

## **INDRA AND ENAIRE DIGITIZE THE SPANISH SKY AND LEAD TRANSFORMATION OF AIR TRAFFIC ACROSS EUROPE**

- **The new generation of air traffic systems is the only technology in a position to optimize flights and reduce CO2 emissions around the world**
- **Indra, a global technological leader in the development and deployment of these systems, and ENAIRE, the fourth largest air traffic services provider in Europe in terms of volume, have just completed the digitization of the en-route and approach control centers and towers at the main airports in Spain**
- **This modernization means more flights can be handled more safely and profitably, increasing punctuality and enhancing passenger comfort**

**Madrid, August 4, 2021.** - Indra, one of the chief global technology and consulting companies, and ENAIRE, the fourth largest air traffic services provider in Europe in terms of volume, have modernized the country's main air traffic control towers in what constitutes a decisive step towards the digitization of the Spanish and European airspace.

This achievement brings closer the goal set by the European Union of making Europe the most efficient and environment-friendly region for flying in the world.

The next generation of air traffic systems constitute the only technology currently available that is capable of reducing the CO2 emissions generated by aviation as we await the development of cleaner fuels and electric-powered aircraft in the future.

Indra and ENAIRE have taken the lead in the deployment of these systems. They have done so in one of the continent's most important airspaces in terms of size and traffic volume. Despite the difficulties the industry has endured in recent months due to the pandemic, the two partners have demonstrated their commitment to the objective of overcoming one of aviation's most pressing challenges, namely flying in cleaner way to minimize its environmental impact.

The airport towers at Josep Tarradellas Barcelona-El Prat, Palma de Mallorca, Adolfo Suárez Madrid-Barajas, Málaga-Costa del Sol and Alicante-Elche have therefore been modernized and are now operating with the new-generation SACTA-iTEC 4 system.

This milestone has been reached following the implementation of the same system in Spain's major en-route and approach control centers just a few months before.

ENAIRE thus manages all phases of the country's air traffic in a fully digitized manner, from the moment the aircraft prepares to take off until it reaches its destination.

This leads to much smoother traffic management, as each flight can be planned much more accurately to prevent unforeseen events and unnecessary holding times for the aircraft.

The new digitized control towers provide for smooth, continuous descents requiring less use of the engine power of the aircraft, which also reduces the noise level.

The new features of the A-SMGCS-2 (Advanced Surface Movement Guidance and Control Systems), which control and guide the movements of the aircraft on the flight platform, enable safer operations in adverse weather conditions with poor visibility and at night. The controllers can act in real time on the runway conditions and receive alerts categorized by the risk in the event of an incursion, key in airports with several landing strips crossing each other.

The electronic progression sheets provide the controller with automated updates of the information on each flight, saving time and allowing more movements to be managed.

All these data flow between the different control centers and towers involved in the management of each operation. Thus, for example, the terminal area controller responsible for managing particularly complex airspaces can see the sequence of take-offs planned in real time so as to better organize his/her work. This improves the coordination between the controllers and facilitates "silent" management, whereby phone calls are replaced by accurate and updated data reachable by the controller by means of a simple click on his/her screen.

### **About Indra**

Indra ([www.indracompany.com](http://www.indracompany.com)) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence markets, and a leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America through its affiliate Minsait. Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2020 financial year, Indra achieved revenue of €3.043 billion, near 48,000 employees, a local presence in 46 countries and business operations in over 140 countries.

### **About ENAIRE**

ENAIRE is the national air navigation agency in Spain. As a partner company with the Spanish Ministry of Transport, Mobility and Urban Agenda, it provides route control services for all domestic and international flights through its five control centers based in Madrid, Barcelona, Seville, Gran Canaria and Palma, as well as approaches to all airports throughout the country. Moreover, 45 air traffic control towers receive ENAIRE's communication, navigation and surveillance services and 21 airports use its airbase control services, including those with the highest traffic in the country. ENAIRE is the fourth-largest European air traffic agency and, in a firm commitment to the Single Sky, forms part of international partnerships such as SESAR Joint Undertaking, SESAR Deployment Manager, A6, iTEC, CANSO and ICAO. ENAIRE is the official provider of aeronautical information in Spain.