Drone Industry Action Group
26 April 2022 – Minutes
(by videoconference)

[Participants – see end of document]

Iain Gray welcomed all to the meeting, which would once again include a range of updates on recent government and sector activity and future plans.

1. **DfT update:** The first meeting of the [Future of Flight Industry Group](#) was held in March, with Baroness Vere chairing (co-chair: Duncan Walker of Skyports) and Jesse Norman attending. The Future of Flight agenda had clear Ministerial support within DFT and the team are focused on drafting and agreeing an Action Plan. A first draft would be circulated before the next meeting (June) and wider engagement beyond the FFIG participants would follow.
    Iain Gray, who attended FFIG, agreed the meeting was dynamic with Ministers keen to ensure the group responded swiftly to the draft plan to build momentum.
    In discussion, participants emphasised the value of wide representation, including practitioners, end users and the wider community.

2. **DSIT update**: since the last meeting BEIS had split into new departments DESNZ (Energy Security & Net Zero) and DSIT (Science, Innovation & Technology), with sector teams including aerospace moving to the expanded DB&T (Business & Trade). Support for technology innovation including robotics would continue in DSIT, which had recently hosted an event bringing c.100 organisations together to discuss adoption of robotics and automation technologies. This showed clear interest in drones but lack of knowledge of their capabilities and regulation.

3. **PWC 'industry perceptions' survey**: Craig Roberts provided summary findings of PWC's recent refresh of their 2019 drone perceptions survey, which would be published shortly. It focused on industry (both public and private sector) to understand their views on drone adoption. While overall it came back more positive than 2019 across all measures, continued challenges included drones generating 'too much data' and a lack of confidence in drone service providers. Recommendations included the need for better showcasing of drone capabilities, targeted funding and adoption support for key use cases, and greater standardisation (incl clearer qualifications) to support adoption. Sector adoption programmes could be a focus area for the DIAG, which should have clear KPIs, timelines and regulatory resources attached to ensure success.

4. **Future Flight Challenge**: Simon Masters updated that Phase 3 projects were approaching the halfway point, with a range of flight demos and milestones over the summer. The team was working across government including DHSC, MOD and Home Office to help connect potential end users to drone capabilities. Wider programme work continues on skills, community integration (with a strong response to the request for Working Group volunteers), and with the KTN, which was developing recommendations for sector industrialisation and scale-up and would report in due course.

5. **DHSC: Drones for supply chain resilience**: DHSC had undertaken an exploratory review of the potential for drones to support healthcare outcomes, including for supply chain

resilience and emergency response. Healthcare delivery use cases could improve health outcomes and save money as well as help the drone sector to build public trust and acceptance of drone deliveries. While specific NHS trusts had led drone trials in the past, this experience had not been captured into the central institutional memory or disseminated internally, including into NHS Blood & Tissue and NHS Supply Chain. In the review, specific use cases (pharmacy, chemo, organs, defib, emergencies, etc) had been considered and found significant potential benefits especially where logistics faced a pressing geographical challenge. The review was being shared internally, including with Ministers and they were hopeful of announcements to come raising DHSC drone use and procurement, including through linkages with police and emergency services. Building capability among traditional logistics companies was a key step, and working with CAA to mitigate risks would be key.

6. **Ajuno: medical delivery toolkit**. Will Barnes updated on a recent series of workshops with stakeholders on medical drone delivery, bringing end users and solutions developers together to accelerate adoption of drones. The process elicited strong support, and found no 'single path' fr drone use, but a range of use cases, geographies, internal and organisational variables and airspace issues to overcome for adoption. Workshops had convened the community, helped develop clear capability options and helped to shape an 'adoption toolkit' of considerations for potential end-users and suppliers. While outputs were still being finalised, the work raised the question of how to balance potential healthcare benefits against impacts on existing airspace users. Protocols existed in other areas, for example HEMS aircraft and emergency services (blue lights) on roads.

7. **MOD** updated they intend shortly to publish a **Defence Uncrewed Systems strategy**. This would be deliberately high level and industry focussed, intending to help industry understand and help address defence needs. A slide pack [attached] was presented highlighting the core problem statements, capabilities sought and challenges of bringing 'system of systems' together. MOD outlined the activities under the Expeditionary Robotics Centre of Expertise (ERCoE), including in maritime and land vehicles. Going forward, MOD would be adopting a range of procurement approaches in parallel, each intending to be accessible and to progress capabilities (traffic light system denoting TRL level and deployment readiness):
   - Red: 'Experimentation' of components and sub-systems – with fail fast philosophy
   - Orange: 'In use' higher TRL capabilities trialled into operational capability
   - Green: 'In service', including larger scale training and sustainment support

   Simon Pope and Eddie Devine welcomed input from the sector, including into what functions or policy should be implemented at MOD level (without restricting Army/ Navy/ Air Force level capability), and where cross-government or international (US/Australia/NATO/other) activity was needed.

8. **AOB**
- Home Office was progressing their refresh of the 2019 Counter-UAV Strategy. They were grateful for input to date and welcomed further comments via this survey.
- Niall Greenwood of Neuron was launching their Project Blueprint on 10 May at Cranfield's DARTEC. The project, supported by Future Flight, aims to provide regulators, technology providers and operators with a blueprint for a UK wide rollout of BVLOS drone operations.
- Richard Nichols of Airwards on 4 May welcomed a capacity audience at the latest 'Future of the Stenosphere' event.

Participants

Chair: Iain Gray, Cranfield University

Ian Williams-Wynn Blue Bear
Mike Gadd Blue Bear
Rikke Carmichael, Network Rail
Graham Brown, ARPAS-UK
Mark Westwood Cranfield
Niall Greenwood, Neuron
Hector Figueredo, Qinetiq
Daniel Wilson BT
Dave Pankhurst BT
Mark Watson NATS
Alex Fuller NATS
Fred Harbottle, consultant
Daniel Ronen UAVAid
James Cranswick Deloitte

Craig Roberts PWC
Will Barnes Ajuno
Stuart Gosney HS2
Andy Philips ADS Group
Philip Binks Altitude Angel
Rami DCMS Fujitsu
Ashley Kerly Fujitsu
Stuart McGlynn Cyberhawk
Chris Gee BSI
Gareth Beverley Consortiq
Elliott Corke, Global Drone Training
Paul Chapman Ofcom
Simon Masters Innovate UK
Andrew Chadwick CP Catapult

Officials from BEIS, DfT, DHSC, Home Office and MOD