Drone Industry Action Group
15 January 2020 – Minutes
BEIS Conference Centre, 1 Victoria Street, London

Attendees:

Chair: Iain Gray Cranfield
Aleks Kowalski Skypointe
Simon Ritterband, Moonrock
Rikke Carmichael Network Rail
James Cranswick Deloitte
Owen McAree Aerofirm
Graham Brown ARPAS
James Dunthorne ARPAS
Will Arinze Animal Dynamics
Philip Tarry Halo Drones
Paul Rigby Consortiq
Neil Watson Thales
Ian Williams-Wynn Blue Bear
Craig Roberts, PWC
Brian Hampson, ADS
Holly Jamieson Nesta
Lachean Humphreys BSI
Mark Watson NATS (by phone)
James de Beauvoir-Tupper CAA
James Bell CAA
Gary Cutts Future Flight
Nikos Pronios Innovate UK
Mark Westwood CPC
Officials from BEIS and DFT

1. Welcome and updates

Iain Gray welcomed all to the first meeting of 2020. The minutes from the last meeting (September 2019) were agreed. The only outstanding item was for a paper on Future Regulation to be presented, which had been circulated. After quick introductions around the table, the Chair introduced the first main agenda item for the meeting.

2. Future Regulation – working with the CAA

Graham Brown introduced the draft proposal, which is an offer of help from IAG members, working collectively and without prejudice or self-interest, to identify priority areas of future regulation and develop recommendations of value to the wider sector. The aim would be to develop generally applicable technologies and guidance that would complement CAA sandbox and pathfinder activities, with supporting evidence. The aim was not to second guess changes that are already in train, but to create a new mechanism to identify and address longer term issues in a more exploratory and dynamic way than were currently available.

In discussion, the following points were made:

- Discussions on safety partnerships and 'pain points' with CAA had been insightful in the past.
- BVLOS: CAP1861 was written to roadmap to describe the journey to BVLOS. The group would need to manage the overlap with this and identify a mechanism for working this through, ie projects / consortia / workshops focused on specific topics.
- Possible areas of focus (to be developed further with IAG and wider sector input) include: electronic conspicuity, remote ID, detect and avoid, conspicuity, FRZs and insurance.
- Electronic conspicuity is a key enabler for BVLOS and critical aspect of effective safety cases.
- Cyberhawk's US partner had been granted an FAA waiver to fly BVLOS to monitor the condition of thousands of electricity pylons, combining long linear and closer inspection capabilities. The UK should borrow from this experience.

- The IAG should draw on the wider drone community for input and better communicate its activities. While the IAG had always aimed to be transparent, including publishing its outputs online, it had never had a budget, which limited outreach. Drone Major was mentioned as an organisation that had engaged actively through events and the IAG could draw on their experience and the inputs they had received to help achieve shared ambitions.

CAA welcomed the offer. They cautioned that EU regulations take effect in July and will be adopted. CAP722 will remain the main tool to prove safety operations. CAA is committed to providing appropriate regulatory support for Future Flight and will receive support from Future Flight to deliver this. CAA has NQE engagement sessions and a Leaders Forum which are effective for disseminating key CAA activities.

CAA chairs an Electronic Conspicuity Deployment Programme (ECDP) Working Group, largely centred on GA conspicuity, but which does include UAS issues. In parallel, CAA's UAS unit is establishing a UAS EC Working Group to develop the EC strategy for UAS. The chair of the ECDP Group will also sit on the UAS group in order to provide that cross-link.

Action: Phil Binks will continue to lead this IAG activity, with support from Graham Brown and BEIS secretariat. The sub-group would work across IAG to agree priority technology challenges facing the sector and to bring them to the attention of the CAA.

3. Updates

3.1 DfT: The Air Traffic Management and Unmanned Aircraft Bill provides police powers to enforce existing legislation and to more swiftly manage malicious use. The Drone Code would be updated to reflect the changes and Government would deliver new guidance for police enforcement and support their training.

