

# **DIUS Innovation Consultation – Questions – and responses from EURIM**

## **Section 1 – Introduction**

Innovation will be one of the key drivers of our prosperity in years and decades to come, but it can also help us tackle emerging global challenges such as globalisation, an ageing population; climate change; rapid technological change, and global security.

Q1. How do you think that Innovation can help us tackle these major challenges?

- Innovation matters. Innovation is the key to tackling these major challenges, as opposed to protectionist trade policy or national champions.

Q2. What is the government's role in meeting these challenges?

- Government has three roles: provision of public services, procurement of innovative solutions and supportive policy. All three are critical in driving innovation.

**NB: Q3 There is a missing but vital question here: What is the definition of success and how do you measure it?**

- The definition of success is:
  - the existence of wealth-creating employment and businesses
  - achieving social outcomes (for instance tackling climate change)
- Measures of success should be determined in terms of outputs rather than inputs.
- Measures of success should be benchmarked against our competitors.

*See also Intellect report – Navigating the New Economy, which covers measuring and monitoring aspects*

## **Section 2 - Business Innovation**

We are interested in Government's role in promoting business innovation in all sectors of the economy, from those that have a technological product or service focus to those which are not technology-based.

Hitherto, much of Government's effort has been aimed at

- a. enablers and incentives for increased R&D investment in business and
- b. stimulating and focusing the demand from employers for better skilled workers and helping remove the barriers to achieving higher skill levels in firms.

Q1. How can government focus on building innovative capacity and on creating the right conditions for companies to innovate?

- Support success:- If industries are generating wealth and making an above-average contribution to the economy, actively encourage them. Don't be afraid to single out high value sectors for special help.
- Foster innovation through targeted funding schemes for commercial R&D and innovation, allowing focused support, plus an assurance that funding is spent on the intended purpose. Successful innovative economies have such schemes (eg Finland and the Netherlands) and do not restrict them to SMEs. The latter group much prefer to work with their customers in large firms in the natural ecology of commerce.
- Encourage businesses to develop Intellectual Property (IP) portfolios, for instance by extending R&D tax credits to IP registration costs. Extend tax credits for larger companies above "noise" level.
- Improve cross-departmental focus including treasury and regulatory authorities, to create an environment that makes it less difficult to innovate in the UK.

Q2. How can we maximise the scope for interaction between different innovative activities, concepts and people?

- Improve stakeholder relations. Find out what the wealth creators value – and provide it. Communicate with key companies and sector representatives to identify their needs, and ensure they are met. Develop expertise in high value sectors to understand their requirements, and provide specialist help.

- Trust successful, innovative businesses as co-developers of policy:- engage them in the policy making process.

### **Section 3 - Public Sector Innovation**

The UK has many examples of world-class public services – the challenge we face is to replicate good practice, learning from what works well or less well, and to create a culture within public sector organisations that allows the space for innovation.

Q1. How can Government help public sector employees, managers and leaders create a more innovative culture?

- In the public sector there is little incentive to compete around innovation. Government needs to:
  - Realign management processes and incentives around successful innovation.
  - Rebuild professionalism and career development structures around successful innovation.
  - Embed incentives for continuous improvement.
  - Encourage employees, managers and leaders to be less risk-averse.

Q2. What else should Government do to promote more innovation in service delivery or in policy development?

- Encourage phased, incremental risk-taking

Q3. What role do universities and institutes have in delivering more innovative public services and policies?

- They have a critical role but there is a huge disconnect between the public sector and the university base. Government needs to:
- Encourage excellence:- refocus the academic reward structure from volume of citations and publications to support excellence in innovation and exploitation. Encourage the development of a sustainable skills base in the UK with fiscal incentives for training and skills development.

### **Section 4 -Innovative Places**

The places in which Government policies have effect are increasingly important factors in determining how these policies are targeted and delivered, recognising that places and communities are different and a one-size-fits-all approach is not appropriate. For policies promoting innovation, initiatives such as Science Cities have given visibility to a more place-focused approach and Local Authorities and RDAs invest significant amounts in promoting innovation in particular places.

**NB: Visibility and investment are NOT measures of success. Measures of success include outputs – for instance the number of taxable wealth creators located in the UK**

Q1. How do you think Government's innovation policies should develop in the context of the recent Sub-National Review of Economic Development and Regeneration?

- Build on existing success:- continuous improvement works best. Focus on developing successful clusters rather than creating new ones.
- Desist from economic or social engineering for political purposes.
- Examples of existing clusters or excellence are Cambridge for technology, Swindon/Cardiff/Malvern for security, Newcastle for marine engineering

### **Section 5 - Innovative People**

The ability of a society and the organisations within it to innovate rests on the skills and motivation of people. For Government to help in creating a more innovative society, its policies will need to stimulate the supply of, and the demand for, more skilled and motivated people. [The Leitch review](#) identified priorities for the UK in terms of the *levels* of skills necessary to meet the long term challenges we face.

