



HM Government

**Industrial
Strategy**

Securing jobs and a
stronger economy

Strengthening UK manufacturing supply chains

An action plan for government and industry

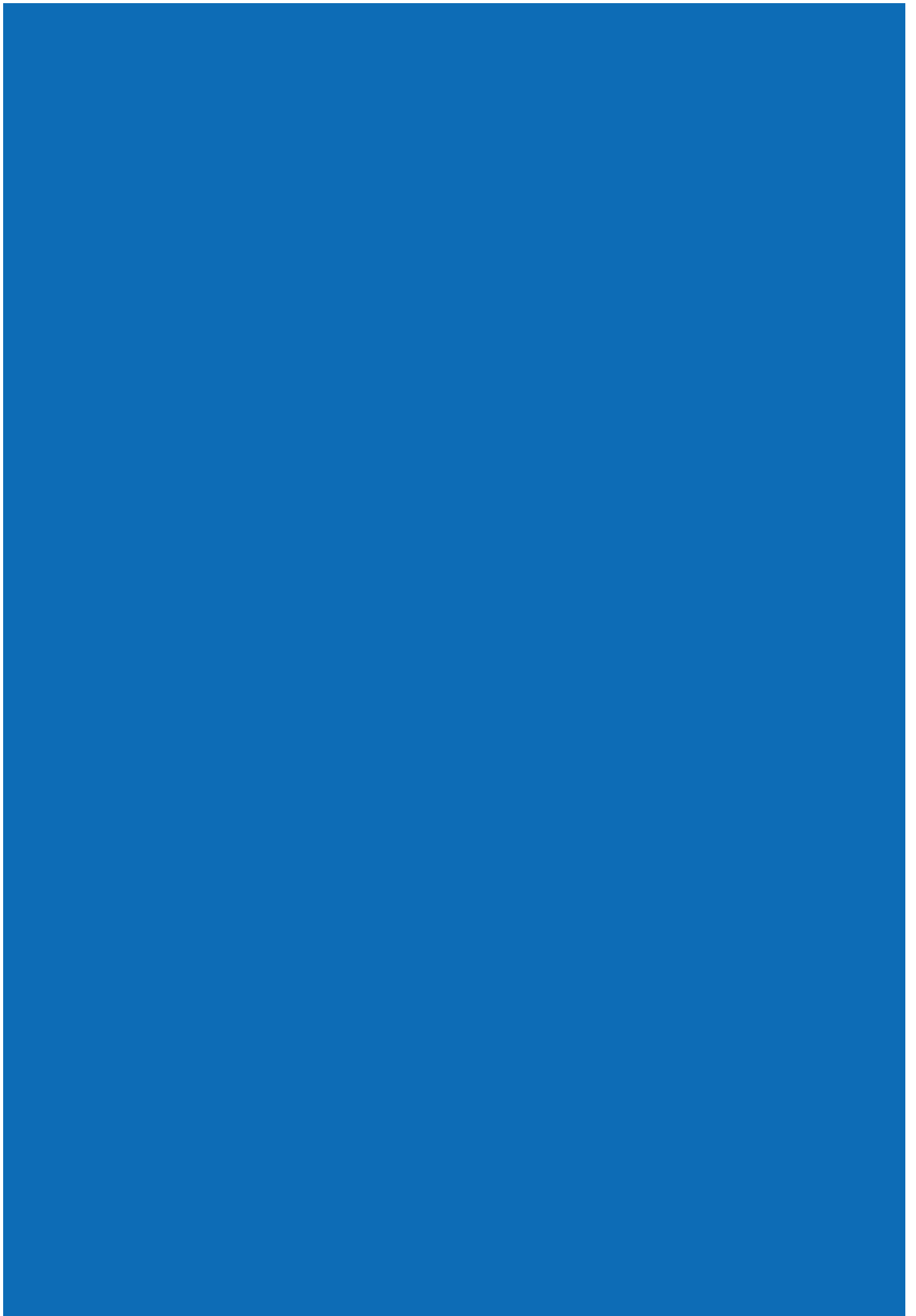


Strengthening UK manufacturing supply chains

An action plan for government and industry

Contents

Forewords	5
Executive summary	9
Introduction	12
Section 1 Innovation	20
Section 2 Skills	26
Section 3 Access to finance	31
Section 4 SME capability	37
Section 5 Supply chain collaboration	41
Section 6 Supply chain resilience	46
Summary of actions	50



Forewords



No one should be in any doubt about just how essential Britain's manufacturing industry remains to our country's continued success.

Overall, this sector employs millions of highly skilled people, produces over half of all UK exports, drives innovation and is the UK's biggest investor in business R&D.

Its impact across the supply chain is also far wider – delivering around £148 billion to our economy in GVA in 2013. We're talking about the suppliers that make essential components, such as manufacturers of steel, wings and control systems for the aerospace sector, turbines for offshore windfarms and car seats, mirrors and other equipment for the automotive industry.

Together, these businesses are creating jobs, driving growth and boosting productivity across the country. That's why this Coalition Government has made it a priority to build on Britain's industrial strengths in the decades ahead.

This includes working with British manufacturers: to develop a long-term industrial strategy; ensure a more competitive business environment; set up the Business Bank to improve access to business finance; creating the Regional Growth Fund to help kick-start private sector investment; increase apprenticeships; and establish our network of Catapult Centres and world-class vocational education institutions such as the High Value Manufacturing College.

But there's more we can do. In a recent report, the CBI estimated that increasing competitiveness across our manufacturing supply chain could boost the UK's economy by around £30 billion by 2025.

This new Manufacturing Supply Chain Action Plan will help us work towards achieving that aspiration. Our ambition is nothing less than to make the UK the best environment in the industrialised world to locate advanced manufacturing supply chains.

Big or small, we want to see our manufacturing suppliers continue to succeed and secure new business in an increasingly competitive global economy.

We look forward to working with you, doing everything we can to help these companies thrive and build a stronger economy for Britain's future.

A handwritten signature in black ink that reads "Nick Clegg". The signature is fluid and cursive.

The Rt Hon Nick Clegg MP,
Deputy Prime Minister



This Government has clearly placed manufacturing at the heart of its plans to rebalance the economy and deliver a return to long-term, sustainable growth.

By launching this Manufacturing Supply Chain Action Plan we reinforce that commitment and set out an approach to address some of the key challenges affecting the performance and resilience of our domestic supplier base.

With business we have set the long-term direction needed to give manufacturers the confidence to invest – creating more opportunities, skilled jobs and making the UK more competitive so that British businesses can thrive and compete with rising economies. There is widespread support for the formation of an industrial strategy – businesses have told us that this partnership and direction is what the country needs and there is cross party support for a long-term strategy through into the next parliament and beyond.

The Industrial Strategy has put in place the building blocks to ensure manufacturers of all sizes can prosper and grow. Some of our key achievements include:

- Creating the High Value Manufacturing Catapult to help commercialise new technology across all manufacturing sectors.
- Reforming apprenticeships, with over 2 million apprentices in training since 2010, and putting skills funding and standards in the hands of employers.
- Through the Advanced Manufacturing Supply Chain Initiative, making £345m available to support the growth of manufacturing supply chains in England.
- Introducing new rules to require all public sector contracts to have 30 day payment terms down the supply chain.

This all represents good and important progress, but these are still the early stages of what has always been a long-term vision.

Building on progress so far, this plan sets out a range of actions that will help strengthen and build our domestic manufacturing supply chains. However things are not going to change overnight. For UK suppliers to win more business in the long-term, it's got to make economic sense against a backdrop of increasingly competitive domestic and world markets.

The plan will address some of the challenges UK suppliers face in tackling skills gaps, adopting innovation and research, and ensuring more business finance to those British companies.

The benefits of stronger UK manufacturing supply chains will be felt across the whole economy – new technologies, a more highly skilled work force and improved productivity will boost growth and jobs in all our regions.

It will need commitment from all sides, but the potential prize is huge. By working together we can ensure our rich manufacturing history is maintained and that the UK will remain a major manufacturing nation for decades to come.



The Rt Hon Dr Vince Cable MP,
Secretary of State for Business, Innovation and Skills



The Rt Hon Matthew Hancock MP,
Minister for Business, Enterprise and Energy



Executive summary

While there is much to celebrate about UK manufacturing, it is clear that the UK's manufacturing supplier base has been eroded over the last 30 years.

The issues vary from sector to sector, but we have identified six common themes where in each case action would benefit suppliers across a range of sectors:

- Innovation
- Skills
- Access to Finance
- Building capability in small and medium size enterprises (SMEs)
- Strengthening collaboration across supply chains
- Creating more resilient supply chains.

Through the Industrial Strategy launched by the Government, many sectors have made good progress in mapping the challenges facing their supply chain and prioritising future action. In addition, the Government has already taken important action against all the themes outlined above, including:

- Launching the Catapult network to help industry commercialise our world class research base
- Reforming apprenticeships, with over 2 million apprentices in training since 2010, and put skills funding and standards in the hands of employers
- Creation of the British Business Bank
- Launching the Business Growth Service to make it easier for manufacturers to get the right help, when they need it most to compete internationally
- Strengthening collaboration through successful delivery of the Advanced Manufacturing Supply Chain Initiative
- Launching the 2020 Export Drive.

However the UK must not be complacent. Technological advances and changing consumer demands are set to transform modern manufacturing with huge implications for supply chain

businesses. And we face strong competition not only from emerging economies but also from industrialised nations such as Germany and Japan.

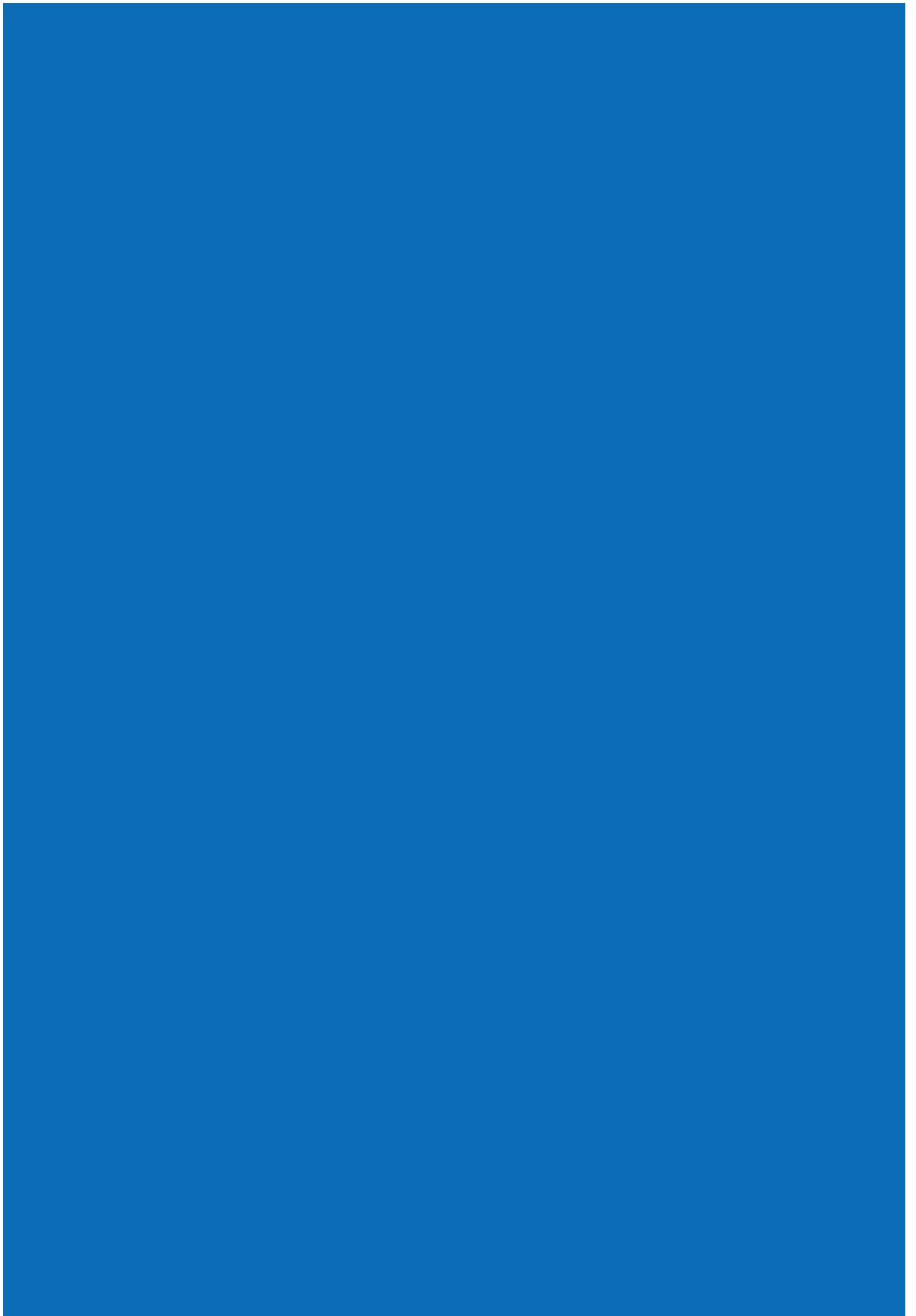
We want to ensure the UK is the best environment for manufacturing suppliers in the industrialised world. We want to boost innovation, skills and exports levels among our supplier base. We want to see UK suppliers retain significant market share in mature, high value sectors like automotive and aerospace, and slow the growth in imported components. And we want to establish collaborative, strong, long-term supply chains in emerging, strategically important sectors like offshore wind, nuclear new build, shale gas and advanced materials.

