Industry Forum
Business Excellence Through Inspired People

April 2013

The UK Industrial Strategy Debate Heats Up

At the end of March the UK Industrial Strategy took a major step forward with the publication of sector strategies for aerospace, civil nuclear energy and oil and gas. The Life Sciences strategy has already been in place for 15 months. In all there are eleven key sectors, (including automotive manufacturing) and in coming months sector strategies will be published for each one. There are various dimensions to the overall Coalition Industrial Strategy but the key sectors are a direct way in which strategy and action come together.

For example, by 2040 70% of the UK's energy requirements will still be met by oil and gas. Furthermore, the recent performance of the UK economy has reflected the contraction of oil and gas sector output. Without this the rest of the economy would have grown by 1.6% since the third quarter of 2010. In February 2013 Section B of the Index of Production, which includes Oil and Gas, was 8.4% down on a year ago.

It is not surprising therefore that the new oil and gas strategy aims to maximise the economic production of UK offshore oil and gas and promote the growth of the UK industry's supply chain in both domestic and international markets. Fortunately, the UK supply chain is internationally recognised as a global leader in subsea engineering and a centre of excellence in project management, design engineering, asset and operational management and design and manufacturing of advanced equipment, all underpinned a large R&D spend.

The new strategy warns that amongst the general public, the oil and gas industry is currently perceived as a "sunset industry" making a diminishing contribution to the UK economy. There is a perception that the industry faces an unsustainable future and that it is coming to the end of its life. There is danger that if this perception persists, talented individuals might overlook the industry - compounding the skills shortage. The strategy proposes therefore that the industry, and the contribution it makes to the nation's prosperity, become much more widely known. The industry and Government should be more visible and confident in championing the industry's achievements.

Public perception and the impact on talent flow is also important for the civil nuclear strategy which covers expenditure of over £125bn up to 2030 on both building new generation capacity and decommissioning existing sites. The strategy involves a major drive to develop supply chain skills while other parts of the strategy are set to enhance innovation and R&D and to attract domestic and inward investment in nuclear projects.

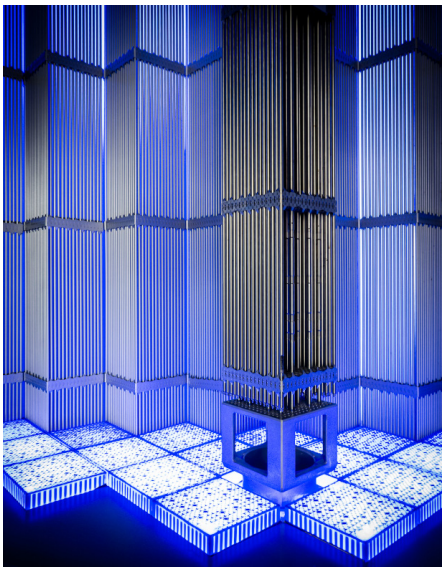
SMMT Industry Forum Ltd
2410 Regents Court, The Crescent, Birmingham Business Park, Birmingham, B37 7YE
T +44(0)121 717 6600 F +44(0)121 717 6699
www.industryforum.co.uk enquiries@industryforum.co.uk twitter @smmtif

April 2013

The detailed skills objectives are:

- The sector must be supported by a workforce with the skills, capability and capacity required to successfully deliver current and future UK nuclear programmes with the highest standards of nuclear professionalism, safety and competitiveness
- The sector must have a supply chain with the skills and expertise to compete on a global basis for contracts
- The UK nuclear industry and its approach to skills and workforce development should be recognised as an example of international best practice

Nuclear industry employers are even now reporting skills deficiencies. The Nuclear Energy Skills Alliance has identified key skills shortages including project and programme management, construction project management, steel fixing, high integrity welding, safety case authorship, R&D, site/ construction supervisors and apprenticeships and higher level apprenticeships.



