

**GOVERNMENT RESPONSE TO THE  
HOUSE OF LORDS SCIENCE AND TECHNOLOGY  
SELECT COMMITTEE REPORT:**

**“Nuclear Research and Development Capabilities”**

1. The Government welcomes the House of Lords Science and Technology Select Committee’s report on the UK’s nuclear research and development capabilities. We set out below the actions we propose to take in the light of the Committee’s recommendations.
2. The Government is committed to delivering a low carbon and affordable energy mix of renewables, new nuclear and clean gas and coal, which will provide continuous low carbon generation and reduce the UK’s dependence on fossil fuel imports.
3. We believe that nuclear power stations have a vital part in our energy strategy to help ensure a diverse mix of technology and fuel sources, increasing the resilience of the UK’s energy system. Nuclear power is a proven technology able to provide continuous low carbon generation and is forecast to be the lowest cost form of low carbon generation. These potential benefits mean that new nuclear power stations have an important role to play in the UK’s energy future.
4. The UK civil nuclear industry is an important sector in the UK economy given its current, as well as potential, contribution to jobs, growth and high value exports. The Government recognises this and has taken steps and will continue to take steps to enable industry to realise its commercial opportunities. There is a growing domestic market for the UK civil nuclear industry in new build, operations, maintenance, as well as the UK multi-billion pound decommissioning programme funded by Government and delivered by the NDA. This places the UK nuclear industry in a good position to grow its global market share in these areas and UKTI, BIS, FCO and DECC work closely together to ensure this strong domestic market does help underpin UK companies global ambitions.
5. The Government is committed to securing the maximum economic benefit to the UK from investment in new nuclear power generation, building on our existing strengths. The Government will work to ensure that the industry is able to take advantage of a range of programmes being developed to support industrial capability, including the New Advanced Manufacturing Supply Chain Initiative announced at the end of 2011 and the next round of the Regional Growth Fund. This intended to enable UK-based supply chain companies to develop the capabilities required to meet the needs of prime contractors and win new business.
6. The Government is equally aware of the important role that nuclear research and development plays in the UK, helping to underpin the performance and safety cases of operational plants, inform government policy, develop innovative solutions and provide industry and regulators with a cadre of skilled people.
7. The Government has several responsibilities in respect of the UK’s civil nuclear activities.

8. The Government has set in place the organisations needed to ensure the nuclear industry in the UK is appropriately regulated, including in compliance with European and international requirements. The regulatory regime applies to current nuclear installations and will apply to any future installations. To further enhance this regime the Government intends to put the Office for Nuclear Regulation (ONR) onto a statutory basis. The ONR will combine the safety, security, safeguards and transport aspects of regulation for the nuclear industry.
9. To facilitate new nuclear build in the UK the Government has taken a number of actions: publishing the Nuclear National Policy Statement which will allow planning applications to come forward for new nuclear power stations; Regulatory Justification; Waste and Decommissioning finance arrangements; and Generic Design Assessment of proposed reactor systems.
10. DECC, through the Nuclear Decommissioning Authority, is also responsible for the decommissioning, clean-up, waste management and eventual disposal of the civil nuclear liabilities created during the public ownership of the nuclear industry.
11. BIS is responsible for industrial policy and R&D more broadly, particularly when delivered through the Research Councils, Universities and Technology Strategy Board. BIS and DECC will continue to work closely together in implementing the policy set out here, ensuring a coherent approach across policies relating to nuclear energy, industry and research and development. This Government response also includes responses from the Research Councils and Technology Strategy Board.

### **Recommendations**

12. The Government response to each of the Committee's recommendations is set out below. For ease of reference, these are presented in the order in which they appear in Chapter 9 of the Report: Conclusions and Recommendations.

#### **Recommendation 1 - Long-term Strategy**

**We recommend that the Government should set out a long-term strategy for nuclear energy, outlining:**

- **how they intend to keep the options open to ensure that, if required, nuclear can contribute more to the energy portfolio beyond the current plans for new build up to 2025; and**
- **how R&D capabilities and the associated expertise will be maintained to keep the different nuclear energy options open;**
- **how they intend to support the exploitation of the UK's strengths in the research base for the commercial benefit of the UK; and**
- **the role they envisage the UK playing in the global nuclear market over the period to 2050 and beyond. This should cover both the development of the supply chain for Generation III technologies and the UK's involvement in the development of new nuclear technologies in the future.**

