NATS SERVICES (ASIA PACIFIC) PTE. LIMITED

NATS is the largest air navigation services provider in the UK, handling more than 2.6 million flights each year in one of the busiest skies in the world. We believe in providing equal access to the airspace and have been approving flight requests from UAS operators for many years.

At NATS, an investment programme is underway to unify air traffic management (UTM) capability that integrates drone flights and other airspace users into our operations. Working with our strategic partner, Altitude Angel, we have introduced the Airspace User Portal (https://aup.nats.aero), an innovative web-based portal that has enabled the processing of more than 2,000 drone and non-standard flight operations to restricted airspace.

The AUP automates much of the work flow for non-standard flights like drones, sending the UTM message directly to the relevant authority for approval and thus reduce workload.

To meet the needs of all airspace users, closer integration between legacy air traffic management systems and new UTM capabilities will be required to cope with a range of different operational concepts. At one end of the spectrum, we may need to accommodate large drones in controlled airspace while, in contrast, we may need to accommodate very small drones operating at low levels.

We believe operations of beyond visual line of sight (BVLOS) drone flights in unsegregated airspace is key to generating the commercial revenues and enable economic growth. In 2018 we demonstrated through Operation Zenith (https://www.operationzenith.com) how drones can be integrated safely into airport operations. NATS is very supportive of airspace integration, especially as airspace capacity is a scarce resource.

The rapid growth in the use of drones signals the fundamental challenge to current operating procedures and solutions that work today cannot be continued.

Segregating each type of user, means that airspace will end up being divided into smaller chunks, restricting everyone's freedom to use it. The challenge is to evolve our airspace into a single expanse, or a less compartmentalised airspace.

Safely integrating, different airspace users as much as we can, will not only maximise capacity but also ensure flexibility and maintain safety.

We regard UTM not as a system but as a unified collection of tools and services in the same way that air traffic management is built on international standards and delivered by different organisations.