There is no single solution and a range of options and actions are required to address the needs of UK supply chain companies, to enable them to compete and grow and meet the needs of world class manufacturing companies. Hence government and industry will take action together across a number of areas:

- **On innovation**, the High Value Manufacturing (HVM) Catapult is committing to increase the number of SMEs it engages with annually by 50 per cent and double the amount of collaborative R&D accessed by SMEs in five years. The Business Growth Service and Innovate UK will also put in place clearer co-ordination and signposting to help firms access the innovation support they need
- **On skills**, we are asking large employers to do more to support the skills of their supply chain companies
- **On finance**, action through the Small Business, Enterprise and Employment Bill (SBEE) currently before Parliament will require large companies to report on their payment practices, and remove barriers to invoice finance. We will also tackle unfair practices such as charging to stay on supplier lists, as well as working with the Offshore Wind Industry Council (OWIC) to tackle issues relating to performance bonds
- **On SME capability**, we will assess the suitability of the BenchmarkIndex® to support supply chain development in a “fit to supply” pilot project and work with the Business Growth Service to improve the effectiveness and raise awareness of its supplier sourcing and matching offer
- **On collaboration**, EEF will run a series of regional workshops to share best practice between sectors on a range of supply chain competitiveness issues, and the CBI will launch a dedicated UK Supply Chains section on their website. Government will also expand the Small Business Research Initiative (SBRI) and learn lessons from successful public procurements to improve opportunities for UK suppliers
- **To support supplier resilience**, UK Trade and Investment (UKTI) will seek to ensure suppliers throughout the UK have increased access to the export opportunities available under the High Value Opportunity (HVO) programme, and will discuss further steps on international trade and investment with all the private sector-led industry councils.

Now is the right time to act. Global dynamics mean that firms are increasingly reappraising supply chain locations. We have a window of opportunity here, and with the right actions to support supply chain growth, the UK can capitalise on this to succeed.

While this will take time, getting there could bring significant benefits to the UK economy. Government and industry need continued dialogue to identify what more should be done. This plan is intended to galvanise that process by setting out where further action is needed, both now and in the future, to boost the competitiveness of our manufacturing supply chain companies.



Introduction

1. There is much to celebrate about UK manufacturing today. The UK remains an important manufacturing nation, with manufacturing contributing £148 billion to UK Gross Value Added (GVA) in 2013 – 10 per cent of the UK economy. Modern day UK manufacturing is increasingly high tech and high value. The UK has manufacturing strengths in key export sectors like aerospace, automotive, and life sciences. Food and drink manufacturing provides the largest number of UK manufacturing jobs, and we also have many niche capabilities in smaller sectors such as electronics and advanced materials.
2. Supporting our manufacturing sectors is essential to achieving the Government's economic objective of strong, sustainable and balanced growth. The 2013 Foresight report, *The Future of Manufacturing*, found that manufacturing is essential for long-term economic growth and resilience. It drives growth across the economy through demand for raw materials, energy, and services like research, design, and finance. Manufacturing contributes disproportionately to overall levels of productivity, generates over half the UK's export of goods, and in 2012 accounted for £12.8 billion of UK business R&D. It provides employment for 2.6 million people and manufacturing jobs are becoming more skilled – the proportion of employees with a degree has almost doubled since 1994 from 9.1 per cent to 17.1 per cent.
3. Technological advances are set to transform modern manufacturing as will increasing consumer demand for bespoke products. These changes have huge implications for supply chain businesses which will need to respond and adapt. Embracing use of robotics, integrated sensors and IT/Cloud Computing central to the 4th Industrial revolution,¹ will impact profoundly on manufacturing supply chain management and customer relationships, bringing greater collaboration and more integrated systems. Flexible processes such as additive manufacturing, advanced joining, and reconfigurable robotics will reduce the importance of economies of scale in some types of manufacturing and so support greater localisation of the supply chain and mass customisation of products. Manufacturers will favour suppliers that are resilient and adaptable to these changes.

The Challenge

4. The UK is only one of many manufacturing nations seeking to take advantage of such new opportunities, so we cannot be complacent if UK manufacturing is to remain competitive. Over the last 30 years, the challenge of globalisation combined with gaps in support for

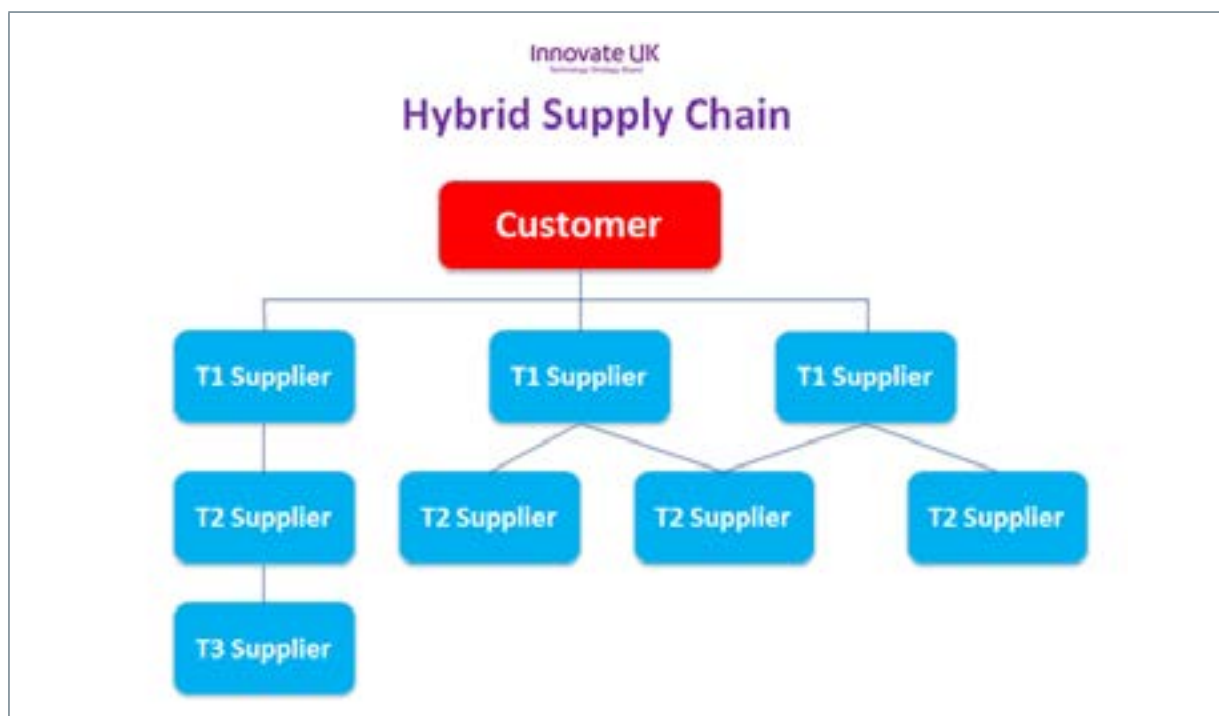
¹ The Industry 4.0 concept – aka 'smart factory' or 'digital manufacturing' is gaining traction in the EU and globally. It emphasises the idea of consistent digitisation and linking of all productive units in an economy. It will lead to better integrated supply chains, interconnected systems and stronger co-ordination.

the commercialisation of innovation and technology, and a lack of investment in technical education has eroded UK industrial capabilities and led to the hollowing out of supply chains across our manufacturing sectors. We face strong competition not only from emerging low cost economies, but from other industrialised nations such as Germany and Japan who have continued to invest in their manufacturing skills and innovation capabilities.

5. Our manufacturing supplier base has been particularly affected by these challenges. Office for National Statistics (ONS) data suggests UK content has been decreasing, with UK manufacturers now supplying only half of UK demand for manufactured components. Domestic supply chains have weakened even in our most competitive sectors like automotive, aerospace and pharmaceuticals. For example, in the automotive sector, one of the UK's biggest manufacturing success stories, UK vehicle makers now import more than £11 billion-worth of components annually, sourcing around 40 per cent of their parts from domestic suppliers, compared to over 60 per cent in Germany and France.
6. This is in contrast to our service sectors, where UK companies still supply over 90 per cent of demand for service inputs into our economy.

What is a Manufacturing Supply Chain?

7. To enable us to address the challenges and unlock the potential of our supply chains we need to understand what supply chains are. There is no one agreed definition, or model for a supply chain. UK supply chains are complex and multi-faceted. The diagram illustrates a fairly simple supply chain showing the interplay between a customer company and its tier 1, 2 and 3 suppliers. Collectively, the aggregated suppliers represent the customer's supplier base.



8. But a supply chain is not just a hierarchical chain of businesses supplying tangible components to make up a final product. The whole supply chain system also includes the functional areas of planning, design, purchasing, manufacturing, distribution, sales, recovery and recycling. Understanding the whole system provides major opportunities for innovation and value creation, and points to the need to ensure that the right skills, leadership and process systems are in place as well as the materials required to form the end product.

9. It is important to note that individual suppliers can supply multiple supply chains and often across multiple sectors. This is good for resilience, providing some protection from economic swings in particular sectors, however, it can make supply chain development limited if it is approached from a purely “top-down” or sector biased viewpoint.
10. This highlights the range of issues faced by UK manufacturers and their supply chain businesses. Supply chains and their challenges also vary by sector and so a broad framework of products and interventions is required to support supply chain competitiveness.

The Opportunity

11. Loss of UK suppliers can lead to a vicious circle – loss of key skills and know-how results in more companies sourcing overseas. Turning this around, and boosting the competitiveness of our manufacturing supplier base will be a long journey, but the potential benefits to the UK economy are substantial. A recent report by the CBI, *Pulling Together* (Oct 2014), estimated a £30 billion opportunity could be realised, with wider benefits including a reduced trade deficit, regional rebalancing, and a boost to our exports.
12. Individual sector supply chain analyses have identified large opportunities in a number of key sectors, including:
 - £5 billion potential extra automotive sourcing opportunities²
 - 30,000 potential jobs in the offshore wind supply chain by 2020³
 - A new shale gas supply chain potentially worth £33 billion in 15 years⁴
 - £4.7 billion to UK GVA from nuclear new build supply chain opportunities.⁵
13. Strengthening our UK supply chains will safeguard UK jobs. It has been estimated that reshoring a new generation of goods and services to the UK could create 100-200,000 extra UK jobs by the mid-2020s.⁶ This is not about repatriating low value jobs but about creating skilled jobs as a result of the UK’s reputation for high quality, advanced manufacturing. Anchoring such high value manufacturing in the UK will also help to safeguard jobs and apprenticeships at all levels, supporting the Government’s strategy to reduce youth unemployment.
14. Strong, local supply chains also benefit businesses in a range of ways:
 - Reduced risk and improved supply chain transparency – companies are more aware of the risks⁷ of long global supply chains. More local supply chains can reinforce business resilience
 - Quality – businesses are becoming increasingly aware of the hidden costs of outsourcing, particularly in terms of lower quality output, or the costs/ difficulties of defending intellectual property overseas
 - Innovation – collaborative innovation with a local supply chain can help businesses deliver greater customisation at lower costs, leveraging the UK’s world-class research base

² Automotive Council UK, *Growing The Automotive Supply Chain: Assessing The Upstream Sourcing Potential*, November 2014

³ BVG Associates estimate cited in the 2013 Offshore Wind Industrial Strategy

⁴ EY *Getting ready for UK shale gas: Supply chain and skills requirements and opportunities*, April 2014

⁵ Oxford Economics, *The economic benefit of improving the UK’s nuclear supply chain capabilities*, March 2013

⁶ PWC *Reshoring – a new direction for the UK economy*, March 2014

⁷ Eg climate change, other natural disasters, poor ethical practices overseas, and geopolitical uncertainty.

- Agile design and production – customers are demanding ever more personalised and bespoke products. Local supply chains can be more responsive to changing customer demands
 - Lead times and logistic costs – local supply chains enable businesses to take delivery of goods much more quickly and cheaply, again helping businesses react to customer demands.
15. Now is the right time to act. All these factors mean leading manufacturers are looking again at sourcing more UK content. This trend to reshore provides a window of opportunity to rebuild our lost industrial capabilities.

What is holding back UK Manufacturing Supply Chains?

16. Many Sector Leadership Councils, Local Enterprise Partnerships (LEPs), and business bodies such as the CBI have looked at the underlying issues, and it is clear that action will be needed in tandem across a number of areas.
17. Although the issues vary in intensity across sectors, all manufacturing supply chains face a number of systemic challenges, including gaps in key technical and business skills; a need for more investment to support commercialisation of the latest innovation and technology; in some cases, problems accessing the finance they need to grow; and a need to boost the capability of our smaller suppliers. These widespread issues do not just affect supply chains – they affect all manufacturers and business more widely – and the Government is already taking action on each of these areas through the Industrial Strategy, and by setting up the Business Growth Service which brings together a broad range of expertise to deliver effective and tailored solutions to boost manufacturing growth and strengthen supply chains.
18. The general business environment also impacts on the ease of doing business for suppliers. The evidence, particularly from local strategic economic plans, suggests that in many areas transport and congestion, availability of superfast broadband, and land for expansion are issues affecting manufacturing suppliers, in common with many other businesses. That is why the Government has introduced Growth Deals, putting power and resource in the hands of local partners to support business. The projects being supported will help to ensure more people get training, create thousands of new jobs, build thousands of new homes and start hundreds of infrastructure projects – including transport improvements and superfast broadband networks. The Government is also supporting industry through the introduction of Enterprise Zones. These zones are creating the local conditions for growth through the focus on infrastructure, new buildings, developing local skills and utilising financial incentives. Many zones have a specific sector focus, so supply chains are being developed and supported.
19. We are also aware that costs of doing business, especially energy costs, remain a concern. The Government is committed to making the UK one of the best places to start, finance and grow a business, and is proud that the UK is consistently rated one of the best countries in the world to do business. We are committed to taking action to ensure the overall business environment remains favourable.