**The strategy should extend up to and beyond 2050. (paragraphs 63 and 79)**

13. The Government has set out<sup>1</sup> its policy that, “in principle, new nuclear power should be free to contribute as much as possible towards meeting the need for around 18 GW of new non-renewable capacity by 2025”. The Government has been taking forward a number of facilitative actions<sup>2</sup> to help achieve this.
14. Now that this Government work is well-advanced, and the private sector are starting to invest in what will be the first nuclear power stations to be built in the UK for several decades, the Government believes this recommendation is timely. The Government accepts that more can be done to maximise the role that the UK can play in the global nuclear market, including how the research base can be tuned to the needs, and particularly the long-term needs, of both energy and industrial policy.
15. The Government will therefore publish a long-term strategy (**the Strategy**) on the role of nuclear up to and beyond 2050 in the summer. The Strategy will draw on and take into account a range of recent reports and papers including: the Carbon Plan, the House of Lords Report on Nuclear R&D capabilities; the CoRWM paper on Waste R&D; the emerging ERP Roadmap; the work of the NDA research Board; Royal Society paper on Nuclear Fuel Cycle; the emerging Smith School work and work on 2050 pathways analysis.
16. The Strategy will include:
- The Government’s position on nuclear power’s potential role in the energy portfolio to 2050.
  - High-level options to maintain relevant R&D capabilities and associated expertise in order to deliver UK energy policy to keep a variety of nuclear technology energy options open.
  - Government will identify with industry the UK’s potential commercial role in the longer-term global nuclear market and the possible support required, including opportunities for exploiting benefits from our national strengths in the research base. This will build on discussions already underway between industry and NNL on the best way for the UK to realise commercial success in this area.
17. The Strategy will be underpinned by:
- A statement and vision of the Government’s civil nuclear industrial policy. (**the Industrial Vision Statement**), produced with industry, and setting out the potential commercial role industry might play in the global market and how the research base can support that.
  - A review leading to a Research and Development Roadmap supporting commercial aspirations and energy policy. (See the response to Recommendation 2, below for further details). The Government Chief Scientific Advisor will start this by drawing up a comprehensive picture of the current nuclear R&D landscape, considering existing

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<sup>1</sup> See the Energy National Policy Statement at <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/consents-planning/nps2011/1938-overarching-nps-for-energy-en1.pdf>

<sup>2</sup> See [http://www.decc.gov.uk/en/content/cms/meeting\\_energy/nuclear/new/new.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/nuclear/new/new.aspx)

nuclear related R&D facilities and programmes, existing and potential resourcing structures for these programmes, and optimal coordination mechanisms for the future.

- The work programme of the Office for Nuclear Development to enable nuclear new build, consistent with the Government's policy on no subsidy<sup>3</sup>
- A programme setting out the skills investment needed to support commercial aspirations and UK nuclear energy policy .

18. As part of developing the Strategy, the Government will create an Advisory Board, under the auspices of the Government Chief Scientific Adviser, who will provide assistance and peer review of R&D aspects of the developing strategy. This work will be conducted in partnership with industry. (Further details relating to this group are set out under Recommendation 3 below.)

## **Recommendation 2 – R&D Roadmap**

**We recommend that, as part of its long-term nuclear energy strategy, DECC should lead the development and implementation of a long-term R&D roadmap in collaboration with industry, academia, the CCFE and NNL to ensure that the UK has adequate R&D capabilities and the associated expertise to keep a range of nuclear energy options open up to 2050 and beyond. (paragraph 142)**

19. The Government accepts that more can be done to ensure coordination, coherency and credibility in this area.
20. As part of developing the Strategy, the Government will, therefore, lead in developing a UK Nuclear R&D roadmap (**the Roadmap**) to 2050 and beyond. This basis for this roadmap will be developed through a review led by Sir John Beddington, the Government Chief Scientific Adviser, in collaboration with David Mackay, the DECC Scientific Adviser and John Perkins, the BIS Scientific Adviser. In taking this work forward Government will establish an Advisory Board, referred to in greater detail under Recommendation 3 below.
21. It is envisaged that the review will consider existing R&D programmes, the R&D infrastructure and landscape, likely R&D resources, international engagement and opportunities, and take into account work of others such as the Energy Research Partnership, TSB, EPSRC, and the Royal Society. The Review will also look at areas of synergy between other areas of energy research, including nuclear fusion, and how greater benefit can be gained between these different areas of research to maximise UK R&D capacity.
22. Given the need for collaboration with industry, academia, and other associated bodies, we envisage that the development of the Roadmap will run in parallel with, and beyond the timing for the long-term strategy, with delivery of the final document envisaged before the end of 2012. The Nuclear R&D roadmap will help determine the R&D programme that could support the Strategy and Industrial Vision Statement (see para 15 above).

