

Euratom Briefing

July 2017

Key Points

- The UK relies on the safe, secure and reliable trade of nuclear material and technology within Europe and around the world. The Euratom Treaty allows this trade to take place.
- The Euratom Community is funded by the EU's central budget and a new relationship with Euratom will need to be included as part of any new funding agreement post-Brexit.
- The Government stated leaving Euratom is necessary because it is "uniquely legally joined" to the Treaty on European Union. This has been disputed by experts in nuclear and European law.
- Unite calls for continued membership of Euratom.
- Euratom benefits UK trade ensuring UK companies have the access they need to the world's largest market for nuclear material and technology.
- Euratom ensures people involved in the nuclear industry from the UK can work in Europe, and European nuclear experts can work in the UK.
- Euratom ensures the safeguarding of nuclear materials and the UK meets its international obligations on monitoring the movement of nuclear products through Euratom.
- Membership of Euratom allows the UK to participate and collaborate in important EU R&D programmes on safety, waste and decommissioning, and on nuclear fusion research. Membership also allows it to gain access to R&D funding.
- Unite believes the best outcome would be for the UK to continue membership of Euratom and the government should seek to pursue that in discussion with the European Commission.

Introduction

The UK relies on the safe, secure and reliable trade of nuclear material and technology within Europe and around the world.

The Euratom Treaty allows this trade to take place under a common agreement within Europe.

What is Euratom?

Formed in 1957, all EU member states are members of Euratom and the UK joined when it joined the European Economic Community in 1973. The Treaty's principal aim is, "to contribute to the raising of the standard of living in the Member States and to the development of relations with the other countries by creating the conditions necessary for the speedy establishment and growth of nuclear industries."

The Euratom Treaty is separate from the European Union Treaties, but it is governed by the same institutions; the European Commission, Council and Courts of Justice. The Euratom Community is funded by the EU's central budget, and a new relationship with Euratom will need to be included as part of any new funding agreement post-Brexit.

Government position

In February 2017, the Government included in the explanatory notes of the European Union (Notification of Withdrawal) Bill 2017 that the UK will withdraw from the European Atomic Energy Community (Euratom) in parallel to leaving the European Union. This position was reaffirmed in the Prime Minister's letter triggering Article 50.

The Government stated leaving the Euratom Treaty is necessary because it is "uniquely legally joined" to the Treaty on European Union. This is a position which has been disputed by experts in nuclear and European law, and was raised during Parliamentary consideration of the Bill.

Unite's position

Unite believes the **UK should seek to negotiate with the European Commission to remain a member of Euratom**, possibly with some form of associate membership, because of its importance to the functioning of the civil nuclear industry both in the UK and across the EU-27 states.

If this proves not to be possible, it is vital that a **transitional period is agreed to guarantee continuity** of current arrangements until they can be replicated in UK regulations and with international agreements in place. Industry is concerned to avoid a cliff edge position in March 2019, which is potentially very disruptive for trade, employment, research and development and could impact on supplies of power and medical isotopes.

How does membership of Euratom benefit the UK?

The UK's membership of Euratom underpins key aspects of activity that have been important for the nuclear industry for more 40 years.

Euratom officials currently implement nuclear safeguards in the UK, which involves checking of the UK's fissile material to ensure it is in the right place and being used for its intended purpose.

As part of Euratom, the UK has access to a number of Nuclear Cooperation Agreements (NCAs) agreed on behalf of member states which has helped facilitate trade between the UK and a number of nuclear markets outside of the EU. These include agreements with Australia, Canada, Japan, Kazakhstan, South Africa, Ukraine, USA and Uzbekistan.

The UK has also benefitted from the common nuclear market created by the Euratom Treaty. The Euratom market allows for the movement of nuclear goods, services and skills including medical isotopes for cancer treatment.

Euratom also oversees a framework for international collaboration in nuclear Research & Development. UK companies use this common trading arrangement to transfer nuclear material, equipment, information and specialist services between the UK and the EU and 3rd countries.

It is essential for the UK nuclear supply chain to have access to trade in uranium fuel and fuel feedstocks, reactor components, nuclear technology (including software), and the provision of specialist services by companies and personnel from outside the UK.