Industrial Strategy: Government and Industry Together

20. Through the Industrial Strategy, the whole of government is already working in partnership with industry to set the long-term direction needed to give business the confidence to invest creating more opportunities, skilled jobs and making the UK more competitive so that British businesses can thrive and compete with rising economies.
21. Strengthening UK supply chains is a key theme of many of the published sector strategies. Sector Councils including automotive, aerospace, offshore wind, nuclear, oil and gas, life sciences, and construction have all considered the health of their supply chains.
22. However, this is not the whole of our work to support sectors. Many supplier sectors are now coming together to consider how they can work with government to support their industry. For example:
 - **Electronics** – the *Electronic Systems Opportunities and Challenges* report was launched last year, and the Electronics Systems Council has been formed to champion this key supplier sector
 - **Chemicals** – building the supply chain is one of the top three priorities of the Chemistry Growth Partnership
 - **Rail** – the Rail Supply Group have just published their ambitions for supporting the capability of the UK rail supply chain in *Fast Track for Growth: A Vision for the UK's Rail Supply Industry*
 - **Composites** – the Government supported the recent expansion of the National Composites Centre and the formation of the Composites Leadership Forum (CLF), and is working with the CLF on a National Composites Strategy
 - **Metals** – the Metals Forum is developing a metals strategy with the support of the Government
 - **Medicines** – the Medicines Manufacturing Industry Partnership (MMIP) has been established to ensure the sector remains a key component of the Bio-Economy, with a key focus on supply chains.
23. An industry-led Additive Manufacturing Leadership Group is also now working with the government to develop a coordinated approach to addressing challenges presented by Additive Manufacturing and to unlock mass exploitation.
24. Additive Manufacturing (AM), also known as '3D Printing', involves the 'printing' of parts in layers, as opposed to conventional manufacturing methods centred around weld fabrication, casting, forging or machining. AM's incredibly flexible new approach means a paradigm shift in the design, prototyping, and manufacture of components, with a corresponding, potentially disruptive impact on supply chains. The development of AM faces unique technical challenges, but there are huge potential benefits including the possibility for more localised manufacturing and the reduced need for part inventory. The UK has a rich history in AM which should be built upon in a coordinated way to retain and grow market share in this exciting new technology.
25. Through the Industrial Strategy, there are many examples of industry taking a lead to strengthen its UK supply chain. For example, the Aerospace Growth Partnership is building the innovation capability of small and medium sized companies in its supply chain through the National Aerospace Technology Exploitation Programme (NATEP), and is boosting supplier competitiveness to win more business globally through Sharing in Growth (SiG).

Sharing in Growth

Sharing in Growth is an innovative and ambitious business performance improvement programme funded by £80 million Regional Growth Funds. It is expected to generate up to £170m industry investment, thereby creating a £250 million programme to raise the capability of up to 64 UK aerospace supply chain companies to share in the anticipated growth of this global market. The programme helps companies tackle barriers to growth and boost exports, and is on track to secure over 10,000 high value jobs in the UK.

With privileged access to information from the primes, the programme's trained experts understand what UK aerospace companies need to do to retain and grow market share. The four year programme provides leadership training for the management team and business improvement training for staff. It also includes tailored high intensity development training, covering areas such as lean production, modern manufacturing and cost management. On-going support is then provided to ensure business improvements are sustained.

For example, AGC AeroComposites Yeovil specialises in advanced composite materials technology for aerospace applications and are proud beneficiaries of SiG. AGC Yeovil have been on the programme for twelve months. With the support of the SiG team they have recently changed the layout of their manufacturing process into cells. Improvements have resulted in record sales and a record number of parts supplied to their key customer in a single month.

So far 37 companies have been approved onto the programme, collectively employing 8,000 people and delivering to over 54 customers. The front six companies have already won or retained over £100 million of contract value due to SiG Support.

Our ambition

26. It is clear that industry and government need to do more, building on what is in place to address the challenges and to realise the benefits. In short we need a plan to galvanise action.
27. We cannot reverse the decades old trend towards offshoring of manufactured components overnight. However, as this Action Plan sets out, there are steps we can take now and in the future to address the issues facing our supply chains. We want to strengthen their competitiveness so that they can compete and win more business both in the UK and in export orders, on the basis of cost,⁸ innovation, quality, and service. We must target our efforts particularly on those areas where there is the potential for the UK to grow high value, highly skilled supply chains.
28. We want to ensure the UK is the best environment for manufacturing suppliers in the industrialised world. By 2020, if we are on track, we would expect to see:
 - The competitiveness of the UK manufacturing supplier base boosted – stronger export performance, higher global market share in key sectors, higher skills, and greater investment in innovation
 - UK suppliers retaining a significant market share in mature, high value manufacturing sectors like automotive and aerospace, and slowing the growth of imported components

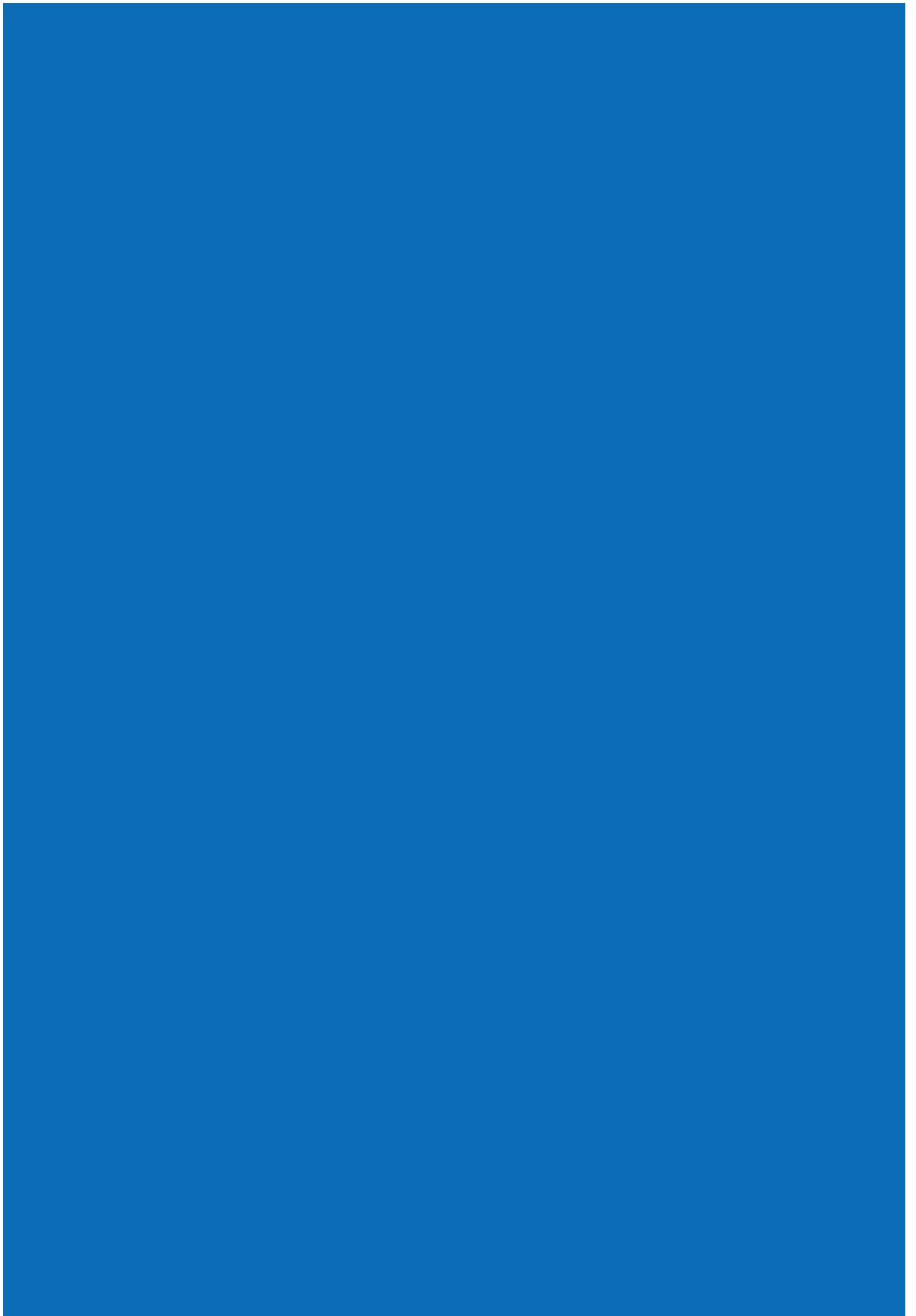
⁸ UK companies can compete on cost through the productivity benefits associated with greater automation and the uptake of other new technologies.

- The establishment of collaborative, strong, long-term UK supply chains in emerging strategically important sectors such as offshore wind, nuclear new build, shale gas, and advanced materials.
29. In the face of strong and increasing global competition, this would be a significant achievement. We also want to strengthen our ability to measure progress in these areas. At the moment, national statistics do not enable us to easily measure the size and strength of our supplier base, or the contribution of different parts of the manufacturing value chain to the UK economy. Improved metrics will enable us to better define our supply chains and understand their needs.
30. As a result, the Business Minister Matthew Hancock has invited Professor Sir Mike Gregory, Head of the Institute for Manufacturing at Cambridge University, to chair an independent expert review of manufacturing metrics. The group will report later in 2015.

The Plan

31. This plan looks specifically at the issues where more joined up action between government and industry would bring benefits across a range of sector supply chains, and where a supply chain focus can provide new solutions. We have focussed on those issues which appear to be the most widespread barriers for supply chains across the country and across a range of manufacturing sectors – namely innovation, skills, access to finance, and building capability in our SME suppliers.
32. In addition, the plan considers some supply chain specific issues where taking action could benefit a range of manufacturing sectors, including:
- Information failures between customers and suppliers, and the need to boost supply chain collaboration. Competition today is increasingly between whole supply chains, meaning a collaborative approach across a supply chain is crucial. However, large primes are sometimes unaware of the capabilities of UK supply chain companies, while potential suppliers do not always know what their large customer's future requirements are, or even that new supply chain opportunities exist. There is also more we could do to encourage good practice across sectors, including in public procurement.
 - Lack of supply chain resilience – in some sectors, customers can be very reliant on single suppliers of key components. Conversely, suppliers can rely overly on single big customers. Additionally, potential suppliers can be too small and financially fragile to meet OEM⁹ requirements. Such supply chains are fragile, and we need to look at how we can strengthen them – for instance by doing more to help firms diversify into new sectors or new export markets, and to bring in inward investment to fill gaps in supply chains. Cross-sector schemes such as the Business Growth Service, which engage across all sectors can help businesses to increase their capabilities to strengthen the national supply base.

⁹ Original Equipment Manufacturer.



Section 1: Innovation

- 1.1 Our review of the evidence suggests that the need to boost innovation capability and investment in the supplier base is a key issue facing most manufacturing sectors. Making UK supply chains more competitive will require long-term investment from both government and industry. Recent NESTA research¹⁰ has highlighted that UK investment in intangibles (such as R&D, design, software, and branding) has been greater than that for tangible assets since the early 2000's. The recent CBI report, *Pulling Together*, confirmed that not enough UK businesses are investing sufficiently in the capital equipment required to support adoption of new technologies and process improvements as firms in other countries. Issues include:
- The need to boost the innovation capability of our supply chain companies, ensuring they are aware of, and can access, the right support
 - The need to boost investment in the capital equipment needed to support the adoption of new technology
 - The need to combine product and manufacturing process innovation with innovation in business processes and systems, to further enhance the productivity of our supply chain companies.

What are we already doing?

Supporting near to market innovation

- 1.2 Innovation is at the heart of the Government's long-term economic plan. It is a key theme within the Government's Industrial Strategy. The UK has recognised the need to bridge the 'valley of death'¹¹ to ensure we successfully commercialise more of our ground-breaking research. Innovate UK, the Government's innovation agency, is the main conduit for supporting business-led innovation and provides support through a number of programmes, including some specifically aimed at SMEs. Innovate UK and the Engineering and Physical Science Research Council's (EPSRC) call for Flexible Manufacturing will invest up to £7 million in collaborative R&D projects, helping to address the issues outlined through the development, demonstration, and implementation of novel equipment, processes, and/or systems. The current funding competition, Production Line Readiness for High Value Manufacturing, will invest up to £1 million in late-stage experimental development projects to help companies bring recent technology innovations closer to the point of manufacturing readiness.¹²

¹⁰ NESTA UK Innovation Index 2014 Working Paper 14/07.

¹¹ In innovation, the gap between proof of concept in a lab and the ability to produce at scale in a business.

¹² Registration closes 25 March 2015 and closing date for entries is 1 April 2015. See <http://tinyurl.com/ppdvt2p>



- 1.3 Innovate UK's Catapult Centres are transforming the UK's innovation capabilities. There are currently seven Catapult Centres – High Value Manufacturing, Cell Therapy, Offshore Renewable Energy, Satellite Applications, Digital, Transport Systems and Future Cities – with two more due to open this year.
- 1.4 The High Value Manufacturing (HVM) Catapult, opened in October 2011. In its first five years of operation, government has invested over £280 million in manufacturing through the Catapult. Over the last 12 months, the HVM Catapult has worked with over 1,500 private sector clients on over 1,000 projects and with over 1,500 SME engagements. In December 2014, the Government committed to provide £61 million of core funding for the Catapult and £28 million for a Formulation Centre to design new products across numerous sectors by combining different gases, solids or liquids.

Supporting original research and development in universities and in business

- 1.5 The Government is continuing to invest heavily in the primary scientific research needed to support our future manufacturing capability. The 2012 Autumn Statement announced a £600 million investment to support eight great technology areas where the UK has the potential to be a global leader, of which several are key to manufacturing eg advanced materials, and robotics and autonomous systems. The EPSRC invests around £80 million a year in manufacturing research and postgraduate training, including 16 university-led research Centres for Innovative Manufacturing. The Research Councils have also recently established six multidisciplinary research networks to consider the implications of emerging technologies and business models for localised manufacturing.
- 1.6 The R&D tax credit scheme now provides £1.4 billion of support to 15,120 companies undertaking research and development activity in the UK. The UK was the leading G20 country in the '2013 Global Innovation Index' and has the highest proportion of overseas-funded research and development in the OECD, suggesting that this and the other sources of innovation support above are encouraging more businesses to locate their research and development activity in the UK.

- 1.7 In addition, through the Industrial Strategy the Government is co-investing with industry in specific areas of need such as the Aerospace Technology Institute and the Advanced Propulsion Centre, and industry sectors are also supporting innovation in their supply chains. For example, the National Centre of Excellence for Food Engineering at Sheffield Hallam University is a hub for collaboration in the food industry, which aims to help the industry develop innovative engineering solutions and support critical skills.

