Nuclear Supply Chain and Skills Action Plan

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Summary and Recommendation:
This report summarises the national Nuclear Supply Chain and Skills Action Plan and the potential benefits that its implementation could bring to Copeland and its communities.

Recommendation:
Members are asked to note the contents of this report and consider ways in which the Plan can be used to enhance opportunities for supply chain and skills development in the Borough.

1. Introduction and Background

On 6th December the Government published the Nuclear Supply Chain and Skills Action Plan which has been developed by Government in partnership with developers, professional bodies, trade associations and industry. The renaissance of nuclear power both in the UK and globally, coupled with the wider move to a low-carbon economy, provides major opportunities for the nuclear supply chain and skilled employment.

It is estimated that 16GW of new nuclear built in the UK by 2025 (in line with current industry plans) would create up to 30,000 new jobs. There will also be opportunities for manufacturing companies to get involved in the building, operating and decommissioning of the UK's new nuclear power stations.

The Government believes that there are significant opportunities in the UK nuclear sector from which the UK supply chain can benefit, provided it builds up its capabilities and competitiveness. The Government wants to ensure that the new nuclear build programme delivers not only much needed low carbon electricity at competitive prices, but also economic benefits to the UK including ensuring the nuclear supply chain is well positioned to access UK and long term export opportunities.

The Nuclear Supply Chain and Skills Action Plan sets out the following key objectives:

- To maximise UK economic activity and growth from the nuclear sector at national and local level, including employment and business opportunities for the UK supply chain.

- To boost job creation in the nuclear industry, and to ensure that potential skills

shortages do not act as a barrier to the future development of the industry in the UK.

- To use the domestic nuclear market to provide a platform for enhancing a sustainable and successful UK civil nuclear industry, and to use this basis as a lever to access export opportunities.

- To maintain and develop a vibrant supply chain covering key capabilities to deliver safe, innovative and cost effective clean up of the legacy facilities and to exploit synergies with new build.

- To raise awareness across the supply chain of nuclear sector opportunities, to identify barriers preventing access to those opportunities and to develop actions for Government and Industry that will help place the supply chain in a stronger position to compete for those opportunities.

In total thirty actions have been proposed in the action plan to tackle the issues identified, and these actions will be implemented by Government and the nuclear industry in the coming years for the benefit of the UK supply chain.

The Nuclear Supply Chain and Skills Action Plan can be found in full on the DECC website at: http://www.decc.gov.uk/en/content/cms/meeting_energy/nuclear/new/supply_skills/supply_skills.aspx

A copy of the Action Plan summary document is attached at Appendix A.

2. Recent developments in Nuclear Supply Chain and Skills

The Office for Nuclear Development (OND) is working with the supply chain and nuclear reactor vendors and operators to help create and support a globally competitive UK supply chain. It will also act as a gateway to market information, contact networks, activities and organisations, to help the UK supply chain fulfil the opportunities presented by new nuclear projects.

Within the Nuclear Supply Chain and Skills action plan a number of issues have been identified across market access, capability and skills that are currently preventing companies from entering, or growing their involvement in, the nuclear sector. For example, the supply chain will need to make timely investments in capability and competitiveness to ensure they are ready to compete for nuclear contracts. But to do this, they will need improved access to relevant information, such as enhanced clarity on the forward pipeline of nuclear contracts. To address this there are actions in the plan relating to the Government working with industry to convey confidence regarding the future of nuclear, to encourage developers and vendors to provide better information on the timing and requirements of future contracts, and to ensure easier, more straightforward access to key information on the nuclear sector.

The Nuclear Industry Association, the Government Department for Business, Innovation and Skills (BIS) and other key partners, is also leading a programme of regional and sector-based initiatives, designed to improve the capability of the UK supply chain, and raise awareness of major opportunities at home and overseas.

In relation to skills development the OND currently has two key objectives in its skills remit:

- To ensure that the UK has the appropriate skilled workforce to deliver nuclear new build in the UK by 2018
- To help the development of UK nuclear skills so that UK workers can play a full role in nuclear new build

It does this by working closely with skills bodies, employers, universities and colleges to help identify skills shortages and gaps and provide teaching, research and training.

Nuclear and radiological technology is an important part of power generation, national defence and health care, as well as research, development and manufacturing. There is also a substantial legacy from past nuclear activities that is the subject of the decommissioning programme, led by the Nuclear Decommissioning Authority (NDA). The action plan recognizes that skilled people in all these areas are required. However, due to past peaks in recruitment, the workforce age profile is skewed, and retirement will take an increasing toll through the 2010s. This is not unique to nuclear; the workforce is ageing across the energy sector, in the UK and throughout the developed world.

To address this the National Skills Academy for Nuclear was set up in January 2008, to work with existing training providers across the UK to develop training and qualifications in this area. In its first three years, it intends to provide 1,200 apprenticeships and 150 foundation degrees, as well as work-based training to help 4,000 employees move from operations to decommissioning.

To identify possible future skills gaps and develop mitigating actions, the Nuclear Development Forum and OND requested that Cogent (the Sector Skills Council covering nuclear) look at this issue alongside other reports that they have published on the civil nuclear workforce. In March 2010, they published ‘Next Generation : Skills for Nuclear New Build’ which identified future possible skills gaps and high risk skills (if current industry plans are realised), and suggested a series of mitigating actions to minimise the risk of key skill shortages.

The Nuclear Energy Skills Alliance, which is made up of key stakeholders, continues to meet on a quarterly basis to review progress against the mitigating actions and ensure that they are kept up to date.

Also, to make sure that nuclear skills continue to be developed and be available as we move towards building the UK’s new power stations the creation of the National Nuclear Laboratory in Cumbria was announced on 23 July 2008.

3. Implications and opportunities for Copeland and its communities

The Council has long recognized the potential value of the nuclear sector and its supply chain as a potential source of employment and wealth creation for Copeland and its communities. Supply chain development in relation to both nuclear new build and decommissioning is seen as a key opportunity and priority within the West Cumbria Economic Blueprint published in June 2012. The Council along with other local authority stakeholders has, through a stakeholder engagement protocol, been working with the NDA and Sellafield Ltd over recent years to identify means by which the local supply chain can be supported and developed to assist the NDA and Sellafield Ltd to achieve their site decommissioning objectives. In addition the Council is in discussion with NuGeneration Ltd regarding the potential development of a new nuclear power station facility at a site to the north of Sellafield known as Moorside. Although these discussions are at an early stage supply chain and skills implications and opportunities will be an important issue for discussion in coming months.

HM Government

Industrial Strategy: government and industry in partnership

The Nuclear Supply Chain Action Plan

Summary Document

December 2012

Contents

1 Executive Summary

1.1 This is a summary document of the Nuclear Supply Chain Action Plan. The complete, more detailed version of the action plan is available separately.