Police powers would include enabling a police officer to:

- Require UAS to be grounded where there is a reasonable belief they are committing are offence;
- Require production of documentation from small unmanned aircraft (SUA) operators or remote pilots to demonstrate that they have met registration and competency requirements, and have the necessary permissions and exemptions; like a driving licence, this could be shown right away or brought to a police station;
- Issue a Fixed Penalty Notice for misuse in situations where no harm occurred; and
- Enable stop and search, entry and search under warrant for offences set out in the Bill.

The IAG welcomed this work and encouraged active engagement with and communication to the public and support for the police.

3.2 Counter drone: Government published the UK Counter UAS Strategy in October 2019. Four chapters focused on risk, testing, police powers and industry engagement. DfT hosts regular working group meetings and engages with NPCC, DSTL, CPNI, ADS and others. DfT would welcome input from the IAG on their issues, activities or perspectives.

3.3 Mark Westwood, **Connected Places Catapult** outlined that Drone Pathfinder is looking to extend its membership and range of activities. Sees.ai had recently joined and further projects are being assessed. Slides of the community pathfinder event in November 2019 are available online here, including an update from EIC on the energy infrastructure pathfinder. Pathfinder programme background, events and workshop details are here. The next Community Day will be 31 March 2020.

The group agreed on the importance of ensuring robust business cases and value propositions underpinned drone activities. The insurance industry currently lacks data on the risks of drone swarms in civilian uses. RAF announced it would be launching drone swarm capability in April 2020.

3.4 Future Flight: Gary Cutts, Challenge Director, updated on progress. There had been significant interest across the segments (drones, UAM (air taxis) and larger regional vehicles), including electrification, autonomy, infrastructure, traffic management and vehicle development. The programme remained open and flexible. Participants must be part of consortia not acting on their own and must have an end goal of real demonstrations of a meaningful use case. Future Flight was undertaking a phased, competitive approach to ensure it was additive and relevant. Next steps:

- Phase 1: c 130 participants had been invited to a discovery workshop 4-5 Feb which would involve consortia sharing their proposed activities and ambitions and using these to help shape the competition,
- Phase 2: Expect to request proposals in early April for 9 weeks, and announce winners in July. Amounts and numbers TBC: they had no predetermined funding pot sizes. Economics and opportunity would guide these. They encouraged consortia to come forward.

Future Flight were working closely with CAA and would ensure the necessary regulatory support was available. Gary confirmed the start of the new Deputy Challenge Director: Simon Masters, currently at Made Smarter, had spent 6 years at InnovateUK and earlier career (6 yrs) at Airbus. Iain Gray is on the Future Flight Advisory Group and was open to input from IAG members.

The drone community would benefit in a number of ways: through direct project support; through the new UTM, communications, energy and infrastructure support; and from new markets and activities in other use areas. The programme aimed to encourage openness and collaboration, but businesses' would need to consider their own commercial interests and IP issues.

3.5 Jim Cranswick, Deloitte is developing a 'transport integration tool'. He hopes to get support from Horizon 2020 who are providing c £2-4m of 100% grants for c 1 yr long projects developing new sustainable urban mobility solutions. The aim of the tool is to gather a wide range of granular data to develop and validate expected adoption curves for new mobility solutions. Inputs including tech, environmental, cost, regulation, etc are needed. **Action**: Jim welcomed input from IAG members ahead of April 2020 deadline.

4. AOB

4.1: *EASA rules*: ARPAS enquired what EASA or CAA guidance material was expected ahead of summer legislation and asked that this be disseminated in time to give businesses clarity well before regulations come into effect. Updating the Drone Code would also help operators and enforcement officers better understand the new EASA rules. The table at the end of CAP1789 was welcomed, but still considered too complicated for the average user.

4.2: *Flight Restriction Zones*: CAA has received c 20 responses from operators to their FRZ feedback form. ARPAS stated this is still an ongoing issue and will share an anonymised version of the positive and negative feedback they had received to ensure CAA had a complete picture.