

Press release: Projects lay the groundwork for a future of robo-lawyers and flying cars

- 15 winning bidders for the £10m Regulators' Pioneer Fund were announced today by Business Secretary Greg Clark
- Fund will support bodies to create a regulatory environment that gives innovative businesses the confidence to invest, innovate and deploy emerging technologies for the benefit of consumers and the wider economy.

Business Secretary Greg Clark has today (5 October 2018) awarded £10 million to UK regulators to help drive forward innovation in the public sector and help it seize long-term opportunities including the growth of Artificial Intelligence (AI) and the future of mobility.

The Regulators' Pioneer Fund is funding 15 unique projects that will unlock the economic opportunities identified in the government's modern [Industrial Strategy](#).

Winning projects include:

- nearly £700k to regulator Ofcom for a project that uses blockchain technology to improve UK telephone number management
- nearly £700k for the Solicitors Regulation Authority to support business innovations that will use Artificial Intelligence (AI) to transform the legal services market for small businesses and consumers
- up to £1 million for the Civil Aviation Authority to support a project that includes a 'regulatory lab' that will bring together relevant bodies to unblock legislative and regulatory barriers to innovations like flying taxis

Business Secretary Greg Clark said:

The UK's regulatory environment is recognised as being among the best in the world and through our modern Industrial Strategy we are building a business environment in which Britain's dreamers, developers and disruptors can continue to thrive.

These projects will further strengthen our regulatory system and ensure that it keeps pace with the innovation and technological advances needed to power our economy now and in the future.

The Solicitors Regulation Authority's project, Data-Driven Innovation in Legal Services, in partnership with Nesta's Challenge Prize Centre, will seek

out and accelerate ethical AI-powered business innovations that support their regulatory objectives. The focus will be on growing the large underdeveloped legal services market for small businesses and consumers, where AI and automation can have a transformative impact.

Paul Philip, SRA Chief Executive said:

We are pleased that our proposal has secured pioneer funding and we are looking forward to working with Nesta on the new SRA Innovate Testbed. Smart use of technology could help tackle the problem that far too many people struggle to access expert legal advice. It will help us further build on our work to encourage new ways of delivering legal services, benefiting both the public and small business.

The Fund will help regulators support businesses get new products and services to market and capitalise on the society-changing trends and industries of the future, where the UK can build on its emerging and established strengths to become a world leader.

The 4 [Grand Challenges](#) identified in the government's modern Industrial Strategy are:

- AI and data: putting the UK at the forefront of the AI and data revolution
- Ageing society: harnessing the power of innovation to meet the needs of an ageing society
- Clean growth: maximising the advantages for UK industry from the global shift to clean growth
- Future of mobility: becoming a world leader in shaping the future of mobility

The Civil Aviation Authority's project, Innovation in Aviation Engagement Capability, includes the establishment of a new advisory service, giving innovators preliminary regulatory guidance while the CAA's new Canary Wharf London base will also be more closely located to East London's Tech City. It also includes a new regulatory 'sandbox' to allow testing, and a regulatory lab that convenes relevant bodies to identify future legislative and regulatory barriers to innovations such as flying taxis.

Tim Johnson, Director at the UK Civil Aviation Authority, said:

We have already seen many global aviation and aerospace innovators choose the UK to develop their new products and services whether they are traditional operators in the sector or are new market entrants. We look forward to continuing to play our role in facilitating successful innovation.

Innovation brings tangible benefits to the UK's economy and to the many people and businesses that use our airspace. The CAA recognises that it has an important role to play in facilitating innovation in aviation, and in doing so continue to focus on passenger and public safety and security. We are delighted to have support from the Regulators Pioneer Fund to advance this innovation agenda.

With its support, we will be able to give some innovators earlier guidance on proposals, allow more safe testing of new products and services and develop new regulatory frameworks for emerging technologies.

Mark Birse, Group Manager Device Safety, Surveillance, Software and Apps at MHRA, said:

We are thrilled to have been successful in our bid for the Pioneer Fund as we are committed to supporting innovative projects in order to protect health and improve lives.

This pilot project, in conjunction with NHS Digital, is aimed at producing synthetic datasets which will help innovators validate software and apps to be able to bring them to market at the earliest, safest opportunity.

The winning regulators will launch their projects in October. All applicants for the Fund have been invited to join a new 'Regulators' Innovation Network', a group run by the Department for Business, Energy and Industrial Strategy to encourage the sharing of best practice and to help forge new partnerships among regulators, government and industry, helping to ensure the regulatory system encourages innovation and remains simple for businesses to comply with.

The Regulators Pioneer Fund follows the Modernising Consumer Markets Green Paper which set out how regulators should ensure that consumers are not being unfairly penalised by suppliers who hold information on their behaviour as well as looking at how their own data can be made more accessible to consumers and making it easier for people to switch to better value services.

The 15 projects winning projects, subject to agreement of contracts, are listed below against each of the Grand Challenge areas they will help to take on.

Artificial Intelligence and data

- Information Commissioner's Office – Regulators' Business Privacy

Innovation Hub: the new hub will work in partnership with other regulators to provide expert support to businesses on ensuring information privacy and data protection – helping them build the confidence to create innovative products and services. A pool of ICO experts will work with other regulators to enable innovation in sectors and develop approaches based on ‘privacy by design’.