For existing nuclear power stations, components, spares, material (including fuel) and finished products (e.g. pumps, motors) frequently pass freely across borders (and often more than once) for analysis, repair or investigative work under Euratom or the Euratom negotiated NCAs with countries outside the EU.

In the event of a supply chain disruption, for many materials/components alternative supply chain options are not readily available. Even where alternative suppliers may be available, for nuclear qualified materials and components, these would take many months and sometimes years to put in place. Suppliers, materials and equipment and services must go through rigorous pre-qualification processes to comply with nuclear safety case requirements.

Implications of leaving Euratom

The implications of leaving Euratom are complex and far-reaching, leaving many aspects of our nuclear industry vulnerable. This is discussed in greater detail below.

International co-operation and trade

Outside of Euratom, the **UK would need to negotiate a replacement Voluntary Offer Safeguards Agreement with International Atomic Energy Authority (IAEA)** to remain compliant with accepted international practice for nuclear weapons states under international law. The removal of Euratom safeguards could also invalidate any bilateral agreement the UK has entered into with third countries making trade with those countries, such as Australia, much more difficult. Previous voluntary offer safeguards agreements have taken many months to conclude.

Once a Voluntary Offer Safeguards Agreement is in place, the UK will need to ratify a number of Nuclear Co-operation Agreements (NCAs) with key markets. **In the USA, an NCA is required under domestic law.** In Australia and Canada, the presence of an NCA is deemed a policy requirement but may still be required to comply with certain international commitments. Other existing bilateral NCAs reference Euratom safeguarding regimes, so would need to be renegotiated.

If the UK fails to negotiate its own bilateral NCAs, nuclear trade would almost certainly be significantly affected and it has taken years for the UK to negotiate, agree and approve each new bilateral NCA.

Nuclear activity in the UK

The UK's nuclear new build programme covers a broad international base including; France, China, Japan, USA, Germany, Spain and many others.

The existing fleet of nuclear reactors generate 21% of the UK's electricity and to continue operating they require access to uranium fuel and fuel feed stocks; reactor components; nuclear technology and the provision of significant services from outside the UK. **For instance, Sizewell B which is scheduled to operate until 2035 is based on a US design and relies on an international supply chain for specialised maintenance.**

The UK's decommissioning programme is reliant on products, goods and services sourced from across the world. Without access to Euratom's NCAs and common market, the nuclear new build programme, nuclear operations and the decommissioning mission could be seriously affected.

Medical treatment

Leaving Euratom also risks breaking a series of time-sensitive supply chains which **supply isotopes used in nuclear medicine**. Radioisotopes are used in medicine for the diagnosis and treatment of various diseases, including cancers, cardiovascular and brain disorders. Over 10000 hospitals worldwide use radioisotopes for the in vivo diagnosis or treatment of about 35 million patients every year, of which 9 million in Europe. The UK does not currently have any reactors capable of producing these isotopes and because they decay rapidly – often within a matter of hours or days – hospitals in the UK cannot stockpile and must rely on a continuous supply from reactors in France, Belgium and the Netherlands. The Institute for Government briefing note on Euratom covers the potential disruption to supply of medical isotopes.

Fusion research

The UK has benefitted enormously from its participation in **long term research** funding projects. Its membership of the Fusion 4 Energy programmes allows the UK to receive contracts and so far the **UK supply chain has been awarded contracts worth €500 million**, expected to rise to at least €1 billion.

The UK Atomic Energy Authority receives £50 million from Euratom each year to operate JET and employs 500 skilled workers. The current contract runs until the end of 2018, but it was expected to be extended to 2020 with an interest to extend it to 2024. Outside of Euratom, these jobs and contracts will put at risk along with the UK's participation in the wider EU R&D agenda as well as access to facilities, material, people and data.

Legal implications

To date all members of the EU have also been members of Euratom and no member state has ever left either Community. To date, the Commission has always taken the view that the respective treaties did not the option of withdrawing from one treaty and not the other. The UK government has also adopted this position stating that the two treaties are *uniquely legally joined*.

There is a reasonable body of legal experts however that view the de-coupling of the EU and Euratom Treaties as legally possible based primarily on the fact that despite sharing institutions the two treaties are distinct and separate legal instruments.

