

# Innovation Infrastructure Partnership

**bsi.**



Intellectual  
Property  
Office

**NPL**   
National Physical Laboratory



**nel**  
flow measurement  
services

# Vision

The Innovation Infrastructure Partnership's vision is to support the creation, adoption and commercialisation of new technologies, helping UK companies to gain a global advantage in areas of strategic importance.



# Our aim

To maximise the impact of investment in the Industrial Strategy Challenge Fund:

- helping to bring new products and services to market faster through championing guidance and best practice;
- delivering competitive advantage for UK-based innovators by
  - leading the creation and adoption of internationally recognised standards
  - helping companies navigate a complex intellectual property environment
- using the UK's world-leading intellectual property, measurement and standards infrastructure in a systematic fashion and through coordinated industrial engagement

# We will achieve our vision by:

- identifying, through consultation, review and landscaping how standards, measurement and intellectual property advice can be used strategically in support of each challenge;
- disseminating knowledge from and contributing to the successful implementation of ISCF-funded competitions and demonstrators through the creation and use of new standards;
- bringing world-leading measurement expertise to the development of new measurement techniques and measurement standards;
- helping promote the rapid adoption of UK standards and measurement techniques internationally; and
- sharing IP expertise to address knowledge gaps and ensure innovators derive value from the proactive management of their intangible assets.

# Benefits and impact

- Helping de-risk investment in and accelerating the adoption of new technologies through confidence in performance, in turn supporting the consolidation of emerging supply chains;
- enabling market barriers to be tackled that no single enterprise can achieve on its own, strengthening national capacity;
- providing a proven alternative to regulation of innovative sectors while still delivering safety, quality and efficacy;
- helping create a global market platform for UK-based innovators either directly or in partnership with other countries; and
- reinforcing the UK's global reputation for excellence in innovation.

# Risks of doing nothing

- UK industry will have to play by the rules established by others
- UK industry will lose opportunities to develop first-mover advantage and global trading opportunities in industries of strategic value
- The development of fully operational/ integrated supply chains in emerging sectors will be delayed
- Governance frameworks underpinning consumer trust and investor confidence in new products and services will be incomplete
- Issues of interoperability will not be resolved in a timely fashion

# Evidence of impact

## Standards

- Research funded by the Department for Business, Innovation and Skills and published by BSI in 2015 concluded that 37.4% of UK productivity, 28.4% of UK GDP growth and £6.1 billion of UK exports can be attributed to standards.
- Setting international standards helps to deliver global leadership for the UK by accelerating innovation and commercialisation of technologies in areas where the UK has strong R&D capability.
- The importance of setting global standards has been acknowledged by the Government Office for Science: “acting as a standards setter is one of the government policy levers that can support emerging technologies by using “insights from living labs to develop UK standards – setting the global agenda by ‘showing, not telling’”.

# Evidence of impact

## Measurement

- Econometrics studies show that support from the National Measurement System can boost employment by 10%-15% within 2 to 4 years.
- Firms who actively engage with universities or Public Sector Research Establishments, including NPL, are up to 72% more likely to generate revenue from products that are new-to-market than those with the same characteristics and past history but who failed to make use of such institutions.
- Almost 40% of measurement case studies cited increased productivity as a result of positive measurement interventions.
- The cumulative effect of domestic measurement R&D on productivity growth has been shown to be somewhere between 0.8% and 2.0% of GDP.

# Evidence of impact

## Intellectual property

- In 2014 firms in the UK market sector invested an estimated £132.6 billion in knowledge assets, compared to £121.3 billion in tangible assets.
- In 2014, 53% (£70.4 billion) of knowledge investment in the UK market sector was protected by intellectual property rights (IPR).
- UK investment in intangible assets protected by IPRs has risen from £46.9 billion in 2000 to £70.4 billion in 2014; a 50% increase.
- IPR-intensive industries generated an estimated 26.8% (7.9 million) of UK employment and 43.7% (€867.9 billion) of UK GDP in 2011-2013 average.

# Who we are

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National Physical Laboratory



*Setting standards  
in analytical science*



flow measurement  
services

National  
Measurement  
System

