free movement within four areas: goods, services, capital and people. While the pace of development in each of these areas is uneven and the institutional development of the EU can be criticised, it is however the case that the engineering and technology industries of Scotland are export oriented and benefit from easy access to this large market. These industries also benefit from flexibility in sourcing skilled labour.

According to [UKCES](#), a larger proportion of employers face skills gaps in Scotland than anywhere else in the UK. Twenty five percent of vacancies were reported to be as a result of skill shortages. Some areas of the Scottish economy (e.g. the oil and gas sector) are particularly dependent on non-native skilled labour. For instance, in 2012 only 82.8% of those employed off-shore were of British nationality. Of the remainder, 14.4% were European Economic Area (EEA) nationals: the other 2.8% being Americans and Canadians. Another sector in which there are shortages is within the digital and technological industries. In March 2014, the Scottish Government announced a £6.6m [Skills Investment Plan](#) designed to attract up to 11,000 jobs in this sector.

Flexibility and ease of recruitment for skilled staff from both within and outside the EU, has benefits for these sectors and also nationally. This view is reinforced by the [IET Annual Skills Survey 2015](#) which indicates that there is a significant increase at a UK level in plans to recruit engineers and technologists from within the EU, with 13% looking to do so within the next 4-5 years. This survey which draws on data from around 400 companies (of which approximately 50 are Scottish) highlights a similar picture of difficulties in recruiting experienced staff, particularly senior engineers.

Besides the economic benefits of belonging to a large free trade area, proponents of EU membership also point out the benefits of active input into policy developments, in the drive towards harmonisation within this large "union" of states. IET, as a leading producer of international standards, endorse this view.

The implications for Scotland of the UK leaving the European Union are considerable for both parties. These include the following.

- Membership of the EU provides considerable opportunities for foreign direct investment. In the case of [Scotland](#), in 2012 there were over 290,000 people employed in 2,100 foreign owned companies with a turn-over of over £87 billion. Around forty per cent of these companies are ultimately owned by entities based in other EU member states. Many of these companies benefit from access to the [world's largest trading area](#).
- In the realm of trade, for Scotland as for the UK in general, the EU is a major destination for international goods. [In 2011](#), for Scotland, this was estimated

as accounting for 46% of international exports with an estimated value of around £11 billion.

- Other benefits include the use of the Community trade mark and the [registration of industrial designs](#) which have reduced the burdens on business and protected intellectual property rights, as EU companies can register a trade mark or an industrial design in the knowledge that it will be recognised in all 28 member states.
- Research and development is vital to economic growth. With close to £80 billion available from 2014 to 2020, the [Horizon 2020](#) programme is the principal means of financing research and innovation projects using EU budget funds. While an EU withdrawal would create opportunities to re-direct funds from the UK which flow to Brussels – would these EU funds for R & D be replaced?
- Research funding is also an issue of concern for [Universities UK](#), a group which is actively campaigning against EU withdrawal. Collectively, UK universities receive £1.2 bn annually in European funding. Universities UK point out that UK wide in 2013, there were 125,000 EU students, generating £2.27 bn for the economy and 19,000 jobs. Some 14 % of academic staff come from other EU nations. As yet, Universities Scotland has not endorsed this pro-EU position, one of the difficulties being that in Scotland EU students are entitled to free tuition and this is expensive.
- If the UK left the EU, there could be further policy and legislative divergence in areas of devolved competence, as the UK Government and the devolved administrations would no longer be required to implement the common requirements of EU Directives. This would be particularly noticeable in policy areas such as the environment.

There are business advantages of being in a wider union of trading nations and this is a growing trend. Currently negotiations are taking place within the United States with a view to creating the [Transatlantic Trade and Investment Partnership \(TTIP\)](#), with the intention of creating a uniform economic zone for about 800 million customers and to eliminate many of the hurdles that obstruct trade across the Atlantic. Unlike earlier trade agreements, the goal of TTIP is to create a common market for European and American companies. While the elimination of these “non-tariff trade barriers” is controversial among many groups seeking to enforce health, environmental and consumer interests, it is undoubtedly true this type of trade alliance is increasingly common. In addition to the European Union itself, as well as groups such as ASEAN in Asia and NAFTA in North America, discussions are also taking place between the United States, Canada and several Pacific Rim states such as Japan and Vietnam in relation to a Trans-Pacific Partnership (TPP). In this world of trade alliances, many would argue that Scotland and the UK would both be in a better bargaining position within the EU, which as a larger entity will have more negotiating clout.

