



Nuclear Industry Association

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Business, Energy and Industrial Strategy Committee Brexit and the implications for UK business inquiry: Nuclear Industry Association response

1. The Nuclear Industry Association (NIA) welcomes this opportunity to respond to the Select Committee's inquiry into the implications of leaving the European Union for British business.
2. NIA is the trade association and information and representative body for the civil nuclear industry in the UK. It represents 260 companies operating across all aspects of the nuclear fuel cycle, including the current and prospective operators of nuclear power stations, the international designers and vendors of nuclear power stations, and those engaged in decommissioning, waste management and nuclear liabilities management. Members also include nuclear equipment suppliers, engineering and construction firms, nuclear research organisations, and legal, financial and consultancy companies.
3. Many of these companies, particularly the new build developers, will be making their own responses to the consultation. However the NIA would like to make some broader points on behalf of the nuclear sector as a whole.

Overview on Euratom

4. Although the nuclear industry is subject to the Euratom Treaty, which is separate to the European Union Treaties, the Government has indicated the UK will leave both treaties at the same time. As the Committee recognised in its April report the Government were supportive of Euratom's activities, but felt the UK had to leave because it saw the two treaties as legally joined.
5. The UK's membership of Euratom underpins four key aspects of activity that have been important for the nuclear industry for more than 40 years:
 - Euratom officials currently implement nuclear safeguards in the UK, which involves monitoring 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 Co-operation Agreements (NCAs) agreed on behalf of member states which has helped facilitate trade between the UK and a number of nuclear markets outside 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 information, services, skills and goods including medical isotopes for cancer diagnosis and treatment.
 - Euratom also oversees a framework for international collaboration in nuclear R&D, including the JET fusion research reactor in Oxfordshire and the larger ITER fusion reactor in the South of France as well as several other research programmes.
6. Given the international nature of the nuclear industry withdrawal of these benefits will lead to significant disruption unless effective replacement arrangements are in place immediately following the UK's departure. In their absence the effectiveness of both the current nuclear fleet and the new nuclear build programme will be undermined, with considerable implications for the UK's energy security. It will also damage the UK's decommissioning programme, which is also reliant on products, goods and services from across the world.
 7. Against this background the NIA believes the best outcome would be for the UK to continue its membership of Euratom, and the Government should seek to pursue this in its negotiations with the European Commission. However as the previous BEIS Select Committee recognised in its report in May 2017 this may be politically unfeasible.
 8. If this is the case we agree with the Committee's conclusions that Government should seek to delay the UK's departure from Euratom to give time for alternative arrangements – including safeguards and international cooperation agreements – to minimise any disruptions to trade and power supplies. Some illustrative examples of cliff-edge disruptions are set out on the NIA's website <https://www.niauk.org/resources/briefing-papers/>
 9. If this is not possible there should be an appropriate transitional period to ensure there is no cliff edge that would result in leaving Euratom without an agreement in March 2019. In this context we welcome the statement in the Prime Minister's Florence speech that the UK is looking for a two year transition period, and would expect that if the UK continues to pursue leaving Euratom as part of the same process as leaving the EU, then the transition period would also apply to Euratom, although this has not been confirmed by the statement.
 10. Any transitional period would need to be long enough to enable the replication of arrangements for the UK outside of the EU, if disruption is to be avoided.
 11. In the meantime the Government urgently needs to carry out the following work:
 - a) Agree a replacement Voluntary Offer Safeguards Agreement with the IAEA and fund and resource the Office for Nuclear Regulation to establish a UK safeguards regime
 - b) Negotiate and conclude NCAs with key nuclear markets including priority agreement with 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 fuel and associated material with the Euratom Supply Agency
 - e) Agree the basis on which the UK's involvement in Fusion 4 Energy and the wider European Union nuclear R&D programme will continue, and implement the new funding arrangements.
 - f) Negotiate export controls similar to existing arrangements to facilitate ongoing trade and cooperation between the UK and EU member states.