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<sup>3</sup> See section on “No Subsidy for Nuclear Power” in DECC SoS written statement of 18<sup>th</sup> Oct 2010 [http://www.decc.gov.uk/en/content/cms/news/en\\_statement/en\\_statement.aspx](http://www.decc.gov.uk/en/content/cms/news/en_statement/en_statement.aspx)

### **Recommendation 3 – R&D Board**

**We recommend that the Government should establish a body (which we suggest may be called the Nuclear R&D Board: “the Board”) with both advisory and executive functions. (paragraph 143)**

23. The UK R&D landscape benefits from having a diverse number of organisations providing expertise, knowledge and direction. These include the UK Atomic Energy Authority, the Research Councils, the Nuclear Decommissioning Authority, the Technology Strategy Board and the Office for Nuclear Regulation, Universities, the National Nuclear Laboratory and the Nuclear Advanced Manufacturing Research Centre.
24. Whilst Government already engages with many of these organisations, we see significant merit in the creation of a more coordinated **Advisory Board** to provide relevant assistance, knowledge and expertise to Government, initially on the development of a long-term strategy and then on progress against the strategy and the Roadmap.
25. As such, government will select and invite experts from industry, academia and other stakeholders to join such an Advisory Board, set up under the auspices of the Government Chief Scientific Adviser, Sir John Beddington. The Advisory Board will be asked to consider and suggest approaches to address a number of the recommendations made in the Committee’s report such as:
  - improved strategic coordination of nuclear R&D in the UK, identifying opportunities and gaps in the research and development landscape, including commercial opportunities;
  - monitoring and reporting on progress against the strategy and the roadmap;
  - identifying and advising on opportunities in other national and international collaborations for UK Science and Industry; and
  - advising on opportunities for R&D investment from international sources where this would support industrial and energy policy objectives.
26. The Government believes that this is the best approach to achieve the objectives set out in the report, rather than setting up an independent NDPB, as recommended. We will keep the function and role of the Advisory Board under review as the Strategy is further developed. Consideration can then be given to whether the advisory group should be maintained permanently or indeed whether there should be a different body with the expertise to advise on the delivery and running of the nuclear R&D programme.

### **Recommendation 4 – Funding**

**We recommend that the Government should discuss with the relevant stakeholders what additional funding is required to implement the R&D roadmap. This funding might come from a combination of stakeholder contributions or the reallocation of funding from other sources (for example, reallocation of around 1% of the £2.8 billion allocated to decommissioning and clean up each year). (paragraph 152)**

27. Before considering additional funding, the Government believes it is important to start with a better detailed understanding of current spend and opportunities for funding (see para 16, 2<sup>nd</sup> bullet). The production of the Strategy and the Roadmap will allow us to ascertain what the funding requirements for nuclear R&D should be in order to achieve the agreed visions for energy and industrial policy.

28. We understand from the nuclear community that R&D would need to ramp up through a phased approach and therefore that any need for additional funding can be considered in parallel with developing the means of funding them. So as well as considering whether further public funding is needed there is time to explore alternative sources of funding to be found from other sources outside of the UK or from the commercial world. As Government's key departments in this area, DECC and BIS will become more engaged in relevant European and international meetings and decision making processes to this end.
29. The Government agrees with the Report on the importance of attracting private investment into nuclear R&D. Work with the Technology Strategy Board and at the Nuclear-AMRC has already brought together public and private investment and we look forward to seeing this develop further. The Government is also encouraging discussion between industry and NNL to explore other opportunities in this area.
30. The Government has either directly, or indirectly through the Research Councils, TSB and NDA, increased the funding going into nuclear R&D over the last few years. The Government has made some significant direct investments in the Nuclear-AMRC and the Dalton Cumbria Facility operated by the University of Manchester, both of which should support companies in growing commercial success in the nuclear market, whether this is new build, maintenance or decommissioning. The Research Councils have also increased their level of spend, as has the TSB who are conducting feasibility projects with a number of SME manufacturers in the nuclear sector and there are plans to extend this.
31. As stated in paragraph 56, the Government does not plan to extend the remit of the NDA, as it would not want to divert precious resources from its crucial mission.