1.2 The Government has a vision of the UK nuclear industry becoming a global leader, with key companies forming an integral part of the domestic civil nuclear market supported by a large and diverse supply chain across manufacturing, professional services, construction, skills, training and educational services. If this is achieved, the UK supply chain will be in a prime position to supply to the major nuclear developers, reactor vendors and operators in both the domestic and global nuclear markets.

1.3 With this vision in mind, the Nuclear Supply Chain Action Plan has been developed by Government in partnership with industry. The action plan focuses on the complete civil nuclear fuel cycle including front end, operations and maintenance, new nuclear build, waste management, decommissioning, with the following key objectives:

- To maximise UK economic activity and growth from the nuclear sector at national and local level, including employment and business opportunities for the UK supply chain.
- To boost job creation in the nuclear industry, and to ensure that potential skills shortages do not act as a barrier to the future development of the industry in the UK.
- To use the domestic nuclear market to enhance a sustainable and successful UK civil nuclear industry, and to use this basis as a lever to access export opportunities.
- To maintain and develop a vibrant supply chain covering key capabilities to deliver safe, innovative and cost effective clean up of the legacy facilities and to exploit synergies with new build.
- To raise awareness across the supply chain of nuclear sector opportunities, to identify barriers preventing access to those opportunities and to develop actions for Government and industry that will help place the supply chain in a stronger position to compete for those opportunities.

1.4 To ensure the UK supply chain is able to fairly compete for contracts in the nuclear sector, the Government has engaged extensively with industry to understand the key issues preventing these objectives being achieved.

1.5 Thirty actions are proposed in this action plan to tackle the issues identified, and these actions will be implemented by Government and the nuclear industry in the coming years for the benefit of the UK supply chain.

2 Nuclear Sector Market Potential

2.1 The civil nuclear sector is estimated to have contributed around £3.8bn in sales to UK companies in 2010/11, demonstrating that sector opportunities are already significant[1]. Of the £3.8bn, activities related to nuclear power plant operations were valued at around £1.5bn. Moreover, the nuclear sector is forecast to grow by 2.8% on average each year until 2014/15.

2.2 There are major planned investments in new nuclear with industry committed to helping build a low carbon secure energy future for the UK.

- EDF Energy and Centrica are seeking to build new reactors at existing nuclear sites at Hinkley Point in Somerset and Sizewell in Suffolk, providing work for companies in the local communities and across the UK economy as a whole.

- Following purchase by Hitachi, Horizon is bringing forward plans to develop either two or three nuclear reactors at each of its sites, Wylfa on Anglesey and at Oldbury in South Gloucestershire. Hitachi has committed to work with Horizon in maximising UK content on projects.

- NuGen's Moorside project focuses on the development of a new generation nuclear power station on land in West Cumbria. NuGen will work in partnership with the local community in West Cumbria and will look to maximise employment and skills opportunities in the region.

2.3 The UK nuclear industry has the capability to carry out a significant proportion of the work involved in new nuclear power station projects in England and Wales. It is estimated that a 16GW new nuclear programme could support between 7,600 to 9,800 direct jobs in the supply chain on average per year over the period 2012-2030[2], with each new power station thereafter employing up to one thousand people in operation.

2.4 This anticipated industry investment of approximately 16GW of new capacity before 2030 equates to almost £60bn, which is equivalent to five new multiple-reactor nuclear power stations each with on average capital investment requirements of around £12.0bn[3]. This compares to an overall cost of around

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[1] Innovas and K-Matrix, Report for BIS. (2012). "Low Carbon and Environmental Goods and Services (LCEGS)2010/11"

[2] Oxford Economics and Atkins, "The Economic Benefit of Improving the UK's Nuclear Supply Chain Capabilities", Forthcoming.

[3] Estimate of around £60 billion is based on capital cost estimates from PB Power (2012), assuming a transition from First of a Kind (FOAK) to Nth of Kind (NOAK) costs. PB Power, Electricity Generation Cost Model – 2012 Update of Non-Renewable Technologies, DECC, 2012.

£9bn for the London 2012 Olympic and Paralympic Games[4].

2.5 There are also attractive export opportunities, and globally the nuclear sector is estimated to have been worth around £95bn in sales during 2010/11 and is expected to grow by 2.1% to 2014/15[5]

3 Issues and Addressing Actions

3.1 The Government has engaged extensively with the nuclear industry to understand what are the key issues preventing the objectives of the action plan, such as growth in the domestic and global nuclear sectors, from being achieved. Findings from the NIA Capability Report[6] and economic analysis by Oxford Economics[7] have also been taken into account.

3.2 Issues have been identified across market access, capability and skills. Actions to address each issue are proposed, and Government is keen to work closely with industry to ensure these actions are successfully implemented.

3.3 For each action a lead organisation has been identified along with initial success measures and target timescales. This information is indicative at this stage and as part of the implementation of this action plan a more detailed delivery programme will be compiled.

Market Access - Issues

- **Confidence Regarding the UK Government's Commitment to Nuclear:** In order for the nuclear industry to maintain and increase investment and involvement in the sector it important that the UK Government not only continues to convey its clear commitment to nuclear and the new build programme, but also that it delivers the necessary market framework to enable new build to come forward.

- **Understanding Market Access:** Currently there are many organisations that provide information to supply chain companies interested in involving themselves in the nuclear sector. Government will ensure a simplified process where key information relating to nuclear sector market access is brought together.

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[4] *http://www.culture.gov.uk/news/news_stories/9470.aspx*

[5] *Innovas and K-Matrix, Report for BIS. (2012). "Low Carbon and Environmental Goods and Services (LCEGS)2010/11"*

[6] *NIA. (2012) "Capability of the UK Nuclear New Build Supply Chain"*

[7] *Oxford Economics and Atkins, "The Economic Benefit of Improving the UK's Nuclear Supply Chain Capabilities", Forthcoming.*