There are a number of options which include amending the Euratom Treaty to facilitate the UK's ongoing membership once it has left the EU, a separate agreement under Article 101 or a formal association under Article 206. Whatever option the UK chooses it would clearly be novel, extremely complex and subject to significant legal and political scrutiny.

There are currently 16 non-EU member states "associated" with Euratom including Switzerland and Ukraine. However, these "associate countries" have only been provided access to the Horizon 20/20 research and development programme, and have still been required to contribute to the EU budget and accept freedom of movement of people.

Safeguarding nuclear materials

Through its membership of Euratom, the UK is part of the Euratom Safeguards regime that has been accredited by the International Atomic Energy Authority (IAEA).

Euratom Safeguards verify that EU countries comply with their international obligations not to use nuclear materials for non-civil nuclear purposes.

For EDF Energy this centres mainly on accounting for fuel transports and ensuring package seals are intact.

It is imperative that the UK continues to comply with its international Safeguarding obligations to ensure continued, uninterrupted movement of nuclear material and equipment in and out of the UK.

Impact on UK's nuclear power stations

The UK's nuclear power stations provide 20% of the UK's electricity needs. They benefit from access to skilled workers, safe and secure movement of nuclear fuel and technologies, and world-leading R&D.

It is self-evident that the issues outlined above need to be addressed as a matter of priority, and we are confident that a resolution can be achieved.

We have appreciated the Government's early and constructive engagement on this issue with us, and look forward to further discussions in the months ahead.

In addition to Euratom, the UK itself has very robust safety and security arrangements for the governance of nuclear materials and technologies. Whatever the status of our membership of Euratom, there is no question that this will continue to be the case.

Movement of nuclear experts

The UK has world-leading expertise in nuclear. The nuclear industry is global, and benefits from the ability of those working in the industry to gain experience and share expertise working in different countries.

This is particularly important at a time when the UK is looking to export its nuclear expertise internationally, and when it needs the very best experts to help deliver a programme of nuclear new build over the next decade.

EDF Group, EDF Energy's parent company, is headquartered in France with staff working in the UK, Europe and around the world. We need to be able to have ongoing transfer of skills and expertise between the UK and the EU, as well as drawing on the best available talent from the EU and the rest of the world.

It is crucial that the UK supply chain can draw on the skilled workers it needs from overseas to construct new nuclear power stations, alongside delivering the countries broader programme of infrastructure development.

Conclusion

Unite believes the best outcome would be for the UK to continue membership of Euratom and the government should seek to pursue that in discussion with the European Commission.

At the least, there should be an appropriate transitional period to ensure there is not a cliff edge that would result from leaving Euratom without an agreement in March 2019. In the intervening period it must carry out the following work:-

- a) Agree a replacement Voluntary Offer Safeguards Agreement with the IAEA and fund and resource the ONR to establish a UK safeguards regime.
- b) Negotiate and conclude NCAs with key nuclear markets; the Euratom Community, China, United States, Canada, Australia, Kazakhstan and South Korea.
- c) Clarify the validation of the UK's current bilateral Nuclear Co-operation Agreements with Japan and other nuclear states.
- d) Set out the process for the movement of nuclear material, goods, people and services to be agreed with the Euratom Supply Agency. The UK and the EU will need to ensure that nuclear industry employees can continue to work in the UK and Europe. This will need to be resolved before the existing arrangements are terminated.
- e) Agree a new funding arrangement for the UK's involvement in Fusion 4 Energy and the wider European Union nuclear R&D programme. The UK may also need to negotiate access to individual Euratom R&D projects to ensure not only that it has access to this world-leading research, but that it continues to be able to contribute its expertise to this work.
- f) The UK will need to put in place arrangements for safeguarding of nuclear materials, in order to demonstrate compliance with international treaties. This is likely to involve the UK establishing its own Safeguards regime, though this presents a challenge of finding and training Safeguards inspectors and nuclear materials accounting specialists and then getting the new UK regime reviewed and accredited by the IAEA (all before we leave Euratom); or it could negotiate access to the Euratom Safeguards regime. These arrangements would have to be in place at the time of exit from Euratom to allow continuity of trade and movement in Safeguarded material.

Given the very challenging timetable, and the government's stated intention to maintain the same standards as currently apply, the options to retain membership of Euratom must be properly explored with the European Commission as an alternative to withdrawal by March 2019.