

# Industrial Strategy Consultation

High Value Manufacturing Catapult  
Submission to BEIS Select Committee

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## Introduction

The High Value Manufacturing (HVM) Catapult is the go-to place for manufacturing technology innovation in the UK. We work with businesses of all sizes and all sectors to take risk out of the innovation process, turning ideas into commercial reality by bridging the gap between technology concept and real commercial value add. Our seven centres across the country collectively cover the full range of manufacturing technology capabilities, from materials to biologics and from additive manufacturing to automation. Our centres offer open access to the leading edge industrial scale equipment, world-class expertise and an environment of collaboration between industry, academia and government, bring the best research to market.

In 2015, the HVM Catapult undertook an economic impact evaluation which showed we generate £15 of net benefits to the UK economy for every £1 of government core funding received.

HVM Catapult's response to the specific questions posed is as follows:

### **1. What does the Government mean by industrial strategy, and what does the private sector want from one?**

An industrial strategy will be critical to stimulate productivity and growth for the UK. Now more than ever, with uncertainties surrounding the UK's relationship with the EU and the rest of the world, industry needs assurance that the UK remains the best place to invest and do business.

Government plays a pivotal role in providing such assurance through an industrial strategy which provides:

- Constancy of purpose and a long-term commitment
- Clear plans for investment to stimulate growth, drive up productivity
- Infrastructure and expertise to exploit innovation and reduce risk
- Alignment and consistency with other government policies and priorities

### **2. How interventionist in the free market should Government be in implementing an industrial strategy, for example in preventing foreign takeovers of UK companies?**

The extent to which the industrial strategy is interventionist cannot be viewed in isolation. Our competitor nations all offer various forms of interventions to retain and attract industry investment. The UK's proposition must be at least as compelling as other nations, building on the UK's world-class track record of innovation and invention.

Such intervention enables British companies to 'home grow' and 'home finance' their innovations rather than looking overseas (a potential risk factor for increasing the likelihood of future foreign ownership).

### 3. What lessons can be learnt from:

#### Previous governments' industrial strategies?

Previous strategies suffered from a lack of longevity and failed to survive changes of ministers and Government. To ensure success, the industrial strategy must be one that has sufficiently widespread support to survive ministerial changes. Strong integration of key linkages in the strategy is essential to the success of Government measures for:

- i). stimulating productivity/growth and exports;
- ii). investment in, and leveraging of, research;
- iii). investment in, and leveraging of, innovation;
- iv). investment in infrastructure and public services.
- v). attracting and retaining a skilled and knowledgeable workforce

Achieving 'joined up' buy-in to the industrial strategy across all Government Departments is essential for successful implementation.

#### Other countries' attempts to develop industrial strategies?

Our experience in working with European counterparts shows that most other nations have a clear strategy and direction for their indigenous industries, with extensive support offered 'as standard' in Europe and the USA. The best of these are typically long-term, joined up, adequately funded and supported by industry. Germany has invested consistently in its industrial strategy and sustaining a strong mechanisms for commercialising R&D has been an essential component of this. Public funding for the German Fraunhofer Institute has flowed for 70 years and now stands at €4bn per annum. A new National Network for Manufacturing Innovation in the USA is being established, with \$1bn initial (Federal) investment for 15 centres, with £500m funding per annum for operating cost, rising to \$1bn per annum after 4 years.

By comparison, UK interventions are often shorter term and UK spending on R&D as a percentage of GDP is generally poor - lower even than nations such as Estonia, Hungary and Slovenia. This issue has to be addressed; the UK can't afford to offer anything less to our globally mobile industries.

### 4. What tensions exist between the objectives of an industrial strategy and the objectives of other policies, and how should the Government address these tensions?

Tensions between a national industrial strategy and other policies could include:

- Geography – a risk of duplication of investment and effort at local and regional level
- Environment – a risk of compromising environmental targets in favour of growth
- Skills – a risk of not attracting sufficient skilled workforce due to immigration rules
- Public spending – a risk of an inadequately funded strategy due to Government spending limitations

Government should address these tensions by ensuring the Industrial Strategy is aligned with relevant national strategies and policies on areas such as those listed above. Integration and collaboration between relevant Government departments is key to preventing and addressing tensions as they arise.

### 5. What are the pros and cons of an industrial strategy adopting a sectoral approach?

A successful industrial strategy must be suitably structured in order to be understandable and usable. A sectoral approach is an acceptable way of doing this.