- **Clarity on the Forward Pipeline and Access to Contracts in the Nuclear Sector:** To undertake the investments required to meet the new build programme, supply chain companies will benefit from clarity on the timing and requirements of forthcoming contracts. Government will work with developers, operators and higher tier companies to ensure clarity on the forward pipeline and that opportunities for UK companies to compete fairly are maximised.
- **Requirement for International Partnerships:** Whilst nuclear developers in the UK may wish to draw upon their pre-existing supply chain base, or their own industrial resource that is based outside of the UK, Government will want developers to encourage links between UK based businesses and these pre-existing supply chains. Opportunities for the supply chain to develop and strengthen links with experienced international nuclear companies will be increased.
- **Costs of Equipment Qualification:** For many nuclear components and equipment there is a requirement for qualification and proving work to be performed even before a contract can be tendered for. The associated costs involved can provide a significant barrier to entry, or challenge competitiveness where companies seek to recoup these costs through early contracts. The Government will work with industry to develop options for addressing this issue.
- **Accessing Export Opportunities:** The global nuclear market is likely to continue to grow, and export opportunities are likely to strengthen the attractiveness of the nuclear sector for supply chain companies. The Government is therefore keen to ensure the supply chain receives enhanced guidance and support in understanding export market opportunities and in gaining exposure to those opportunities.
- **Export Control Constraints:** Export Control requirements and processes may affect the UK supply chain's ability to respond quickly to emerging opportunities, and to access markets considered difficult from an export control perspective. The UK Government will seek to streamline the implementation of export control processes whilst maintaining legal commitments.
- **Attractiveness of the UK Export Finance Offering:** UK Export Finance does not directly offer credit for export projects, but guarantees repayments for banks that provide the financing. UK Export Finance will work with industry to raise awareness of the services they provide.
- **Level of Alignment of Public Sector Procurement Across Nuclear Related Sectors:** The Government is involved in the procurement of significant aspects of the UK nuclear sector. Clarification and alignment of the procurement processes in the nuclear decommissioning and R&D markets (e.g. Fusion) would enhance the potential for the supply chain operating in these areas to grow their global market share. Alignment of certain aspects of public sector purchasing (the NDA, MOD and Fusion), such as generic terms & conditions and pre-qualification questionnaires will be investigated.

Market Access – Actions

Confidence Regarding UK Government's Commitment to Nuclear

3.4 A key first step to attracting developers and industry investment in building capacity and capability for the new nuclear programme is a strong and consistent commitment from Government to that programme. As part of the Government's long-term industrial strategy for the nuclear sector, and to help deliver the near-term actions set out in this plan, a new Nuclear Industry Council (NIC) will be created, bringing together key players throughout the supply chain.

ACTION 1 **Nuclear Industry Council**	Government, with industry will establish a partnership in the form of a Nuclear Industry Council to be co-chaired by the lead industry body and BIS and DECC Ministers. The NIC will focus on areas of common strategic interest to the UK civil nuclear industry, represent their interests and work to advance the UK nuclear industry securing global commercial success.	**Lead: BIS & DECC**
Initial Success Measure: NIC to be operating with clear terms of Reference		**Q1 2013**

3.5 Whilst Government's overarching role is to secure commercial interests for the UK as a whole, it is also recognised that particular benefits need to accrue to communities that host nuclear facilities. Accordingly, Government will oversee the formation of Strategic Delivery Forums at a local level, to demonstrate commitment to the industry and to maximise local opportunities.

ACTION 2 **Local Strategic Delivery Forums**	Government will facilitate the formation of Strategic Delivery Forums at a local level, bringing together local and national Government representatives with developers, education and business partners. Objectives include maximising local and regional employment and supply chain opportunities arising from new nuclear (in the event that development consent is granted), and NDA developments in the area, and to address obstacles that would prevent local people finding employment, particularly for the long term unemployed. Welsh Government will continue to support the Energy Island Programme and recognises the strength and effectiveness of the collaboration the programme brings. Welsh Government will seek to	**Lead: DECC** Supported by: The NDA Welsh Government

	utilise this model of delivery in deriving benefits across the wider nuclear related opportunities presented to Welsh companies in nuclear generation, decommissioning and new build.	
Initial Success Measure: First Local Strategic Delivery Forum operating		**Q1 2013**

Understanding Market Access

3.6 More clarity regarding market entry options is required, as confusion exists regarding how supply chain companies can become involved, or widen their involvement in the nuclear sector.

ACTION 3 **SC@Nuclear Website Upgrade**	The NIA, with the Nuclear-AMRC will upgrade the SC@Nuclear website to act as a market access portal, with links to detailed procurement information provided by the new build developers, nuclear operators and the NDA. The portal will also provide links to information from other relevant organisations such as Devolved Administrations, the Nuclear-AMRC and NSA Nuclear. The level of information provided should ensure sufficient notice of future plans, and the specifications required, to enable companies in the UK to make investment decisions and to compete openly for work. Initially funded by the Nuclear-AMRC through a grant from BIS, longer-term, funding for this initiative will be transferred to industry if successful.	**Lead: NIA** Supported by: NIC BIS Nuclear-AMRC
Initial Success Measures: NIA update of their "Essential Guide to the Nuclear Supply Chain" SC@Nuclear website procurement links updated		 **Q4 2012** **Q1 2013**

3.7 When preparing to become involved in the nuclear sector, or seeking ongoing continuous improvement of their efforts, it is important that supply chain companies are prepared with the right capabilities and skills to enable them to submit high quality bids. Support in this area will be led by the Nuclear-AMRC.

ACTION 4 **Entering the Nuclear Market**	The Nuclear-AMRC exists to support manufacturing companies to market, develop and enhance capability, competitiveness and improve quality, durability and reliability of their products, whilst significantly reducing costs of manufacture. Specifically relating to readiness to provide bids and tenders into the nuclear arena, the Nuclear-AMRC will: • Provide guidance on the completion of Pre-Qualification Questionnaires (PQQs) • Work with manufacturers to enable them to produce technically capable and competitive bids for tenders for new build, maintenance and decommissioning • Work with manufacturers to build and maintain their overall fitness for work in this sector and work with them to help match their existing and potential capabilities to products detailed the procurement pipelines • Develop specific training packages for SMEs on tendering and delivering estimates for work, including pricing in the cost of quality. • Build on the single procurement portal with additional specific information for manufacturers associated with the Nuclear-AMRC to enable them to access global nuclear markets through global nuclear reactor designers, developers and decommissioning companies. Additionally, NSA Nuclear Manufacturing, supported by the Nuclear-AMRC, will work with SMEs to undertake detailed Skills Needs Analysis and to develop plans to address identified issues	**Lead:** **Nuclear-AMRC** Supported by: NSA Nuclear Manufacturing
Initial Success Measures:		
Workshop on nuclear estimating		**Q1 2013**
Workshop on winning nuclear tenders		**Q1 2013**

Clarity on the Forward Pipeline of Contracts in the Nuclear Sector

3.8 The process of engagement with the supply chain by utilities, vendors, SLCs and higher tier companies to provide them with indicative timetables and scope of procurement will be continued and deepened to provide enhanced clarity of the new order pipeline and confidence that there will be repeat orders for which they will be able to compete. Regular dialogue should therefore be maintained with the supply chain to exchange information about the expected pipeline of orders, and where possible to agree on phasing of orders to enable suppliers to contribute effectively and economically to project delivery.