#### **Recommendation 5 – Generation IV forum**

**We recommend also that the Government reinstates UK active membership of GIF at the earliest opportunity. (paragraph 172)**

32. DECC's Chief Scientific Adviser, David MacKay, will give further consideration to the potential and options for seeking to contribute to, and re-engage with the development of advanced reactor designs, including the Gen IV International Forum and its programme of research into new reactor designs. This will be undertaken in discussion with the HMG Chief Scientific Adviser and the Advisory Board. Given the global nature of the nuclear industry, it is important to understand from R&D programmes where these offer commercial opportunities or strategic advantages to the UK and therefore a return to the taxpayer.
33. Consideration will be given to energy policy as well as commercial interests, including appropriate areas where UK R&D expertise might naturally fit with Gen IV technology programmes. Results of this consideration will be set out with the long-term strategy.

#### **Recommendation 6 – NNL Phase 3 Laboratory**

**We recommend that the proposed Nuclear R&D Board should work with DECC, NNL, the NDA, BIS, the research councils and relevant industry groups to develop a business case to commission the Phase 3 laboratory at NNL as a national research facility for studying irradiated materials, taking into account its wider value to the nuclear sector and to the research community for research and, in particular, its contribution to training the next generation of experts and increasing the attractiveness of the UK as a destination for international research collaboration. (paragraph 181)**

34. The Government acknowledges the significant current and potential future capability of NNL, and also recognises that it is important that NNL's activities continue to make commercial sense. We note the potential that NNL Labs could become part of a European network, and agree that commissioning of Phase 3 of the already world class Central Laboratory could enable research to be conducted on a range of highly radio-active materials.
35. NNL is already working with a wide range of potential users of the Phase 3 facility, both in the UK and overseas, covering the full spectrum of potential uses. This is to understand their requirements and to see if a business case can be developed to commission the facility. Subject to the outcomes of this work, Government will consider further the business case, technical challenges and options for commissioning the laboratory.
36. We envisage being able to provide further details of such consideration with the publication of the Strategy.

#### **Recommendation 7 – Legacy and Existing Waste systems**

**We recommend that the NDA, NERC and other relevant funders ensure that sufficient R&D capabilities and associated expertise are maintained over the longer term to manage legacy and existing systems waste. (paragraph 189)**

37. NERC and the NDA plan to collaborate on the design and delivery of the NERC-led Radioactivity and the Environment (RATE) research programme, which will be partially informed by the NDA's requirements. The programme will be specifically designed to develop capability and expertise in relevant areas including, but not limited to, radioactive waste management and disposal. Beyond the 5-year time limit of this programme (2012-2017), NERC will continue to support fundamental research of relevance to radioactive waste management and disposal.
38. The UK also plays a leading role in the Implementing Geological Disposal Technology Platform (IGD TP) which is a technology platform on research, demonstration and development in the area of geological disposal of high level and other long-lived radioactive wastes. NDA RWMD are a member of the executive committee whilst a significant number of UK research organisations are participants in the platform. In the field of geological disposal, RWMD has a number of collaboration agreements with international programmes, enabling the UK to build its technological base from the experience of other more advanced programmes
39. The optimisation of a strategy for nuclear waste management depends partly on a good understanding of how the radioactive waste decays over a period of time. The validity of the models used to predict this relies partially on the accuracy of the input data (e.g., neutron

absorption and fission cross sections, fission yields, and gamma decay heat measurements). The Government agree it is important that the UK retains the capability to contribute to international endeavours in the area of nuclear data, to ensure that the UK nuclear industry benefits from these new measurements. This is an example of how one area of the UK's expertise can be brought to bear on legacy waste issues and future management, recycling and reprocessing strategies.

40. Whilst most intellectual property value resides in new technology design and build, there is notable value in some areas of decommissioning and this is especially true in the area of waste handling, cleanup and storage.
41. Government will continue to work with NDA, CoRWM, the research councils and others to ensure that R&D capabilities to manage legacy and existing systems waste are included in the development of the Strategy and its supporting workstreams.

