



Commercial drones

A statement of ambition – emerging narrative

Approach to date

July

- DfT and we gained Ministerial approval to proceed
- Convened a DIAG 'small group' of 12, + Future Flight, DfT, CPC. CAA supportive.
- Agreement that government will hold the pen

August

- finalised our support for PWC's refresh of 'Skies without Limits' which will provide much of the material on the current priority use cases and sectors, and the 2030 opportunity. We hold fortnightly project meetings. BEIS and DfT analysts closely involved.

Sept / Oct

- Discussions and input with DIAG 'small group' to develop core content and approach and presentation 19 October to full DIAG

Expected output

c.20 page ambition statement, with graphics

Overarching vision and ambition

This joint statement of ambition, between HM Government and the UK Drone Industry Action Group outlines an exciting future for commercial drones and how we can work together to unlock it. It aims:

- To state an ambition that commercial drones will be commonplace in the UK by 2030 in a way that safely benefits the economy and society.
- To outline the current **opportunity** for public and private sectors to improve efficiency, boost productivity and deliver new capabilities today, and to clarify the technology and regulatory **roadmap** ahead to autonomous flight, beyond visual line of sight.

***Scope of this document** is limited to commercial drone use; ie excluding passenger aviation or counter-drone activities.*

***The audience for this document** includes government, drone operators and end-users of drone services in private and public sectors who could directly benefit in terms of safety, cost, carbon and efficiency, were they to adopt commercial drones. We aim to describe what drones are already doing and will soon be able to do, to demystify their capabilities and to provide the information to help drive further adoption.*

The opportunity

Drones can help drive productivity and growth, better and safer jobs and new capabilities. UK opportunity: by 2030, £### of economic productivity gains / jobs

Today they are saving money, saving lives and reducing carbon (fewer helicopters for inspection, fewer people working at height). Integrating drone solutions into business' digital operations can unlock a step-change in productivity.

- Asset inspection has clear untapped potential in sectors x y and z [See over, to be populated from PWC report] providing essential inspection, monitoring and surveillance of critical infrastructure, agriculture and transport networks to keep people safe.
- Clear public benefits and potential government 'pull' for new services; eg supporting firefighters, coastguard and emergency response, and also for military (observation and comms). Possible local government level business case pooling the different local needs to maximise value.

Longer-term, as technology and regulation push forward, novel capabilities will enable longer distance, autonomous flight, supporting drone deliveries and other capabilities.

Sectoral opportunities and use cases

Highlighting the biggest opportunities from today to 2030 – drawn from PWC study

- Total Addressable Market 2020 – 2030 and expected adoption timeline / S-curve
- Description of drone activities and their current capabilities
- Environmental, safety (3 D's) benefits

Roadmap – short-term

Boosting end user adoption: End users lack awareness of drone capabilities and confidence to procure and integrate drone solutions effectively into their business models.

- Increasing awareness of successful case studies, replicable service models and accessible test beds to demonstrate capability; esp Future Flight, and wider networks KTN, CPC Air Mobility Directorate; CAA Innovation Hub, + sector bodies including ARPAS. Also highlighting sector based procurement opportunities: eg Agriculture, Defence, Logistics: medical, Royal Mail
- But we need to understand and address deeper constraints, eg cultural barriers, integration challenges, etc **and with CPC will host workshops (ETA November) to understand these challenges**

Supporting SME growth: eg finance, skills, business support, exports

Action: We need to work with DIAG to better understand and tell the story of how the drone sector is investing & driving agenda forward

Roadmap – longer term

REGULATORY

NB. [Regulatory Consultation closes 22 Nov](#) – views welcome from DIAG participants

- Ambition is for BVLOS in unregulated airspace but safety is paramount. This will include inputs from the regulatory review (consultation) and RHC study and CAA Innovation Hub experience. Wider context of tech support and international streamlining

TECHNOLOGY (2020-2024)

- Future Flight will invest up to £125m to develop new, electric and autonomous flight technologies.
 - **Phase 2** (incl Covid funding) has supported a range of trials and **Phase 3** will drive complex system demonstrations

Q: What sector-led initiatives should we include in this forward look? Eg Private investment funds; Test beds or proving grounds; technology standards