Boosting innovation through collaboration

- 1.8 The Advanced Manufacturing Supply Chain Initiative (AMSCI) has boosted innovation in supply chains by supporting collaborative projects. The Manufacturing Advisory Service (MAS) – now part of the new Business Growth Service¹³ – is working closely with a number of OEM and Tier 1 manufacturers to help them identify capable suppliers in England and establish development programmes, fostering collaboration between buyers and suppliers. The Business Growth Service is delivering the Fit for Nuclear programme with the Nuclear Advanced Manufacturing Research Centre, including funding for R&D and engagement between beneficiaries and potential buyers. The Business Growth Service is also forging stronger ties with Innovate UK and the HVM Catapult. The additional £61 million core funding provided to the HVM Catapult at the Autumn Statement will assist them to reach out to more small and medium sized businesses. They are working increasingly closely with the Business Growth Service to help SMEs enter or grow in the supply chain.

STRIVE – Simulation Tools for Rapid Innovation in Vehicle Engineering

With the support of Bentley Motors, STRIVE is contributing to the development of a new digital supply chain, helping to retain a globally competitive vehicle manufacturing supply chain in the North West of England.

Supported by the North West Automotive Alliance, and by almost £2 million AMSCI funding, innovative supply chain companies Optis, Icona, and DNA Agile are working with experts at the University of Liverpool's Virtual Engineering Centre, to combine their new products and processes to develop world-class virtual prototyping tools for Bentley. The project is on track to deliver a significant reduction in the time it takes Bentley to launch new vehicles as well as enhanced manufacturing quality, through early-stage design improvements.

Using new digital technology which can simulate real world interactions with incredible accuracy, the STRIVE virtual toolset has the potential to provide a revolutionary 'step change' to UK automotive manufacturing. The project is key towards building the critical mass required for a new UK digital supply chain. Government funding is needed for R&D in this area as developing such new 'digital' toolsets carries a high risk, especially for SMEs. However, the benefits of this approach are potentially transformational across a wide range of UK manufacturing sectors.

Supporting Business Innovation

- 1.9 Product innovation is not the only form of innovation. Improvements in the design of business processes can also be a powerful enabler of innovation and productivity improvements. The Design Council has developed a new programme, Design for Leadership of Supply Chains, which has been piloted with Rolls-Royce Aerospace and two of its suppliers during 2014 to improve the design of process and systems to better meet customer quality and service expectations. The Design Council and Rolls-Royce

¹³ MAS became part of the Business Growth Service in December 2014. The Business Growth Service brings together the best specialist advice so that businesses can fulfil their growth potential.

are exploring how this approach could be extended to all Rolls-Royce suppliers, and the Design Council are keen to scope opportunities to deliver the programme for other companies in aerospace and other sectors. Design mentoring services are also now available to small businesses via the Business Growth Service.

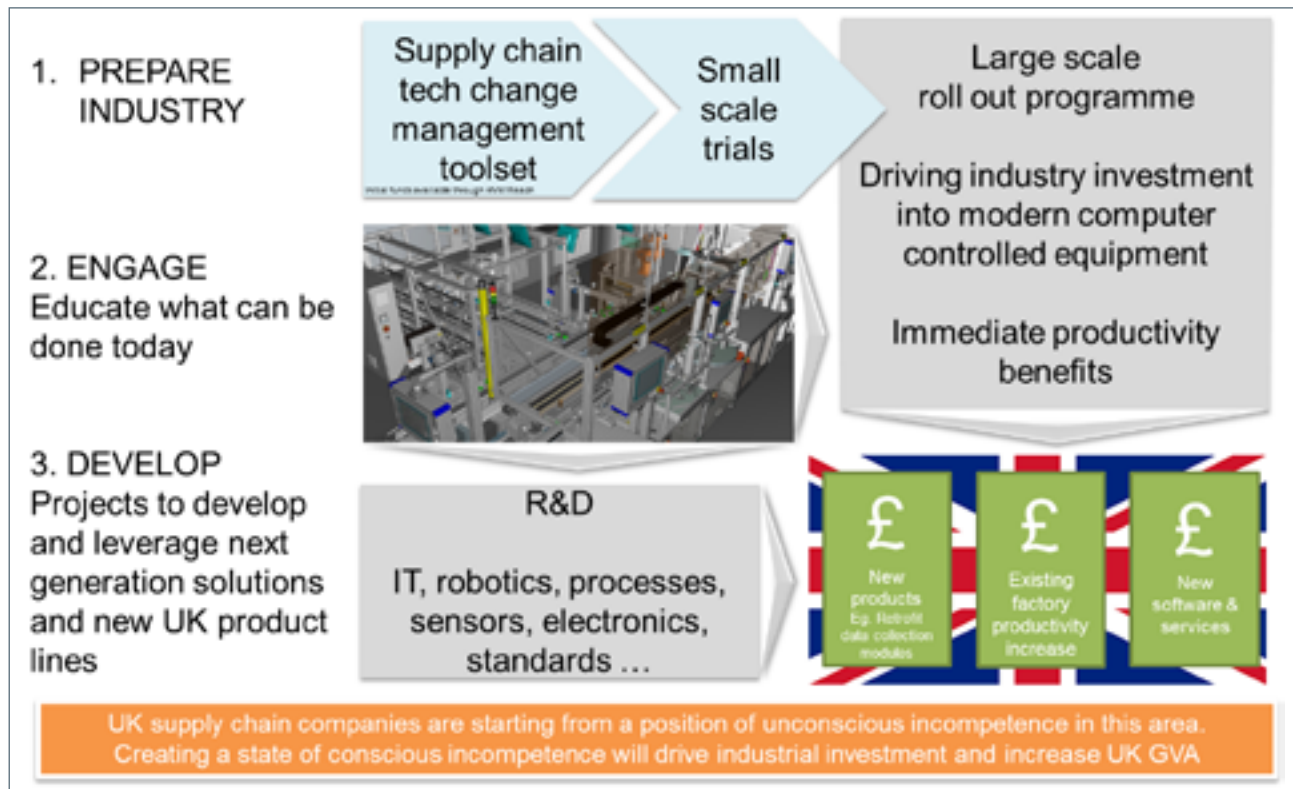
- 1.10 The UK Commission for Employment and Skills (UKCES) will invest up to £1 million in projects to help manufacturing employers develop, pilot or scale-up new ways of boosting the non-technological skills and business practices needed to commercialise innovation, through the UK Futures Programme competition, Skills for Innovation in Manufacturing.¹⁴ Industry-led proposals must be submitted by midday on 11 March 2015.

What more do we need to do?

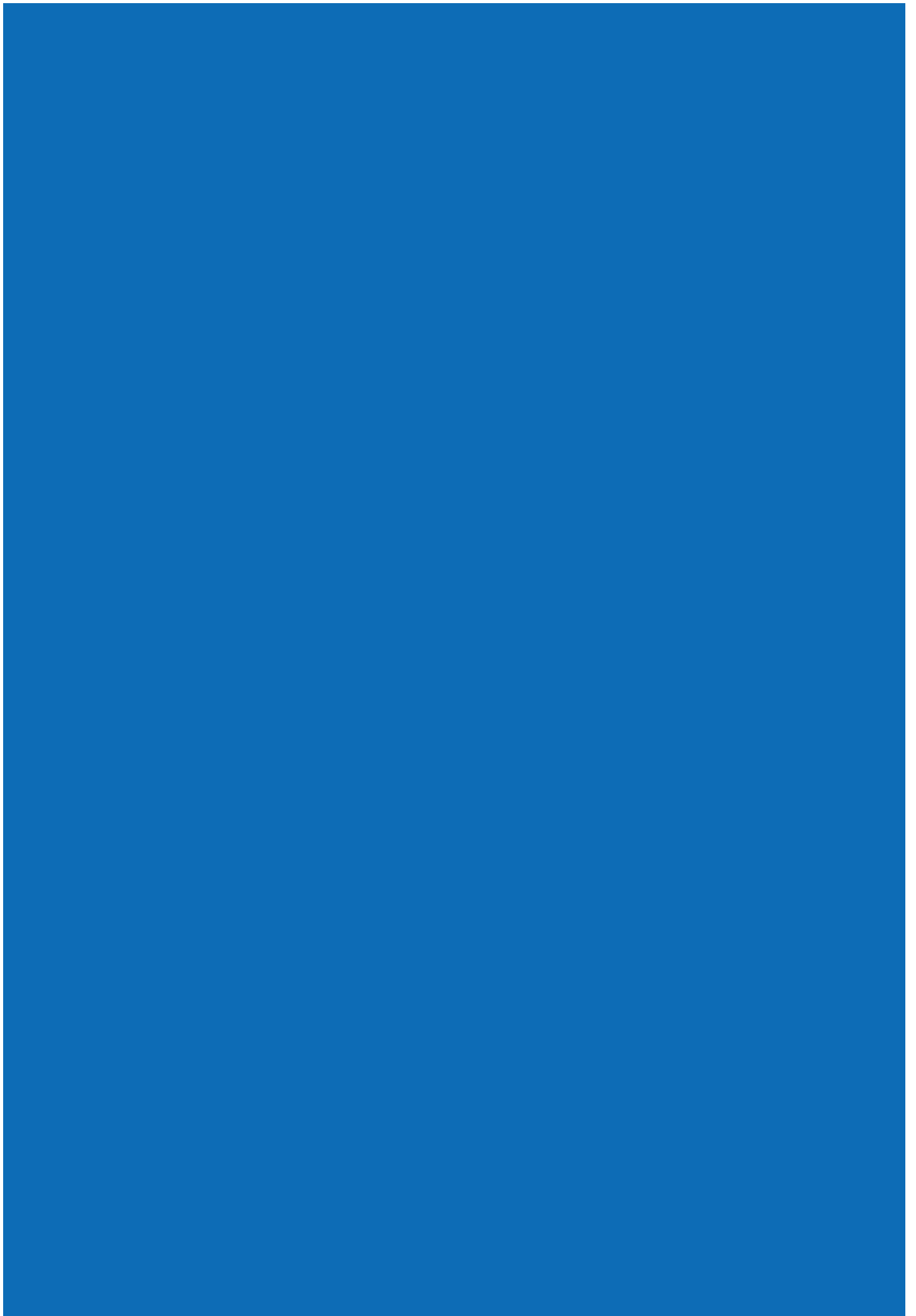
- 1.11 A number of market failures mean that investment by firms in new technology is less than optimal, and these usually impact on smaller supply chain companies. If firms do not have clear enough information about the benefits that the technology will bring, they will be less likely to innovate. Issues can be categorised according to the technology capability of the company:
- Low technology capability: firms lack understanding of the availability of, and the potential business benefits of the latest technology
 - Medium technology capability: firms keen to innovate, but lack the knowledge and skills to develop the right innovation and technology update programme for their company – may not yet be ready for Innovate UK support
 - High technology capability: firms with strong innovation potential and a clearly identified project, but without the resources to invest by themselves.
- 1.12 The adoption of Industry 4.0 type capability within manufacturing enables manufacturers and machines to share information with the wider supply chain, so that manufacturing processes can reconfigure themselves more efficiently based on stronger data flows. But, supply chain companies are not aware of this massive technological opportunity now becoming available.
- 1.13 An independent international benchmarking study by Roland Berger¹⁵ indicates that the UK is a prime candidate for exploitation of these manufacturing system changes.
- 1.14 Wide scale adoption of digital and smart manufacturing systems must be a key part of the UK's industrial supply chain strategy, to allow our supply chain companies to compete on a global stage. This vision will require international R&D and standards setting over a number of years, but many technologies which could enhance productivity are available for factory implementation now.
- 1.15 To compete in this environment a greater level of automation and electronic control will be required on our factory floors. This is an area where international benchmarks show the UK to be lagging behind. Smaller businesses will require a toolset to enable them to readily invest in the latest equipment.
- 1.16 The Manufacturing Technology Centre (MTC), part of the HVM Catapult, has been working with the Electronic Systems Community (ESCO) to develop a path for exploitation of Industry 4.0 capability for the UK. This is summarised in the following diagram.

¹⁴ <https://www.gov.uk/government/publications/ukces-futures-programme-skills-for-innovation-in-manufacturing-competition-brief>

¹⁵ *Industry 4.0 The new industrial revolution – How Europe will succeed.*



- 1.17 As part of the HVM Catapult Reach programme announced in the Autumn Statement, the MTC over the next 18 months will develop and pilot at small scale a reusable toolkit for SME and Midcap suppliers to enable them to undertake manufacturing technology change within their existing factories.
- 1.18 BIS, ESCO and MTC will explore how to leverage EU Horizon 2020 programmes to deliver a UK demonstrator facility to engage UK business in the opportunities for exploitation of the technology and in development of products and software systems for sale into this new European market.
- 1.19 BIS and the British Standards Institute (BSI) will work with the HVM Catapult to establish the areas where standards could increase the rate of innovation in Industry 4.0 capability and put this framework in place.
- 1.20 We will also provide clearer co-ordination and signposting of support to firms to assist them in navigating the different parts of the innovation system to help address these issues.
- 1.21 We will ensure that all highly innovative SMEs receiving funding from Innovate UK are also offered help to source any additional support they need – such as growth capital and specialist export advice – to help them grow their business and achieve commercial success.
- 1.22 We will also increase the quantity and quality of referrals from Business Growth Service to Innovate UK and the HVM Catapult for those SMEs with the potential to benefit from specialist innovation support.
- 1.23 To improve the ability of SME suppliers to innovate, the HVM Catapult will increase the number of SMEs it engages with annually by 50 per cent in five years. It will also double the amount of collaborative R&D accessed by SMEs over this timeframe to £120 million per annum.



Section 2: Skills

- 2.1 Evidence suggests that manufacturing supply chain companies across all sectors are concerned about workforce skills. Business concerns include how to find and recruit new employees with the right skills, how to train the existing workforce to the right level, and how to inspire a future generation of young people to consider future careers in manufacturing and engineering.

What are we already doing?

- 2.2 The successful development of our skills base requires a strong and stable partnership over the long-term between the Government, individuals, businesses, colleges and skills providers. There is a huge amount of work already in place which will benefit manufacturing supply chains.
- 2.3 Skills is a key theme of the Government's Industrial Strategy. Government is working with the business community to create the right framework to allow businesses to flourish. Our aim is to create more opportunities, skilled jobs, and make the UK more competitive so British businesses can thrive and compete with rising economies. We are putting employers in the lead and co-investing with industry, for example through the Employer Ownership Fund (EOF).

