



# Practical use cases from DOMUS U-space demonstration

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Enaire

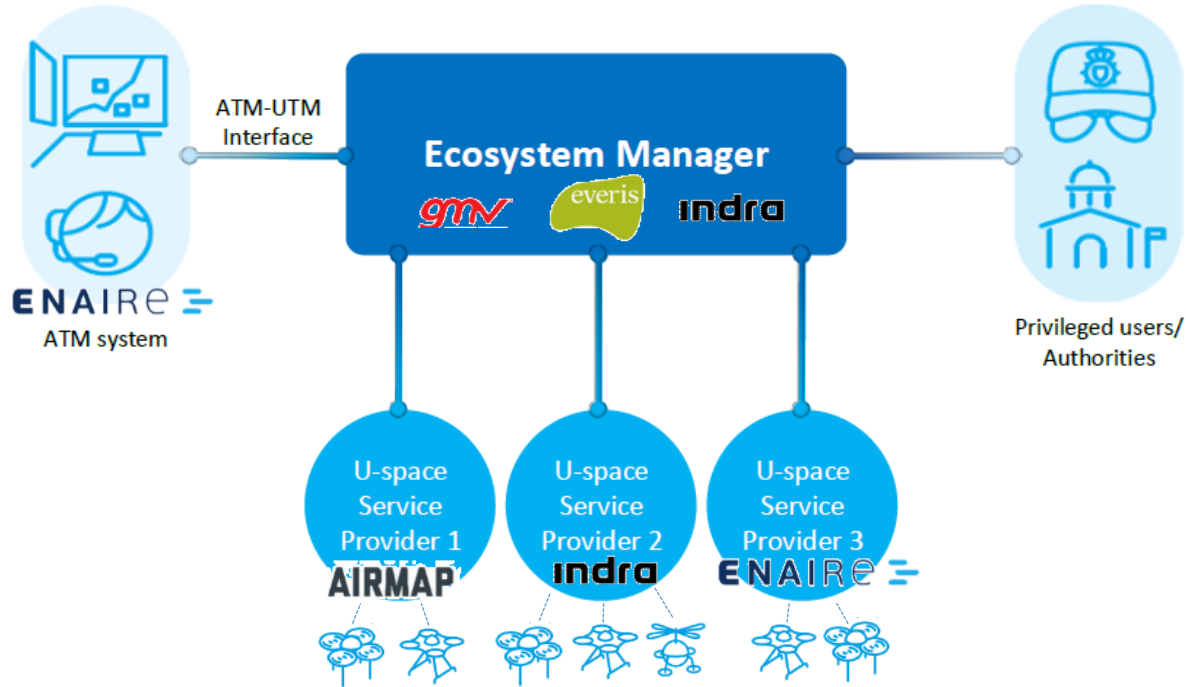


# DOMUS scope

- U-space initial services (U1 and U2)
- Some specific U3 services:
  - Tactical Deconfliction
  - Collaborative ATM
- Smart City use cases
- 3 USP's in the same area

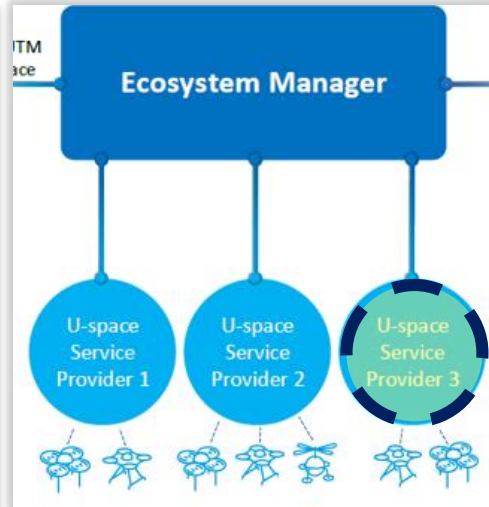


# DOMUS Architecture



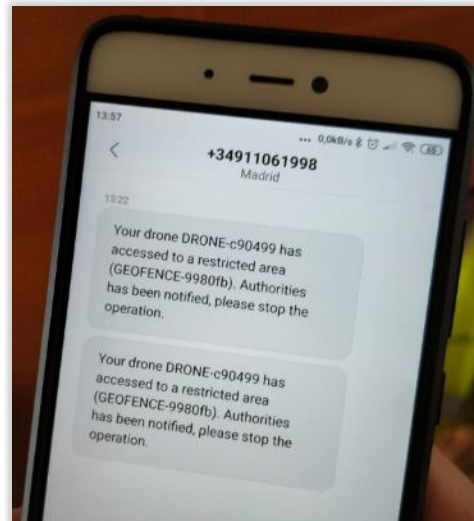
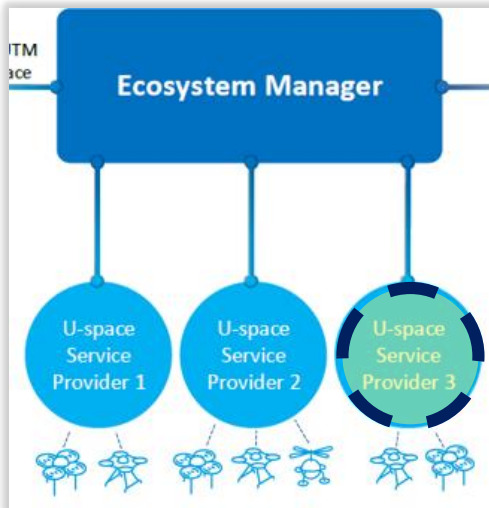
# Recreational drones

- DOMUS included automatically Recreational drones **WITHOUT FLIGHT PLANS** to manage these flights and alerts to other users.



