

# DIAG Workshop - Public and Commercial Perception

**Meeting date:** Thursday 7<sup>th</sup> March 2019 (12.30 – 16.30)

**Attendees:** Craig Roberts, Ajay Modha, Ben Evans, Ian Williams-Wynn, Simon Ritterband, Graham Brown

*Apologies: Kathy Nothstine, Rikke Carmichael, Phil Tarry*

**Location:** hosted by PwC at 7 More London Riverside, London, SE1 2RT

## Executive Summary

The March 7<sup>th</sup> workshop had an excellent level of engagement and agreed the scope and objectives of the working group. Also agreed was the approach to address public and commercial perception to maximise the potential for the growth of the UK drone economy, including how to target and influence groups that have the most negative perceptions and/ or the most potential to drive economic growth. The working group will input into the drone perception survey currently being commissioned by PwC and use the results of this to ensure that targeting information is up-to-date and serves as a mandate for action.

The consensus is that the DIAG should act as a repository and distribution mechanism for “drones for good” case studies, be these aimed at public or commercial perception groups. Whilst the group believes that such case studies may be obtained, assessed and prioritised at no cost by the group and that group members will be willing to be the “face” of such stories if appropriate, a level of funding is required. Funding is key to ensure that the messaging and distribution is effective and may include items such as website design and maintenance, PR firm engagement to write press and distribute to traditional and social media. A level of marketing support may be provided by TSC. It was noted that these actions would raise the profile of the DIAG and position it to be a positive voice for the industry.

The group concluded that we now face a key test of the role of the DIAG. Given that the working group has a clear mandate and actionable strategy, is there the ambition and can funding be channelled to enable this strategy to be deployed?

This document details the strategy including guiding principles, objectives, scope, public and commercial approach and actions.

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## Guiding Principles

- DIAG actions are transparent, based on clear mandate and freely available online
- Actions to address the perception of drones and accelerate the growth of the drone economy are based on direct feedback from the public or industry
- Prioritisation (e.g. of targets or case studies) will be agreed by the working group and, should it be required, a one-vote per membership body approach shall be taken

## Objectives

Facilitate the growth of the UK drone economy by

- Identifying and deploying actions that will address negative drone perceptions held by the **public** and/or ensure that the public has a balanced view of drones by emphasising "drones for good"
- Engaging with **commercial** sectors that will benefit from drone-based solutions and deploying actions to improve awareness and accelerate the adoption of DroneTech

## Scope

| In Scope   | Out of Scope   |
|--|--|
| UK   | Identification and development of funding opportunities for drone development  |
| 12 month horizon for DroneTech (so excluding delivery, passenger, etc)   | Identification of skills gaps presenting a barrier to wider adoption of drones |
| Educate public in terms of benefits offered by drones and importance of safe operation                               |  |
| Educate industry on possible applications of drones, and the associated business case, to support market development |  |
| Identify engagement routes and communications agenda   |  |
| Determine optimum group composition, funding requirements/ options and governance                                    |  |

Note, specific scopes for public and commercial perception workstreams are below.

## Public Perception

### Scope

At this stage, no parts of the drone ecosystem or target groups (groups with negative perceptions to target in any “drones for good” messaging) are ruled in or out. The group intends to wait until the PwC drone perception survey results are available and use this, along with cross referencing of previous surveys, to finalise where to target the messaging.

In the meantime, the group will use the TSC analysis below to obtain “drones for good” stories that the group reasonably expects will play well with most audiences, for example blue light human-interest stories. It was noted that case studies may fall into two buckets. Those that have a significant impact on a few stakeholders or those that have a minor impact on many stakeholders and both may have a role to play, for example “drone rescue of missing person” vs “drone use on Blue Planet”.

TSC’s analysis indicates that

- 27% of the public had a negative perception
  - Significant differences between age groups, with 18-34 yr olds more likely to associate words such as ‘advanced’, ‘futuristic’ or ‘innovative’
  - 35-54 and 55+ yr old groups associated with ‘unregulated’ and ‘dangerous’
- Significant variation in public support for different use cases

- Emergency response and police monitoring enjoy strong public support (84% and 78% respectively)
- Infrastructure management and monitoring has strong public support (76%), but relatively low public awareness (36%)
- Leisure use, and retail use have far lower public support (41% and 36% respectively)
- High proportions of public (79%) have concerns over drone use
  - By far, the most significant concern was privacy/ intrusion (59%)
  - Other concerns included, misuse of drones (28%), use of airspace/ aircraft collisions (25%), safety of device (19%), drones malfunctioning (15%)

Open question is whether privacy and misuse concerns should be in scope. They are certainly a consistent concern, but can this group effectively target them without negative messaging, e.g. “they’re not as bad as dash cams”.

### Survey Approach

PwC’s survey will poll 1500 UK adults (nationally representative) with c.20 questions. At time of writing (14/3/19), these are in draft form. Once reviewed by PwC’s drone and marketing teams, the questions will be shared with the working group for comment.

The workshop considered that there was a need for questions regarding “trust” in the public perception survey (i.e. do you trust an airport to respond properly to drones, do you trust the police to respond properly to drones, do you trust that drones are safe to fly?). It requested a distinction between public and commercial use when questioning the public. i.e. “Are you concerned about privacy issues from commercial operations?”