Building parity of esteem between the vocational and academic routes

- 2.4 We want the new norm to be two equally prestigious routes to a great career – university or an apprenticeship. Hence we are working to improve the quality of vocational education. We are creating more higher level apprenticeships and making all apprenticeships world class, so that the programme is even more rigorous and responsive to meet the changing needs of employers and the future economy. We are putting employers in the driving seat – giving them the role of designing apprenticeships through employer-led 'trailblazers' and giving them control of the funding so that they become more demanding customers.

Inspiring the next generation

- 2.5 We are improving careers advice, and encouraging employer engagement with schools to inspire the next generation. The Your Life Campaign¹⁶ is motivating more young people, especially women, to consider engineering and technology as a career option. See Inside Manufacturing (SIM),¹⁷ a partnership between BIS and industry, is inspiring more young people (aged 11-19 years) into manufacturing by dispelling outdated ideas of industry.

¹⁶ <http://www.yourlife.org.uk/>

¹⁷ <http://discuss.bis.gov.uk/seeinsidemufacturing/>

2.6 The Government has also opened 30 University Technical Colleges providing high quality technical education for young people age 14-19, with a further 26 in development, exceeding the Government's commitment to establish at least 24 by 2014. With employers and universities as lead sponsors, they are equipping around 35,000 students with technical skills as well as GCSE's that employers demand.

Tackling the engineering gender gap

2.7 We are taking steps to tackle the gender gap in engineering, and support the National Centre for Universities and Business' (NCUB) target of doubling the numbers of female engineering graduates by 2030. We are encouraging more women into engineering apprenticeships, and will support a dedicated platform to match STEM trained women to return to jobs in industry following career breaks. Through EOF, Government has announced funding for two specific projects to boost the number of women engineers into the sector.

Creating world-class institutions

2.8 Government has announced the creation of a new generation of national colleges¹⁸ to help the UK develop the world-class technical skills we need to compete globally, and to address high level skills gaps in key sectors of the economy. National colleges will be employer-led institutions and will set industry standards for training within their sector (including apprenticeships), based on emerging technology and innovation, in state-of-the-art facilities.

2.9 The National College for Advanced Manufacturing is being developed by the HVM Catapult and EEF, the manufacturer's organisation. The Advanced Manufacturing Research Centre (AMRC) in the Sheffield region and the MTC in Coventry, both members of the HVM Catapult, will form key training hubs of the National College. National College status will help the MTC and AMRC Training Centres to expand their facilities and grow the numbers of apprentices they train.

Leadership and Management training

2.10 Business Growth Service provides grant-funded business development coaching (BDC) and training for leadership and management (L&M), supporting the development of key skills required by high growth manufacturers for success in winning new work in supply chains. Business Growth Service helps SME leaders to navigate the offers of providers in the public and private sectors to find the right training at the right time.

What more do we need to do?

2.11 We have identified two areas – recruitment and training – where supply chain collaboration may be able to boost and complement existing work and further support our manufacturing supply chain companies to have world class skills.

Recruitment and Retention

2.12 Well known manufacturing companies at the top of a supply chain – so-called primes – attract many more qualified applicants than they can offer apprenticeships or employ; at the same time, less well known supply chain companies have difficulty finding the talent

¹⁸ The seven national colleges announced are for High Speed Rail, Nuclear, Onshore Oil and Gas, Digital Skills, Wind Energy, Creative and Cultural Industries, and Advanced Manufacturing. £80 million of capital funding is available over 2015-16 and 2016-17 to support the establishment of the national colleges, to match employer investment to a potential total of £160 million by 2017.

they need. Primes can use their brand power to help their suppliers recruit through clearing houses which redirect high calibre additional candidates to supply chain companies and by supporting engineering talent platforms like the Talent Retention Solution (TRS)¹⁹ a national, employer-led engineering talent bank platform. Advanced manufacturing and engineering employers advertise their vacancies directly on the TRS system – whether for experienced professionals, apprentices, graduates, postgraduates or undergraduates – to individuals who have registered their desire to work in the sector.

2.13 While the major automotive companies often receive over 20 applicants for every apprenticeship, their less well known suppliers struggle to recruit. To ensure excellent apprenticeship applicants are not lost to the industry, the Automotive Industrial Partnership²⁰ is commissioning the development of an IT based platform. The platform will provide supply chain companies with access to the details of appropriate candidates who have given their permission for data to be shared, making it much easier for supply chain companies to recruit the high quality apprenticeship candidates they need. This platform should be ready to roll out by spring 2016 with the potential to extend into other engineering sectors in the longer-term.

Training

2.14 As well as recruiting new employees, supply chain companies face barriers to training their existing workforce. Lack of administrative capacity, difficulties financing the investment, and unawareness of available support can all deter suppliers from systematically engaging with training. As a result, some supply chain companies find recruiting pre-trained staff more efficient than training, but such ‘poaching’ within the supply chain is likely to be counter-productive in the long-term.

2.15 Companies such as Sainsbury’s, McCain’s, Rolls-Royce, BAE Systems, Toyota, Jaguar Land Rover, and Siemens are already working with their suppliers to assist them in training their workforce, as they know this will enable their suppliers to better meet their requirements. Examples include running workshops and establishing supplier groups to help share good practice and tips on how to run a successful apprenticeship programme, as well as opening up training programmes and facilities to the supply chain. For example, in the food industry, McCain’s have established grower groups to help their farm suppliers to produce more potatoes using fewer inputs, thereby driving costs out of the supply chain for everyone. And Sainsbury’s has developed the *Sainsbury’s Farming Apprenticeship Programme* in partnership with the British Growers Association, which takes the administrative burden away from farmers and growers wishing to recruit an apprentice.

2.16 If such examples were adopted more widely, not only by other large primes but by large companies throughout the supply chain, this could have a significant impact in increasing the skills of our manufacturing workforce.

2.17 LEPs have a key role to play in helping small supply chain companies navigate the skills system.

¹⁹ <http://talentretention.biz/>

²⁰ the Automotive Industrial Partnership, with £11.3 million of Government funding alongside a £2.8 million cash investment and £16.4 million in-kind contributions from industry, brings together major automotive businesses to ensure future skills needs are met for UK vehicle manufacturers and supply chain companies.

Sheffield City Region – Skills Made Easy

Skills Made Easy is a pioneering programme, funded through the Sheffield City Deal, which puts control over training directly into the hands of employers in the Sheffield City Region. The aim is to help small and medium sized companies across the Sheffield City Region to get the high quality training of the type they need, in the place they need it, and at the time that they need it – whether it is recruiting apprentices or training the existing workforce. Help is given through support for workforce planning, applicant selection, help with accessing grants, design of training, and guidance over selection of training providers.

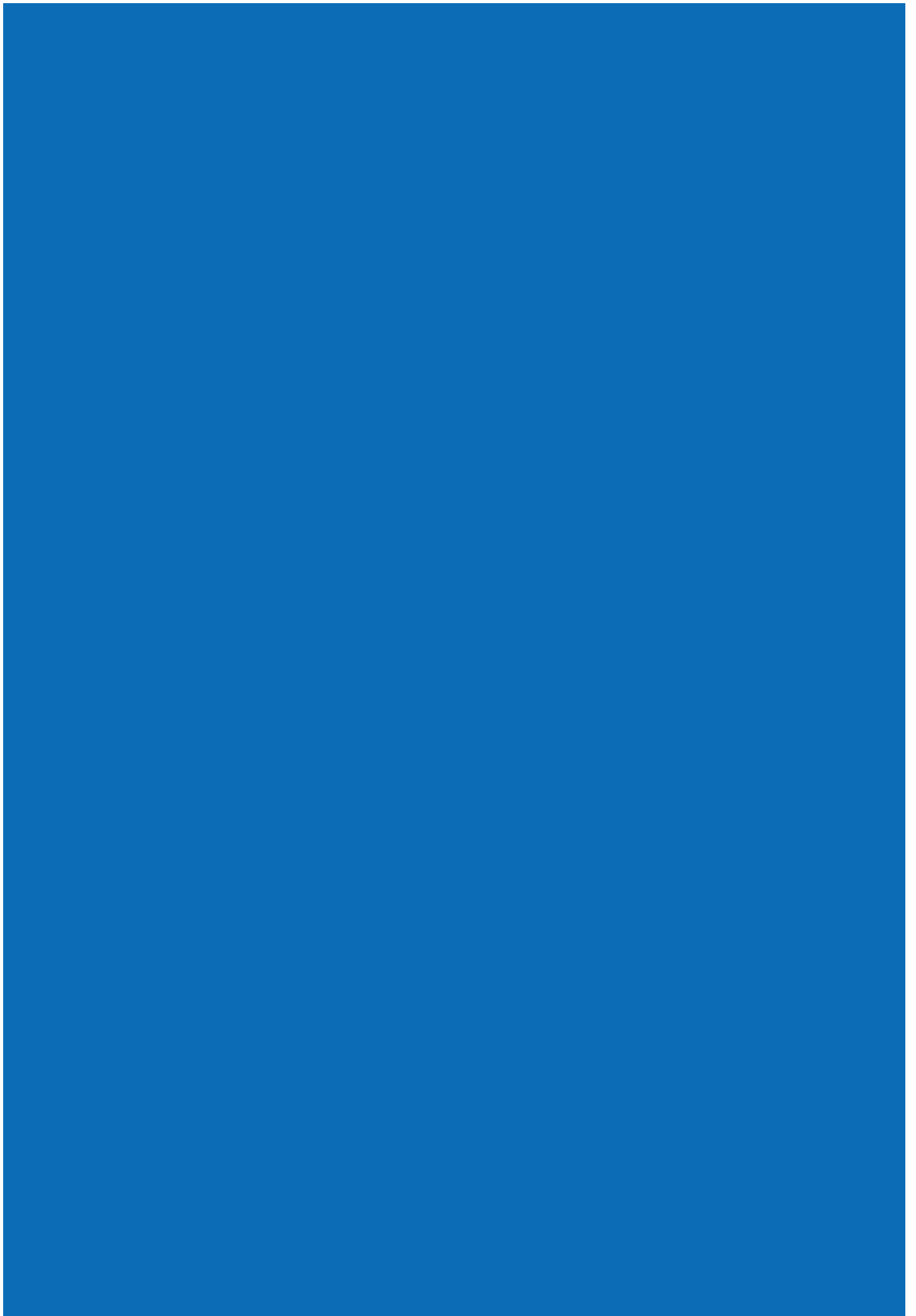
For example, Krantech fabricate complex structures in heavy plate and sections for customers within the oil and gas, nuclear, defence, power generation, and general engineering sectors. The director at Krantech, Paul Wright, came to Skills Made Easy to help source suitable specialist training to enable the company to recruit more young people. Skills Made Easy visited Paul at his offices where his designated Account Manager recognised that a standard welding or mechanical engineering apprenticeship training framework would not be sufficient as Krantech needed apprentices with additional knowledge of Geometric Dimensioning & Tolerancing (GD&T).

Within two weeks, Skills Made Easy came back to Paul with details of what could be delivered by local providers. This included standard mechanical engineering, welding and fabrication apprenticeship frameworks but with additional training in GD&T ‘bolted on’ to be delivered alongside. Both elements of the training came fully funded – the apprenticeship training through the Skills Funding Agency and the commercial GD&T bolt on via the Skills Made Easy Incentive Fund.

Actions

- 2.18 We will encourage employers to do more to support the training needs of the supply chain.
- 2.19 We have already supported the automotive supply chain with two calls for funding through the Employer Ownership Fund (EOF). Through these calls we are co-funding additional training for employees in automotive supply chain companies to help these companies to grow and meet the demand for increased automotive manufacturing. Six successful projects were supported in the first call, and 27 projects have applied for the second call which closed on 6 February. Longer-term, subject to funding, we will consider strong cases for EOF supply chain based skills calls in other sectors.





Section 3: Access to finance for the supply chain

- 3.1 Evidence suggests that while access to finance is not seen as such a critical issue as innovation or skills, it remains an issue for suppliers in some manufacturing sectors eg in financing large up-front capital investments. Much action is already being taken to unlock finance for small business and to tackle issues of poor procurement practice such as late payment. The key challenge is to ensure that suppliers are aware of all the options available to them.

What are we already doing?

- 3.2 At present over £50 billion is lent by banks to smaller businesses each year. However many smaller firms still face difficulties accessing finance. Government is committed to a more competitive banking sector which will increase choice and service for business. Actions taken include:
- Giving competition objectives to the financial regulators
 - Legislating to establish a new regulator for the payment systems, ensuring fair access to this vital banking infrastructure
 - Introducing legislation to require large banks to refer declined small business finance applications to online platforms, helping to put businesses in touch with alternative lenders
 - In addition, the Competition and Markets Authority is currently undertaking a full investigation of competition in small business banking and is expected to report in April 2016.

Creation of the British Business Bank

- 3.3 Government created the British Business Bank²¹ as an economic development bank with the goal of making business finance markets for smaller businesses more effective and dynamic, allowing them to prosper, grow, and support the UK economy. Around 11 per cent of British Business Bank support went to manufacturing businesses in the 12 months to end September 2014, which is in line with the manufacturing contribution to UK GVA (approximately 10 per cent in 2013).
- 3.4 Over the next 5 years, the British Business Bank is aiming to unlock £10 billion of finance for viable smaller businesses. The current round of the British Business Bank's Investment

²¹ Operationally independent, Government-owned financial institution from 1 November 2014, it manages all of Government's business finance support for small businesses within a single commercially-minded institution.

Programme remains open for applications from finance providers who meet the funding needs of small UK business, funding growth, working capital, and asset acquisition. The success of the programme has seen it extended to a £400 million programme with £50 million of funding available for regional businesses.

Finance information and support for small business

- 3.5 An important aim for the Bank is to ensure that businesses have access to better information about the finance options available to them, and alongside the Institute of Chartered Accountants in England and Wales, the Bank recently published the *Business Finance Guide*.²² The guide also includes several tools and ideas to help businesses consider their options, make decisions, and plan how they will finance expansion.
- 3.6 The British Business Bank will hold discussions with Industrial Sector Leadership Councils to understand the financial issues that their supply chain companies face.
- 3.7 Business Growth Service also supports the financial needs of manufacturing SMEs. It can provide grant-funded advice on access to finance to high growth SME manufacturers focused on preparing to raise funding, writing financial documentation, making introductions, and managing investor conversations. In addition, it runs events and webinars to promote awareness of key financial matters, including the Manufacturing Financial Expert programme.