The sector priorities for workforce capabilities also include:

- Educating new entrants on the basic requirements for working on nuclear sites in the UK and promoting awareness and understanding of the nuclear industry
- The flexibility and mobility of the workforce and supply chain
- The ability to demonstrate supply chain competence
- Trained and qualified craft and technician personnel

On nuclear build projects construction, site preparation and engineering construction make up around 60% of the workforce. To deliver each build to time and to budget, it is essential that the construction and engineering construction workforce has the right skills and competences.

Oxford Economics and Atkins' estimate that the UK's likely newbuild plans will create 30,000 – 41,000 jobs - 14,000–19,000 direct jobs and 16,000–22,000 indirect jobs. As things stand nearly 70% of current staff with management roles and subject matter expert roles, are due to retire by 2025.

The civil nuclear sector skills needs cannot be seen in isolation. There is likely to be fierce competition between aerospace, automotive manufacturing, oil and gas and nuclear for first class talent, not least because top UK engineering talent is sought by non-engineering sectors and other developed countries.

Professor John Perkins CBE, the Chief Scientific Adviser for BIS, is looking at the issue of engineering skills supply in the UK. Based upon initial analysis of demands/supply constraints, job market trends for rising skill levels, data on skills gaps and structural supply issues, he has concluded that the economy will need a substantial increase in the supply and the quality of engineers entering the labour market with the right mix of skills as sought by employers. Perkins suggests this will require action on 6 fronts:

Industry Forum
Business Excellence Through Inspired People

April 2013

1. Changing the perception of engineering making it much more accurate and positive, challenging outdated negative views of the profession
2. Addressing the diversity issues in engineering including the 'gender gap' (only 9% of professional engineers in the UK being women), thereby reaching out to the widest possible talent pool
3. Encouraging sponsorships and strengthening industrial links to students, making engineering courses more attractive and increasing students' employability
4. Helping engineers who have left the profession and wish to rejoin it and others who wish to convert to it
5. Provision of the appropriate education to support engineering careers. Increasing the number of students with the right educational background (i.e. a strong grounding in maths and physics), providing modern educational infrastructure, and giving accurate careers advice
6. Encouraging and supporting the provision of more engineering apprenticeships, particularly higher level apprenticeships

These proposals are equally relevant to the requirements of the aerospace manufacturing sector where the strategy is based on an ambitious long-term partnership between Government and industry with £2 billion investment. The goal is to retain the UK's position at the forefront of world aerospace manufacturing and to ensure that the UK remains Europe's number one aerospace manufacturer and that it remains second only to the United States globally. In the US strategists are considering the business implications of the expected expansion of civil aviation in emerging markets which will be the major growth opportunities in the next two decades.

The UK aerospace sector strategy stresses the importance of further strengthening the supply chain. The sector has for some years been operating the 21st Century Supply Chain programme to strengthen supply chain firms using a global quality standard. Further supply chain development will include collaborative research projects, improved access to finance and the embedding of world-class manufacturing processes and continuous improvement methods throughout the supply chain.

The strategy also suggests that the UK needs to find a means at national level for companies to enhance the management of their own supply chain and to work collaboratively with their suppliers and peers to boost competitiveness. Capability analysis work is under way to identify those areas of high strategic value and where UK capabilities are at risk.

Industry Forum has experience in depth of supply chain development including integrated skills development programmes. In the last 12 months we have been working closely with a number of blue chip UK primes on the Advanced Manufacturing Supply Chain Initiative. We look forward to further work with the aerospace, civil nuclear and oil and gas sectors on supply chain and skills development as part of their sector strategies.

Author: Iain Cameron, SMMT Industry Forum Ltd

scan with smartphone

SMMT Industry Forum Ltd
2410 Regents Court, The Crescent, Birmingham Business Park, Birmingham, B37 7YE
T +44(0)121 717 6600 F +44(0)121 717 6699
www.industryforum.co.uk enquiries@industryforum.co.uk twitter @smmtif