

## **PROJECT WILL PROVIDE SINGLE VIEW OF AIR TRAFFIC TRAJECTORIES IN EUROPE FOR MORE PREDICTABLE AND PUNCTUAL FLIGHTS**

- **Providing a precise and synchronised view of air traffic in Europe will enable the full introduction of four-dimension trajectory flights across the continent**
- **This will enable a more efficient way of flying, improving punctuality, reducing fuel consumption and CO<sub>2</sub> emissions, increasing capacity and reinforcing security**
- **28 companies and bodies led by Indra are developing the solution that will improve quality, consistency and speed in the exchange of aeronautical, meteorological and trajectory-related information**

**Madrid, November 23, 2017.** A European project is developing solutions and procedures to provide one single and precise view of air traffic movements across the continent. The Four Dimensions Trajectory Management (4DTM) project is addressing one of the key challenges for advancing the Single European Sky: guaranteeing that navigation service providers, airport operators, airlines and the aviation community at large share a single harmonised view that is updated in real time with the movements of both civil and military aircraft throughout Europe.

The project is run within the framework of SESAR, the technological pillar Single European Sky, and is funded under the EU's Horizon 2020 research and innovation program. Led by Indra, the project consortium is comprised of 28 participants including navigation service providers, technology companies and research bodies from European Union, Norway and Switzerland.

The core characteristic of 4D is that trajectories are always synchronised between air and ground systems in every moment of its route. The project will use data from each country's air traffic ground control centres, the European Network Manager - the body that supervises all of Europe's air traffic-, and airport operators. It will also process data on trajectories handled by the aircraft themselves and data used for flight planning by airlines' flight operations centre. Likewise, information on military flights will also be used in order to better evaluate the impact on civil traffic.

Not only with will the project synchronise flight trajectory data, it will also develop new tools to improve the availability of precise and harmonised aeronautical and meteorological information. Doing so will enable the detection in advance, of any unexpected situations that may generate delays and require adjusting scheduled operations.

The solution paves the way for the definitive implementation of flights using 4D trajectories across the entire continent. This new way of flying allows aircraft to select direct routes, thereby reducing fuel consumption, CO<sub>2</sub> emissions and costs. Furthermore, controllers will have available more precise information for planning operations and managing traffic more smoothly, and will be to respond to the expected increase of traffic in the coming years. Finally, improving Europe's transportation efficiency will not only directly result in cost savings, but will also improve the environment and airline passenger convenience, while directly impacting the economic growth of the entire continent.

The objectives of SESAR are to enable a threefold increase in traffic management capacity across Europe, improve safety by a factor of 10, reduce the environmental impact by 10%, and cut the costs of air traffic management services by 50%.

Only by modernising systems and air operations will Europe be able to keep pace with the constant annual increases in air traffic. Flights are forecast to rise from 10 million per year at present to 16.9 million by 2030.

### **About SESAR**

The aim of SESAR, as the technological pillar of the Single European Sky initiative, is to modernize and harmonize air traffic management in Europe. SESAR Joint Undertaking (SESAR JU) was created in 2007 as a

public-private partnership to support these efforts. To provide this support, the consortium uses the combined knowledge and resources of the entire ATM community to define, research, develop and validate innovative technology and operational solutions. SESAR JU is also responsible for executing the European ATM Master Plan, which defines the EU priorities in R&D and implementation. Founded by the European Union and Eurocontrol, SESAR JU comprises 19 members. Together with partners and affiliated associations, it represents more than 100 companies active both in Europe and further afield. SESAR JU also works closely with airport staff, associations, regulators and operators as well as the scientific community.

**About Indra**

Indra is one of the main global consulting and technology companies, the top IT firm in Spain, and the technology partner for the core operations of its clients businesses worldwide. It offers a comprehensive range of proprietary solutions and cutting-edge services with a high added value in technology, which adds to a unique culture that is reliable, flexible and adaptable to its clients' needs. Indra is a world leader in the development of end-to-end technology solutions in fields such as Defense & Security, Transport & Traffic, Energy & Industry, Telecommunications & Media, Financial Services, Electoral Processes, and Public Administrations & Healthcare. Through its Minsait unit, it addresses the challenges of digital transformation. In 2016 Indra posted revenues of €2,709m and had a workforce of 34,000 professionals, a local presence in 46 countries, and sales operations in more than 140 countries. Following its acquisition of Tecnocom, Indra's combined revenues amounted to more than €3,200m in 2016 with a team of nearly 40,000 professionals.