Responses to the Committee's detailed questions

12. Against this background we have the following responses to the Committee's specific questions:

Market Access

13. As noted above the nuclear industry is multinational in nature, with goods, services, information and personnel frequently crossing EU borders. The industry in both the UK and the EU-27 therefore need continuing access to respective markets – free of tariffs and customs barriers – both to supply chain products and services, and to a skilled and mobile workforce – see paragraphs 30-32 below
14. Similarly the imposition of customs barriers or more onerous export controls (see Non-tariff barriers below) could result in significant delays that could impact both the UK's existing nuclear stations and the new build programme. In particular additional barriers to international supply chain activity could have an adverse effect on plant performance, not simply from impeded access to uranium fuel and feed stocks but because of the continuing need for reactor components, nuclear technology and the provision of services from outside the UK. This could have an impact for example on recovery from unplanned outages (breakdowns) and potentially also planned maintenance outages in terms of both time and cost. There could also be an impact on the planned life extension programme.
15. The UK's current nuclear fleet provides 21% of the UK's electricity, generating large scale, carbon-free, baseload electricity, which could be put at risk if there is disruption to normal business following Brexit.
16. Looking beyond the current programme, the industry is gearing up for huge investment in new nuclear generating capacity to enable the UK to meet its energy security and carbon reduction targets. Together these projects - amounting to an investment of well over £60bn and providing an additional thirty to forty thousand jobs during the construction phase - will make a massive contribution to meeting the UK's future energy security and carbon reduction objectives.
17. Again these programmes are reliant on products, goods and services from across the world, and without access to Euratom's benefits, and in the case of non-nuclear essential products (e.g. engineering spares; specialist oils and gases etc) to the single market and customs union, could be seriously affected. The adoption of WTO rules could result in tariff charges every time a border is crossed, at significant cost to the industry.

Non-tariff barriers

18. The key potential non-tariff barriers facing the nuclear industry after leaving the Single Market and Customs Union would be the lack of a safeguards regime, and export controls.
19. As noted above nuclear safeguards in the UK are currently implemented by Euratom, and a replacement UK safeguards regime will need to be in place immediately following the UK's departure from Euratom. Greg Clark's written ministerial statement of 14 September confirms that the Government will establish a UK arrangement that will deliver to existing Euratom standards, and will bring forward legislation, but there is clearly much to do in a limited timescale. The greatest risk lies around the ONR's ability to recruit the personnel with the necessary skills.
20. Any delay would have major implications for the UK's nuclear sector and its ability to operate.

21. With regard to exports, the main legal basis for controls on dual-use goods within the European Union is the EU Dual-Use Regulation, with the process for obtaining a licence for movements of nuclear fuel and components/systems/technology/information (Category 0 items) between member states being a relatively straightforward process (i.e. Government to Government assurances allowing Governments to sign the licence on behalf of the counterparty).
22. With a view to ensuring that trade is not hindered post Brexit the industry is arguing that the existing arrangements are preserved and that the UK and EU should negotiate a similar arrangement to that which exists currently to facilitate efficient on-going trade and cooperation between the UK and EU member states.
23. The absence of such an agreement could result in significant delays that could impact both the operating fleet and the new build programme and ultimately additional costs to the consumer.
24. In addition, as noted above, any additional customs processes as a result of the UK being outside the Single Market and Customs Union could result in delays and additional cost for UK businesses and consumers.
25. It is also important that the ownership of special nuclear materials within the UK is clarified, and that existing contracts for the supply of nuclear material between operators in the UK and Euratom will remain valid and not require any further approvals from the EU.

Regulation

26. The UK has a robust and well established safety regime operated by the Office for Nuclear Regulation - separate from Euratom's safeguarding arrangements – which will continue. Leaving Euratom will not therefore result in the industry being less safe.
27. Since the basic safety standards required under the Euratom Treaty are ultimately derived from the international standards under the auspices of the IAEA, which will continue to apply both in the UK and the EU 27, there is unlikely to be significant divergence after the UK leaves Euratom.
28. However given the international nature of the nuclear industry it nonetheless makes sense for the EU and the UK to work closely together on nuclear and regulatory issues. Ideally we would like to see continued engagement on safety and regulation issues via WENRA and ENSREG, and on broader policy issues through a new UK-Euratom consultative body.
29. As noted in paragraphs 18 and 19 above the UK will also need to set up a safeguards regime to become operational immediately the UK leaves Euratom. Without such an agreement, trade with other nuclear nations would be difficult, and any existing bi-lateral nuclear cooperation agreements that the UK has entered into will become invalid. Normal business would be disrupted right across the nuclear industry in both the UK and the EU.

