

**Submission on preparedness and delivery of Brexit by examining by  
the Department for Business, Energy and Industrial Strategy (BEIS).**

Submission by Prospect union to the Public Accounts Committee.

**19<sup>th</sup> January 2018**

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## Introduction

1. Prospect is the largest union representing skilled specialists and engineers in the UK civil nuclear sector. Our members work throughout the nuclear industry, in generation, decommissioning, research, and regulation, giving us a unique and valuable perspective on nuclear policy issues. For the purpose of this submission, we have members in the Joint European Torus (JET) research centre in Culham, as well as working across the civil nuclear sector.
2. Prospect also represents public servants working within government departments including the Department for Business, Energy and Industrial Strategy (BEIS). Overall, Prospect represents 142,000 engineers, managers, and other professional specialists across the public and private sectors.
3. This submission focuses on some of the specific issues within the BEIS brief facing the nuclear sector because of Brexit and also on issues facing staff employed directly by BEIS and in the agencies they sponsor.

## Euratom and access to the Common Nuclear Market

4. The UK is home to the world's first and most successful civil nuclear programme, and Britain's membership of Euratom has been critical to this success. By virtue of our participation in the European Common Nuclear Market, as established by the Euratom Treaty, we have benefitted from tariff-free nuclear trade between Euratom member states, whilst at the same time we have enjoyed the benefits of Nuclear Cooperation Agreements (NCAs) negotiated between the Euratom Community and key third-party nuclear powers such as the United States, Canada, and Japan.
5. Britain's civil nuclear sector relies heavily on access to this nuclear free market. The free movement of nuclear materials, investment capital, and specialist workers has helped to reduce costs and has allowed our civil nuclear installations to operate efficiently and effectively for decades. Similarly, mechanisms for the sharing of intellectual property and vital nuclear research have allowed the UK to participate in and benefit from a global nuclear research community.
6. Existing nuclear installations, such as the pressurised water reactor at Sizewell, rely on complex international supply chains. Critical supplies, personnel and intellectual property need to be able to cross borders frequently and easily to ensure the smooth operation of these facilities. At the same time, new build nuclear projects, such as the new power station under construction at Hinkley Point in Somerset, also rely heavily on the existing system of free nuclear trade. The construction process requires access to an extensive international supply chain, while the Hinkley reactors themselves will be based on a Japanese design and use fuel from the United States.
7. The government explicitly recognised in its recent Ministerial Statement on Euratom<sup>1</sup> that "continuity of open trade arrangements for nuclear goods and

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<sup>1</sup> 'Energy Policy: Written statement by Greg Clark, Secretary of State for Business, Energy and Industrial Strategy', 11 January 2018, HCWS399, <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2018-01-11/HCWS399>

products to ensure the nuclear industry is able to continue to trade across EU borders without disruption” is an objective of current negotiations.

8. The government has also recognised the need for a transition as the UK prepares to leave Euratom: “As set out by the Prime Minister, the UK Government is proposing a time-limited implementation period where we continue to have access to one another’s markets on current terms and take part in existing security measures. This implementation period would cover Euratom too. The exact nature of the period will be subject to forthcoming negotiations including on the issues outlined in this statement.”<sup>2</sup>
9. There is an urgent need for clarity, however, on the nature and timing of this transition period. The government must aim for the longest possible transition period on Euratom matters. Replacing the nuclear free trade regime is likely to be a lengthy and complex process which will almost certainly take many years to complete. It is unlikely that if the government fails to secure the transition period for Euratom that it will be possible to put in a place a comprehensive alternative system in time for the UK’s planned exit date in March 2019.