Supply Chain Finance

- 3.8 Supply Chain Finance (SCF) is an innovative way for large companies to help their supply chain access credit, improve cash-flow and at a much lower cost. With Supply Chain Finance a bank is notified by a large company that an invoice has been approved for payment; the bank is then able to offer a 100 per cent immediate advance to the supplier at lower interest rates, knowing the invoice will ultimately be paid by the large company. Taken together, this means that leading companies could deliver up to as much as £20 billion of new cheaper, finance to their suppliers, including many UK SMEs.
- 3.9 Government has been working with large corporates to help develop supply chain finance that will help tens of thousands of businesses secure increased levels of affordable finance. The Prime Minister hosted a roundtable of companies in 2012 to help support job growth and help aspiring business get ahead. And the government is also working with industry leaders to help encourage businesses to more widely adopt supply side finance alongside trying to ensure SMEs have the widest range of credit options available to them.
- 3.10 The Government is also taking through measures in the Small Business, Enterprise and Employment Bill to improve company reporting on payment practices and policies. As part of this, the Government has just finished consulting on proposals that large companies should report quarterly on their payment practices, including the availability of supply chain finance. The Government will report on the outcome of its findings in the coming weeks.

Working Capital – Tooling Finance

- 3.11 Supply chain firms can find it difficult to raise the capital for tooling to make new components. When a customer company places an order for a new component with a supplier, new tools need to be made to manufacture the new component to specification. The customer will usually pay for such tooling but not until the tool is completed and shown to meet the specifications. In many engineering sectors, this process can take 12-18 months or longer. The financial products used currently by the main banks to fund

²² The guide is available at: <http://viewer.zmags.com/publication/703d32a6#/703d32a6/1>

the working capital requirements of manufacturing suppliers are not designed to meet the needs of a 12-24 month cycle and therefore many UK based suppliers are presently starved of the working capital that they need to fund this process.

- 3.12 This issue is being addressed through a national Tooling Loan Fund set up by Finance Birmingham, with help from the Business Growth Service and financial backing from the Government through the Regional Growth Fund.²³ The Tooling Loan Fund is still open for business and can provide loans from £50,000 up to £1 million to companies of all sizes and in all manufacturing sectors for tooling costs connected with a confirmed order.
- 3.13 The HVM Catapult will also engage the banking sector to ensure banks have early sight of good quality lending opportunities supported by the “technical risk reduction” processes embodied in the Catapult centre.

What more needs to be done?

Prompt Payment

- 3.14 Late payment remains a significant problem for UK businesses. As of January 2015, the overall level of late payment owed to small and medium sized businesses is reported as standing at £32.4 billion, with the average amount owed to a small business at £31,901. The Government is taking forward a suite of measures to tackle the issues of late payment. We are leading by example in the way in which we conduct public procurement. This includes a new legal duty for all public sector bodies. The new procurement reforms in the Public Contract Regulations 2015 will make it a legal requirement for contracting authorities to mandate prompt payment terms of 30 days down the entire public sector supply chain and publish the proportion of invoices paid on time to their first tier suppliers as well as the amount of interest paid and liable due to late paid invoices.
- 3.15 The Mystery Shopper service will also assist in ensuring the contracting authorities comply with these new measures and will “name and shame” poor payers through the fortnightly publication of Mystery Shopper cases on gov.uk.
- 3.16 Successfully tackling these issues is an economic growth issue and the Government is committed to building a responsible payment culture in both the private and public sectors.

Construction – Prompt Payment Charter

A Construction Supply Chain Payment Charter that sets out payment terms of 30 days has been agreed by the Construction Leadership Council (CLC), the body set up to deliver the Government’s industrial strategy for construction.

The charter sets out 11 “fair payment commitments”. These include a commitment to reduce payment terms to a supply chain to 30 days from January 2018. The charter also sets out stages before this: terms of 45 days from June 2015, and 60 days with immediate effect.

- 3.17 Through the Small Business Enterprise & Employment Bill, currently before Parliament, we will introduce a requirement for large and quoted companies to report on their payment practices.
- 3.18 This measure will give suppliers the information that they need to negotiate fair contract terms, challenge unfair terms, and better plan when to expect payment. Secondly, it will increase competitive pressure to improve payment practices and policies in line with peers.

²³ Further information is available at www.financebirmingham.com/tooling

Increased transparency, through this tough reporting requirement on all the UK's largest companies, will help take significant steps to address the current imbalance in economic power between small and large contracting parties.

- 3.19 A key part of the Government's drive to change payment culture is reforming the Prompt Payment Code. The Government, in conjunction with the Chartered Institute of Credit Management, will strengthen the Code to give it more teeth. The reforms, agreed by an industry-led Prompt Payment Advisory Board, include the introduction of 30-day payment terms as the standard for all signatories and a maximum payment term set at 60 days. The maximum payment term will apply in all but exceptional circumstances, enforced by a new Code Compliance Board, on a comply or explain basis. The Compliance Board will investigate challenges made against signatories to the Code by their suppliers, and will have the power to remove those found to be in breach of the Code's principles and standards. Signatories will be actively encouraged to start complying with the strengthened Code from March 2015, with the formal requirement coming into force next year.
- 3.20 Reforming the Code to promote 30-day payment terms as best practice, combined with the tough new reporting requirement being introduced through the Small Business, Enterprise and Employment Bill, will drive forward the required change in payment culture.
- 3.21 We want 30 day payment terms to be adopted as normal practice across the UK supply chains, as it is in other countries like Germany. We will eject companies that routinely pay over 60 days from the Prompt Payment Code, and expose bad payment practice through the new tough transparency measures. Late payment and the treatment of suppliers will become issues at boardroom level, which will reflect on a company's corporate culture and risk management.

Tackling unfair practices

- 3.22 Government is clear that large companies should not be using their economic power to place further strains on already hard-pressed small businesses. There is a firm commitment to achieve real change on the ground – a cultural shift that will make it unacceptable for larger companies in positions of extreme bargaining imbalances to exploit smaller suppliers. We are currently working to build the evidence base on wider unfair payment practices, such as requiring payment to be on a supplier list. This will allow the Government to understand the prevalence and impact on small business, and the necessary scope, and implications of possible further changes.
- 3.23 Government will tackle specific unfair practices, such as charging suppliers to join or remain on supplier lists, to build a more responsible payment culture.

Performance Bonds

- 3.24 Developers in the offshore energy sectors typically require suppliers to post performance bonds, often around 10-20 per cent of the overall contract size, to manage the risk that suppliers will not deliver. Matthew Chinn's recent review²⁴ of opportunities and barriers in the UK offshore wind supply chain highlighted that some suppliers struggle to post performance bonds. Whilst banks are generally willing to finance performance bonds, they often require high, up-front cash security. This ties up working capital for the companies and restricts their ability to bid for further contracts, make investments, and grow. The Enterprise Finance Guarantee was extended in April 2014 to cover performance bonds, covering loans up to £1 million.

²⁴ <http://www.thecrownestate.co.uk/media/389763/owic-uk-offshore-wind-supply-chain-review-opportunities-barriers.pdf>

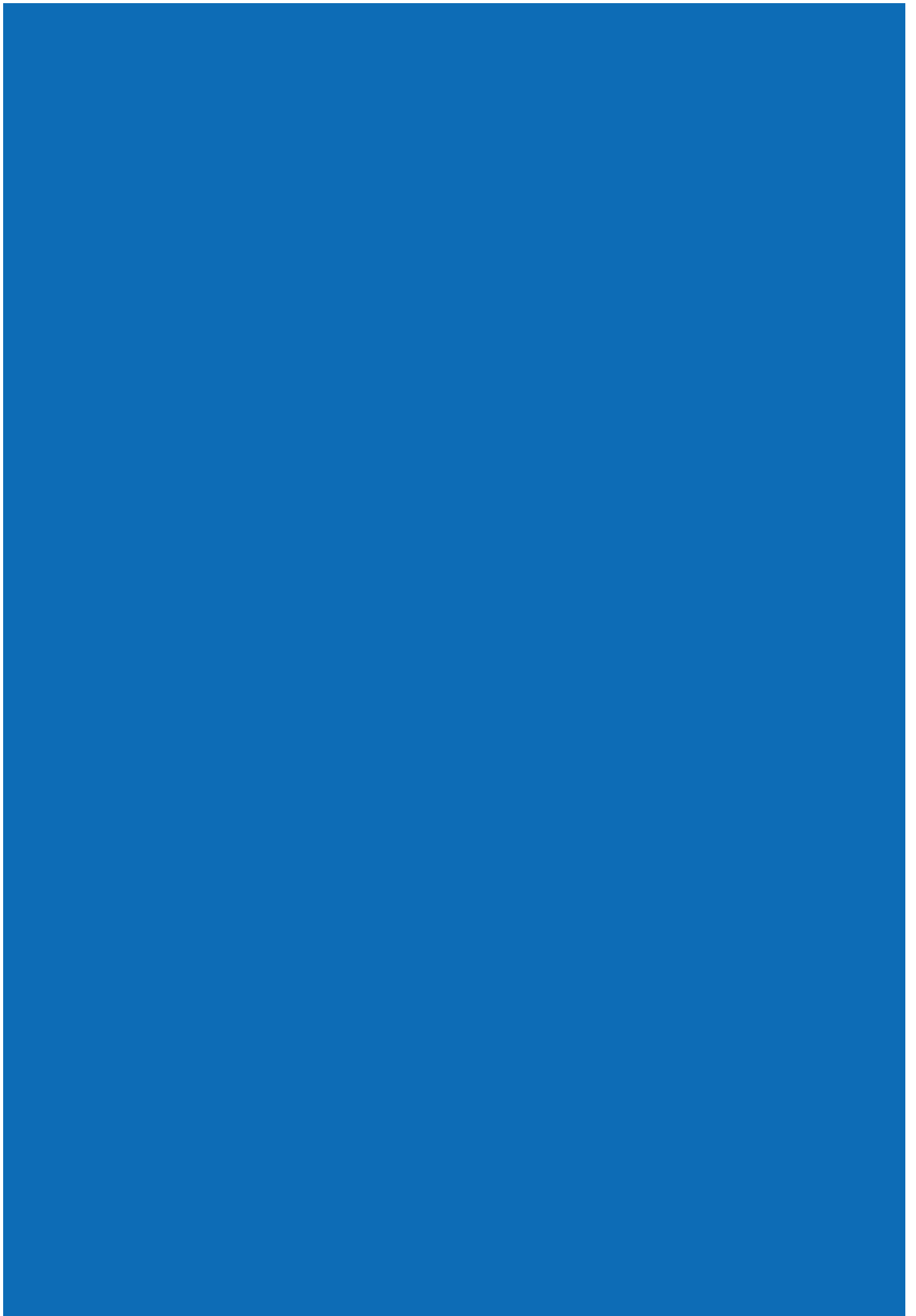
Action

- 3.25 The Offshore Wind Industry Council will work to build consensus on the appropriate level of bonding, and challenge punitive levels of bonding where it occurs.
- 3.26 The Offshore Wind Industry Council will work with the finance industry, the supply chain and the Government to identify alternative options that genuinely mitigate the risks arising from the suppliers chosen and to take forward approaches that are viable and consistent with the wider goals of cost reduction.
- 3.27 Alongside this, the British Business Bank will complete analysis of what more could be done to tackle this issue by Spring 2015.

Enabling invoice finance

- 3.28 Invoice financing is where a third party agrees to buy a supplier's unpaid invoices for a fee. There are two types of invoice financing in the UK – factoring and invoice discounting.²⁵ Government wants to make it easier for business to access invoice finance and is proposing to create a power for the Secretary of State to make regulations which can invalidate contractual barriers that currently inhibit small businesses' use of invoice finance. It is hoped that invoice financing will be offered to suppliers at more affordable rates because of lowered administrative costs to invoice financiers. This measure will be implemented during the next Parliament.
- 3.29 Through the Small Business, Enterprise and Employment Bill, currently before Parliament, we will introduce a measure to remove contractual barriers to invoice finance.

²⁵ More information is available at: <https://www.gov.uk/business-finance-explained/invoice-financing>



Section 4: SME capability in the supply chain

- 4.1 Evidence suggests the need to boost the capability and competitiveness of our small supply chain companies is an issue facing the majority of manufacturing sectors. While the UK has some extremely innovative and agile small manufacturers, many smaller businesses will need support to achieve their full potential. Research carried out by Liverpool LEP²⁶ found that small businesses may need support to: develop their strategic management and leadership capability; to develop training strategies to meet future skills needs; to access the right finance; to improve their branding; to make the right connections with buyers; to meet the standards OEMs demand; and to find the right innovation support.

What are we doing already?

- 4.2 Government is making it quicker and easier for every business to get the help that they need. Further improvements have been made to GREATbusiness.gov.uk as a single place to go for help from Government, supported by a helpline and online tools that will help identify the right support.
- 4.3 For businesses with the ambition, capability, and capacity to improve and grow we have launched the Business Growth Service which brings together the best specialist advice for up to 20,000 businesses a year, including supporting 3,000 manufacturers per year with specialist manufacturing advice. The Business Growth Service is increasing its engagement with OEMs and Tier 1 operators to improve opportunities for SMEs both within and across industrial sectors and supply chains.
- 4.4 Growth hubs will work with both local and national partners to ensure that businesses in their area have a clear, simple way to access all business support. 23 growth hubs are now operational, delivering business support at the local level to 45 per cent of the registered business population in England, with the full 39 (one in each LEP area) due to be fully operational by March 2016.
- 4.5 Industry also has a strong interest in building the capability of its supply chain and in a number of manufacturing sectors has led the way in developing supply chain improvement programmes.

