

## Response ID ANON-496B-EY5S-B

Submitted to **National Innovation Plan: call for ideas**

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### National Innovation Plan: Call for Ideas

#### What is your name?

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#### What is your organisation?

**Organisation:**

BIG INNOVATION CENTRE

#### Confidentiality and data protection

**I want my response to be treated as confidential :**

No

**Comments:**

#### 1 How best can our regulators drive innovation and make the UK the regulatory test bed capital of Europe?

**text to speech:**

The Big Innovation Centre's Purposeful Company Taskforce Interim Report – constituting 15 companies and organisations including the Bank of England and Innovate UK - sets out 21 policy / regulatory options for change to help companies express more purposeful and high innovation strategies. Arguably this is the crucial precondition for any successful National Innovation Plan. We ourselves are inviting comment over the next six weeks, but potential regulatory interventions include encouraging investment institutions to build up block shareholdings, requiring more systematic reporting of investment in intangible assets, making takeover harder, consolidating Britain's very fragmented pension fund schemes and encouraging executive incentives, especially vesting periods for equity, both to be long term and geared to metrics that gauge innovation. See our website [www.biginnovationcentre.com](http://www.biginnovationcentre.com) for more details.

#### 2 How can we deliver real culture change within public procurement?

**text to speech:**

(i)

**Obstacle:**

Although government procures energy, health and transport services for public consumption, it does not do the same with innovation services via UK's innovation centres and innovation service companies. As a result, the UK's innovation ecosystem is fragmented.

**Opportunity:**

**SIMPLIFY THE UK INNOVATION ECOSYSTEM: CROWD IN THE INNOVATION ECOSYSTEM TO WORK WITH PRIVATE SECTOR TO CO-DELIVER THE INNOVATION PLAN**

The strategy should focus on simplifying the innovation ecosystem through collaborating with a range of private sector and quasi-public partners more overtly than in the past. In Israel, for example, the equivalent body to Innovate UK (the Office of the Chief Scientist) crowds in the innovation ecosystem to co-deliver the vision – thereby unlocking private sector funding – and so simplifies the delivery infrastructure. For example, government agencies and Innovate UK could find a range of partners more overtly than in the past to deliver its current and future strategy and vision or innovation plan using their capabilities. Such a value network could include (in alphabetic order) Big Innovation Centre (BIC); British Business Bank; all Catapults; Design Council; QUANTIPLY; Intellectual Property Exchange; Intellectual Property Office (IPO); Nesta; Office of National Statistics (ONS) etc.

(ii)

**Obstacle:**

UK does not know its innovation landscape, but a good example where the government should crowd in the innovation ecosystem and publically procure is regarding innovation monitoring. As the make-up of our innovative sectors and places is unknown, government and business cannot implement the most suitable regional or industry polices and business solutions.

**Opportunity:**

**PUBLICALLY PROCURE SERIOUS INNOVATION MONITORING:**

An annual innovation audit of the innovative capabilities in the UK nationally could be convened by Innovate UK, and publically procured. Using existing capabilities:

- Design Council can be asked to monitor via an innovation audit: UK's design innovation.
- Intellectual Property Office (IPO) can be asked to monitor via an innovation audit: UK's intellectual property.
- Nesta can be asked monitor via an innovation audit: a) UK's science and technology base; and b) UK's R&D.
- Office of National Statistics (ONS) can be asked to monitor via an innovation audit: UK's innovation related productivity growth.
- Big Innovation Centre can be asked to monitor via an innovation audit: a) The Innovative Capability of the private sector and the regions; and b) The entrepreneurial finance ecosystem nationally and regionally.

### **3 How can we ensure that we put the UK at the forefront of open data opportunities?**

#### **text to speech:**

##### **Obstacle:**

The open data revolution has in the UK been around opening public data sets but not creating enough incentives for citizens to share their data which is vital for businesses to develop, launch and implement new data-driven businesses models and products, everything from business services to smart energy.

##### **Opportunity:**

INTRODUCE A 'CHARTER' ON WHAT CAN BE DONE WITH PERSONAL AND BUSINESS DATA, INCLUDING 'FAIR USE' & AN "OPT-IN UNLESS YOU OPT-OUT" APPROACH TO DATA DISCLOSURE

By introducing a 'Charter' on what can be done with personal and business data, everyone will know how their data is used, which in turn increases trust and creates incentives to allow data to be shared. This means a shift from policies around controlling the data itself to how the data is governed.

Such a Charter should also introduce 'fair use' of personal and business data if you're not competing with the owners of the data or harming their ability to monetise it. This would create a truly free space to innovate by supporting entrepreneurship from the data revolution.

The Charter should also adopt an 'opt-in unless you opt-out' approach to personal and business data disclosure. Allowing citizens from birth to be born into a data sharing revolution (in which there is a Charter on how business can deploy private data) will empower each citizen. Just as there is no point in being the only one with a telephone or on Facebook, the opportunity from personal data can only be exploited when it is shared.

### **4 Where can we maximise the opportunities for innovation, as we deliver high-quality infrastructure that unlocks broad economic opportunities?**

#### **text to speech:**

##### **Obstacle:**

Digital inequality is a further driver of social and economic inequality. Today it's not merely about Internet access as in the early days, but about internet quality and access to affordable IT services. This hampers everything from education to business and sustainability (e.g. smart health or energy) and the UK's digital economy and competitiveness is thereby diminished.

##### **Opportunity:**

CLOSE DIGITAL INEQUALITY

Recognize citizens as consumers, users, entrepreneurs, workers, students and players by making Internet access a public good (as important as water and energy).