- Ofcom – Using blockchain technology to improve UK telephone number management: As telephone networks move online, Ofcom will develop a secure sandbox environment – in partnership with industry – for voice communications providers to trial porting and managing telephone numbers using blockchain. This testbed environment will allow users to build interfaces, test business processes and rules, and trial security arrangements.
- Ofgem – Secure Data Exchange: This new service will deliver a better user experience for anyone who exchanges information with Ofgem or wishes to know what information is available from Ofgem. It will enable a transformation in the way data is exchanged and managed between regulated marketplace participants; easy and effective data exchanges will facilitate market disruption, driving better consumer outcomes.
- Ofgem – Energy Market Challenge: Ofgem and Nesta’s Challenge Prize Centre will together launch a major initiative which stimulates the development of better services for the 8 million households who are not engaged in the energy market and who are supplied their energy through higher rate tariffs. Building on the Open Banking model, Ofgem will provide a safe environment for innovative firms to develop and implement the ideas that will provide better services to customers through a range of potential services such as AI-assisted services, integrated money management apps, online banking apps and chatbots.
- Intellectual Property Office – AI solutions to enhance the intellectual property right (IPR) online filing process: To ensure that Intellectual Property Office continues to deliver for its customers and maintain its ranking as one of the world-leading intellectual property (IP) offices, the benefits of innovative Artificial Intelligence (AI) solutions will be assessed and implemented to modernise the process of filing for Intellectual Property Rights (IPRs), for example by using AI-powered preliminary searches for applicants filing for patents, trade marks and designs as part of the online filing process.
- Solicitors Regulation Authority – Data-Driven Innovation in Legal Services: The new SRA Innovate Testbed is an open innovation competition, created in partnership with Nesta’s Challenge Prize Centre, to seek out and accelerate ethical AI-powered legal services. The focus will be on growing the underdeveloped legal services market for small businesses and consumers, where AI and automation can have a transformative effect on improving access to the help they need. It will be open to law firms, tech companies, civil society organisations, universities, academics and any other innovators looking to collaborate to bring these into the market.
- Financial Conduct Authority – Digital Regulatory Reporting: the FCA and Bank of England are looking at how technology could potentially improve the efficiency of the current regulatory reporting process. They are investigating the feasibility of codifying some reporting requirements

to make them machine readable and machine executable, potentially making the legal terminology used today easier for humans and machines to understand. In the future, this could lead to efficiency gains, reducing barriers to entry and promoting competition.

Ageing society

- Care Quality Commission – Supporting innovation in health and social care: With innovative and technologically-enabled models of care developing rapidly, it is important that regulation can keep pace and continue to ensure people receive high quality care. This project will explore how CQC can encourage good models of innovation that maximise benefits while keeping people safe, and test out new ways of engaging with innovative providers, such as regulatory sandboxing.
- MHRA – Developing and applying datasets for the validation of algorithms: In partnership with NHS Digital, MHRA will develop synthetic datasets to validate algorithms and artificial intelligence used in medical devices. A small group of innovators will be invited to validate their algorithms against the synthetic data as a pilot. If successful, the synthetic data sets would be made available to innovators to validate their products.

Clean growth

- Ofgem – Future Services Lab: Ofgem recently concluded that the retail energy market design, in which suppliers play a broad and central role, may not maximise future benefit for consumers. Fundamental regulatory reforms are therefore being considered. In the Future Services Lab Ofgem will work with the Energy Systems Catapult to iteratively trial and refine these potential changes. Households will be invited to participate in small trials of alternative retail models. A cross-functional team of policy experts, service designers and researchers will constantly visit and gather feedback from these trials, rapidly iterating future plans to find the best model to roll out.
- Scottish Environment Protection Agency – Decommissioning Regulatory Hub: This project will provide a safe, collaborative environment that supports industry to develop and test innovative new products/services in support of decommissioning. It will bring together operating companies and multiple regulators (from the oil and gas industry and the waste supply chain) to address cross-cutting areas, share best practices, create innovative solutions and manage the associated risks together.

Future of mobility

- Maritime and Coastguard Agency – Putting Wind in the Sails of the UK Autonomous and Smart Shipping Industries: This project will establish a regulatory 'innovation lab' bringing together industry specialists, academics and government to: Pioneer new approaches to the regulatory challenges facing the Smart Shipping and Maritime Autonomous Surface Ship (MASS) industry and make marine and maritime data assets available to remove barriers and catalyse new collaborations, in order to drive

innovation and support the UK as a world leader in this space.

- Civil Aviation Authority – Innovation in Aviation Engagement Capability:
This proposal includes the establishment of a new advisory service to give innovators some preliminary regulatory guidance and the CAA a better understanding of the innovation pipeline. It also includes building a new regulatory sandbox to allow testing of selected innovations in carefully controlled environments, and creating a regulatory lab to work with relevant organisations to develop new regulatory frameworks and policies for innovations such as flying taxis and automated systems. The CAA's new Canary Wharf London base will also be more closely located to East London's Tech City.
- UK Space Agency – The Spaceflight Licensing Digital Gateway will ensure that the UK's licensing regime for commercial space operations keep pace with this innovative sector. The Government is working to develop a 'a one-stop shop', by which operators will apply for spaceflight licences from both the UKSA and CAA.