### **The Office for Nuclear Regulation (ONR)**

10. Leaving Euratom will place significant additional responsibilities on the Office for Nuclear Regulation (ONR) to provide and enforce a safe new regulatory system for the UK nuclear sector. The government has introduced the Nuclear Safeguards Bill, however, it has yet to clearly spell out how it will provide the skills and resources to implement the new safeguarding regime. The government specifically said in its recent written statement on Euratom that the government will provide certainty that: “the UK has a safeguards regime that meets international standards by the end of March 2019.”<sup>3</sup>
11. The government is placing more responsibility on the ONR without giving them the resources to do the job. Although the ONR is mainly funded through charges to the nuclear industry, it does receive some grant funding and it is this that currently pays for nuclear safeguarding work. Under current plans, the government intends to halve its grant to ONR in the period to 2020. The ONR is already operating at a stretched budget, yet leaving Euratom and creating a domestic safeguards regime will place an additional burden on the organisation – one that can only be paid for from either government funds or increasing charges on business.
12. In the explanatory notes to the Nuclear Safeguards Bill BEIS states that “The costs to set up a UK domestic safeguards regime (which remain subject to further analysis) are potentially up to £10m. This would include procurement of a new IT system, recruitment and training of a large number of inspectors and strengthening institutional capacity to deliver the project.”<sup>4</sup> Yet no detailed breakdown of how this figure is derived or whether it is sufficient to cover have been provided.
13. The government has also failed to address the availability of skilled experts to create a domestic safeguards regime. Euratom currently employs around 160 staff around 25% of whom focus on UK installations. Without Euratom’s infrastructure

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<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> ‘Nuclear Safeguards Bill, Explanatory Notes - Financial implications of the Bill’, 10 October 2017, <https://publications.parliament.uk/pa/bills/cbill/2017-2019/0109/en/18109en08.htm>

and resource, this work is likely to fall to the Office for Nuclear Regulation (ONR). ONR's safeguards unit currently employs 8 professional staff. Resourcing to the level that will be required poses a major challenge and may be unachievable by March 2019. There is already an acute shortage of suitably qualified people to undertake this work. In the short-term the only options available to the ONR are recruiting experts from industry, importing skills from elsewhere in the world, or lowering standards.

14. The ONR corporate plan for 2017/18, published in July 2017 highlights that the organisation is already stretched for expert staffing and resources – and that is before leaving Euratom and the Nuclear Safeguards Bill is factored in. The report says that: "...the loss of experienced regulatory staff will lead to a thinning of over overall regulatory capability."<sup>5</sup>
15. Prospect argues that the government must aim to include all aspects of Euratom cooperation in the transition or implementation period as well as providing the resources that the ONR will inevitably need.

### **Euratom and Research and Development**

16. The UK has been a net recipient of Euratom research funding and is home to cutting edge nuclear research projects, in particular the Joint European Torus (JET) fusion project at the Culham Centre for Fusion Energy in Oxfordshire, which is currently the largest fusion reactor in the world. JET receives £50 million annually from Euratom, and the work of hundreds of scientists and specialists at Culham depends on this funding. In addition, the UK's participation, via Euratom, in the International Thermonuclear Experimental Reactor (ITER) project under construction in France, has allowed UK companies to win contracts worth €500 million so far.
17. It is not simply a question of funding however. The UK's participation in Euratom R&D programmes provides access to international research networks, which facilitates research collaboration between UK-based experts and the international scientific community, and allows the UK to benefit from the fruits of this research through the sharing of new intellectual property. As a full member of Euratom we also have the opportunity to shape the scope and objectives of Euratom's R&D programme. Even if we continue to pay into, and receive funding from Euratom's R&D budget after leaving the treaty, we would be likely to lose the ability to influence the direction of Euratom research activity.
18. If the UK leaves Euratom it is also not clear how that will impact our participation in the ground-breaking ITER project, and what, if any, access we will have to new IP that arises from it. Fusion energy research, more broadly, has already led to important breakthroughs in areas such as materials science and advanced containment processes, and further such breakthroughs are likely as fusion research progresses. It is essential, therefore, that the government not only commits to fully replacing Euratom funding, but also assures UK-based researchers of full and equal access to critical international research networks, and rights to new intellectual property arising from joint research projects.