#### Pros

- Easy to understand
- Recognised by industry
- Aligned to existing government mechanisms, e.g. Innovate UK

#### Cons

- Risk of silo-working and losing the benefits of transfer of technology and innovation between sectors
- Risk of misalignment with the sector-agnostic nature of much of the current support infrastructure (including the HVM Catapult network)
- Risk of confusion regarding sector coverage and definitions

### Should the Government proactively seek to 'pick winners'?

The industrial strategy should adopt a balanced portfolio, which should include targeted support and intervention for 'winners'. However, the definition of a 'winner' must be clear and long-term and should include indicators such as productivity, level of R&D investment and global market opportunities.

Investment in 'winning' sectors should be complemented by arrangements for the transfer of knowledge, technology and innovation between such winners and other sectors, for the benefit of the wider UK economy.

Innovation hungry companies should continue to be supported, e.g. through the Catapult network. In addition, the industrial strategy must recognise that many UK companies could still benefit significantly (with improved productivity and efficiency) from more generic levels of intervention previously provided by the Manufacturing Advisory Service for example.

The industrial Strategy must recognise that it is not just the development of new technologies that is important but the rate at which new technologies and best practice become broadly adopted by industry that determines our international competitiveness. A good example is the UK's poor take up of industrial robotics in manufacturing where we lag behind many competitor countries including Germany, Sweden, Italy and the US which is having a detrimental effect on our productivity. There must be support to encourage industry to adopt current best practice and new emerging technologies if we are to ensure that the UK develops and strengthens the capabilities of its supply chains.

### **What criteria should be used to identify which sectors are supported?**

The criteria to identify which sectors should be supported should include:

- Size of current and potential future market
- Existing UK strengths and capabilities
- Alignment with societal challenges (e.g. environment, energy, aging population)
- Spill-over benefits (e.g. supply chain, service sector, balance for regional economies)
- Sovereignty (the extent to which the sector ensures the UK is resilient and self-sufficient)

### **Should the Government prop up traditional industries that it considers to be in the national interest?**

What constitutes 'in the national interest' should be clearly defined within the industrial strategy. The definition should relate to the criteria set out above. Once the term is clearly defined, the case for Government intervention can be fully assessed.

In addition, mechanisms should exist to ensure that the status of those industries deemed to be in the national interest / critical to the sovereignty of the UK, can be constantly monitored. A combination of industrial engagement and relevant analysis should be maintained – hence avoiding an unexpected downturn or loss.

### **If not a sectoral approach, should the industrial strategy have a broader objective, such as improving productivity?**

These two approaches are not mutually exclusive. The extent to which broader objectives, such as improving productivity, can be achieved may vary across sector and the level and nature of intervention will differ.

Regardless of its structure, the industrial strategy should contain a number of cross-cutting objectives. These include:

- Productivity
- Innovation
- Skills
- Resource efficiency

### **6. Should the industrial strategy have a geographical emphasis?**

Whilst not necessarily emphasised, the UK's geography should feature as part of the industrial strategy. The national industrial strategy should provide the framework to which regional and local strategies should be aligned, building in specific regional or local strengths.

Regional and local investment decisions should consider industrial strategy objectives and priorities.

## Industrial Strategy response from HVM Catapult

### How should an industrial strategy link with devolution initiatives aimed at devolving taxation and decision making away from Westminster?

The industrial strategy should take account of the fact that innovation activity requires a critical mass. Devolved funding carries the risk of losing critical mass in innovation spending or duplication of effort, thus failing to generate the desired level of impact on industry and the wider economy.

### What examples are there of interventions from central Government that have successfully supported economic growth away from London and the South East of England?

The HVM Catapult forms part of Innovate UK's national Catapult programme, supported by UK Government. The HVM Catapult works with companies from all parts of the country. Our seven centres are located in Scotland, the North East, Yorkshire, the Midlands and the South West. In addition, we run outreach facilities and activities in other areas, such as the North West, Wales and Northern Ireland, generating lasting economic benefits throughout the UK.

### How should the industrial strategy work with local authorities and Local Economic Partnerships, reconciling a U.K.-wide strategy and local, regional and devolved nations' priorities?

The national industrial strategy should provide an overarching framework under which local, regional and devolved nations' priorities can be defined. This framework should define how the public authorities at all levels from national to local will interact with industry, giving a consistent overall model. Key industrial sectors for the nation should be identified at the "headline" level. Within this interaction and national priority framework, more detailed sectorial priorities should be defined taking into account local, regional and devolved nations' specific characteristics. Specifying priorities outside of these "headline" sectors will require specific and more detailed local, regional or devolved nation justification.

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