

Chief Operating Officer, Altitude Angel



# **Session Objectives**

Driving continuous safety improvement in challenging times

Briefly, who we are.

New aviators.

Altitude Ange

The Drone Industry

the Future

The Roadmap to

How we safely integrate UAS into airspace.

Now and Next

UTM



## **Altitude Angel**

Values: Trust, Integrity & Shared Achievement

An Aviation Technology company, founded in 2014. HQ in Reading, UK with a subsidiary in Amsterdam, NL.

Our Company

Our mission is to provide the technology which unlocks and unifies the airspace, enabling more people and organisations to realize the potential in drones.

Mission

Passionate about airspace safety, and we serve millions of drone pilots with accurate and reliable safety information and services.

Global airspace information



#### **Drone Operations Today**

- A largely 'quiet' sky
- Drones are very powerful tools and already add significant value to businesses and public services
- Flights are typically limited to visual line-of-sight
- In most areas there is a non-unified mosaic of pro/no-drone zones
- Countries such as Norway have begun the journey to formalize systems which can digitally permit drones into Controlled Airspace.
- The use of drones continues to grow rapidly.







#### **Drone Operations Tomorrow**

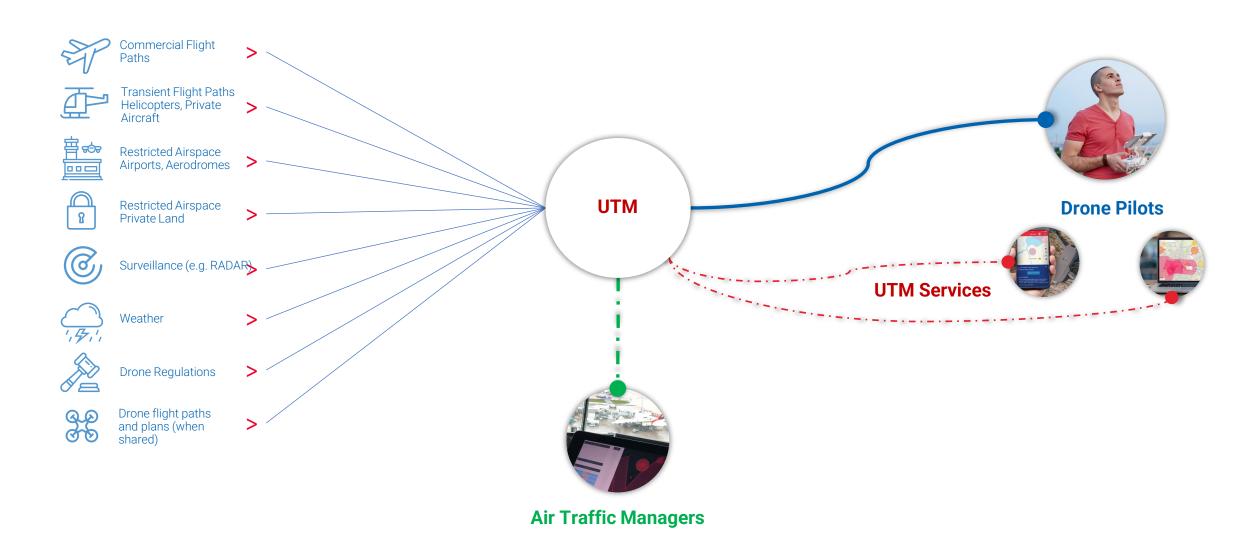
- Busier skyscape
- Mixture of manned and unmanned, piloted and pilotless
- Coordinated movement
- Important routing and sequencing considerations
- Mixed-use of airspace including incorporation of UAS for:
  - Deliveries
  - > Oil and Gas
  - > Inspections
  - > Emergency services scenarios
  - > UAM, and much, much more...



#### **UTM** is a Key Enabler

- The gradual introduction of *automation*
- Adaptation and augmentation to existing airspace management systems and processes
- A platform for collaboration between stakeholders
- The 'digital infrastructure' for our future skies

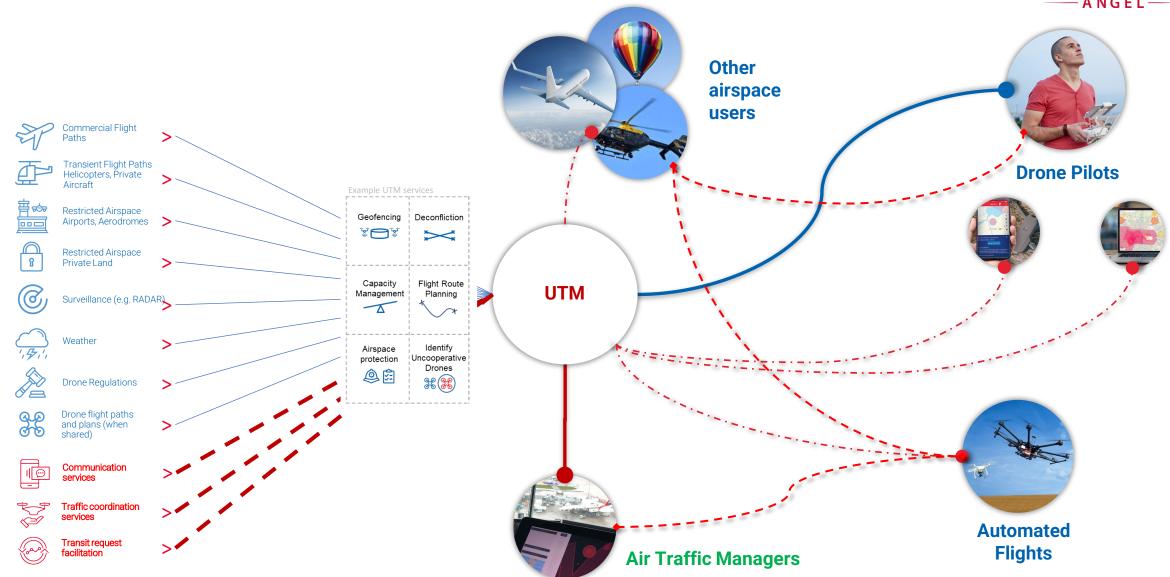




#### **UTM Tomorrow**

#### **Inform, Assist, Connect & INTEGRATE**







### **UTM misconceptions**

- Total and complete visibility of everything, everywhere
- It's only for commercial or automated flights
- UTM can't help if flying in a remote location; there's no cellular coverage!



### **Key Takeaways**

- UTM is an enabler for future aerial operations, including automated UAS.
- It is complementary to the onboard automated systems being developed and necessary for scale.
- Unifying the airspace as a common resource, accessible to both existing and new classifications of air traffic, is key

