

Technological challenge 3

Department that propose the challenge:

- Deputy presidency and Ministry of the Presidency, Public Administration and Justice (Galician Emergency Agency)

1. - Areas/topics that the department wishes to investigate/innovate with the aim of improving the delivery of public services through UAVs.

Battery autonomy; protection systems of the rotor blades with aerodynamic efficiency; stabilisation systems that improve UAV technical characteristics in order to use in adverse weather conditions; satellite guidance system in difficult areas or no radio coverage; record "black box" in case of a UAV accident; accessory for counting the capacity in human concentrations; Amphibious UAVs for underwater searches; support for radio communications in disasters / disaster MCI (Mass Casualty Incident).

2. - Activities or resource intensive processes that can improve the department by employing UAV based solutions.

The range of possibilities for improvement is linked to the limitation of the UAV itself, since all parcels related to emergency management could be improved or of added value in the use of these devices. Thus, we can discuss emergencies involving industrial accidents, associated with human activities in bad weather situations search for missing persons, salvage and rescue, anthropic risks, radio communications and security, among others.

3. - Technical or technological challenges that should solve these solutions (this section includes the integration of solutions into existing processes or technology platforms department)

4. - Management and technical team provided by the department with technological partner.

Managerial and technical personnel: 3 persons

5. Operational improvement, process optimization, cost reduction ... that it expects to achieve by implementing solutions based on UAVs

In the case related to emergency management it is considered as essential its use and added value in operational improvements, optimisation of resources and risk reduction and economic costs associated with the underlying activity of the operational management of the emergency.