



Introduction to the CAA Innovation Hub

Vision | To create an environment where innovation in aviation can flourish in line with our principles

1. **Gateway** to **make it easier for aviation innovators** to work with us as regulators

2. **Sandbox** to **maximise regulatory readiness** by enabling the exploration and testing of Innovation concepts in a safe space.

3. **Regulatory Lab** to **anticipate and respond to complex emerging aviation challenges** in order to shape the future regulatory landscape.





CAA Safety & Airspace Regulation Group

including UAS, Airspace (Civil & MOD), Aerodromes, Spectrum, ATM, Strategy

CAA International utilising policy and regulatory experience to deliver training and consultancy internationally

CAA Aviation Security

CAA Strategy & Policy

HM Government

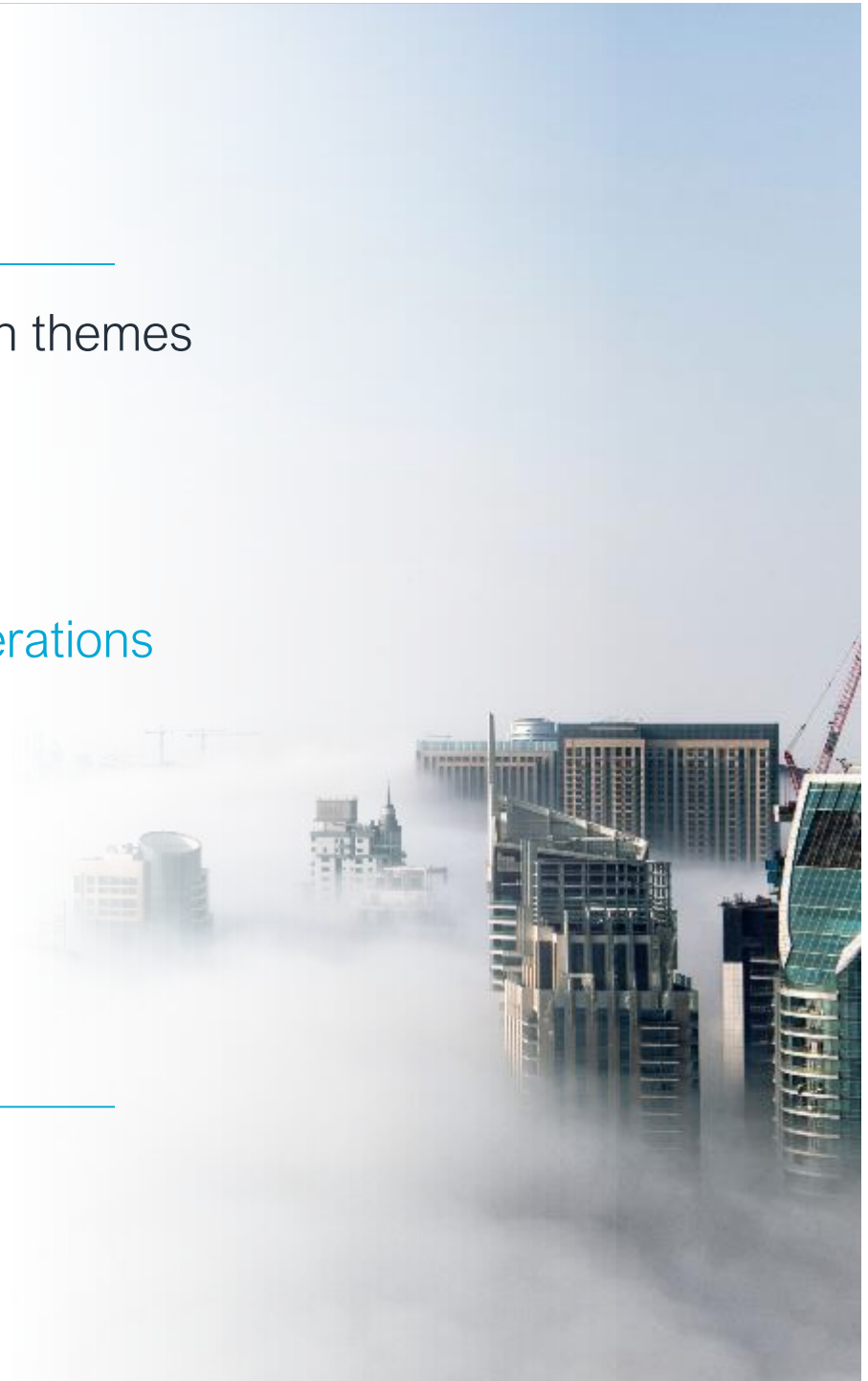
Supporting the development and implementation of government policy and strategy