²⁶ http://www.liverpoollep.org/priorities/knowledge_economy/making_it-1.aspx

Hinkley Supplier Enabling Programme (HSEP)

The Hinkley Point C development being commissioned by EDF Energy is a £16 billion investment in Somerset and the South West that has the potential to create thousands of local jobs in the 10 year construction period. Through the £1 million 2014 Sector Mentoring Challenge Fund, BIS provided £95,000 of support to the HSEP programme, led by Somerset Chamber of Commerce, which provides mentor experience to help local suppliers step up to the challenge.

A combination of volunteer specialist sector mentors and professional generalists liaise with EDF Energy and the Tier 1s to identify and communicate work packages early enough for suppliers to access the support they need to respond. The scheme then links firms with existing networks, including Business Growth Service manufacturing support, to meet particular requirements. So far, 14 supplier cluster groups have been supported involving 195 supplier businesses, and contracts of circa £1.8 million awarded with over £50 million in the pipeline over the next 12 months.

For example, Tier 1 contractor BYLOR – a joint venture of Bouygues TP and Laing O'Rourke – has been working with the Somerset Chamber to identify potential metal fabrication suppliers in Somerset that could meet requirements for Hinkley Point C. Through a series of structured workshops BYLOR has given local suppliers an insight into the opportunities available, as well as the challenges they will face and the support available to them through the Hinkley Supply Chain Team and the Business Growth Service manufacturing advisors.

As a result, Somerset Steel Fabricators, a group of metal fabrications suppliers, has teamed up to bid for work worth tens of millions of pounds, with assistance from the Hinkley Supply Chain Team.

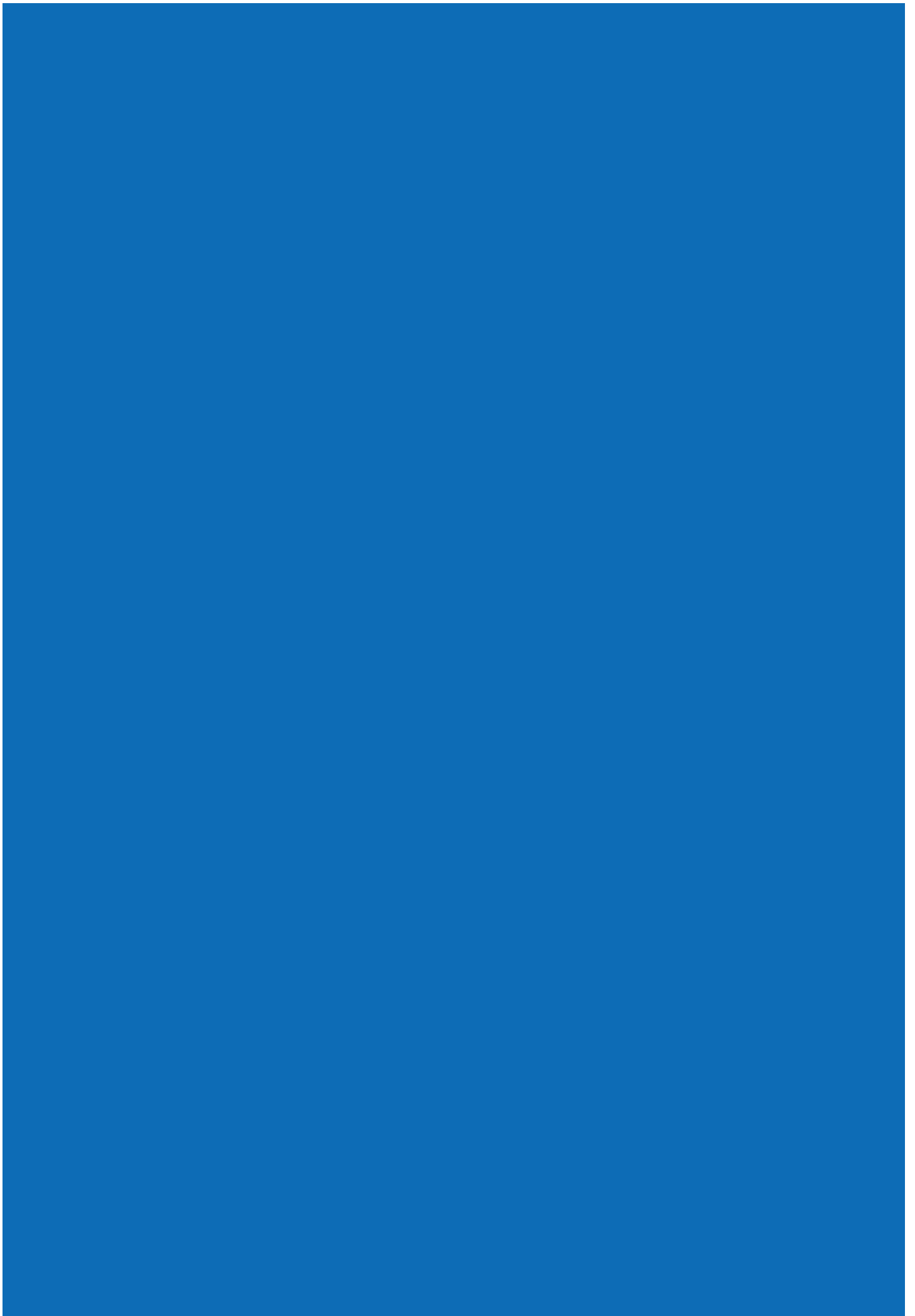
What more do we need to do?

- 4.6 According to the Federation of Small Business (FSB) Small Business Index confidence has risen dramatically, growth aspirations are up and turnover is up. In manufacturing, the latest Manufacturing Barometer report indicates that small manufacturers are positive about the outlook.
- 4.7 However, there remains concern in a number of sectors that suppliers continue to need more support to build their capability and leadership and to remain ahead of the competition in terms of cost, quality, delivery, and service.
- 4.8 We will assess the suitability of the BenchmarkIndex® to support supply chain development in a “fit to supply” pilot project.
- 4.9 Certain sectors continue to lead in their areas. Following the November 2014 report *Growing The Automotive Supply Chain: Assessing The Upstream Sourcing Potential*, the Automotive Council is looking at the specific support that can be given to SME supply chain companies to grow their long-term competitiveness in line with the six themes identified in the Automotive Industrial Strategy. They are also exploring developing a network of SME supplier best practice clubs using an industry standard framework for benchmarking and non-competitive collaboration.

- 4.10 In February 2015, as part of the Aerospace Growth Partnership, the business performance improvement programme *Sharing in Growth*²⁷ was awarded £30m Regional Growth Funds. Combined with the earlier awards and industry commitments the programme, in total, is worth in the region of £250m and is expected to raise the capability of up to 64 UK Aerospace supply chain companies to share in the anticipated growth of this global market. The programme helps companies tackle barriers to growth and boost exports, and is expected to secure over 10,000 high value jobs in the UK.
- 4.11 With privileged access to information from the primes, the programme's trained experts understand what UK Aerospace companies need to do to retain and grow market share. The four year programme provides leadership training for the management team and business improvement training for staff. It also includes tailored high intensity development training covering areas such as lean production, modern manufacturing and cost management. On-going support is then provided to ensure business improvements are sustained.
- 4.12 The Defence Growth Partnership (DGP) is supporting greater collaboration in the defence value chain by developing commercial and financial operating frameworks for companies to work together on developing products and services that meet customer needs. It is supporting the creation of cooperative groups to improve market access and industry's capability to deliver more competitive export offerings. The DGP is also helping UK companies exploit the existing network of support and infrastructure in place to help UK business to improve competitiveness and bring new products and services to market.
- 4.13 A range of other sectors are at different stages in exploring how to support supplier capability. For instance, the Rail Sector Council has just published their ambitions for supporting the capability of the UK rail supply chain in *Fast Track for Growth: A Vision for the UK's Rail Supply Industry*.



²⁷ <http://sig-uk.org>



Section 5: Supply Chain Collaboration

- 5.1 In a number of sectors, communication and collaboration between primes, tier 1s and lower tier suppliers has been highlighted as a market failure. The Automotive Council report: *Growing the Automotive Supply Chain: Assessing the Upstream Sourcing Potential*, stated “One key market failure is the information gap, with buyers insufficiently aware of suitable suppliers, while suppliers are insufficiently aware of potential demand for their products.”
- 5.2 Increasingly, as the well known large brands at the top of supply chains expect more risk-taking and innovation from their suppliers, competition is no longer just about the performance of the big name brand companies, but between whole supply chains. Effective collaboration across supply chains is therefore vital if suppliers’ bottom-up innovations are to be successfully adopted by primes, and if suppliers are to be clear on the future requirements of their customers. This does not happen enough.

What are we doing already?

Meet the Buyer events

- 5.3 In some sectors, Industry Leadership Councils are tackling information failures by holding ‘Meet the Buyer’ events and other programmes of pre-procurement communications. The Business Growth Service is delivering *Learn and Connect* events as part of the Fit for Nuclear programme with the Nuclear Advanced Manufacturing Research Centre and the National Skills Academy Nuclear. These events connect new and existing suppliers with buyers and build awareness of opportunities in the sector.
- 5.4 The Automotive Council is building on their existing programmes to consider how to increase UK sourcing in new areas. Its research into supply chain opportunities highlighted the potential for increasing UK sourcing in high value import commodities. As a result, the Council has committed to hold a series of commodity based workshops investigating the feasibility of increasing UK content. Following a first workshop involving automotive companies, the metals supply chain and related trade associations, specific actions have been identified around the need to boost supplier skills, build confidence between smaller suppliers and vehicle manufacturers to support investment decisions, and the need to innovate.
- 5.5 Plans are in place to further develop the process of matching buyer and seller through targeted ‘Meet the Buyer’ events focussed at cross-sector commodity level. Events involving suppliers from within the automotive, aerospace, marine, and motorsport sectors will start in 2015.

- 5.6 Building on this work in commodities, the Automotive Sector will explore the feasibility of increasing UK content in other areas of high value imports. Preliminary discussions are now underway with the electronics sector to share information and develop a similar programme of joint work.
- 5.7 The government will encourage other Industry Councils to consider whether more cross-sector discussion could facilitate stronger UK content in other areas.

Targeted brokerage

- 5.8 Business Growth Service, through its active network of manufacturing experts, currently provides an informal brokerage service for buyers and suppliers based on the insights gained through close working relationships with OEMs and large suppliers and with SMEs across all manufacturing sectors and specialisms. We will work with the Business Growth Service to improve the effectiveness and raise awareness of its supplier sourcing and matching service.

Collaborative approaches

- 5.9 The Advanced Manufacturing Supply Chain Initiative (AMSCI) has made £245 million available over four national rounds and a regional scheme to support the repatriation, anchoring, and growth of collaborative manufacturing supply chains in England. A further £100 million AMSCI 2014 round was launched in June 2014.
- 5.10 Some large companies, such as Anglia Water, are promoting greater collaboration through initiatives which provide opportunities for suppliers to communicate their innovations, through online and face-to-face innovation exchanges.

Sharing good practice

- 5.11 There is a great deal of work already going on to support our manufacturing supply chains, and additional good practice examples are highlighted in the 2014 BIS publication *UK Supply Chains: Good Practice from Industry and Government*.²⁸
- 5.12 As different sectors are at different stages on this journey it is essential that we encourage cross-sector discussion to share good practice and help different sectors learn from each other.
- 5.13 For example, the medicines manufacturing sector is looking to learn from the UK's successful motorsport supply chain. Motorsport Valley, as it is referred to now, is home to around 4,300 companies, employing around 41,000 people. GSK has partnered with McLaren to explore their approach.

²⁸ <https://www.gov.uk/government/publications/uk-supply-chains-good-practice-from-industry-and-government>

GSK and the McLaren Group are working together to help drive innovation

Through a unique partnership, GSK is identifying opportunities to align the high-tech approach applied by the McLaren Group – including their Formula 1 racing team – with GSK's strengths in manufacturing, R&D and nutritional research.

For example, working with McLaren engineers, GSK have taken a fresh approach to running 'changeovers' (setting up a production line to change from making one product to another) at some factories, massively improving efficiency.

GSK is also bringing in McLaren's expertise in data capture and analysis to help find better ways to capture, visualise and interpret research information. A number of early-stage projects illustrate the potential benefits of the partnership in areas such as data management in drug discovery and 'biotelemetry' in clinical trials.

- 5.14 EEF will run a series of regional workshops to share best practice between sectors on a range of supply chain competitiveness issues. These will work with LEPs and other local bodies to discuss how they could collaborate to support local supply chains. These events will be rolled out across English regions through Spring/Summer 2015.
- 5.15 Later this year, the CBI will be launching a dedicated UK Supply Chains section on their website. This new section will act as an accessible portal of information, advice, and support to UK suppliers and their customers. Users will be able to read or contribute to examples of industry best practice, enter into the wider debate around the future of UK manufacturing, and find targeted guidance on where to look for support on issues ranging from finance to reshoring.

Role of public procurement

- 5.16 Government can play a major role through improving public procurement practice. The potential gains are enormous as businesses have the opportunity to bid for £230 billion of public sector contracts per year. Government has already taken major steps to ensure business gets the most out of procurement opportunities, whilst still securing value for money.
- 5.17 Transparency of procurement pipelines – in December 2013, the Government published updated procurement pipelines covering central government and local authorities, which span 19 sectors. The potential contract opportunities are now worth around £191 billion (up from £177 billion in 2013).
- 5.18 Opening up public procurement – the Government has accepted Lord Young of Graffham's proposals to ensure a simple and consistent approach across all public sector authorities to improve SME access. In the food and drink sector, the Government has published a plan for Public Procurement of Food and Catering Services, designed to open up the supply chain to a wider range of companies, including SMEs and new entrants.²⁹ Lord Young's proposals will be introduced in Spring 2015.³⁰

²⁹ A Plan for Public Procurement: Enabling a healthy future for our people, farmers and food producers https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332756/food-plan-july-2014.pdf

³⁰ Lord Young's latest report, published on 10 February, at <https://www.gov.uk/government/news/government-support-and-accessible-technology-key-to-golden-age-for-small-business>

- 5.19 Encouraging innovation – businesses with innovative ideas can find it difficult and confusing to engage with the public sector. The Small Business Research Initiative (SBRI) offers opportunities for businesses, especially early-stage businesses and small and medium-sized enterprises, to develop and demonstrate technology to public bodies acting as the lead customer.³¹
- 5.20 Government will expand SBRI further. Over the next 12 months, we will increase take up across departments, improving their awareness and understanding of SBRI and communication of successful outcomes.
- 5.21 Supporting supply chains – working with business to assess the strategic capabilities required in the public procurement supply chain. Government published reports on Tunnelling, Building Information Modelling (BIM) and Renal Care which identify actions for Government and industry to respond to future opportunities.
- 5.22 Pre-procurement communications – many public bodies also use strong pre-procurement communications programmes to ensure that suppliers are aware of forthcoming opportunities. This includes communicating with the lower tier suppliers about the private contracts which will flow from the main public contracts.