ACTION 5 **New Build Contract Transparency**	Developers and higher tier companies will provide transparent information regarding contracts, procurement processes and timings for new build reactors, based on the most likely deployment scenarios. Ideally this should also make clear the products and services which are out of scope to companies in the UK. The NIA SC@Nuclear website will provide links to this information. The NIC will encourage its members to provide this information to the supply chain.	**Lead: NIC** Supported by: Developers Higher Tier Companies
Initial Success Measure: NIC satisfied with the level of procurement information available to the supply chain		**Date TBC by the NIC**

ACTION 6 **Operational Support Contract Transparency**	Operators of nuclear facilities to clearly set out the procurement processes, timings and contracts to support their operations in the UK to enable firms to evaluate opportunities to bid for work to support maintenance and operations. The NIA SC@Nuclear website will provide links to this information. The NIC will encourage its members to provide this information to the supply chain.	**Lead: NIC** Supported by: Operators
Initial Success Measure: NIC satisfied with the level of procurement information available to the supply chain		**Date TBC by the NIC**

ACTION 7 **Waste Management and Decommissioning Contract Transparency**	Contracts Finder is the Government's single platform providing access to public sector procurement related information and documentation, including the facility to publish both tender and contract documents in the same place. The NDA and the majority of their key contractors will use Contract Finder to provide details of major contracts. More information on Contracts Finder can be found at: https://www.gov.uk/contracts-finder	**Lead: NDA** Supported by: SLCs
Initial Success Measure: NDA and SLC procurement information on the Contracts Finder website		**Q1 2013**

ACTION 8 **Government Encouragement for Enhanced Contract Transparency**	The UK Government will continue to clearly communicate its commitment to maximising the commercial opportunities of the UK civil nuclear industry and to seeing the domestic market act as a platform to enable growth in global market share. Government will convey expectations to key industry players that the supply chain in the UK must have genuine market access and that the UK public expect UK industry to have the best opportunities to compete fairly. Developers, vendors and top tier companies will be invited to report on progress (metrics to be defined). Information about this will be reported annually to the Secretaries of State at DECC and BIS, through the NIC.	**Lead: BIS & DECC**
Initial Success Measure: Improved contract transparency, confirmed by the NIC		**Q2 2013**

Requirement for International Partnerships

3.9 It is recognised that new build developers may wish to utilise the experience of established international supply chains, at least in the early stages of the UK new build. It may therefore be beneficial in some instances for UK companies to form partnerships and/or joint ventures with international companies.

ACTION 9 **Opportunities for Engagement with Foreign Companies**	Via its programme of nuclear activity, UKTI will provide opportunities for the UK supply chain to meet potential international partners to support and facilitate engagement. UKTI will publish a forward programme of nuclear events, and liaise with the supply chain to describe support available to participants. UKTI will work with UBIFrance and the NIA to arrange regular targeted sessions for the UK nuclear industry to meet French nuclear companies, such as the Franco-British Nuclear Forums. Similar effort will also be applied to other global supply chains of particular relevance to the UK. The Nuclear-AMRC is also mapping out potential partners and sub suppliers to the European suppliers who may be involved in the UK plants, and along with the NIA, will liaise closely on this with UKTI.	**Lead: UKTI** Supported by: UBIFrance Nuclear-AMRC NIA
Initial Success Measure: UKTI to publish forward programme of nuclear events		**Q1 2013**

Costs of Equipment Qualification

3.10 For many nuclear components and equipment there is a requirement for qualification and proving work to be carried out even before a company can be invited to begin to compete for the work via a competitive bidding process. The associated costs involved in these qualification exercises can represent a significant barrier to entry, or challenge competitiveness if companies seek to recoup these costs through early contracts.

ACTION 10 **Equipment Qualification Costs**	The Government working with industry and devolved administrations, commits to work with the Nuclear-AMRC, NNL and others to attempt to develop methods to ease or overcome the challenge posed by the costs of this type of qualification e.g. through common facilities for equipment qualification and accreditation. The NIA will also consider this particular challenge as part of their working group on quality (see Action 21).	**Lead: DECC**
Initial Success Measure: First meeting with industry to understand issues		**Q1 2013**

Accessing Export Opportunities

3.11 Initiatives to support UK industry in accessing and succeeding in export markets will be led and driven forward by UKTI, supported by key partners through the following action:

ACTION 11 **Support to the Development of Export Opportunities**	UKTI will develop a coordinated nuclear export strategy with agreed market priorities and the development of specific campaigns to enhance the nuclear industry's understanding of, and access to, export opportunities. To include: • Key Government agencies with existing strong brand recognition (e.g. the NDA) that can significantly enhance the international profile of UK nuclear capability will be enabled to actively support and promote civil nuclear exports. • Ministers and Senior Officials will support trade missions where appropriate. • UKTI will facilitate industry led discussions to investigate the potential for UK companies to form integrated and coordinated nuclear offerings to address export opportunities across the nuclear sector. • Under its High Value Opportunities initiative, UKTI, working with industry, will identify a number of top priority nuclear projects that offer significant potential to the UK nuclear industry. Campaigns will be developed around these projects to help ensure the UK supply chain can secure maximum benefit. • UKTI will consider organising a major event, perhaps on an annual basis, in association with the NIC to showcase UK nuclear capabilities to an international audience. • The NIA Export Group will maintain an issues log of aspects restricting export opportunities for discussion on a six-monthly basis with UKTI and BIS. The NIA Export Group will also provide an overview of where UK companies are winning work	**Lead: UKTI** Supported by: DECC BIS FCO Devolved Administrations NIA NDA NSA Nuclear Nuclear-AMRC

	globally and future opportunities • UKTI will work with NSA Nuclear, NIA, Nuclear-AMRC and wider industry to develop promotional material about the UK commercial offer and capabilities. This would include a Skills Service Provider Directory produced by the Nuclear Skills Academy to market UK nuclear training to the domestic and global market. • Supported by UKTI, NSA Nuclear will build on the existing strong links and partnerships it has developed with INPO and IAEA to promote the excellence, capability and high standards of nuclear professionalism of the UK workforce internationally • As an additional dimension to the NIA SC@Nuclear website, a global opportunities section will be developed utilising data from UKTI, NDA, NIA, World Nuclear Association and global developers. This could provide skills, capability and capacity data and a gateway to nuclear export opportunities, including as appropriate, timelines and route to market.	
Initial Success Measure: UKTI coordinated nuclear export strategy developed		**Q2 2013**

ACTION 12 **NNL Strategic Export Role**	NNL will play a greater strategic role in marketing UK nuclear capability and R&D overseas.	**Lead: NNL** Supported by: BIS DECC
Initial Success Measure: NNL's programme to market UK capability overseas developed in accordance with Government long term nuclear energy strategy		**Q3 2013**

Export Control Constraints

3.12 The UK Government recognises that export control issues impact the UK supply chain and is placing significant emphasis on continued improvement of the Export Control / Compliance processes. Specific points are currently under consideration by UK Government, including:

- The ability to engage in sizeable export markets where some export control challenges exist.
- The delays associated with multiple requests for single licences, where open licences could significantly reduce the burden on both the supply chain and the Government.