To what extent and in what policy areas is there a need for EU Reform? What are the implications of EU reform for Scotland both in relation to devolved and reserved policy areas?

While many areas of the EU could benefit from reform, in the current climate of economic uncertainty, reforms aimed at encouraging growth, promoting productivity and fostering innovation must be a priority. In this context the ten year growth strategy outlined in the [Europe 2020 Growth Agenda](#) is to be welcomed.

Scientific research is a key element in promoting advances in productivity. [EU Commission figures](#) reveal that Europe is spending 0.8% of GDP less than the US and 1.5% less than Japan every year on Research & Development (R&D). Although the EU market is the largest in the world, it remains fragmented and is not innovation-friendly enough.

For Scotland (and indeed for the EU as a whole) in relation to advancing a reform agenda policies in three areas are of crucial importance:

- those which promote innovation and research;
- those aimed at completing the Single Digital Market; and
- those aimed at easing regulatory burdens for small businesses.

Innovation and research: Figures from the [European Union](#) indicate that, within the UK, the I&R system performs above the EU average, with strengths in the quality of research, but weaknesses in the introduction of innovations to the market are indicated by the numbers of patent applications which are below the EU average. The relatively low score in patents is partly explained by the UK's economic structure, in which the patent-intensive manufacturing sector has a relatively low share of economic activities. Figures published in December 2014 on the [regional spread of research and development in the UK](#) indicate that Scotland ranked ninth out of twelve regions/nations. This needs to be improved.

Scotland like many parts of Europe has de-industrialised areas in need to regeneration and rejuvenation. Increased [EU structural funds](#) are needed to seed an open enterprising economy supported by long-term public and private investment in infrastructure, skills and science. One way to promote innovation in relation to “advanced” manufacturing, is to foster the links between research bodies and business as exemplified by the network of [Catapult technology transfer centres](#), such as the one opened last year at the University of Strathclyde.

Single Digital Market: Within the EU, Scotland is a peripheral area, located a considerable distance from the main population centres of both the UK and mainland Europe. The promotion of the [Single Digital Market](#) will be critical in counter-acting this geographical isolation in the future. In tandem with measures at an EU level to dismantle many of the barriers to the free flow of online services, promote a single area for on-line payments and protect customers in cyber-space, at a local level in Scotland there needs to be:

- A sustained programme of investment in good quality broadband and perhaps the establishment of a single Government department responsible for cyber security, e-commerce and privacy.
- There also needs to be a rapid implementation of initiatives such as the [EU Directive 2014/61/EU](#) on measures to reduce the cost of deploying high-speed communications networks.

Lessening the regulatory burden: The European Commission has stated that the estimated 20.7 million small and medium sized enterprises (SMEs) in the EU account for over 65 % of private sector employment. SMEs are amongst the most innovative businesses, leading the creation of jobs and growth. Apart from access to financing and markets, regulatory burdens represent one of the main barriers to the start-up and development of small businesses. The Commission [acknowledges the problem](#) and this issue must continue to be tackled with vigour.

What should the role of national parliaments be in relation to EU legislation and whether there should also be a role for sub-state legislatures?

The EU has a complex structure with inter-linked, multi-level governance, strongly weighted to the Executive branch (in the form of the European Council, the European Commission and the Council of Ministers). The powers of the European Parliament are limited and most of the activity of scrutinising EU proposals is done at the level of the national Parliaments in the member states. Sub-state Parliaments with legislative powers are a feature of around eight EU member states (Germany, Austria, the UK, Spain, Italy, Portugal and Finland) although they all differ considerably from each other. The right of consultation of the Scottish Parliament is contained in the [Memorandum of Understanding and Supplementary Agreements](#) (October 2013).

While acknowledging the “democratic deficit” in the EU, questions can be asked as to whether regional parliaments with limited staff resources could tackle the thousands of complex documents which the EU sends out each year. The issue needs to be tackled comprehensively across the EU and resources increased to match any increase in workload.