This means an aim to close digital inequality by 2020, by providing every single household access to top-quality high-speed broadband plus guaranteed ICT support.

Also, aim for 50% households to become part of a smart energy grid by 2025, 100% by 2035

### **5 Where can the UK work alongside the private sector to create the deepest pool of innovation finance in Europe?**

#### **text to speech:**

(i)

##### **Obstacle:**

Innovation backed finance is not a core part of UK funding programme. UK has provided no challenge to match Google, Amazon, and the UK should aim to scale up 5000 IP and technology-rich companies in the UK before 2025.

##### **Opportunity:**

(A)

INNOVATE UK AS THE IP UNDERWRITER

Big Innovation Centre proposes that Innovate UK becomes the UK IP underwriter, via IP badged products (Loans – Grants – Equity – Innovation Badges) and services at the heart. In this proposed scheme, Innovate UK will provide direct IP funding (loans, equity, grants) to companies and university spin-outs by using the commercial IP market place and by working with local IP exchanges. For example, a company which looks for innovation finance would hand over (sell) their single IP (or a bundle of IP) to Innovate UK, but the company would retain exclusivity to use the IP or license the IP for revenue, and buy it back over time. Using

IP as the collateral, Innovate UK's funding will be de-risked: Should the organization get in financial distress, Innovate UK owns the IP and can sell or license it in the market. Also, because IP rich companies are more likely to succeed, so Government is more likely to get its financing back.

(B)

BRITISH BUSINESS BANK AS THE UNDERWRITER OF TECHNOLOGY RICH BUSINESSES

British Business Bank needs to act faster and with more force to act as the underwriter for British innovation rich companies. This can include the development of innovation insurance schemes.

(ii)

Obstacle:

UK Science base is commercialized elsewhere and our universities are not entrepreneurial or entrepreneurial enough.

Opportunity:

INNOVATE UK AS THE GATEWAY TO AND CATALYST OF COMMERCIALISABLE INTER-DISCIPLINARY RESEARCH AND TECHNOLOGY

Innovate UK should position itself as the centre of an innovation ecosystem (not simply the translational arm of the Research Councils), i.e. it really should unleash its catalytic capability for commercialization of technology into UK and global outlets to create revenue streams. This probably means that its market intelligence, mastery of innovation finance, IP, regulation and most crucially business connectivity is strengthened in contrast to today. This would permit Innovate UK to:

- Stimulate inter-disciplinary research
- Identify which market-led research funding opportunities which the Research Councils will fund and so be the voice of government's strategy (for example, as manifested in the 8 great technologies)
- Ensure all commercialisable university IP is known about and
- Give the best commercialisation opportunities to University IP.

## 6 What do we need to do to get maximum benefit to the UK economy from challenger businesses?

**text to speech:**

Obstacle:

Competition policy needs to be more aggressively on the side of challengers rather than incumbents. There is too much stress on short term efficiency gains from consolidation and scale, and too little on potential innovation losses from entrenching incumbents. Competition policy as currently framed actively encourages and rewards rent seeking rather than innovation.

Opportunity:

OPEN INNOVATION, CO-VENTURING AND PARTNERING.

Open innovation strategies should be encouraged to foster sharing of technologies, co-venturing and partnering. The Intellectual property regime should do more to favour licensing and openness.

## 7 How can we ensure that the UK's inventiveness and creativity capitalises on our strong intellectual property system to generate growth and further innovation?

**text to speech:**

(i)

Obstacle:

Transactors in intellectual property are faced with three core problems. There is no 'marketplace' for a critical mass of sellers and buyers to meet and have opportunities to trade with a wide range of potential transactions: as a result it is hard to find both the best, fit-for-purpose IP and who owns it. Transactions are too time consuming and expensive, with too many parties at the table including internal decision makers, brokers and others for each item of IP trade. And thirdly it is very hard to assess the value of IP, undertake due diligence and thus negotiate a fair price and terms for any given deal

Opportunity:

MAKE UK A WORD LEADER IN B-TO-B IP COMMERCE:

Work with existing IP exchanges as UK Copyright Hub and the Intellectual Property Exchange of the Big Innovation Centre to capture all IP and intangible assets (copyright, patents, technology, know-how, trademarks, designs etc.) on one platform, and put all university IP on one go-to global market place.

(ii)

Obstacle:

The UK has no challenge to Silicon Valley and Boston as high-tech hubs

Opportunity:

BUILD CLUSTERS AND COMMUNITIES OF IP

Could UK build innovative hotspots at the size of Silicon Valley or Boston? We propose the 21st century version of online IP clusters and IP communities. Working with local IP exchanges, such as Intellectual Property Exchange of the Big Innovation Centre, an aim should be for the UK to build clusters of IP and IP

communities in the areas in which we are already investing, or should be investing, such as digital economy, satellite applications, artificial intelligence, low carbon and offshore wind, energy systems and storage, water, precision medicine, cell therapy, high value manufacturing, materials, transport systems, aerospace and FinTech.

**Is there anything else the UK could need to do to create the best possible framework for innovation?**

**text to speech:**

**Obstacle:**

The UK starts at a low innovation base. The government should dare to set audacious innovation goals, and charge the private sector with co-creating the outcome. In particular the government should use its convening and pulpit power to draw attention to the growing importance of intangible and knowhow assets – and set challenging targets for their growth.

**Opportunity.**

RAISE INTANGIBLE ANNUAL INVESTMENT TO 20% OF GDP (AND R&D TO 3% OF GDP)