ACTION 13 **Export Control Service Improvement**	The Export Control Organisation in BIS is committed to continuous development of the Export Control Service including greater use of Open Licensing and awareness work for the UK supply chain on export control processes, possibly through an annual Q&A event. Government wants to see industry increase the number of high value exports, and will strive to ensure an export control system exists that enables this whilst recognising our non-proliferation obligations. Export Control welcomes regular interaction with the NIC and NIA on areas that are working well and areas that are not delivering. Drawing on successful examples, work will continue to be done to clarify and streamline the export process once issues are properly identified.	**Lead: BIS** Supported by: DECC FCO MoD NIC NIA
Initial Success Measure: Update on export control service improvement to be reported to the Minister for Business and Enterprise.		**Q4 2012**

Attractiveness of the UK Export Finance Offering

3.13 UK Export Finance is the UK's export credit agency. As a government department (UKEF is the new trading name for the Export Credits Guarantee Department) it operates under an Act of Parliament, to complement the private market by providing Government assistance to exporters and investors, principally in the form of insurance policies and guarantees on bank loans. UK Export Finance's range of products and services has recently changed, providing the potential to assist a wider range of UK exporters. Offering:

- A range of credit insurance and financing products to complement the commercial finance and insurance markets; and
- Political risk insurance on overseas investments.

3.14 UK Export Finance recognise that as they don't offer direct financing, other country's export banks who do offer finance can look more attractive to organisations seeking loans. However the recent announcement by the Chancellor of a refinancing scheme which, whilst not aimed at competing with pricing of other countries export banks, will help commercial banks to provide loans for large projects and longer tenures. UKEF is working with British Bankers' Association on details of the scheme with a view to its introduction in the coming months.

ACTION 14 **UK Export Finance**	UKEF to continue working with UKTI / DECC / NIA to raise awareness of its products. UKEF to support UK industry and UKTI in developing key overseas opportunities.	**Lead: UK Export Finance**
Initial Success Measure: UKEF continued support to UK industry		**Ongoing**

Alignment of Public Sector Procurement Across Nuclear Related Sectors

3.15 To improve clarity and alignment amongst public sector nuclear clients (Fusion, MOD and the NDA) and to support the most efficient use of limited resources, a high level Public Sector client group will be drawn together tasked with collaborating to ensure the most efficient use of the supply chain resource. The objective of this group would be to perform action such as the creation of one generic set of terms and conditions, a standard approach to Pre-Qualification Questionnaires and agreement of a common approach to advertising work and to working with SME's.

ACTION 15 **Public Sector Client Group**	Government will form a public sector client group to assess the potential for efficiency improvements across public sector procurement (i.e. NDA, MoD and Fusion portfolios) and supply chain development. This client group will likely take into account standard value for money considerations, but also the long-term benefits of using procurement to develop indigenous capabilities and agreed industry wide skill standards. This group could become a sub-group of the NIC.	**Lead: NDA**
Initial Success Measure: Public sector client group operating with clear terms of reference		**Q2 2013**

UK Supply Chain Capability and Capacity - Issues

3.16 The following issues have been identified and the UK Government is therefore keen to work closely with industry to further understand, and where possible, help to address these challenges.

- **Need to Enhance Capability and Competitiveness in the Nuclear Industry**: The supply chain may need a level of assistance in developing and closing gaps in capability and competitiveness. Significant benefits for the supply chain will only be realised if projects can be delivered in a competitive way and Government is keen to do what it can to help. Investment in capability and capacity will be required if benefits are to be maximised. However, some of these investments may be difficult to finance through conventional market instruments, so Government is keen to work with industry to understand how best to provide support in this area.

- **Quality and Accreditation in the Supply Chain:** The supply chain is required to understand the importance of high-quality performance and quality assurance in products and services provided. Support, training and guidance will be required to be ready to deliver projects to nuclear quality standards. It would also be valuable to consider whether a single accreditation system could be developed for approving supply chain companies to work in part or all aspects of the nuclear sector.

- **Project Continuity and Programme Alignment:** To ensure the most efficient use of UK capability, capacity and resources, it will be ideal for projects to be sensibly phased and for developers in the UK to align their plans. Clients and contractors will be encouraged to develop more effective collaboration to ensure best practices are applied to the new build programme based on a shared commitment to reduce project risks and a mutual interest in successful delivery.

- **Enhanced International R&D Collaboration:** It would be valuable to stimulate increased international R&D Collaboration as the UK currently has limited involvement in some international research programmes such as Gen IV[8], and it is recognised that engagement in international forums could be used to generate related commercial opportunities.

[8] *Generation IV reactors (Gen IV) are future nuclear reactor designs currently being researched. Current reactors in operation around the world are generally considered as second or third generation systems.*

Supply Chain Capability & Capacity - Actions

Need to Enhance Capability and Competitiveness in the Nuclear Industry

3.17 The Government has made available significant funding to support the nuclear supply chain to develop its capability and competitiveness. Some specific examples from 2012, representing investment of around £52m, are included below:

3.18 **RGF Funding:** The Regional Growth Fund (RGF) is now a £2.4bn fund operating across England from 2011 to 2015. It supports projects and programmes with significant potential for economic growth that can create additional, sustainable private sector employment. In October 2012 the Deputy Prime Minister Nick Clegg announced that 130 bids have been selected under Round 3. Amongst these, Sheffield University has been selected to go forward to final contracting and due diligence for a £37m project involving continuing support for the Nuclear-AMRC. The Nuclear-AMRC has launched a large-scale programme of nuclear supplier development and manufacturing research in partnership with key industrial members.

3.19 **TSB Funding:** The Technology Strategy Board is leading efforts to fund the development of UK nuclear capability (co-funded by RCUK, DECC & the NDA) and has initiated the following competitions:

- **Collaborative R&D and Feasibility Funding** - Up to £14m is being made available for feasibility projects and collaborative research and development to stimulate innovation in the civil nuclear power sector and to strengthen the UK supply chain. Up to £2m of this is available for feasibility studies lasting between six and twelve months. Projects must be led by an SME and be collaborative. The remaining £12m is available for collaborative R&D.
- **Knowledge Transfer Partnerships** - Up to £1m has been made available to establish new Knowledge Transfer Partnerships in the field of nuclear technologies for civil power generation, decommissioning and waste management. This initiative will help businesses improve their competitiveness, productivity and performance in the nuclear sector through better use of the knowledge, technology and skills that are available within the UK knowledge base.

