



European Commission selects seven ENAIRE projects to forge ahead with the Single European Sky

- ENAIRE is participating with CRIDA, its R&D partner, to develop the SESAR Exploratory Research technology programme
- ENAIRE's proposals have been chosen from 29 finalists out of a total of 128 proposals presented
- These projects involve drone flight capacity, communications networks, the impact of new automation systems on safety, the use of artificial intelligence and assessment methods to incorporate new technologies
- Other projects include the probabilistic prediction of weather phenomena and models of air control performance at the European level

Madrid, 21 April 2020

The European Commission has selected seven ENAIRE projects involving the SESAR Exploratory Research programme to forge ahead with the Single European Sky.

The ENAIRE and CRIDA projects were chosen from 29 proposals selected out of a total of 128 applications that were presented for the fourth call of the European Commission's SESAR Exploratory Research.

The high proportion of projects awarded demonstrates ENAIRE and CRIDA's creative potential to contribute novel ideas to the digitisation of European air traffic management.

It also represents a great milestone and an opportunity for ENAIRE, together with CRIDA, to contribute to the research, development and innovation taking place in Europe involving the most novel concepts in the field of air traffic management.

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Spain's air navigation manager is at the forefront of air traffic management technology, thanks to the active role that it will play in the following initiatives:

- **DACUS Project.** Promotes services to balance capacity and demand involving drone traffic. It integrates tools with predictions for demand based on Artificial Intelligence.

ENAIRe is taking part in this proposal under the leadership of CRIDA, together with EUROCONTROL, Boeing Research & Technology Europe S.L.U., ISA Software Limited (ISA), Ingeniería y Economía del Transporte (INECO), Jeppesen GmbH (JEPP), Darmstadt University (Tuda), Sopra Steria Group (SSG), Toulouse Metropole (TM) and AHA (Netgengid ehf).

- **SINAPSE Project.** Studies a digital communications network with an architecture based on software augmented with artificial intelligence.

ENAIRe is participating alongside Frequentis AG and Bradfrede University in this initiative, which is led by ALTYS Technologies.

- **FARO Project.** Analyses the impact that new automation systems have on the safety and resilience of ATM systems.

CRIDA is spearheading this proposal in cooperation with ENAIRe, EUROCONTROL, Polytechnic University of Madrid (UPM), University of Belgrade (UB), Lund University (LU) and ZenaByte.

- **TAPAS Project.** Facilitates understanding of the results of artificial intelligence systems and automatic learning to make them transparent and explainable, thereby facilitating their implementation in air traffic management.

CRIDA is leading this initiative in concert with Boeing Research & Technology Europe S.L.U., ISA Software Limited (ISA), INDRA Systems (INDRA), University of Piraeus (UPRC) and the Fraunhofer Research Centre.

- **ITACA Project.** Develops tools and methodologies to assess new policies and regulations in order to accelerate the development and implementation of new technologies in air traffic management.

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CRIDA is involved, together with Kungliga Tekniska Hoegskolan (KTH) and Transport & Mobility Leuven, under the leadership of Nommon Solutions and Technologies (NOMMON).

- **ISOBAR Project.** Considers the use of artificial intelligence and the prediction probabilities of meteorological phenomena to more efficiently manage capacity and demand.

CRIDA leads this proposal, in which Carlos III University of Madrid (UC3M), Cranfield University (CU), EUROCONTROL, Ecole Nationale de l'Aviation Civile (ENAC), Direction des Services de la Navigation Aerienne (DSNA), Swiss International Air Lines Ltd. (SWR), Sopra Steria Group (SSG), Earth Networks (EN), Spain's National Meteorological Agency (AEMET) and Météo-France (MF) are also taking part.

- **NOSTROMO Project.** Develops models for measuring ATM performance at the European level using artificial intelligence. The goal is to yield a system that is simple and transparent while preserving the complexity necessary to represent the air traffic management system realistically.

CRIDA is leading this initiative, which also involves Nommon Solutions and Technologies (NOMMON), Universitat Politècnica de Catalunya (UPC), ISA Software Limited (ISA), University of Westminster (WU) and University of Denmark (DTU).

These projects will be implemented over a period of 30 months, and those research concepts that yield the most promising results will be considered for subsequent research and development phases, both within the SESAR programme and as part of the Horizon Europe framework.



CRIDA, ENAIRE's innovation centre

CRIDA is a non-profit economic interest group, established by ENAIRE, the state-owned engineering company Ineco, and the Polytechnic University of Madrid (UPM), and its mission is to improve the efficiency and performance of the air traffic management system.

By developing R&D projects in close collaboration with ENAIRE, the senior partner, it helps to provide innovative solutions for safely developing quality air navigation services efficiently and sustainably.

About ENAIRE

ENAIRE is the company of the Ministry of Transport, Mobility and the Urban Agenda that manages air navigation in Spain. It renders aerodrome control services at 21 airports, including the busiest in terms of air traffic, plus en-route and approach control, from five control centres: Barcelona, Madrid, Gran Canaria, Palma and Seville. In addition, ENAIRE provides communications, navigation and surveillance services to 45 air control towers.

In 2019, ENAIRE handled 2.1 million flights to and from four continents (Europe, America, Asia and Africa), transporting 300 million passengers.

ENAIRE is the fourth most important European air navigation service provider, and, in a clear commitment to the Single European Sky initiative, belongs to international partnerships such as SESAR (Single European Sky ATM Research) Joint Undertaking, SESAR Deployment Manager, A6, iTEC, CANSO (Civil Air Navigation Services Organisation) and ICAO (International Civil Aviation Organization).