

Flying High: Shaping the Future of Drones in UK Cities

Presented by

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Flying High Challenge

Cambridge Wireless

12 July 2018

Kathy Nothstine, Nesta



Innovate UK





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We combine knowledge, networks, funding and skills to back new ideas that tackle big challenges.

We do:

- **Policy & research**
- **Skills (for innovation)**
- **Investments**
- **Programmes**
- **Challenge prizes**

Technology is advancing rapidly - not just military and hobbyist



A significant commercial opportunity

Taking flight

Commercial drones are the fastest-growing part of the market

Most drones today are either cheap toys or expensive weapons. But interesting commercial uses are emerging in the middle, says Tom Standage



Search DronesX...

Goldman Sachs Predicts A Combined \$100 Billion Global Drones Market For All Sectors By 2020

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GS Research // <http://www.goldmansachs.com>

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MARKET ANALYSIS

December 23, 2016

Like the internet and GPS before them, drones are evolving beyond their military origin to become powerful business tools. They've already made the leap to the consumer market, and now they're being put to work in commercial and civil government applications

Drones predicted to give British economy a £42bn lift by 2030

Wider use of unmanned aerial vehicles will create jobs and boost GDP by 2%, says report



▲ Drones spraying pesticides in China are an example of their cost-saving commercial usages. Photograph: VCG/VCG via Getty Images

Using drones to transform working practices could boost Britain's economy by £42bn by 2030, research claims.

How can cities shape the future of drone applications?



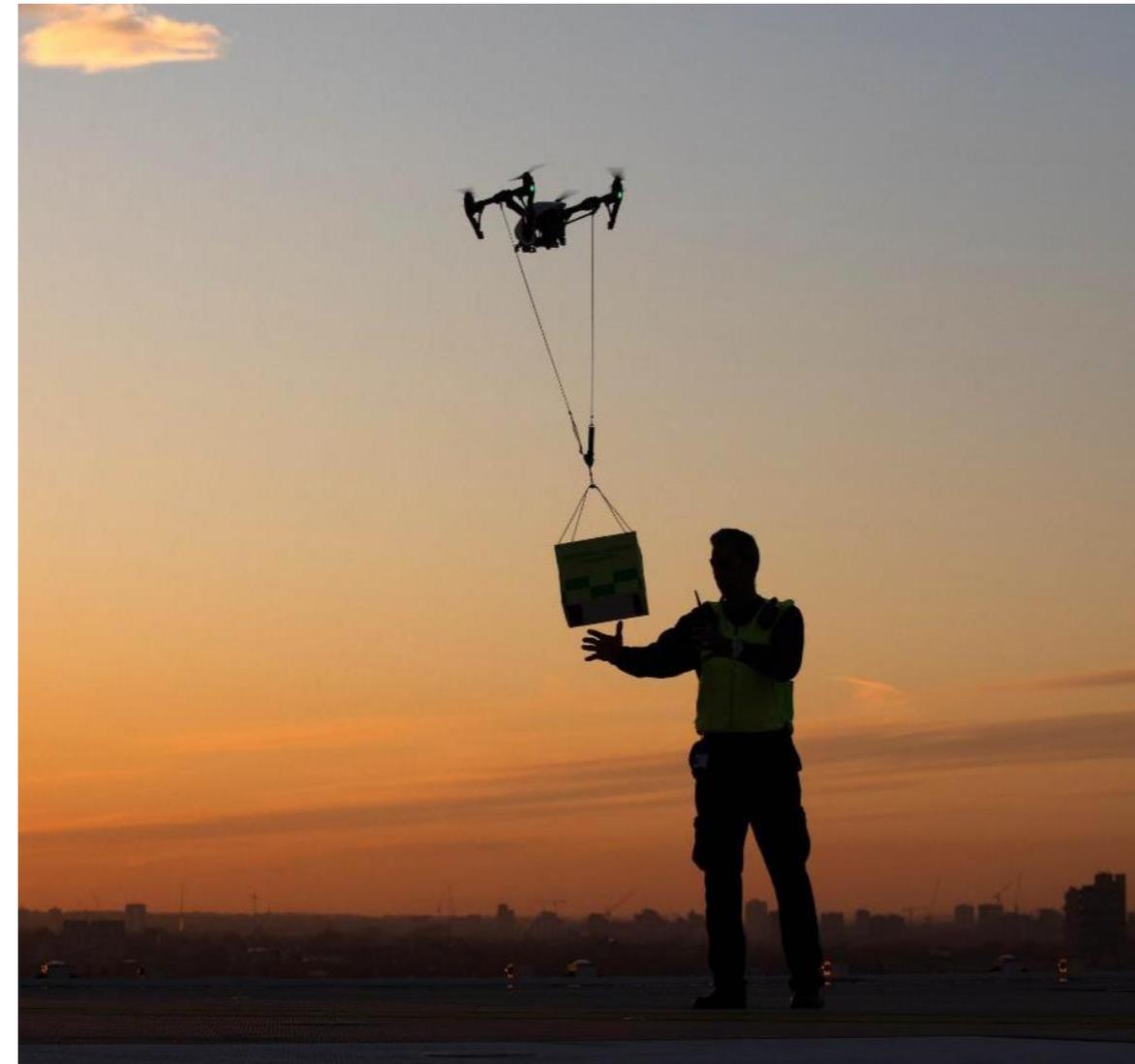
Flying High is a collaborative engagement with UK cities to shape the future of urban drone technology to address local needs.