Skills

30. A key benefit of the Euratom arrangements has been the provision for free movement of nuclear industry workers. This has allowed nuclear workers in the UK to work in the EU, and vice-versa. The global nature of the industry and shortage of specialist skills means this has been a reciprocal benefit for the UK and the EU. Continuance of the current close cooperation and knowledge sharing is essential.
31. The movement of people is critical to the continued success of the nuclear sector, particularly in relation to the new build programme. These will be the first nuclear power

stations to be built for over 20 years and there are inevitably some skills gaps. Niche and specialist skills (such as welding, fabrication, installation and commissioning of nuclear components) will be required, and there will also be volume requirements. Moreover in relation to Hinkley Point C EDF draw heavily on the French workforce and on engineering and construction labour from elsewhere in Europe. There could also be a shortage of UK construction workers. For example 1400 steel fixers are needed when the total population of steel fixers in the UK is 2500.

32. Whilst the industry is committed to improving the UK's skills base demand for skills in major project infrastructure is increasing and restrictions on access to skilled personnel from the EEA area could be detrimental to the current UK nuclear fleet and to the new build project.

33. R&D

34. The UK nuclear industry has benefitted enormously from its participation in long term research projects such as the ITER and JET Fusion 4 Energy (F4E) programmes facilitated by Euratom. The UK's membership of F4E and participation in the ITER project has already led to UK companies winning contracts worth €500 million, and this was expected to rise to at least €1 billion.
35. The UK Atomic Energy Authority receives £50 million from Euratom each year, and 500 people are employed to operate the JET fusion facility at Culham in Oxfordshire. The UK government has pledged to meet its share of funding for the JET programme until the end of 2020 but its future remains unclear, and there was interest from Euratom to extend it further to 2024.
36. The Euratom H2020 Fission R&D programme is worth circa €60 million each year and funds research into nuclear fission, radiological protection, waste management and geological disposal.
37. All of these programmes involve extensive collaboration between member states in the EU as well as other international partners, and give the UK access to research infrastructures and capabilities not available in the UK.
38. Withdrawal from Euratom would put fulfilment of these contracts at risk and endanger the participation of the UK in areas where it has unique capability. The government should negotiate an agreement which enables the UK's participation at ITER fusion programme to continue and ensure JET continues to operate. More generally, the UK and the EU should reach an agreement which enables cross-border international collaboration to continue.

Trade opportunities

39. Brexit and withdrawal from Euratom are unlikely to present any immediate trade opportunities for the UK nuclear industry. Rather – as set out above – current business is likely to be significantly circumscribed unless the benefits currently provided by Euratom are put in place in the form of bilateral arrangements and agreements to take effect immediately we leave.
40. In particular it is important a Nuclear Co-operation Agreement (NCA) between the UK and Euratom is in place to ensure the UK is able to continue to trade with the Euratom community without additional barriers and vice versa.
41. Prior to withdrawal from Euratom it is also vital the government ratifies new bilateral NCAs with key nuclear markets outside of the EU. The government has earmarked the US, Canada, Japan, Australia as the priority NCAs but it is important agreements are also put in place with

South Korea and Kazakhstan, and that any bilateral NCA's already in place are revised, agreed and ratified to incorporate the new UK safeguarding regime.

42. The UK will also need to put in place export and import licenses to allow the transfer of nuclear material in and out of the UK to ensure it remains in compliance with its obligations until international law – paragraph 21 refers.
43. Given their scale, potential international trade opportunities in the nuclear sector are a key element of the nuclear sector deal being drafted by the Nuclear Industry Council and the Department for Business, Energy and Industrial Strategy. The UK has a vast amount of experience in nuclear decommissioning, operations, fuel manufacturing, and services, and the supply chain will soon enhance its new build related skills as the new programme gets underway.
44. It is vital that these opportunities are not undermined because the UK leaves Euratom with no alternative arrangements in place.

Transitional arrangements

45. Withdrawing from Euratom without comprehensive successor arrangements that maintain the same conditions as before presents a serious issue for the UK nuclear industry. Euratom facilitates trade beyond the EU, manages safeguarding, promotes nuclear R&D and allows for the free movement of nuclear goods, people, services and skills within the EU.
46. As a result, the NIA and its members have urged the government to review its withdrawal position and seek a more pragmatic resolution with the European community that would see the UK remain a member of Euratom post-Brexit.
47. If this is not possible, the government should seek a transitional arrangement that would avoid any possibility of a damaging cliff-edge. For normal nuclear business to continue in both the UK and the EU it is important that the UK remains a member of Euratom until suitable successor arrangements are in place, and that ceasing to be a member of Euratom will not take effect until that is the case.
48. Similarly, as noted above, the EU Single Market and Customs Union are important in facilitating the smooth movement of non-nuclear but nonetheless important products for the nuclear sector and similar transition arrangements are required.

Nuclear Industry Association

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