



Celtic-Plus Proposers Day 19th May 2017, Barcelona

Project Pitch "UAV connectivity"

Tobias SCHLAAK, Airbus Defence and Space Germany Tobias.schlaak@airbus.com









What is the main benefit of the idea/proposal? What makes the added value? Why should I participate in the project?

- Unmanned systems (e.g. drones) increasingly significant
- Transportation will make even more use of 3rd dimension (congestions are a huge problem!)
- Connectivity of systems is crucial (safe, secure, flexible, bandwidth)
- Ecosystem is under high pace (4G > 5G, regulations, UTM etc.)
- No established connectivity solution for UAVs covering reqs
- We are currently developing a portfolio of products and services
 (→invest in connectivity as a key qualifying competence)
- Airbus is a key player in aerospace



Organisation Profile



WE CONNECT AND PROTECT **lives.**

Airbus Defence and Space is Europe's largest and most innovative defence and space company. We develop and manufacture world-class aerospace products. Our exceptional platforms and services allow our customers to address even their most challenging operational needs.

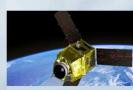




AIRBUS



















Proposal Introduction (1)



What is the idea/proposal about (vision, motivation, content)?

- Scope: commercial UAV applications for end-users (or dual use) (public transport, large industries, energy, security forces...)
- Connectivity covers vehicle C2 (green) and mission chains (blue)
- Blue: automatic processing of collected information like video, image, IR/EO (e.g. default detection, identification of missing elements, difference analysis, anomaly detection, etc.)
- *Blue*: Connectivity services for augmented reality (remote piloting)
- Green: Swarming capabilities: physical configuration to be defined; communication protocols to be identified and enhanced for improved performances (5G)
- Contribution to (ATM/UTM and Spectrum) regulations: What connectivity aspects should regulations take into account? What regulatory conditions do hamper connectivity most? Pattern breaking? Disruptions?



Proposal Introduction (2)



Short info on expected outcome, impacts, schedule

- Outcomes:
 - Definition of concise use cases involving end-users
 - Connectivity architecture definition
 - Connectivity design & prototyping
 - 1 to 3 flying demonstrations addressing key use cases
 - Identification of current regulation limits and proposal for evolutions
- Duration: 2 to 3 years
- Next milestone: we intend to answer the October call



Partners



Existing consortium, involved countries. Expertise, profiles and types of partners you are looking for.

• TBD, inviting all interesting contributors



Contact Info



For more information and for interest to participate please contact:



Tobias SCHLAAK tobias.schlaak@airbus.com +49 89 – 3179 3846 Willy-Messerschmitt-Str.1, 82024 Taufkirchen (Munich) www.airbusdefenceandspace.com