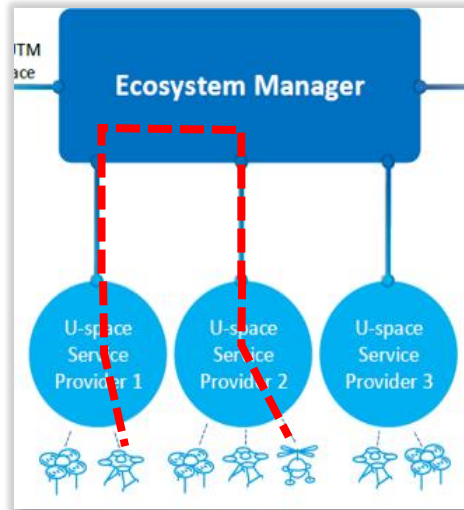
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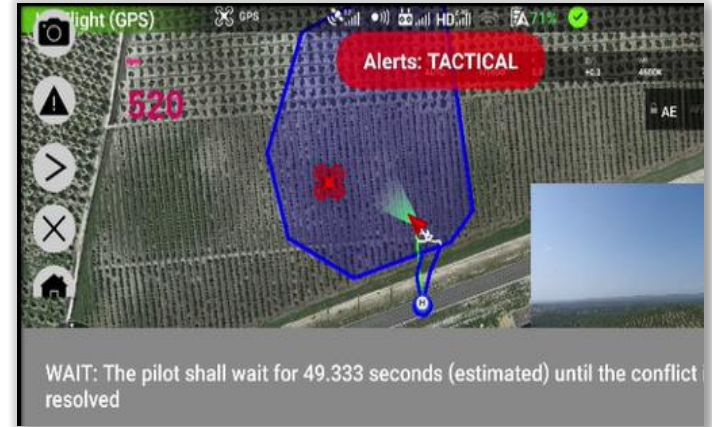
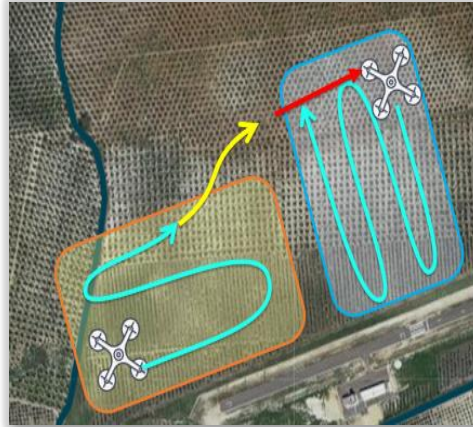
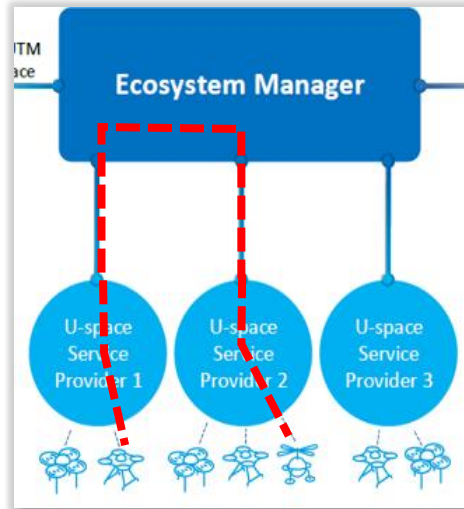
# Tactical Deconfliction

- How do we manage and tactically deconflict 5 flights at the same time? Using the central figure of the ESM



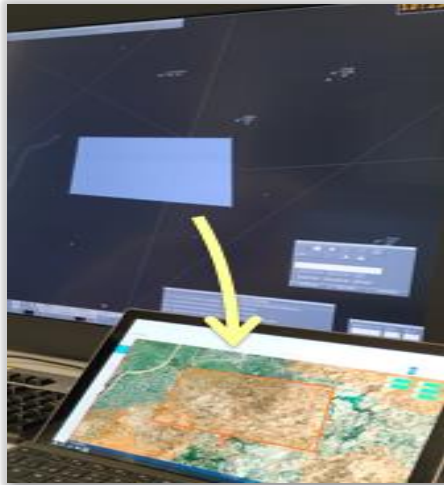
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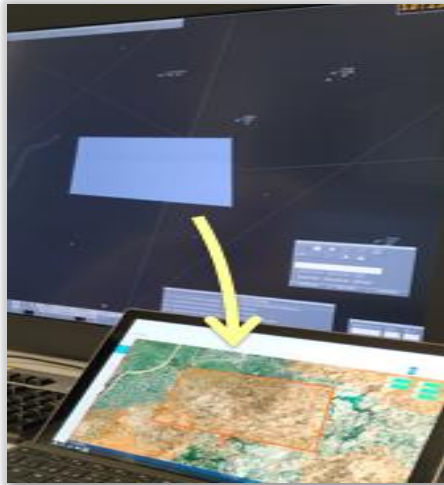
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- Avoid increasing ATCO workload



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# Main Outputs

- The demonstration has been articulated by a highly modular federated architecture.
- Interesting Future R&D Needs after DOMUS experience:
  - Airspace with some special requirements beyond “Emergency Zones”.
  - Different sets of flight rules within certain geofences (Emergency Zone example)
  - Flight plan: in-flight modification and consequences
  - Dynamic Geofencing not addressed (U3 service)
  - Scalability in VLDs