3.20 The TSB is also supporting innovation in high value manufacturing through Nuclear-AMRC as part of the **HVM Catapult**, and an integrated and dynamic network of business, academic and policy stakeholders to deliver strategic and effective knowledge exchange through the nuclear group of the **Energy Generation & Supply KTN**.

3.21 See www.innovateuk.org for more information on TSB funding.

3.22 The Welsh Government has also invested significant funding into delivering infrastructure such as business parks, Construction and Energy Centres of Excellence for future students, R&D programmes through the Low Carbon Research Institute and Enterprise Zones.

3.23 It is recognised however that there is a need for larger scale investments in some parts of the industry, especially if the UK is to develop capability in some of the areas of equipment supply where none currently exists. Given the long-term nature of these investments, and the need to make a return over several projects with different timescales and clients, these investments will be difficult to finance through conventional market instruments.

3.24 Industry wish Government to consider mechanisms including the provision or underwriting of loans on a commercial basis to support specific investment requirements, and Government is keen to continue to investigate opportunities to help the UK nuclear industry develop capability and competitiveness.

ACTION 16 **Supply Chain Investment Requirements**	BIS, along with the Welsh Government, will continue to work with the civil nuclear industry to identify investment requirements and how these might be met. To date Government has worked with industry, supplying co-investment through the Regional Growth Fund, the Advanced Manufacturing Supply Chain Initiative and other funding sources, including working with the private sector and financial community. Moving forward this work will also be considered as part of the Government's Industrial Strategy to see what the best ways are of working alongside industry to deliver long-term investment.	**Lead: BIS** Supported by: Welsh Government
Initial Success Measure: BIS to continue to work with industry to review potential funding options		**Ongoing**

3.25 UKTI offer extensive support and facilitation for inward investment from overseas companies interested in bringing high-quality investment to the UK in support of the UK nuclear sector. Free and confidential support services are delivered in partnership with teams in London, the regions and the devolved administrations in the following areas:

- Tailored information including advice on financing, recruitment and activities such as R&D, tax, human capital and visas
- Building key contacts - UKTI can provide introductions to service providers, local, regional and national Government and trade organisations, and centres of excellence
- Assistance in finding new partners through a Partnership Programme
- Aftercare through ongoing support

ACTION 17 **UKTI Support for Inward Investment**	UKTI will continue to engage with potential foreign investors, presenting details of the services offered to support the right high value inward investment to develop capacity and capability in the UK, through a programme targeting key markets.	**Lead: UKTI**
Initial Success Measure: Continue contact with potential nuclear inward investors		**Ongoing**

3.26 The supply chain has improved its awareness of the opportunities arising from the new build programme but it is recognised that more needs to be done to improve capability and capacity. Leading companies in the nuclear sector can play a vital role in working together to identify the challenges, and perform joint actions to address those challenges. This work is best led by industry itself but it is vital to secure the confidence and buy-in of clients to ensure that the right issues are being addressed.

ACTION 18 **NIA Readiness Programme**	The NIA will establish working groups of major companies from each sub-sector to identify challenges and the joint actions to improve readiness for new build. These will be coordinated by an industry chairman and will report to the NIA Programme Management Board[9]	**Lead: NIA**
Initial Success Measure: Working groups to be established by the NIA Programme Management Board		**Q1 2013**

3.27 The Nuclear AMRC and NSA Nuclear Manufacturing are applying significant effort to develop UK manufacturing capability / competitiveness and will continue to do so.

ACTION 19 **Manufacturing Capability Development**	To support the development capability and competitiveness, the Nuclear-AMRC and NSA Nuclear Manufacturing will: • Deliver nuclear safety, culture and quality workshops • Facilitate Supplier Excellence Training • Offer localized SME tailored training and ensure these are more inclusive • Provide SME sized companies with manufacturing improvement opportunities • Undertake specific capability programmes covering processes, quality and people	**Lead:** **Nuclear-AMRC** **&** **NSA Nuclear Manufacturing**
Initial Success Measure: Workshop on Nuclear-AMRC support for supply chain capability development		**Q1 2013**

[9] *The NIA chairs the Programme Management Board (PMB), which was set up to ensure that a programme management approach is implemented for nuclear new build in the UK*

3.28 There would be value in enhancing research and the dissemination of best practice across construction contractors in the nuclear industry. The NIA will work with Constructing Excellence and the ICE to set up a forum to develop a common understanding of the principles that should guide new build projects, consider research opportunities and productivity improvements.

ACTION 20 **Construction Forum**	Nuclear new build developers who are at the point of proceeding will establish with the NIA, Constructing Excellence and the ICE, a construction forum led at the most senior levels from the client and contractor communities that will establish a shared vision of the key lessons from existing and previous large infrastructure construction projects and how these might be applied to UK nuclear construction by developers in the construction and engineering construction industry. The NDA has useful experience of delivering challenging nuclear construction projects, so they will also participate in this group. The forum will secure commitment from both clients and contractors to a programme of the activities to deliver the vision.	**Lead: NIA** Supported by: Constructing Excellence ICE NDA
Initial Success Measures: Construction forum operating with clear terms of reference		**Q1 2013**

Quality and Accreditation in the Supply Chain

3.29 The NIA will set up a Working Group, led by industry, to consider numerous aspects of nuclear quality and equipment qualification. The group will include key industry players including new nuclear developers, the ONR and the NDA.

ACTION 21 **Quality In the Supply Chain**	The NIA with the support of the Nuclear-AMRC and NIC will set up an industry led working group to manage UK supply chain quality and coordinate all other significant industry initiatives on quality development. The detailed objectives will be developed by the group, but are likely to include: • Develop a clear understanding of quality requirements for the UK new build projects and to convey these requirements to the supply chain • Identify any gaps in UK quality capability or understanding and where needed, develop clear plans to raise the quality standards • Ensure the supply chain is accredited to the level required, recognising the varying requirements for supply of different components and services • Assess the availability of facilities for equipment and options for addressing any shortages in capacity . • The Nuclear-AMRC and NSA Manufacturing will support the NIA by linking in with their quality initiatives.	**Lead: NIA** Supported by: Nuclear-AMRC NIC
Initial Success Measure: Map of other industry quality initiatives and this working group's objectives prepared		**Q1 2013**

Project Continuity and Programme Alignment

3.30 In order to maximise the chances of successful deployment of a programme of nuclear new build in the UK, it is important for developers to work together to manage plans and thus ensure most efficient use of resources.

3.31 The NIA chairs the Programme Management Board (PMB), which was set up with participation from Government to ensure that a programme management approach is implemented for nuclear new build in the UK. As such its membership includes all consortia planning to build reactors in the UK, along with vendors and other key industry organisations. The PMB will work closely with the NIC although the exact relationship between those groups is still to be defined.

