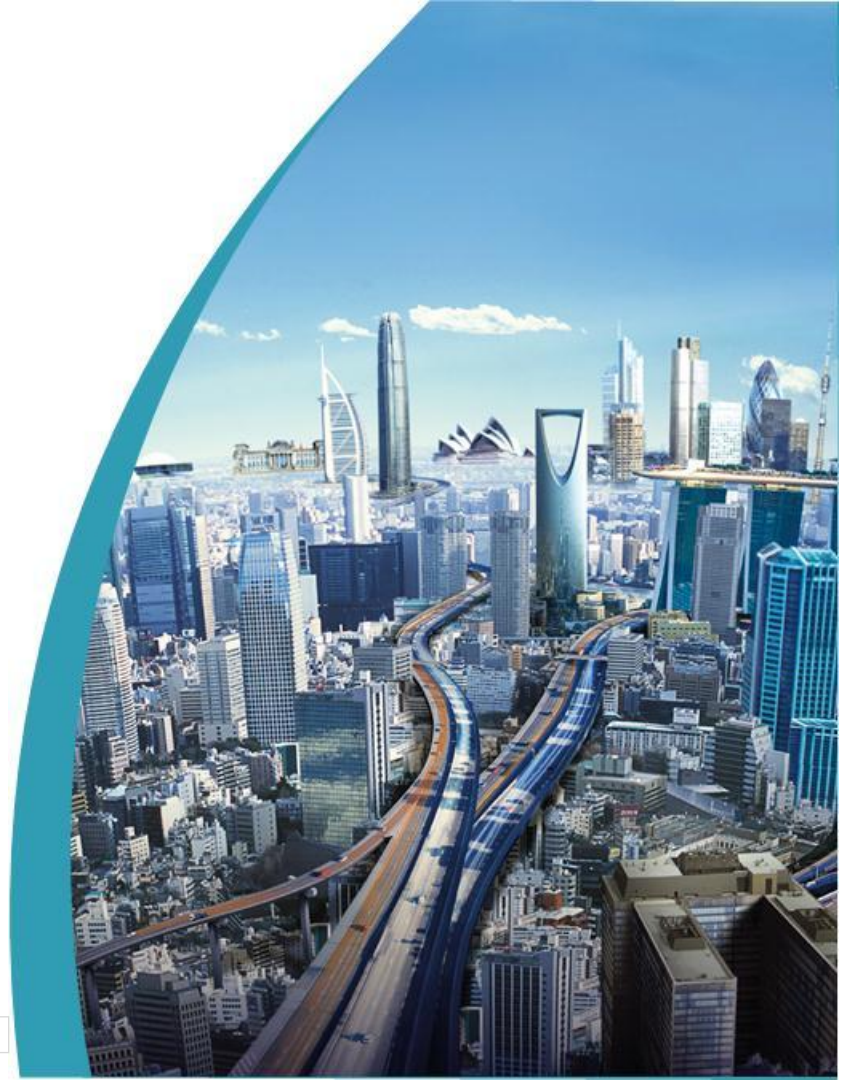


How to safely manage low level air traffic: an Urban Traffic Management concept

*High Level Conference on Drones,
Warsaw, 23-24 November 2016*

Luc Lallouette



A societal change is on-going

Safety

- Crashes on population
- Collisions with aircrafts
- Collisions between drones

First Aids Enhancement

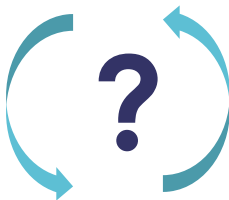
- Search and Rescue
- Organs transport
- Fire fighting

Societal Acceptance

- Privacy
- Nuisance

Surveillance

- Borders
- Public events



Business Efficiency Enhancement

- Infrastructure inspections
- Parcel delivery

Airspace Access

- Affordability
- Easy procedures

Geo Disparities Reduction

- Delivery in isolated area

Security

- Infringement of secured site
- Infringement of airport areas
- Terrorism

How to reconcile **concerns** and **opportunities**?

