



Department for
Science, Innovation
& Technology








**Forward looking
approaches to
technology
governance**

UK CONTEXT: HOW WE APPROACH THE CHALLENGE



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Technology	Engineering Biology 	Robotics 	Advanced Materials 	Neurotechnology 	AI 
Opportunities	Healthcare Agriculture/food Chemicals Environment	Manufacturing Delivery Emergencies	Construction Healthcare Energy	Healthcare Disability	Advancing human intelligence e.g. Drug discovery
Risks	Safety Trust Weapons	Labour market Hazards	Safety Defence	Ethics Safety	Labour market Disinformation Safety Enhanced risk

UK CONTEXT: HOW WE APPROACH THE CHALLENGE



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Press release

Game-changing tech to reach the public faster as dedicated new unit launched to curb red tape

Science Secretary launches new Regulatory Innovation Office today to speed up public access to new technologies.

From: [Department for Science, Innovation and Technology](#) and [The Rt Hon Peter Kyle MP](#)

Published 8 October 2024



HOW WILL THE RIO OPERATE?



Knowledge



Strategy



Capability

To enable the RIO to make early impact, we have identified 4 technological domains as our initial focus areas. These are:

- **Engineering biology**
- **Drones and other autonomous technology**
- **Space**
- **Artificial intelligence and digital in healthcare**



KNOWLEDGE: EXPERT COUNCILS

Semiconductor Advisory Panel

Press release

First meeting of UK science champions to cement UK leadership in safe, responsible biology breakthroughs

News story

Robotics Growth Partnership launches cyber-physical infrastructure vision

The Quantum Technologies Strategic Advisory Board (SAB) provides independent, expert advice to the UK Government and its arm's-length bodies on quantum technologies.

KNOWLEDGE: FORESIGHT AND HORIZON SCANNING, EXPERTISE



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Government
Office for Science

Collection

**Pro-innovation Regulation of
Technologies Review**

Research and analysis

**Rapid Technology Assessment: Digital
twins**

Research and analysis

Wireless 2030

Research and analysis

**Engineering biology public trust survey
findings**

Published 29 November 2024

KNOWLEDGE: REGULATORY HORIZONS COUNCIL



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REGULATORY
HORIZONS
COUNCIL

The Role of Regulation in
Supporting Scaling-up

REGULATORY
HORIZONS
COUNCIL

Regulating Quantum
Technology Applications

Independent report

**Regulatory Horizons Council: the
Future Regulation of Space
Technologies**

Independent report

**Regulatory Horizons Council: The
regulation of Artificial Intelligence as a
Medical Device**

Independent report

**Regulatory Horizons Council:
Unlocking the Potential of Robotics
and Autonomous Systems (RAS) in
Agriculture and Horticulture**



PUTTING IT INTO PRACTICE 1

Experts convened: Biosecurity Leadership Council



Risk from emerging technology identified: DNA synthesis misuse



Mitigation developed: Voluntary guidance



Monitoring and evaluation: experts and user test groups, surveys, horizon scanning

Research and analysis

**Rapid Technology Assessment:
Synthetic genomics**

Research and analysis

**Rapid Technology Assessment:
Nucleic acid technologies**

Guidance

**UK screening guidance on synthetic
nucleic acids for users and providers**

Published 8 October 2024

PUTTING IT INTO PRACTICE 2



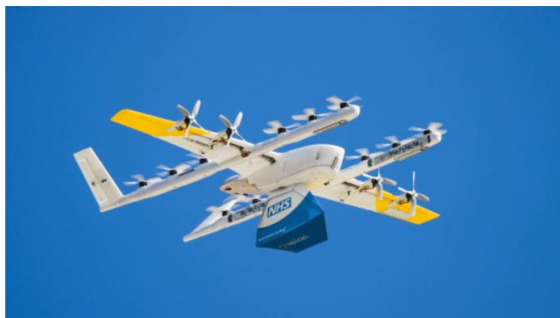
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Regulatory Sandboxes:

- Civil Aviation Authority: BVLOS
- Engineering Biology: Novel Foods

NHS blood samples to be delivered by drones in London first

Monday 16 September 2024



Other latest news

[Joe Wicks helps people get fit for surgery at Guy's and St Thomas'](#)

Friday 29 November 2024

[Children's community nurses celebrated for reducing health inequalities](#)

Friday 29 November 2024

Guidance

Engineering Biology Sandbox Fund

This fund will support innovative engineering biology sandboxes which aim to accelerate pro-innovation regulatory reform and encourage business innovation and investment.

NEWS

Groundbreaking sandbox programme for cell-cultivated products announced

The Food Standards Agency (FSA) has won a bid to run a programme designed to make sure cell-cultivated products are safe for consumers to eat before they are approved for sale.



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THANK YOU
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