ACTION 22 **Programme Alignment**	The PMB will continue to identify any obstacles to delivery arising from the interfaces between projects and potential barriers to the deployment of a programme of new build in the UK.	**Lead: NIA**
Initial Success Measure: The PMB will consider an analysis of skills and capacity requirements rising from the NIA capability report[10]		**Q1 2013**

Enhanced International R&D Collaboration

3.32 It would be useful to stimulate increased international R&D collaboration, which could lead to valuable niche business opportunities.

ACTION 23 **International R&D Collaboration**	The Government's forthcoming nuclear strategy and underpinning R&D roadmap will define a domestic national programme for nuclear and specifically the fuel cycle. This will facilitate stronger international collaboration on R&D in a number of areas.	**Lead: DECC**
Initial Success Measure: Government to issue the R&D Roadmap		**Q2 2013**

[10] *NIA. (2012) "Capability of the UK Nuclear New Build Supply Chain"*

Skills Issues

3.33 The following issues have been identified and Government, alongside the skills body members of NESA, is keen to work closely with industry to help to address these challenges.

- **Defining the Industry skills requirements for the UK Nuclear Programme:** Government's Skills Strategy *Skills for Sustainable Growth*[11] sets out the need for employers to lead skills development, rather than just advising on it. Key factors for the success of the new strategy will be: industry clearly defining its skills 'ask'; industry engaging and driving the activities of their Sector Skills Councils, Skills Academies and learning providers; and that businesses have access to finance. It is however essential that public funding is able to unlock private sector skills investment.

- **Ensuring robust, unified labour market intelligence for accurate workforce planning:** There is currently no comprehensive and robust labour market intelligence for workforce planning over the course of the new nuclear programme. Current labour market intelligence is made up of a combination of specific intelligence from different sectors within the industry and anecdotal information gathered at workshops and working groups; interventions are therefore based on evidence gathered in this way.

- **Ensuring funding is available for key training:** There are several funding pots available for skills interventions but there are ways for industry and Government to utilise them more effectively to best address the areas of most concern.

- **Ensuring availability of specific skills in key workforce groupings:** In advance of industry-wide labour market intelligence, industry has identified certain key skills where they have significant concerns about not having enough people of the appropriate quality to ensure that the new nuclear programme can go ahead without any delays or large cost increases.

[11] *http://www.bis.gov.uk/skillsforgrowth*

Skills Actions

Defining the Industry Skills Requirement for the New Nuclear Programme.

3.34 The Government is clear in its skills strategy *Skills for Sustainable Growth* that the skills sector is most effective when it is led by employer demand. Whilst there is a substantial amount of work that the Government can and is doing to harness the job creation benefits of the new nuclear programme, industry needs to work closely with the relevant skills bodies to articulate its skills requirements in order for the skills sector to fully deliver.

ACTION 24 **Industry skills requirements**	Industry to articulate its skills requirements for the new nuclear programme so that the UK skills system can develop an agreed set of deliverables.	**Lead: Industry**
Initial Success Measure: Clear details to be provided by industry as to their skills requirements as new build plans become more developed.		**Q3 2013**

Ensuring Robust, Unified Labour Market Intelligence

3.35 The development of robust labour market intelligence is vital to identify gaps between the supply and demand of labour in specific roles over the course of the new nuclear programme. This will act as the evidence base to help the industry better prepare for the different new build scenarios and the resulting demand on labour, making the most of job creation opportunities in the UK workforce. As such, this will support industry when articulating its skills requirement.

3.36 DECC has funded initial design and development work undertaken to create the software to model this information, and the focus is now on ensuring high-quality input data from all relevant sources so that the labour forecasts are accurate. The project includes significant input from the other skills bodies in NESA to ensure that the model benefits from their specific areas of expertise on crucial areas including construction, engineering construction and manufacturing.

ACTION 25 **Generation of Robust Labour Market Intelligence**	Industry to supply accurate and detailed data to the nuclear workforce model via the NESA members, and keep this updated as their plans develop and mature.	**Lead: Industry**
	NESA members will make appropriate assumptions about future supply and demand data by working closely with industry.	**Lead: NESA members**
	As data becomes available, the outputs from the model will be analysed to identify skills gaps. This analysis will be regularly communicated to Industry.	**Lead: Cogent** With support from NESA Members
Initial Success Measure: Initial outputs from the model communicated to industry		**Q2 2013**

Ensuring Funding is Available for Key Training

3.37 Where a skills gap has been identified, it is important that employers are aware of available funds and support to help address the issue. Government is looking to ensure that these funds can be used effectively to support skills development across the whole industry.

Making existing funds work for Nuclear

3.38 Government is working with the UK Commission for Employment and Skills, reforming the skills system to support employer investment and co-investment in skills training. It is for employers to drive the skills system, with control over their funding, with Government providing the support and information needed to help employers make the right choices for their future. This new approach to skills has included the launch of the £250m Employer Ownership of Skills (EOS) programme, offering employers in England direct access to funds to design and deliver their own training solutions. Funding from round one of the EOS pilot demonstrates Government's ability to provide tailored support to the nuclear supply chain where employers are able to articulate specific requirements, for example, in principal approval has been given to:

- Doosan to help increase the supply of construction welders, including the development of as new Level 4 Diploma;
- Laing O'Rourke to train construction supervisors and steel fixers for the nuclear programme in conjunction with Bridgwater and Gateshead colleges;
- Support was also granted to a consortium of eleven major construction companies to advance the use of apprenticeships and develop leadership and management in the construction sector.

3.39 This support is levering significant funding and contributions from the industry themselves, including the Industry Training Boards (ITBs), to support development of the UK construction capability.

3.40 ITBs operate with the consensus of employers in the industry they cover to address the key skills needs identified by the employers and trade federations in their sector. Both the CITB and ECITB include those construction and engineering construction employers for whom nuclear new build is a priority. As the demand for key skills increases, It is expected that ITBs will focus their attention increasingly on those key requirements levy payees identify as critical to the build programme. The CITB has already committed £2m of funding to the nuclear build programme and the ECITB has been investing around £2.5m annually in support of skills for nuclear; this is expected to increase to over £5m annually.

3.41 The Growth and Innovation Fund (GIF), worth up to £34m in 2012-2013, has also been used to fund nuclear industry projects For example, funding has recently been agreed for the NSA Nuclear project 'Transformational Growth in the Nuclear Industry – A National Nuclear Gateway' to specifically support the

development of skills and capability across the nuclear supply chain.

3.42 Government wants to ensure wide access to the GIF for employers in the future. Industry Training Boards, Sector Skills Councils and Skills Academies can access resource through the GIF to fund projects that address the delivery or take up of skills in the sector.

3.43 The latest round of the EOS competition brings the elements of the GIF and EOS into a single fund allowing bids to develop new skills systems to be made alongside bids to increase and assist participation in skills development and advance apprenticeship learning.

