Robotics Growth Partnership launches cyber-physical infrastructure vision

The Robotics Growth Partnership (RGP) has today launched its <u>Vision for cyber-physical infrastructure (CPI)</u>, bringing together physical and digital tools to help accelerate the innovation process and reduce cost and risk for innovators to rapidly prototype, test and develop ideas.

The RGP was established by government in 2019, with the aim of putting the UK at the cutting edge of the global smart robotics revolution. It brings together representatives from across industry, academia, and government to determine how smart machines will be able to support the UK's economic recovery from the pandemic, build resilience to future shocks, and help achieve national objectives such as Build Back Stronger and Net Zero.

Published today (11 February 2022), the RGP's Vision for CPI recognises the quickening pace of technological change, and the ways in which the pandemic has demonstrated the significance of data — particularly real-time data for national systems and infrastructure — identifying that in combating significant challenges, those with the right tools, models and simulations are the most able to adapt and respond at pace and scale.

Science Minister George Freeman said:

From tackling climate change and revolutionising healthcare, to preparing for national security risks and disruptions to supply chains, we are facing a number of significant opportunities for innovative problem-solving on a global scale.

Advances in connected digital and physical technologies are allowing us to create new tools and models to better predict and manage future global shocks from climate change to pandemics, test innovation in real time and drive UK leadership in new approaches to agile regulatory testbeds.

This Vision represents an important milestone, and lays the groundwork for the commitments made in our Innovation Strategy.

The RGP has engaged widely and effectively to develop and test this Vision through a series of virtual events including workshops, seminars, and a dedicated Cyber Physical Fabric summit in July 2021.

The RGP's Vision and thinking have played an important role in informing the ongoing work in government on digital twins and wider CPI, and it will lay the groundwork for the upcoming CPI consultation committed to in the Innovation Strategy.

The implementation of the CPI would build upon and complement several other

national strategies including the National Data Strategy, the AI Strategy, Innovation Strategy and 10 Point Plan for a Green Industrial Revolution.

See also the <u>letter from Science Minister George Freeman in response to the publication of the Vision for CPI</u>.