

DRONE INDUSTRY ACTION GROUP (DIAG)

Offer of support to develop future UK drone regulations

Challenge:

Within a common airspace, where a vast array of different aircraft types and capabilities operate, we can no longer continue to take a siloed approach, developing different rule sets for both manned and unmanned aviation. The airspace is a limited resource and therefore all areas of aviation need to play their role to maintain efficiency, whilst improving levels of safety.

Beyond Visual Line of Sight (BVLOS):

BVLOS is the goal many innovators wish to achieve and end-users anticipate (reference CAA CAP1827). For this to be standard, many technologies need to come together, including automation / autonomy and the wider supportive ecosystems that enable safe operations alongside other aircraft. In addition, there is a need to consider the potential legal and regulatory implications of BVLOS when conducted with support (and through to direct instruction/ command) from a traffic management system.

The DIAG believes that, while there is no regulatory barrier per se, the UK lacks a 'drone knowledge system' where innovators can work within a supportive environment to develop, prove and share new technologies, procedures and approaches that work.

The DIAG has brought together considerable thinking on a possible drone knowledge system approach and would like to present it to a senior DfT/BEIS group prior to engaging directly with CAA, pathfinder programme and other key players. DIAG members would commit to being neutral, trusted providers of expertise and experience, working collaboratively and openly.

Proposal:

The drone industry is seeing exponential growth in numerous parts of the world with operators seeking increased access to airspace. The DIAG is offering on behalf of the industry to help overcome existing barriers to ensure the UK can achieve real leadership and harness the full potential of the drone economy.

The DIAG believes essential supportive structures should be developed to fulfil future regulatory requirements (airspace, conspicuity, comms, etc) and to develop solutions to emerging regulatory gaps (swarming, full autonomy, etc). This would complement the CAA's Sandbox and Innovation Hub.

The DIAG, on behalf of the drone industry, is able to work with and inform the aviation industry on the developing technologies which will allow aviation to move forward, taking advantage of the digital connectivity capabilities and positioning the UK as world leaders. This would include demonstrations to show how manned and unmanned aviation can operate safely together, expanding on previous demos such as Operation Zenith and airspace management capabilities like NBEC.

In order to implement a sustainable, world-leading airspace modernisation programme, both the approach and design of the airspace will need to be responsive to new technologies. A comprehensive picture of air operations is needed for a completely known traffic environment. It is therefore anticipated that manned aviation will also need to change and adopt new technologies such as ADS-B/Data Transponder/App Tracker/etc in order to ensure digital visibility and conspicuity and to aid deconfliction.

Next Steps:

The DIAG believes it can bring its collective expertise and networks together to support the CAA as we empower and accelerate growth of unmanned aircraft operations in the UK with global reach in an environment of proportionate legislation and regulation.