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## PRESS RELEASE

### **THE ARIADNA CONSORTIUM SUCCESSFULLY COMPLETES THE FIRST SIMULTANEOUS FLIGHT OF A CIVIL DRONE AND A MANNED AIRCRAFT IN A SPANISH AIRPORT**

- This exercise is one of the first experiences of flying drones in a conventional airport carried out in Europe
- The ATLAS Experimental Flight Center in Jaen hosted the tests in which two drones, a manned aircraft and an air traffic controller participated, simulating a real traffic situation at the airdrome
- Instrument landing procedures by satellite navigation for drones were validated
- The ARIADNA project, led by Indra and integrated by FADA-CATEC, ENAIRe, and CRIDA, is part of the SESAR program, which is the future technological pillar of the Single European Sky

**Madrid, May 23, 2016.-** The European ARIADNA consortium led by Indra and integrated by CRIDA, ENAIRe and Fada-Catec has completed the first simultaneous flight tests in a conventional airport of a drone or remotely piloted aircraft (RPAS/UAS) in the presence of a manned aircraft.

This is one of the first flying experiences undertaken in Europe for a drone to be able to operate in the area of the traffic of a conventional airdrome. The European ARIADNA project thus allows further progress in integrating these aircrafts in non-segregated airspace, i.e. in the same space used by manned aircrafts

Additionally, success in tests is a very important step for the members of the ARIADNA project, which are positioned at the forefront in the area of research and development for integration this aircrafts in the air traffic control environment.

The flight program was held at the ATLAS Experimental Flight Center, located in Villacarrillo (Jaen). This center has an associated airspace that can be segregated for such operations.

The exercises were carried out in two distinct phases. In the first, a drone, called Viewer, flew executing various maneuvers on the airfield while the Indra MRI P2006T manned aircraft operated simultaneously.

A controller supervised the operation, as you would do in a real situation, giving separation instructions to the aircrafts. The drone's remote pilot, which monitors the aircraft from the ground at all times, had the position data of both aircrafts provided by an ADS-B receptor, thus improving situational awareness of traffic in the area.

Another drone was used in the second phase of flights — the unmanned helicopter Logo— with which the feasibility of instrumental approach and landing procedures with vertical guidance based on satellite navigation was validated. The ability of these aircrafts to operate at an airport under the same conditions as other aircrafts was thus demonstrated.

#### **Leading R&D in Europe**

The ARIADNA project has been developed by a consortium of companies and institutions in the Spanish aeronautical sector, composed of Indra as coordinator and industrial partner of RPAs; ENAIRe as manager of Air Navigation in Spain; CRIDA, as a research center in air traffic management; and FADA-CATEC, as a research center and RPAs operator.





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The project is one of several demonstrations co-funded by the SESAR Joint Undertaking aimed at safely integrating drones into the European ATM system. SESAR (Single European Sky Air Traffic Management Research) was set up to modernise and harmonise ATM systems through the definition, development and deployment of innovative technological and operational solutions. Established in 2007, the SESAR Joint Undertaking (SJU) is a public-private partnership which pools the knowledge and resources of the entire ATM community in order to define, research, develop and validate SESAR Solutions. Founded by the European Union and Eurocontrol, the SJU currently has 15 members who together with their partners and affiliate associations represent over 80 companies working in Europe and beyond. The SESAR JU also works closely with staff associations, regulators, airport operators, and the scientific community. In 2014, the SESAR Deployment Manager (SDM), comprised of air navigation service providers, airlines and the SESAR-related Deployment Airport Operators Group (SDAG), coordinates the implementation of the EU's Pilot Common Project, the first set of SESAR Solutions to be deployed in a synchronised and timely manner across Europe.



FROM INNOVATION TO SOLUTION