## Commercial Perception

### Scope

- Drone ecosystem
  - In – industrial (*inspection and survey – O&G, utilities (incl. water), renewables, rail, construction, mining, transport, nuclear, telecoms, agriculture, etc*), surveillance and security, marine
  - Out – delivery, passenger, emergency response/ search and rescue, media, “touch” applications (powerline stringing, tree planting, etc)
- Target groups (where to aim drone perception messaging)
  - In – industrial sectors that it is reasonable to assume will buy or insource drone services if education improves
  - Out – drone service providers, public services (eg regulatory bodies/ blue light), sectors that will be served by delivery or passenger drone applications

### Prioritisation Methodology

To maximise the impact of any perception activities, the group agreed to adopt a prioritisation scoring approach for relevant market segments. This approach will combine segment growth potential, technology available in the next 12 months and drone-use maturity. PwC will develop the exact scoring mechanism but, for example, if a segment is set to grow using existing tech and has a low adoption of drones, it will be a priority.

- Growth potential
  - The PwC UK Drone Economic Report “Skies Without Limits” will be used as a starting point and a further breakdown into vernacular market segments shall be derived
    - Technology, Media and Telecoms
    - Transport and Logistics
    - Construction and Manufacturing
    - Financial, Insurance, Professional and Administrative Services
    - Public and Defence, Health, Education and other services
    - Agriculture, Mining, Gas and Electricity
- Technology available over the 12 month time horizon of the project
  - For example, if the transport and logistics market sector has a high growth score (above), this will be modified by a low score in technology, reflecting the fact that drone delivery will not be available in 12 months and this is a key driver of the projected growth by 2030 in transport and logistics
  - NB, assessment of market segment drone-use maturity (below) is backwards-looking and, as such, based on current technology, thus excluding (volume) BVLOS, passenger and delivery drones
- Drone-use maturity
  - If a market segment already has embraced drones and they are part of business as usual, they should, all else equal, be a lower priority than segments where drone use is not mature
  - If we use Oil and Gas (O&G) as an example, we can see mature VLOS drone adoption using multiple indicators such as the creation of an O&G operating standard (ref Unmanned Aircraft Systems (UAS) Operations Management Standards and Guidelines, January 2017)

## Survey Approach

The group discussed two options to obtain commercial perception information

- PwC “post Gatwick” trust survey approach
  - 250 senior decision makers across named sectors and all size businesses, 20 questions
- DIAG suggested “industry body” approach
  - DIAG forms relationships with key industry bodies
  - Scope of the relationship could extend beyond initial perception activities, setting up a channel to industry

Faced with a choice between these approaches, the workshop agreed to pursue both. Industry bodies would, however, be limited to 4 or 5, these to be determined. Suggestions included Oil & Gas UK; RAeS; Institute of Mechanical Engineers; Institute of Engineering and Technology (IET); Institute of Asset Management.

## Commercial Case Studies

The workshop noted that case studies may either be anonymous or feature the drone company and its client(s). The anonymous approach may ensure that no drone company gets an unfair advantage from being selected for a case study that will be publicised by the DIAG. The workshop considered, however, that this positive would be outweighed by the significant reduction in interest and traction that anonymous stories would have in comparison to those that go into details about the drone company and, where possible, their client. Accordingly, it will be key that the process for including a drone company in a case study is transparent. This point will be raised at the DIAG meeting on 20/3/19.

## Actions

### LEVEL 1

- a) Confirm strategy with DIAG – Craig, 20/3/19
  - o Per this document, including “public face” of the DIAG
  - o Whether drone companies in case studies will be named/ featured in case study PR, unfair commercial advantage?
- b) Determine if funding will be made available, initially in principle (website design and maintenance, PR firm engagement to write press and distribute to traditional and social media, etc). NB, TSC marketing support suggested – Iain/ Gordon, tbc
- c) Share PwC public perception drone survey questions for comment from group – Craig, 22/3/19
- d) As c) but for commercial perception – Craig, 31/3/19

**LEVEL 2** – actions dependent on satisfactory resolution of level 1 actions (a) *strategy* and (b) *funding*, accordingly, dates to be confirmed

#### General

- a) Working group composition, meeting schedule and governance
- b) Detailed resource and funding plan, including KPIs
- c) Retain website/ PR resources

#### Public

- d) Collate “drones for good” public perception stories in agreed format with permissions, e.g. blue lights (emergency rescue and law enforcement), potentially infrastructure monitoring
- e) Analyse results of PwC survey to identify/ confirm target groups
- f) Determine whether privacy and misuse concerns can/ should be addressed by the group
- g) Build a campaign
  - o Assesses, select and prioritises case studies based on target group survey feedback
  - o Agree KPIs
  - o Agree channels (social/ traditional media, campaign approach, public "face" of DIAG, key relationships)
  - o Determine whether a “content feed” approach is taken, i.e. “drones for good” stories from other sources are posted on the website

#### Commercial

- h) Collate “drones for good” commercial stories in agreed format (including clear numerical benefits such as financial, health and safety improvements and time savings), with permissions
- i) Agree 4 or 5 key industry bodies that we could reach out to with the commercial perception questions (in the PwC survey) and build relationships
- j) Determine market segment prioritisation scoring mechanism and complete a prioritisation table in the following format

| Market Segment | Growth Score (drill down into PwC report categories) | Technology Score (is the key enabling tech available in 2019?) | Maturity Score (how saturated is the drone service market) | Overall Score/ priority | Comments |
|----------------|--|--|--|-------------------------|----------|
| Eg Oil & Gas   | 1-5  | 1-5  | 1-5  | Sum                     |          |

- k) Build a campaign

- Assesses, select and prioritises case studies based on target market segments and survey feedback
- Agree KPIs
- Agree channels (social/ traditional media, campaign approach, public "face" of DIAG? Key relationships?)