



# ASPRID

Seven European entities are participating in ASPRID project

## **ASPRID continues to validate the effectiveness of the project to protect airports against drone intrusions**

- The latest validation test carried out within the *Airport System Protection from Intruding Drones* project confirms the system effectiveness in detecting, tracking and neutralising unauthorised drones at airports
- The results demonstrate ASPRID's ability to eliminate or reduce the impact of the drone threat on airport operations
- The exercise was based on the representation of different scenarios with real-time airport traffic simulation
- The project has a 2-year duration and is funded by the SESAR 3 Joint Undertaking under the European Union's Horizon 2020 research and innovation programme

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Partners in the *Airport System Protection from Intruding Drones* (ASPRID) have carried out a validation test of a system to safeguard airports from drone intrusions. The project has confirmed the effectiveness of the ASPRID system to detect, track and neutralise drones, eliminating or reducing the impact of unauthorised drone threats on airport operations.

This system has been developed through the multi-disciplinary analysis of potential safety-critical operations with unauthorised drones and their evolution to identify appropriate responses. In this way, ASPRID enables threat identification, tracking, flight path prediction and decision support with the help of AI, which increase its efficiency.



This validation test had a Gaming Exercise format based on the representation of different scenarios (from the least complex to the most demanding) in which real-time airport traffic simulation software tools were used, as well as a reporting environment developed during the project.

### **Qualitative and quantitative data**

The conclusions are based on qualitative and quantitative data collected during the validation test. The quantitative part, related to human-in-the-loop (HITL) and real-time simulations, has allowed the successful development of this test of the ASPRID solution in a laboratory environment. On the other hand, the qualitative part, performed through questionnaires and briefing sessions with experts, has provided risk assessment feedback that has confirmed the efficiency of the system and the positive impact on airport security.

The simulations involved ENAIRE air traffic controllers, experts from Aena's Security and Operations divisions and employees of the Spanish Ministry of the Interior who performed the role of the LEA (Law Enforcement Agency). For air traffic controllers, a clear value-added has been the integration of the drone's position and related threat into their regular radar display. In the words of the air traffic controllers involved: "When it comes to drone intrusions at airports, it is very useful to have the enhanced situational awareness provided by the ASPRID project prototype".

This validation test was organised last June at the premises of INTA (Instituto Nacional de Técnica Aeroespacial), together with *SoulSoftware* SRL, *Aerospace Laboratory for Innovative Components* (ALI Scarl) and the *Italian Aerospace Research* (CIRA).

### **About the ASPRID project**

ASPRID has developed an operational concept and system architecture to protect airport operations from unwanted drones by identifying technologies, procedures and regulations that can help the airport environment recover from any disruption as quickly and efficiently as possible.

The project has a 2-year duration and involves 7 European entities from Spain, Italy and France, experts in the different sectors involved: airports, research, innovation technologies, drone operations, IT, safety and security.



The companies that make up the consortium are: Aena, *Aerospace Laboratory for Innovative components* (ALI Scarl), *Italian Aerospace Research Center* (CIRA), ENAIRE, Instituto Nacional de Técnica Aeroespacial (INTA), *Office National d'Etudes et de Recherches Aérospatiales* (ONERA) and *Soul Software* SRL.

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Further information on the project:

Website: [www.asprid.eu](http://www.asprid.eu)

Twitter: [@ASPRIDProject](https://twitter.com/ASPRIDProject)



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