### **Recommendation 8 – Nuclear Safety**

**We recommend that the ONR should not wait until it has been set up as a statutory corporation to establish a reformulated NuSAC, but should do so as soon as possible. The advisory committee should provide independent and transparent advice and external challenge to the ONR's work for both the Chief Nuclear Inspector and the Secretary of State. (paragraph 197)**

**We would also urge the Government to ensure that there is no further delay in converting the ONR to a statutory corporation and that in the meantime it is able to continue with the existing arrangements that are in place (for example the interim arrangements on pay discussed in paragraph 130). (paragraph 198)**

42. The Office for Nuclear Regulation is already in the process of exploring options for the creation of an advisory panel or similar body. This includes the potential for setting up such a body prior to the formation of the ONR as a Statutory Corporation.
43. On 8 February 2011, Chris Grayling (Minister of State for Employment) announced that the Government intends to bring forward legislation to create a new independent statutory body outside of the Health and Safety Executive (HSE) to regulate the nuclear power industry. The statutory Office for Nuclear Regulation (ONR) would take on the relevant functions currently carried out by the HSE.
44. Pending this legislation, an interim ONR has been established as an agency of the HSE from 1 April 2011, signalling Government's commitment to securing an appropriately resourced and responsive regulator for the future challenges of the nuclear sector.
45. Government is currently progressing the relevant legislation and will introduce it as soon as Parliamentary time allows

## Recommendation 9 - Skills

**We recommend that Cogent should conduct a comprehensive assessment of the current provision of undergraduate, Masters and PhD courses relevant to the nuclear sector to determine whether they are sufficient to meet the future needs of the research community, the regulator and industry for both the current plans for new build and an extended programme up to 2050. (paragraph 127)**

46. Ensuring the right provision of skilled labour is vitally important, both to ensure industrial success, but also the maximum employability of people. Considerable work has been undertaken in the last few years by the National Skills Academy for Nuclear, Cogent, the Sector Skill Council, Government and others to ascertain the predicted skill requirement needed for the nuclear sector. This has resulted in an increase in nuclear university places, together with further education courses and other nuclear relevant training.
47. The building blocks for an effective approach to delivering the skills needed to the nuclear industry are now largely in place. The National Skills Academy for Nuclear is the core organisation and with Cogent and the other relevant skills partners have established the Nuclear Industry Training Framework, which sets out all the nuclear job roles, qualifications and industry standards. Bolstering this NSA-Nuclear, with industry, have developed the 'Certificate of Nuclear Professionalism' to ensure that graduates and other entrants to the nuclear industry have the skills, behaviours and competencies required to operate effectively in a nuclear environment. Industry now needs to fully utilise these programmes to ensure an adequate flow of suitably qualified individuals into the sector. We will continue to work with industry and skills partners to establish how this is best achieved.
48. The research base has also grown considerably since 2005 with an increase in Research Council spend from £952,000 in 2005-6 to almost £6.5 million in 2009-10 and just over £6.5m in 2010-11. It is anticipated that this level of funding will continue. The nuclear research funded through the Research Councils contributes to skill development by training increasing numbers of people. This includes two Centres for Doctoral Training which are training 50 PhDs and 50 EngDs and a further 98 PhD students working on current Research Council nuclear-specific grants. Additionally, the Research Councils fund training in a wide spectrum of non-nuclear specific disciplines but which feed in to nuclear R&D and industry. EPSRC is looking to align fellowship calls with doctoral training activities to ensure an attractive career path for talented young nuclear scientists and engineers. The Government has also invested over £50m in UK universities in the last 5 years to expand our world-leading nuclear research facilities in key technology areas including radiation science and other areas of manufacturing. Much of this has been in partnership with industry on the right focus for the investment.
49. The Nuclear Energy Skills Alliance (NESA), a grouping of the relevant skills bodies that work in the nuclear industry has been formed at the request of Government and is chaired by the National Skills Academy for Nuclear. The Group has been assembled to take stock and ensure coordination of the future approach in skills at a strategic level. NESA are overseeing a review of the nuclear skills requirement to ensure, that through providers, the right skills are delivered

appropriately and affordably to support the nuclear industry in the UK and wider UK global commercial aspirations. NESA will report progress to BIS and DECC ministers as well as the Nuclear Development Forum of industry representatives, chaired by the DECC Secretary of State.

50. In addition, the National Skills Academy for Nuclear and Cogent are playing a key role working with the National Nuclear Laboratory, specifically to look at skills for R&D and how R&D can help develop ensure a comprehensive skill set. Their work will be published soon and will be considered as part of the Roadmap.