Shaping the Future of Air Travel

The Innovation Hub is exploring a range of innovation themes that will contribute to shaping the future of air travel

- Urban Air Mobility
- Beyond Visual Line of Sight (BVLOS) UAS Operations
- Unified Traffic Management (UTM)
- Electronic Conspicuity
- Automated Decision Making



Regulatory Sandbox



Altitude Angel Development of framework for assuring safety of software used in UTM platforms

Amazon UK's first commercial drone delivery service in non-segregated airspace

National BVLOS Experimental Corridor Development of infrastructure to support drone operations in non-segregated airspace

NATS Deployment of AI assistant within an active tower environment to assist ground operations

NESTA's Flying High Challenge Development of model for drone public services (healthcare delivery, surveys of infrastructure and blue light services) in non-segregated airspace

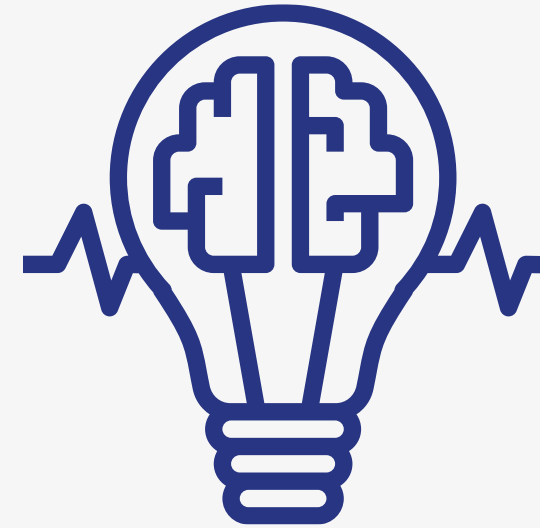
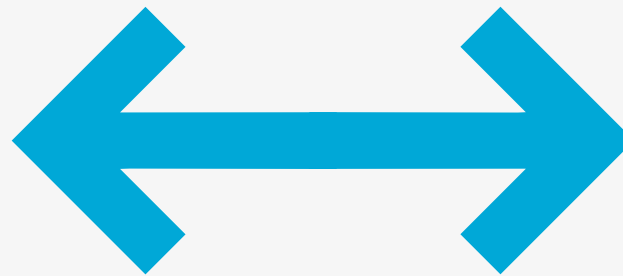
Sees.ai Remotely piloted BVLOS operations aiming at industrialising aerial data capture

Volocopter UK's first test flight of a passenger carrying drone (initially without passenger)

Development of New Regulatory Products



Test and development of innovative technology, operations, methodologies



Identifying regulatory gaps, developing new frameworks, providing material

Regulatory Lab Clarifying the CAA's Position



Introduction of
**Unmanned
Traffic
Management**



**Urban
Air
Mobility**



**Beyond Visual
Line Of Sight
In non-segregated
airspace**

Regulatory Lab Activity

Future Regulatory Frameworks Input to and output from the Regulatory Sandbox

Cross-Regulator Network Enabled by the Regulators' Pioneer Fund

Unified Traffic Management The CAA's response to the introduction of unmanned traffic management systems

Urban Air Mobility Scoping the certification and approval of UAM platforms and associated systems

Non-Segregated BVLOS From establishing the fundamentals through to development of certification and approval frameworks

Automation Reviewing the standardisation and regulatory activity for automation across sectors to scope the applicability to aviation



Regulatory Lab Products



Novel Operations in a Specific Trials Area (NOSTrA)

Non-binding, good practice guidance to enable innovators to try out novel and innovative aviation technologies and operations in a sustainable manner, in UK airspace



Unified Approach to the Introduction of UTM

Position paper on unmanned traffic management with actions for creating a policy framework that will facilitate the introduction of a unified approach to the safe integration of unmanned aircraft systems



Fundamentals of BVLOS & Detect and Avoid Ecosystem

Articulating and educating to a baseline understanding, and introducing a potential framework for approval of DAA systems



Urban Air Mobility Strategy

Describing the CAA's position on UAM, and applying a safety assessment approach based on Bow-Tie analysis for the certification of novel aircraft

...and more to come!

www.caa.co.uk/innovation
[@UK_CAA](https://twitter.com/UK_CAA)