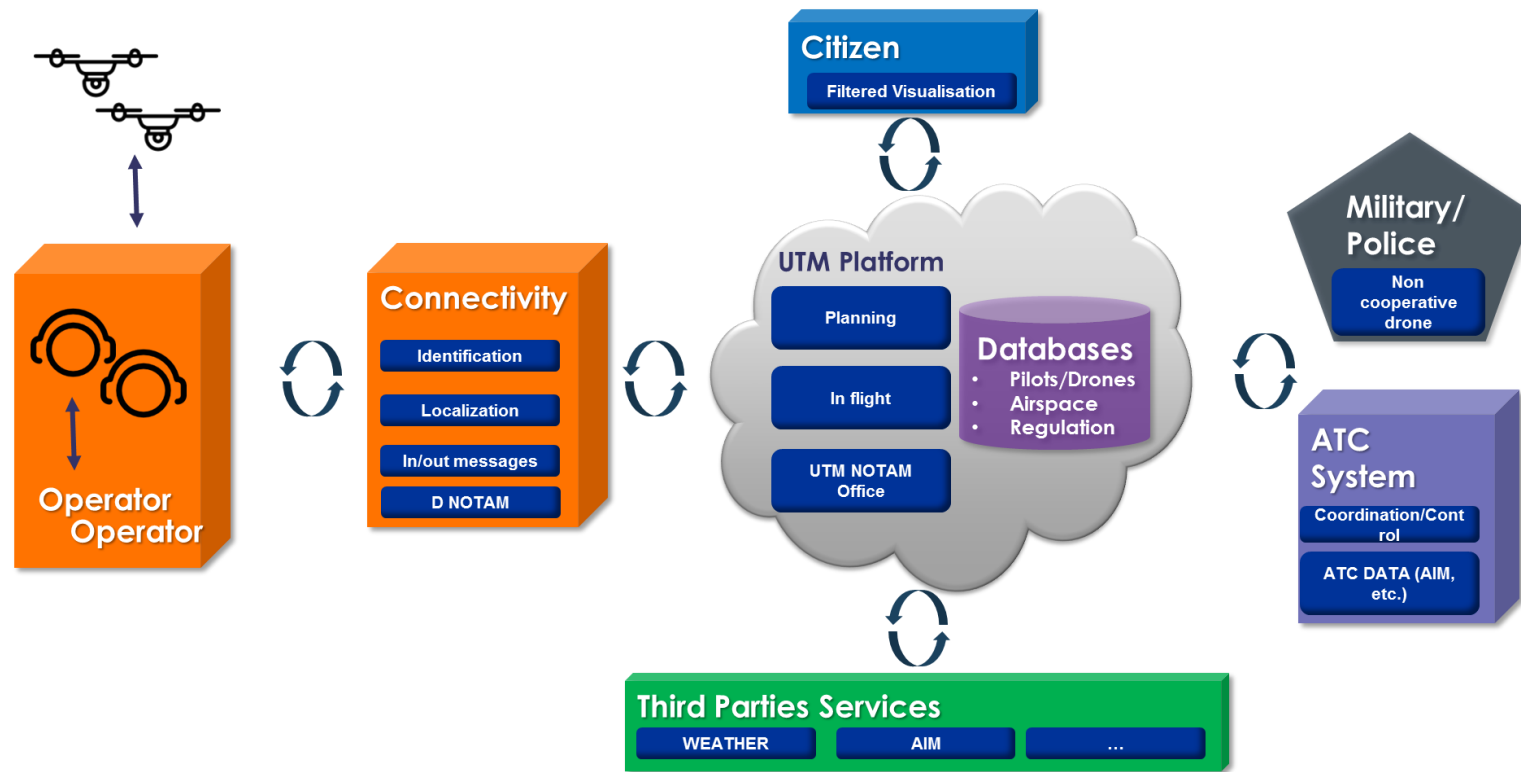
OPEN

THALES



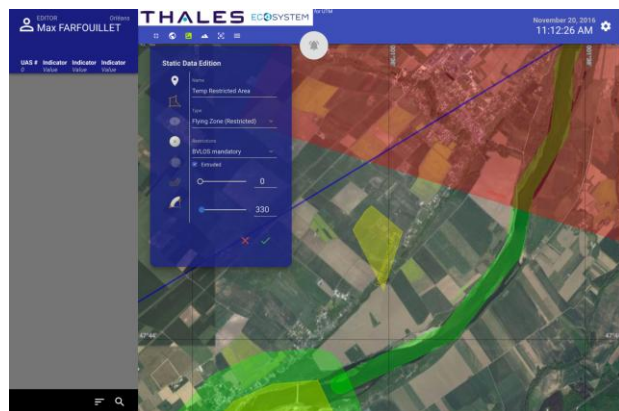
THALES UTM Solutions contribute to enable secure, safe and efficient drones flight/missions while supporting societal acceptance

Thales UTM Solutions – Overview (1/2)



Multi-users cloud based platform ready to embed third party applications

Thales UTM Solutions – Overview (2/2)



➤ Authority Profile – Airspace areas static/dynamic creation

- Different kind of areas can be created (no fly area, preferred fly area, restricted fly area, etc.)
- Once validated, it is automatically stored and shared across the system for any users

➤ Operator Profile – Trajectory/volume management

- Trajectory/volume request
- The system automatically check the drone equipment, the applicable regulation, the pilot certification, etc. to display contextual areas
- Two main processes applicable: automatic or specific approval, the system determine the workflow to be applied

OPEN



What do we need from you?

■ Set up the rules of the game

- Recognition of the need to have UTM services in EU
- Regulation/implementing rules with the required level of performance/certification for the UTM services (performance based regulation)
- Appointment at EU level and per nation of Authorities in charge of UTM

■ Funding mechanism

- Define the framework or use an existing framework
- Focus funding on activities which are related to interoperability (standardization, technical feasibility of regulation/implementing rules, operational de-risking, etc.)

■ Support on-going and future standardization activities to avoid fragmentation

- Increase contribution of CAAs, EASA, JARUS and ANSPs experts to Eurocae

Thales UTM Solutions: enabling safe and secured drones business growth

Thank you for your attention