### **Recommendation 10 – Roles and responsibilities**

**Given the evidence of the apparent confusion about the role of DECC, for the avoidance of doubt, we recommend that DECC should be designated as the lead department in developing a national nuclear policy and R&D roadmap, outlining what R&D capabilities and associated expertise are necessary to support its policies. (paragraph 200)**

51. Government notes the Committee’s concerns with regard to apparent confusion around the roles of DECC and BIS in the field of Nuclear R&D and we agree that there is merit in providing further clarity.
52. DECC Ministers, as the department responsible for Energy Policy, will take lead responsibility for developing and publishing the Strategy referred to earlier in this response. Both the Strategy and supporting work (including the Industrial Vision Statement and the Roadmap) will be developed through strong cross government collaboration with BIS, the Government Office for Science and other government departments leading on input in their respective fields.
53. As also noted above, the Government Chief Scientific Adviser will take forward the formation an Advisory Board to assist both the BIS and DECC ministers.

### **Recommendation 11 - Advanced fuel recycling and reprocessing**

**We recommend that the Government, in consultation with the proposed Nuclear R&D Board, should consider which body should be given responsibility for maintaining R&D capabilities and associated expertise in advanced fuel recycling and reprocessing and, if none of the current bodies is considered to be appropriate, they should consider whether a new one should be established. (paragraph 219)**

54. The Government will consider this recommendation as part of the Strategy, seeking the advice and assistance of the Advisory Board.

### **Recommendation 12 – Role of the NDA**

**We recommend that the Government should clarify the NDA’s responsibilities for dealing with new build waste and for commissioning and co-ordinating research and**

**maintaining R&D capabilities and associated expertise in respect of new build waste. (paragraph 222)**

55. The Government fully recognises that much of the UK's knowledge relating to nuclear waste management lies within the NDA estate and that it is important that this expertise is made available to the UK's broader nuclear programme.
56. The Nuclear Decommissioning Authority's (NDA) core objective is to ensure that the historic civil public sector nuclear legacy sites are decommissioned safely, securely, cost effectively and in ways that protect the environment. Management of the waste arising from its operational facilities and from decommissioning its own sites is critical to meeting that objective. The NDA is also responsible for implementing geological disposal of higher activity radioactive waste and for delivering an integrated nuclear waste strategy for the whole of the UK's nuclear industry.
57. The NDA's responsibilities, objectives and approach are clearly set out in their Strategy. The NDA takes a UK-wide view, including the operations of other waste producers (e.g. EDF Energy) and provides for waste potentially arising from the UK's new build programme. With Government agreement, the NDA is providing information and advice to utilities involved in this programme. This is intended to ensure an integrated approach to radioactive waste management across the industry. With regard to related R&D, the Strategy sets out the NDA's aim to "encourage innovation and open market solutions, and sustain R&D matched to the challenges of waste management both by direct investment and indirectly through the programmes of our SLCs".
58. Whilst we believe that the NDA's responsibilities for waste, including new build waste are clearly stated in the NDA's Strategy, for the avoidance of doubt, Government will provide further clarity on responsibility for R&D capabilities around new-build waste in the Strategy and the Roadmap. More widely, Government would have serious concerns about changing the remit of the NDA, as we would not want to dilute their focus on decommissioning and dealing with the existing legacy issues.

**Recommendation 13 – Role of the NNL**

**We recommend that the Government extend the remit of NNL to enable it to carry out a programme of applied long-term R&D of national strategic need, under the direction of the proposed nuclear R&D Board, in order to maintain capabilities in vulnerable areas for which no body currently has responsibility for (such as advanced fuel recycling and reprocessing and deep geological disposal) and to maintain the breadth of R&D capabilities and associated expertise needed to meet the UK's future energy policies. (paragraph 250)**

59. The development of the Government's strategy, including the Roadmap and the Industrial Vision Statement (see response to recommendations 1 and 2) will consider how to ensure maintenance of R&D capability, including the role of the NNL and other organisations, in order to achieve this. In the meantime, the Government is pressing forward with its assessment of needs to ensure innovation in nuclear technologies. The NNL is providing analytical support in this and the work includes an examination of the R&D capabilities needed for innovation.

## **Recommendation 14 – Integrated Policy Approach**

**We recommend that responsibility for co-ordinating overlapping nuclear R&D capability requirements across Government should be assigned to the proposed Nuclear R&D Board to ensure that the UK’s nuclear R&D capabilities and associated expertise match the UK’s requirements across different policy areas in the long term. (paragraph 261)**

60. The Government acknowledges the importance of providing consistency and credibility across the R&D landscape, together with the need for coordination and monitoring in the long term. We will consider the options for the provision of an enduring model to take this work forward as part of the Strategy and the supporting workstreams.