

Innovation and the R&D Roadmap

December 2020

On 1 July 2020, we published the UK's Research & Development Roadmap

We want to ensure the UK is the best place in the world for scientists, researchers and entrepreneurs to live and work, while helping to power up the UK's economic and social recovery and level up the UK.

Engagement



The Roadmap marks the start of a conversation to identify:

- the strengths and challenges facing the sector
- the issues that need to be addressed
- how we want to work with universities, businesses, the third sector and across Government to cement the UK's reputation as a science superpower

Funding



The Roadmap builds on the ambitious commitment set out at Budget.

At Budget, the Government announced an increase to public spending in research and development (R&D) to reach £22 billion by 24/25, putting the UK on track to reach 2.4% of GDP being spent on R&D across the UK economy by 2027.

Announcements



The Roadmap sets out some new commitments:

Including an 'Office for Talent', establishing an Innovation Expert Group, and tackling bureaucracy in the system. The document also reiterates commitments to publish a place strategy, and create a new independent UK ARPA body.

The Roadmap outlined seven themes



Raising our research ambitions

Increase our investment in research, unlocking new discoveries and applying research to solving our most pressing problems in government, industry and across society.



Inspiring and enabling talented people

Attract, retain and develop the talented, diverse people and teams that are essential to delivering our vision.



Driving up innovation and productivity

Improve how we support the whole innovation system, including strengthening the interactions between discovery research, applied research, innovation, commercialisation and deployment.



Levelling up R&D across the UK

Take greater account of place-based outcomes in how we make decisions on R&D in the UK, ensuring that our R&D systems make their fullest contribution to our levelling up agenda.



Being at the forefront of global collaboration

Be a partner of choice for other world-leading research and innovation nations, as well as maintaining and strengthening R&D partnerships with science superpowers, emerging knowledge economies and developing countries.



Developing world-leading infrastructure

Provide long-term flexible investment into infrastructure and institutions, developing and maintaining cutting-edge research, development and innovation infrastructure, with agile and resilient institutions able to play their fullest role.

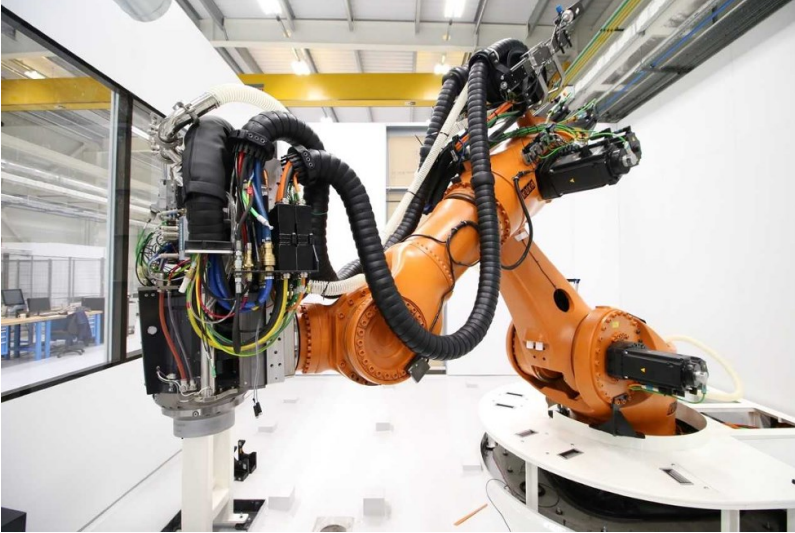


Ensuring a healthy system

Enable strategic decision-making, provide the right incentives to enable research and innovation to inform each other, and ensure that money flows to the best researchers, innovators and entrepreneurs with the least friction possible.



Driving up innovation and productivity



Where are we now?

- The UK is ranked 5th in the Global Innovation Index 2019 and in the top 10 best countries worldwide to start, locate and scale a business.
- We have leading innovative companies in sectors and places across the UK
- We attract significant venture capital – at a level that exceeds that of Germany, France and Sweden combined.
- We are home to 77 unicorns (start-ups valued over US \$1 billion), more than a third of the total across Europe and Israel.
- We have seen UK innovators adapting and responding to the challenges of the pandemic – in vaccines, ventilators, PPE and many other fields.

But we think we can do more to support innovation in the UK.

We want to look across the ecosystem to identify ways to increase innovation

We have appointed an Innovation Expert Group – chaired by Dr Hayaatun Sillem CBE – to provide advice on how to drive up the UK's productivity through innovation. They are helping us identify the top priority actions that we can take to support innovation in the UK, including:

Making government's direct support for innovation as effective as possible

Ensuring innovative firms at all stages of growth have access to finance

Promoting adoption and diffusion of innovation across sectors and regions

Steering innovation activity towards top priority societal challenges and missions

Considering whether UK regulations and standards support innovation

Encouraging deep collaboration and knowledge exchange between universities, businesses and others

Innovation will be crucial to economic recovery and to the UK's long-term prosperity. We welcome your views on where we should focus our efforts to boost innovation in the UK.