Ensuring Value for Money

3.44 To ensure that funding can be targeted at the skills issues that pose the highest risk to the Nuclear Programme, the members of NESA, working with Government, will create a funding map to demonstrate the funds available to address specific shortages and highlight key challenges to access these funds.

3.45 Concerns have been raised that the current path of money from Government to providers is inefficient as employers do not have control over which training provider they use. As a result industry are concerned that there is not a free market that can be used to drive up quality on training. The Government is working with the Skills Funding Agency to ensure that failing providers are addressed and new providers, including employer led organisations are introduced to the marketplace.

ACTION 26 **Skills Funding Map**	Create a funding map to demonstrate what funds are available to the industry, highlighting any key challenges in terms of accessing/relevance of these funds	**Lead: NESA Members**
Initial Success Measure: Production of a funding map linking available funds to skills priorities		**Q2 2013**

Ensuring Availability of Specific Skills in Key Workforce Groupings.

3.46 NESA members are currently developing a delivery plan that will set out specific actions to be taken by each member. This will act as a co-ordinated response to skills issues identified by the industry and will be a 'live' document, updated regularly to reflect changing priorities. Actions in the delivery plan will cover the whole range of skills required for the nuclear programme, from construction supervisors, concretors and engineers for the construction phase, to manufacturing engineers needed to maximise UK supply chain opportunities, through to the operational and maintenance personnel required when the new plants become operational. There will also be cross-sector activity to facilitate the transfer of experienced workers from other industries and to increase the number of apprentices in the nuclear industry.

3.47 A common theme when considering concerns around areas of skills is building experience and increasing organisational capability. In many areas it is felt that increasing secondments and pooling labour allows organisations to increase capability, even when their own workload does not allow experience to be gained.

3.48 Another concern for the supply chain is taking on apprentices and wider labour pools when work cannot be guaranteed, and not giving those that are employed the widest experience. Schemes exist to pool labour resources among the supply chain to allow them to take on work and develop skills, even when their own company does not have sufficient contracts to offer experience. The NSA Nuclear Supply Chain Apprenticeships for Nuclear (SCAN) programme has been launched to specifically help SMEs take on new and additional apprentices. It is worth considering how this can be expanded on or what further initiatives would be appropriate.

3.49 In addition, Government commissioned an independent review, led by the entrepreneur Doug Richard, to take a medium to long-term look at the future of apprenticeships in England. The review has been completed[12] and sets out a comprehensive vision for the future of apprenticeships. The Government will now consider the review and issue a full response in the New Year.

ACTION 27 **Skills Shortages**	Address key skills shortages through targeted interventions that attract new people to the sector, consider redeployment of existing skills and draw in relevant skills from related industries (up skilling where needed).	**Lead: NESA Members**
Initial Success Measure: Publication of the initial version of NESA's delivery plan		**Q1 2013**

[12] *http://www.bis.gov.uk/policies/further-education-skills/apprenticeships/richard-review*

ACTION 28 **Technical Workshops**	NESA members to hold technical workshops to look in detail at the specific key issues identified by industry and fully assess the effectiveness of proposed mitigations. Any findings from these workshops will be reflected in a revised delivery plan. This will provide clarity on all actions and minimise overlap.	**Lead: NESA Members**
Initial Success Measure: Workshops planned for all key skills priorities		**Q1 2013**

3.50 Concerns are also raised that key talent within the workforce is sometimes not retained. In particular this is true of those currently working in decommissioning when their workstreams come to an end, and those from the armed forces, who come to the end of their service. Both have many of the practical skills and nuclear awareness that could be utilised in the new build, operations and decommissioning.

3.51 The Talent Retention Solution (TRS) already exists as a means of retaining skills in the Advanced Manufacturing and Engineering (AME) Sector by putting skilled individuals looking for work and companies searching for new employees in direct contact. Nuclear employers, such as EDF and Rolls-Royce, are sponsors of the programme and the ECITB is working with TRS to establish a broad, industry-wide platform that is accessible by the supply chain.

ACTION 29 **Nuclear Careers for Ex Military**	Government to work with NESA and industry to ensure that nuclear career paths are promoted to the military when retraining at the end of their service.	**Lead: Government** **Supported by: NESA**
Initial Success Measure: The detailed plan for this workstream outlined in the NESA delivery plan		**Q2 2013**
ACTION 30 **Retention of Existing Skilled Workforce**	The NDA will develop and take forward its work on a transition framework to retain skills in the nuclear industry	**Lead: NDA**
Initial Success Measure: Maximise the use of resources and protect the skills base by identifying the key changes and put plans in place to manage resources effectively.		**Q3 2013**

4 Action Plan Governance, Direction and Implementation

4.1 It is essential that this action plan is successfully implemented if the objectives of the plan are to be realised. Accordingly, the Secretary of State co-chaired Nuclear Industry Council will oversee how the action plan is taken forward and implemented.

4.2 Day to day management of the implementation of this action plan will be the responsibility of the Head of Supply Chain and Skills in DECC who will work with the Council and wider industry to ensure that an appropriate implementation structure is in place.

4.3 Whilst this document identifies a lead organisation along with an initial success measure for each action, this information is indicative at this time. The next stage of work on this action plan will include the development of a detailed implementation programme.

Glossary

BIS	The Department for Business, Innovation and Skills
CITB	Construction Industry Training Board
DECC	The Department of Energy and Climate Change
ECITB	Engineering Construction Industry Training Board
EOS	Employer Ownership of Skills
FCO	Foreign and Commonwealth Office
FOAK	First of A Kind
IAEA	International Atomic Energy Agency
INPO	Institute of Nuclear Power Operations
JV	Joint Venture
KTN	Knowledge Transfer Networks
KTP	Knowledge Transfer Partnerships
MoD	Ministry of Defence
NDA	Nuclear Decommissioning Authority
NESA	Nuclear Energy Skills Alliance
NIA	Nuclear Industry Association
NIC	Nuclear Industry Council
NOAK	Nth Of A Kind
NNL	National Nuclear Laboratory
NSA	National Skills Academy (Nuclear)
ONR	Office for Nuclear Regulation
PMB	(NIA) Programme Management Board
PWR	Pressurised Water Reactor
R&D	Research and Development
RCUK	Research Councils UK
RGF	Regional Growth Fund
RPV	Reactor Pressure Vessel
SCAN	Supply Chain Apprenticeships for Nuclear
SEMTA	Sector Skills Council for Science, Engineering and Manufacturing Technologies
SLCs	Site Licence Companies
SMEs	Small and Medium Enterprises
TBC	To Be Confirmed
TSB	Technology Strategy Board
TRS	Talent Retention Solution
UKEF	UK Export Finance
UKTI	United Kingdom Trade and Investment
WNA	World Nuclear Association

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