Q1. Specifically for innovation, what types of skills should Government be encouraging and what levers or incentives can Government apply to achieve this?

- Government needs to find ways to identify forward demand from business and industry – consultation doesn't work.
- Government should fund the sector skills councils to conduct proper market research into what industry needs
- Public Sector Agreements need to reflect the priorities identified in the Leitch review for workforce skills. CPD needs to be a core priority, not an add-on
- Mentoring and structured work experience is both expensive and difficult to do and needs fiscal incentives to provide motivation. Those who do provide this should be rewarded in after-tax earnings and not just in heaven.

### **Section 6 - Innovative users and consumers**

People as users of products and services, whether as direct consumers or as customers within other organisations, are key drivers of innovation. In some areas, consumers are developing a strong pro-innovation culture, for example iPods, Broadband, mobile phones and online shopping/booking. There is increasing interest in products that can help combat climate change or improve the environment. Increasingly, companies are using their supply chains to help them innovate and, in "open innovation" mode, are out-sourcing some of the ideas generation process to others.

Q1. What should Government do to encourage a society that is comfortable with and drives innovation?

- Be a better listener! ...and **act** on feedback.
- Business is driven by competitive pressure in turn driven by the market pull of consumers and users. The public sector, the major service provider, is driven by budget processes not by market pull so public sector needs to implement market research and improve its offerings via user feedback

Q2. Are there areas of existing government policy that constrain the ability of consumers to demand or obtain innovative products and services?

- Yes. In education and health. For instance the Health service currently prevents patients from access to new drugs not covered by the NHS because patients are barred from part-funding their treatment. Those who do are denied any NHS care at all.

### **Section 7 – Science**

Public funding of science and research is one of the country's main drivers of innovation. Several £billion per annum is provided to Research Councils, Universities and other institutions.

***There is no evidence to support this statement.***

Q1. How can the Research Base help innovation in the wider economy (eg. interaction from Universities; engaging SMEs and the service sectors)?

- Stop confusing research and innovation: they are not the same. **Research turns money into ideas; innovation turns ideas into money.**
- Encourage the research base to create R&D. R&D is NOT the same as contract research.
- Again, track outcomes NOT inputs
- Create a more supportive environment for new revenue creators. Understand that this may involve whole new sectors or sub-sectors.
- Consider wider business models for rewarding innovation: Open access models may generate more wealth in some cases than royalty streams and IP licensing. (eg: Tim Berners-Lee created the WWW as an open access model with zero IP or licence revenue)

Q2. Is the Research Base working innovatively itself? Is it sufficiently agile and responsive to new challenges (eg incentive mechanisms; inter-disciplinary research; university culture)?

- No. However, it could do: The Research Base responds very accurately to its incentive structure and its ability to exploit government funding processes is extremely innovative.

Q3. What role do universities and institutes have in delivering more innovative public services and policies?

- The right incentives will drive innovation

### **Section 8 – International**

Science and innovation are international, business is operating in a global marketplace. The competition to attract inward investment in R&D is fierce and while the UK's record in this area is impressive, we cannot be complacent. The rapid rise of the emerging economies, especially China and India, mean that we must redouble our efforts to offer an internationally competitive and innovation-friendly environment, including world class research facilities and highly skilled workforce. UK business increasingly needs to establish international S&T alliances and bases as part of their strategies to penetrate new markets and stay ahead of world competitors.

Q1. How would you characterise the innovation process in a global context and the role of Government, if any, in stimulating it?

- Government needs to understand the role of the UK in a global economy and how UK markets work as part of a global innovation chain.
- Government needs to recognise genuine, global, demand-led business.
- Government needs to make sure that the UK provides the best place to do business in terms of taxation, regulation, skills and infrastructure
- Government needs to make the UK the place where key members of the innovation team want to bring up their families.
- Government must understand that innovative, knowledge-based businesses are ephemeral and can move relatively easily from one location to another as circumstances change. They are no longer managing an industrial estate, where relocation is protracted and painful, but a campsite – where people can strike camp quickly and easily once circumstances do not suit.

Q2. Does the UK demonstrate major shortcomings in its ability to exploit European and global innovation networks? If so, what should be done?

- Yes.
- In the first place, the UK has to recognise what those global networks are. For instance, HMG has yet to recognise that the UK is a major node in the global open source environment. HP has its global security operation in the UK, and the only absent partner is HMG.

Q3. How should the UK prioritise its international innovation efforts in terms of geographic markets? Are there particular technologies where we should focus our efforts with these countries?

- It shouldn't. It should focus on technologies where industry is seeking partners.

### **Further reading**

*A Flourishing Innovation Economy: how the UK must attract and retain knowledge-based businesses – 2006, EURIM*

*Navigating the New Economy – 2006, Intellect*

*Innovation Nation, 2005, Intellect*

*An Innovative Society: Capturing the Potential of Science and Engineering, 2007, STEM taskforce*