Crossrail builds strong UK supply chain

Driven by strong support from its Chair, Crossrail has used its procurement approach to secure wider economic benefits to the UK from its £18.4 billion investment. The team learned lessons from the successful procurement activities of the London Olympics, incorporating strong pre-procurement communications with the whole supply chain; clarity of expectations around value; contractual obligations on Tier 1s to advertise 'appropriate opportunities' widely; and strong monitoring and transparent reporting of supply chain Key Performance Indicators (KPIs).

Pre-procurement communications were planned strategically from the outset, starting months before the formal procurement process. This raised awareness of emerging procurement plans and enabled contracts to be packaged and procured in a way most likely to secure competitive bids.

Crossrail also took action to develop skills, committing to delivering at least 400 apprenticeships through its supply chain over the lifetime of the project. All main works contractors are obliged to deliver one apprentice (or equivalent) per £3 million spend.

The outcome was excellent – a large sample study of contracts from Tiers 1 to 3 suggested that 97 per cent of contracts were awarded to UK contractors. Tracking some individual supply chains in depth, the vast majority of those particular supply chains were in the UK down to Tier 5.

- 5.23 Such examples of good practice are not yet the norm in all major procurement and there is more to do to ensure that organisations making major investments – whether public sector bodies or private sector companies – also invest in appropriate communication with the supply chain to ensure that UK supply chain companies are aware of and able to bid for suitable opportunities. We will commit to learning the lessons of these successes in the next Parliament and publicising them further.

³¹ <https://sbri.innovateuk.org/competitions>



Section 6: Supply Chain Resilience

- 6.1 In some specific high value sub-sectors, there is a lack of UK suppliers. This is the case in some developing industries such as offshore wind. In other sub-sectors, UK supply chains exist but are fragile as they are dominated by a large number of small companies who may not have the financial strength or a diverse enough customer base to withstand economic shocks. In the chemicals sector, many companies ultimately rely on a single source of key 'building block' chemicals in the UK. In all these cases, there is a need to strengthen the resilience of UK supply chains.
- 6.2 Where there is a lack of suppliers in high value areas, there may be an opportunity to attract inward investment, or to encourage UK companies to diversify from related sectors, to build UK capability. Where supply chains are fragile, encouraging supply chain companies to diversify into new sectors, or to expand into export markets will help them to build their financial strength and ability to withstand future shocks.
- 6.3 Many supply chains are global. They are more often than not controlled by large overseas entities – particularly in sectors where the UK does not have home-grown primes. There is a role for the Government to use its unique convening power to help smaller UK companies, or groups of companies, penetrate such global value chains at an appropriate level.

What are we doing already?

UK Trade & Investment (UKTI) export support

- 6.4 As part of UKTI's export support, International Trade Advisers (ITAs) based across the country provide high quality international trade advice and support to help companies reach their full potential in overseas markets. This includes the Passport to Export training scheme, as well as supporting companies of all sizes through regional events, trade missions, market visits, webinars, and meet the buyer events. UKTI can provide companies with access to Language and Cultural Advisers and e-Business Advisers, and works closely with Export Finance Advisers within UK Export Finance (UKEF). Trade advice is being integrated into the new Business Growth Service to provide a seamless business support service for high growth companies.
- 6.5 The UKTI High Value Opportunities (HVO) programme helps UK businesses access large scale overseas procurement projects, identifying opportunities and helping secure contracts. UKTI, with support from UKEF, brokers links between UK suppliers and the main contractors who have won large HVO programme contracts overseas.

6.6 UKTI is also working in partnership with industry in particular sectors to ensure UK supply chain companies benefit from the opportunity to expand to serve new markets. For example:

- Working with the Aerospace Growth Partnership, UKTI has appointed a US civil aerospace market specialist to help supply chain companies identify opportunities and understand customer requirements in this key market
- Following successful trade missions to Switzerland and Germany, the Chemistry Growth Partnership is undertaking a trade mission to the US this year for agri-chemical SMEs
- In the automotive sector, UKTI and the Society of Motor Manufacturers and Traders (SMMT) are using Meet the Buyer events to support purchasing professionals from the UK, as well as overseas, looking to source from UK based suppliers.

Inward Investment

6.7 Where industry councils have identified weaknesses in the UK supply chain, inward investment can play a key role in building capacity and skills, focussing on sectors where there are opportunities to attract high value jobs and investment and grow the UK's competitive advantage. Investment Organisations, led by senior industry figures, have now been established by UKTI, in partnership with industry, in a number of key sectors including automotive, life sciences, and offshore wind to drive this effort.

Leading offshore wind suppliers invest in Teesside

As a result of efforts by UKTI's Offshore Wind Investment Organisation (OWIO) and Embassies in Germany and Denmark, leading offshore wind suppliers, EEW SPC of Germany and Bladt Industries of Denmark have taken over the TAG Energy facility in Teesside.

OWIO identified the offshore foundations sub-sector as a priority area for new investment to boost UK capability. Working with Embassies all the established European foundations manufacturers were visited to make the pitch for investing in the UK to provide this solution, and made the link between potential investors, and the investment opportunity at TAG.

As a result of the dedicated support by the cross-government team to EEW/ Bladt, the Joint Venture (JV) plan to invest up to £20-25 million to upgrade the facility into a world class manufacturing base for the offshore wind industry. It's expected that the facility will create up to 350 direct jobs in the local area, as well as a similar number in the supply chain.

UKTI are continuing to work with the new JV to support their recruitment of new staff, their timely upgrading of the facility and to maximise opportunities for the local supply chain.

UKTI'S OWIO is doubly effective because of its cross-governmental structure and work as one team with DECC, BIS and Government's network of overseas posts to support investments like this one.

6.8 However, activity is not confined to sectors with an investment organisation. For instance, government, with the key UK chemical clusters will support the resilience of the entire chemicals sector by running an inward investment mission of overseas suppliers later this year to plug supply chain gaps.

6.9 Reshore UK, which brings together the expertise of UKTI and the Business Growth Service, is supporting supply chain resilience by building capacity and expertise in manufacturing companies to compete for previously offshored contracts and bring back

in-house activities. Additionally, Reshore UK is supporting SMEs to identify and win supply chain opportunities which arise as a result of OEMs and larger suppliers reshoring their activity.

Supporting Suppliers to Diversify

6.10 The Business Growth Service is also assisting UK manufacturers to diversify into new sectors. It is playing a key role in building new UK supply chains in areas of emerging opportunities, working with delivery partners on sector specific programmes such as GROW Offshore Wind and Fit for Nuclear.

What more do we need to do?

UK Export Finance

6.11 UK Export Finance (UKEF) currently supports supply chains indirectly through the support it provides to major exporters.

6.12 Measures included in the Small Business, Enterprise and Employment Bill (currently being considered by Parliament) will broaden UKEF's powers, allowing it to consider, for example, working capital finance to businesses involved in exporting supply chains. The changes will also enable UKEF to consider support for invoice finance schemes that are offered by major exporters to their supply chains.

UKTI Export Support

6.13 Given that manufacturing sectors contribute over half of UK exports, it is clear that many manufacturing firms are already experienced exporters. Nevertheless, there are some export markets, including the BRIC countries, where the UK as a whole does not compare well with some of our competitors.

6.14 Experienced exporters particularly value the on-going advice and guidance that comes from working with a trusted ITA who knows their business and their products. UKTI is committed to working in partnership with local areas to develop their capacity to provide a range of complementary international business services through European Structural and Investment Funded projects. Where LEPs have strong proposals, UKTI regional teams will assist in securing funding through the European Structural and Investment Fund, encouraging private sector delivery partners to submit applications to deliver them.

6.15 UKTI identifies opportunities for suppliers to join up in consortia to bid for major overseas contracts through the HVO programme. UKTI will further develop best practice within the programme to ensure greater engagement of UK suppliers in consortia.

6.16 Using its network of regional ITA champions the HVO programme will seek to ensure suppliers throughout the UK have increased access to the export opportunities available under the programme.

6.17 Working with BIS, UKTI will discuss international aspects of their sector strategy with all the industry councils to understand where exports and where inward investment leading to longer-term exports (Export Oriented FDI) can further support industry.

6.18 UKTI, working with six LEPs will organise the second Grand Prix Showcase in July this year. This one-day event will explore the transferability of cutting edge technologies from motorsport to automotive and beyond. The British Grand Prix is an ideal opportunity to celebrate motorsport engineering, and bring overseas companies to the UK, allowing them to directly engage with UK manufacturers, and then subsequently invest in the UK and export.



Strengthening UK manufacturing supply chains: An action plan for government and industry

Summary of Actions

Innovation
As part of the HVM Catapult Reach programme announced in the Autumn Statement, the MTC over the next 18 months will develop and pilot at small scale a reusable toolkit for SME and Midcap suppliers to enable them to undertake manufacturing technology change within their existing factories.
BIS, ESCO and MTC will explore how to leverage EU Horizon 2020 programmes to deliver a UK demonstrator facility to engage UK business in the opportunities for exploitation of the technology and in development of products and software systems for sale into this new European market.
BIS and BSI will work with the HVM Catapult to establish the areas where standards could increase the rate of innovation in Industry 4.0 capability and will ensure we put this framework in place.
We will ensure that all the highly innovative SMEs receiving funding from Innovate UK are also offered help to source any additional support they need – such as growth capital and specialist export advice – to help them grow their business and achieve commercial success.
We will increase referrals from Business Growth Service to Innovate UK and the HVM Catapult for those SMEs with the potential to benefit from specialist innovation support.
To improve the ability of SME suppliers to innovate, the HVM Catapult will increase the number of SMEs it engages with annually by 50 per cent in 5 years. It will also double the amount of Collaborative R&D accessed by SMEs over this timeframe to £120 million per annum.
Skills
Training
We will encourage employers to do more to support the skills of the supply chain.
Longer-term, subject to funding, we will consider strong cases for EOF supply chain based skills calls in other sectors.

Access To Finance

Finance Information and support for small business

The British Business Bank will hold discussions with Industrial Sector Leadership Councils to understand the financial issues that their supply chain companies face.

Working Capital – Tooling Finance

The High Value Manufacturing Catapult will also engage the banking sector to ensure banks have early sight of good quality lending opportunities supported by the “technical risk reduction” processes embodied in the Catapult centre.

Prompt Payment

Through the Small Business Enterprise & Employment Bill, currently before Parliament, we will introduce a requirement for large and quoted companies to report on their payment practices.

Government will announce changes to strengthen the Prompt Payment Code in Spring 2015.

Tackling unfair practice

Government will tackle specific unfair practices, such as charging suppliers to join or remain on supplier lists, to build a more responsible payment culture.

Performance Bonds

In response to the Chinn Review, the Offshore Wind Industry Council will work to build consensus on the appropriate level of bonding, and challenge punitive levels of bonding where it occurs.

The Offshore Wind Industry Council will work with the finance industry to develop alternative options that genuinely mitigate the risks arising from the suppliers chosen.

The British Business Bank will complete analysis of what more could be done to tackle this issue by Spring 2015.

Enabling invoice finance

Through the Small Business, Enterprise and Employment Bill, currently before Parliament, Government will introduce a measure to remove contractual barriers to invoice finance.

SME Capability

The Automotive Council will take further steps to grow the competitiveness of their supply chain.

We will assess the suitability of the BenchmarkIndex® to support supply chain development in a “fit to supply” pilot project.

Supply Chain Collaboration

Meet the Buyer events

Building on the work in commodities, the Automotive Sector Council will explore the feasibility of increasing UK content in other areas of high value imports.

The Government will encourage other Industry Councils to consider whether more cross-sector discussion could facilitate stronger UK content in other areas.

Targeted brokerage

We will work with the Business Growth Service to improve the effectiveness and raise awareness of its supplier sourcing and matching service.

Sharing good practice

EEF will run a series of regional workshops to share best practice between sectors on a range of supply chain competitiveness issues. These will work with LEPs and other local bodies to discuss how they could collaborate to support local supply chains. These events will be rolled out across English regions through Spring/Summer 2015.

CBI will launch a dedicated UK Supply Chains section on their website. The site will act as an accessible portal of information, advice and support to UK suppliers and their customers.

Role of public procurement

Government will expand SBRI further. Over the next 12 months, we will work to increase take up across departments, improve their awareness and understanding of SBRI and communication of successful outcomes.

Government will learn the lessons of successful public procurements such as Crossrail in the next Parliament and publicise them further.

Supply Chain Resilience

UK Export Finance

Through the Small Business, Enterprise and Employment Bill, currently before Parliament, we will broaden UKEF's powers, allowing it to support working capital finance to businesses involved in exporting supply chains and support for invoice finance schemes that are offered by major exporters to their supply chains.

UK Export Support

Where LEPs have strong proposals, UKTI regional teams will assist in securing funding from the European Structural and Investment Fund.

UKTI will further develop best practice within the High Value Opportunities (HVO) programme to ensure greater engagement of UK suppliers in consortia.

The HVO programme will seek to ensure suppliers throughout the UK have increased access to the export opportunities available under the programme.

UKTI will discuss international aspects of their sector strategy with all the industry councils.

UKTI, working with six LEPs, will organise the second Grand Prix Showcase in July this year.

Department for Business, Innovation and Skills. <https://www.gov.uk/government/organisations/department-for-business-innovation-skills>

First published February 2015. URN BIS/15/6

© Crown copyright 2015

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

Visit www.nationalarchives.gov.uk/doc/open-government-licence, write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email psi@nationalarchives.gsi.gov.uk