Business is ready for the drone economy: if we seize the opportunity, the UK can prosper.

Through industry mapping, engagement with national stakeholders and our work with five partner cities, we have seen clear evidence that drones are an opportunity for the UK.

We find a considerable appetite for the use of drones in cities, particularly the perceived benefits of drone use in public services.

However, there are significant technical, regulatory and policy challenges to be unlocked – including the question of public confidence.



Full report and findings to be released 23 July
FlyingHighChallenge.org



Bradford



London



Preston



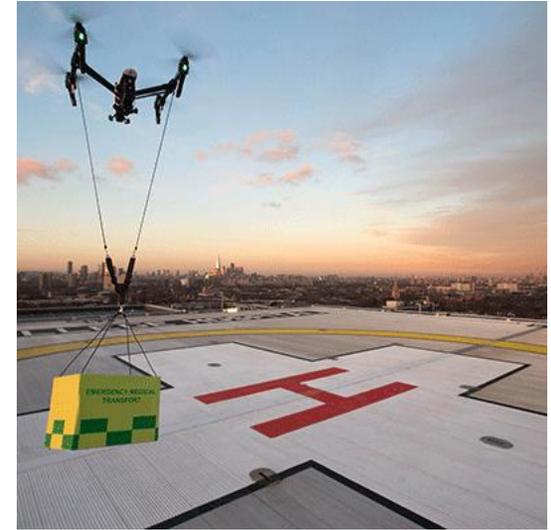
Southampton



West Midlands

Programme Objectives

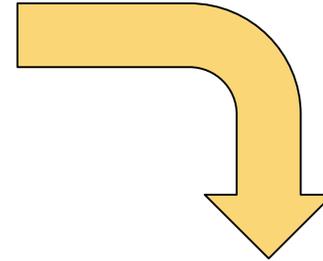
1. **Democratise the development of drone use in urban areas**, to understand if and how people want to drones to operate in their cities - be proactive not reactive
2. **Explore civic and commercial urban drone use cases** inc. technical and economic feasibility; challenges and opportunities
3. **Unlock latent commercial opportunity** for civic and commercial drone products and services (particularly in hazardous and challenging environments), shifting public debate on drones
4. **Inform regulators** on drone demand to support new regulation



Flying High Phase 1 (Feb – June 2018)

1. City Visions

- Vision Statement (Why and What)
- Guiding Principles (How)
- Place-based strategies & demonstrator opportunities



Findings Report

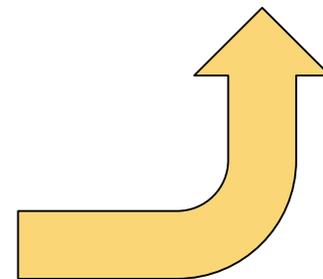
- National Opportunity
- City Visions
- System Requirements
- Feasibility Studies



Phases 2 & 3

2. Technical and Economic Feasibility Studies (one per city)

- Disaster Response (Bradford)
- Medical & Time-Critical Urban Delivery (London)
- City Regeneration / Construction (Preston)
- Isle of Wight Connectivity (Southampton)
- Traffic Incident Support (West Midlands)



Report Launch and
Phase 1 Event
23rd July 2018

Flying High investigated five socially useful use cases identified by the Flying High cities in terms of their:

- Technical feasibility
- Economic feasibility
- Social impact

London

Medical delivery between hospitals



Bradford

Supporting the fire and rescue service



West Midlands

Traffic incident response



Southampton

Southampton-Isle of Wight medical delivery



Preston

Construction and regeneration





Thank you

<http://flyinghighchallenge.org/>

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