

INDRA AND ENAIRE VALIDATE THE SAFE AND EFFECTIVE INTEGRATION OF DRONE AND MANNED AIRCRAFT FLIGHTS THROUGHOUT EUROPE

- The technical tests of the company's digital platform conducted at Málaga Airport constitute a milestone in the future of air navigation, by allowing the safe co-existence of drones and manned aircraft within the airspace
- The validation lays the groundwork for the progressive and safe implementation of the new drone applications and operations that are being developed on a daily basis, including infrastructure inspection, surveillance, emergencies, monitoring, and delivery services
- Indra and ENAIRE are leading the development of this technology within the framework of the ENSURE project, funded by the European Commission (Horizonte Europe grants) and managed by SESAR 3 Joint Undertaking, which involves 18 partners across Europe

Málaga, February 3, 2026. – Indra has taken a key step towards the safe and effective integration of drone flights into the European airspace. In partnership with ENAIRE, the company has successfully validated the interoperability of unmanned air traffic management systems (U-space) and conventional air traffic control (ATM) in a technical and operational demonstration carried out at Málaga Airport, which is managed by Aena.

The validation demonstrated how they can co-exist in a safe and coordinated manner by managing their flights in a fully digital setting, thereby laying the groundwork for the progressive incorporation of new drone and unmanned aircraft systems (UAS) operations into the day-to-day environment. These include infrastructure inspection, surveillance, emergency management, monitoring, and delivery services, the development of which requires orderly and reliable integration into the airspace.

In this sense, the solutions and procedures developed within ENSURE project, have a direct application on drones' operations in highly complex airspaces, such as the airport environment or urban areas near the airport, allowing the safe integration of these new airspace users with conventional aviation. This would allow for future drones' maintenance and runway inspection to be carried out, sharing real-time information between U-space and ATM system, thereby reducing downtime whilst maintaining the safety levels of conventional air traffic.

The demonstration included the presentation of the results of the operational validations carried out in Spain within the framework of the European ENSURE project, granted by the European Commission (Horizonte Europe grants) and managed by SESAR 3 Joint Undertaking. It involved a specific trial of the ATM-U-space interface developed by Indra, which allows for the coordinated integration of individual drone operations in areas of higher operational risk through an ongoing exchange of information between the two environments, as well as dynamically adjusting the airspace according to the needs of each moment, ensuring that drones and aircraft do not interfere with each other and maintaining aviation safety standards

The validation exercises covered the entire operational cycle, from the flight planning to the real-time flight management, to this end a great deal of constant coordination between the drone operators involved and the airport's air traffic control service has been required, while maintaining at all times the sector's stringent safety standards and the priority of the airport operations.

Led by Indra, the project involves 18 European partners, including air navigation service providers, industry, research centers, and leading technological players. Against this backdrop, ENAIRE's role will prove key as an air navigation service provider and designated single common information service provider in Spain, a core player in the operational implementation of U-space.

ENAIRE is developing and deploying one of the most advanced unmanned air traffic management (U-space) platforms throughout the country, with Indra as the technology provider, which are vital for the safe integration of drones into the airspace. This platform will facilitate the development of a completely new sector in Spain that will lead to new services, employment, and technological know-how.

UTM and ATM leadership

The validation conducted in Málaga is particularly significant within the context of the rapid growth of drone use in Europe, which is being driven by the demand for surveillance, maintenance, inspection, and transport services in multiple sectors. Unmanned traffic management (U-space) systems capable of identifying, coordinating, and managing drone access and mobility in a safe and effective manner are of utmost importance for the integration of this upturn into airspace operations.

In this regard, Indra Group has strengthened its standing as a major player in drone traffic management by recently acquiring GuardianUTM, the unmanned traffic management platform run by the British Altitude Angel firm. This operation will broaden its offer with a comprehensive portfolio of solutions.

This leadership is based on Indra's far-reaching experience of air traffic management (ATM) systems. In global terms, the company has equipped over 11,000 facilities worldwide and it boasts one of the most comprehensive portfolios of new-generation solutions in the industry, one which is capable of managing a flight from its take-off to its arrival at its destination.

About Indra

Indra is a leading Spanish multinational and one of the foremost global defense, air traffic and space companies that, through technology, protects our current way of life and anticipates the needs of the future. Its committed team of experts, its in-depth knowledge of the business and the latest technologies, and its unique innovation and systems integration capabilities make it the trusted technology partner for key operations and digitalization for its customers around the world. Thanks to its leadership in major European programs and projects, as well as its spirit of collaboration and partnership strategy, it drives the industrial and innovative ecosystem in these sectors. Indra is an Indra Group company which, in the 2024 fiscal year, posted revenue totaling €4.843 billion, with a local presence in 49 countries and business operations in over 140.

About ENAIRE

ENAIRE is the air navigation service provider in Spain.

As a company of the Ministry of Sustainable Transport and Mobility, it provides air traffic control services during the en route and approach phases of all flights to and from Spain and overflights. In addition, it manages communications, navigation and surveillance services from ENAIRE in the airspace and the entire AENA airport network in Spain and provides aerodrome air traffic control services in 21 airports, including the busiest.

ENAIRE is the fourth largest European air navigation service provider, and it is a member of international partnerships A6 Alliance, SESAR (Single European Sky ATM Research) Joint Undertaking, SESAR Deployment Manager, iTEC, CANSO (Civil Air Navigation Services Organisation) and collaborates closely with ICAO (International Civil Aviation Organization).

ENAIRE has obtained the highest rating in the key performance indicator for air safety at European scale for six consecutive years, the last five with the maximum possible score of 100%. It has also been awarded the EFQM 600 Seal for its safe, efficient, innovative and sustainable management of air navigation services.

About SESAR 3 Joint Undertaking

SESAR is the technological pillar of the EU's Single European Sky policy and a key enabler of the European Commission's Sustainable and Smart Mobility Strategy. SESAR defines, develops and deploys technologies to transform air traffic management in Europe.

The SESAR 3 Joint Undertaking (SESAR 3 JU) is a European institutional public-private partnership set up to accelerate through research and innovation the delivery of this digital transformation, in other words, the Digital European Sky. To do so, it is harnessing, developing and accelerating the take-up of the most cutting-edge technological solutions to manage conventional aircraft, drones, air taxis and vehicles flying at higher altitudes. With the Digital European Sky comes the promise of making Europe's airspace the most efficient and environmentally-friendly sky to fly in the world.

Building on the work of the first SESAR Joint Undertaking, the SESAR 3 JU has 10-year mandate (2021-2031), corresponding to the duration of the Horizon Europe programme (2021-2027), followed by 4 years to complete the work outlined in the Multiannual Work Programme.

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