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<sup>5</sup> 'Office for Nuclear Regulation corporate plan 2017 to 2018', *Office for Nuclear Regulation*, 6 July 2017, <https://www.gov.uk/government/publications/office-for-nuclear-regulation-corporate-plan-2017-to-2018> p.30

19. The government has expressed its desire to remain in JET and ITER and has committed to the UK share of JET's funding until 2020. However, beyond this it is far from clear if it has a concrete plan to deliver on these aspirations and safeguard UK jobs, skills and innovation.

### **BEIS workforce**

20. Prospect has repeatedly raised the effect of cuts to public spending and public sector pay restraint on both moral within government departments and the ability of departments to recruit and retain people skilled members of staff. It is clear that the Civil Service is dangerously short of the capabilities and skills it needs to take the country through the period ahead. But no one knows the full extent of this crisis in the absence of a comprehensive and systematic audit of the skills the civil service has and needs.
21. Recent developments have inevitably focused attention and activity on the diplomatic and negotiating skills that the referendum result has maybe necessitated. But the truth is this is only the tip of the iceberg. As things stand, the evidence we do have, including our own members' reports direct from the frontline of policy development and service delivery, points to glaring and growing gaps in a number of critical areas. For example, in agencies within the responsibility of BEIS, the Science and Technology Facilities Council, UK Atomic Energy Authority, and National Environment Research Council do not have enough scientists.
22. The department itself reported in 2016 (prior to its absorption of DECC) that: "A number of BIS's Partner Organisations have cited the two-year pay freeze and subsequent one per cent pay cap as causing problems to business delivery, particularly in specialist areas, such as science, engineering and IT."<sup>6</sup> Agencies sponsored by BEIS have also reported problems themselves. The Science and Technology Facilities Council reported last summer that: "We continue to lose staff in Science Engineering and Technology (SET) roles due to lack of competitiveness on pay."<sup>7</sup> The UK Atomic Energy Authority warned that "Attracting and maintaining specialist expertise in the organisation continues to be a significant challenge. Challenges in competing with market pay rates due to government pay constraints and uncertainty surrounding freedom of movement following UK's exit from Europe is impacting UKAEA's ability to attract and retain key specialist skills. These external factors affect UKAEA's ability to deliver its goals."<sup>8</sup>
23. Government is also reliant on many highly skilled EU nationals in the civil service to deliver on its objectives. The post-referendum debate and rhetoric left many feeling unwelcome in the UK and unsure of their futures. In addition, Prospect is concerned about potential changes to Civil Service Nationality Rules that may restrict the ability for EU citizens to hold certain civil service posts, after Brexit. Currently there are certain posts within the civil service that are restricted to UK, EEA or Commonwealth nationals. In response to parliamentary questions submitted

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<sup>6</sup> 'Annual Report and Accounts 2015-16', *Department for Business, Innovation and Skills*, 13 July 2016, <https://www.gov.uk/government/publications/bis-annual-report-and-accounts-2015-to-2016>, p.87

<sup>7</sup> 'Annual Report and Accounts for 2016-2017', *Science and Technology Facilities Council*, 13 July 2017, <http://www.stfc.ac.uk/news/annual-report-and-accounts-for-2016-2017>, p.30

<sup>8</sup> 'UKAEA Annual Report & Accounts 2016/17', HC 295', *UK Atomic Energy Authority*, 19 July 2017, <https://www.gov.uk/government/publications/ukaea-annual-report-accounts-201617-hc-295>, p.6

by Tom Brake MP the Cabinet Office could not provide information on how many EEA citizens currently hold such positions or whether they would continue to be eligible to work in these roles after the departure date.<sup>9</sup> Urgent clarity on this issue from government is vital to reassure those EEA citizens working in protected roles that there will be no change to their status after Brexit.

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<sup>9</sup> 'Civil Servants: Nationality: Written question – 117517', written question from Tom Brake MP, answered by Caroline Nokes MP, Parliamentary Under-Secretary (Cabinet Office), 12 December 2017, <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2017-12-05/117517/>