



Satellite constellation led by ENAIRE and Indra

STARTICAL RECEIVES SUPPORT FROM EUROPEAN UNION TO BRING AIR TRAFFIC MANAGEMENT TO SPACE IN A PIONEERING PROJECT

- The ECHOES Digital Sky Demonstrator, led by Startical, ENAIRE and Indra, will receive some 15 million euros from the European Climate, Infrastructure and Environment Executive Agency (CINEA), with the aim of demonstrating the advantages, reliability and availability with which new space-based applications will transform air navigation
- The demonstrator, which will accelerate the deployment of new satellite communication and surveillance systems to improve the capacity, fluidity, efficiency and environmental friendliness of air transportation, was one of the highest-rated proposals in CINEA's Intelligent Transport Call for Proposals
- ECHOES allows for the continuation of investment to promote this pioneering satellite infrastructure within the framework of SESAR and its Digital European Sky research and innovation programme and will be a driving force for the Spanish and European aerospace sector, positioning it in a highly disruptive segment and boosting its competitiveness

Madrid, July 21, 2022 - The innovative proposal of Startical, created by Indra and ENAIRE, to launch a constellation of small satellites to improve air traffic management (ATM) has received significant backing from the European Commission, which will support the development of a key demonstrator to speed up the deployment of the solution.

The Climate, Infrastructure and Environment Executive Agency (CINEA), through the Connecting Europe Facility (CEF) fund, will make a contribution of around 15 million euros to the ECHOES project, led by Startical, ENAIRE and Indra, with the objective of validating and quantifying the advantages, reliability and availability, with which this space infrastructure will transform the air navigation sector, making it much more sustainable and bringing it closer to the decarbonisation objective set for 2050.

The proposal secured this high percentage of funding in the call for Intelligent Transport projects launched by CINEA thanks to an excellent rating, with some of the highest possible scores in the various evaluation criteria. This is a recognition of its technical solvency, its innovative nature, the enormous impact of the initiative and its disruptive capacity.

The EU's strong support for the ECHOES project through this call, in addition to allowing for the continuation of the investments in this technology within the framework of the SESAR 3 Joint Undertaking (SESAR 3 JU) and its Digital European Sky research and innovation programme, is compatible with the Next Generation Funds, which are considered a sign of the Commission and the Member States' consistency and complementarity in terms of promoting the development of major capabilities for air infrastructure and for the European and Spanish aerospace sector.

In addition to improving the capacity, fluidity, efficiency and environmental friendliness of air transport, this disruptive critical satellite infrastructure, with a major technological and industrial component, will act as a driving force that will position the Spanish and European industry at the forefront of new space, a business segment with strong growth potential. It will mean a leap forward in terms of quality, which in turn will boost the sector's competitiveness on a global scale.

Transformative technology that acts as a driving force

Press release



Startical's managing director, Fernando García, says, "The European Union and CINEA are decisively backing an initiative that provides a groundbreaking and bold solution to the challenges faced by the sector to ensure its sustainability and growth. As a strong driving force, the project should provide momentum for the development of an industrial sector that, in Europe, has substantial capabilities, but that must move towards the deployment of the paradigms of the new commercial Space."

ENAIRE's managing director, Ángel Luis Arias, highlights, "The confidence the EU has placed in a project that offers a unique opportunity to place our industry on the global cutting edge in terms of the new Space segment, which is currently growing rapidly."

Indra's Director of Integrated Systems and Space, Domingo Castro, says, "The deployment of a large constellation of satellites, which will be replaced every five years, ensures a constant flow of work that could energise the entire sector, also requiring the development of completely new advanced technologies on a constant basis."

Oceanic and remote routes

As part of the ECHOES demonstrator, two small satellites will be launched into space to provide combined VHF voice and data communications and automatic dependent surveillance broadcast services to meet the needs of air traffic controllers and airlines.

The objective is to provide a quality service in oceanic, polar and remote areas that existing radars and terrestrial systems cannot cover. This prevents aircraft from having to increase the safety buffer on arrival, slowing down and causing traffic on some of the busiest routes on the planet.

The project will demonstrate the feasibility, potential environmental impact reduction, and cost-benefit ratio that ATM services provided from space could offer, paving the way for regulators and standardisation bodies to establish the rules for their deployment and for the optimisation of air routes.

ECHOES allows for the continuation of investment in the development of these technologies within the SESAR's VOICE project. At the same time, the roll-out of the project confirms the high expectations that airports, air navigation service providers and airlines, as well as the European Commission, have expressed regarding the Startical project and its transformational capacity in support of the Digital European Sky, during the last edition of the World ATM Congress, held in Madrid last June.

The ECHOES project consortium, coordinated by Startical, also includes ENAIRE, Indra, Mitiga, NAV Portugal and DLR, and works in collaboration with a group of 21 organisations from all over the continent representing industry, universities, navigation service providers, national safety agencies and other institutions, including some of the major regulatory bodies such as EUROCAE and EASA and highly significant industry players such as IATA and EUROCONTROL.

About Startical

Startical is a company recently created by ENAIRE, the national air navigation agency in Spain, and Indra, a world leader in the development of air traffic management systems. The company will launch a constellation of over 200 satellites specifically designed for air traffic management (ATM), that will provide global VHF AMS(R) voice and data communications coverage and ADS-B surveillance services. Startical will own the constellation, which will result in controlled costs, the ability to offer integrated communication and surveillance services and new services such as integrated ADS-B data verification using multilateration techniques. Startical's services will not require any changes to avionics or existing facilities. For further information: www.startical.com.

About ENAIRE

Press release



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 air traffic manager in Europe. As of January 1, 2022, it chairs the A6 Alliance, a coalition for the modernization of the air traffic management system of air navigation providers responsible for more than 80% of European air traffic. It is also a member of other international alliances for the promotion of the Single European Sky such as SESAR Joint Undertaking, SESAR Deployment Manager, ITEC, CANSO and ICAO. ENAIRE, as the agency recognized by MITMA as being in charge of the implementation of the U-space system in Spain, will use its digital platform to provide the common information services (CIS), which are essential for the provision of U-space services to drones and Urban Air Mobility in interaction with the local air traffic services, and which will allow for the safe coexistence of all types of aircraft. ENAIRE has earned the highest score in the key performance indicator for aviation safety at the European level. It also has the EFQM 500 Seal for its safe, efficient, innovative and sustainable management of air navigation services. For further information, visit www.enaire.es.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers worldwide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence markets, and a leading firm in Digital Transformation 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, end-to-end focus and with a high innovation component. In the 2021 financial year, Indra achieved a revenue of 3.39 billion euros, near 52,000 employees, local presence in 46 countries and business operations in over 140 countries.

About SESAR 3 Joint Undertaking

The SESAR 3 Joint Undertaking is an institutionalised European partnership between private and public sector partners set up to accelerate through research and innovation the delivery of 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.

The SESAR 3 JU partnership brings together the EU, Eurocontrol, and more than 50 organisations covering the entire aviation value chain, from airports, airspace users of all categories, air navigation service providers, drone operators and service providers, the manufacturing industry and scientific community.

The partnership also works closely with the regulatory and standardisation bodies, notably EASA and Eurocae, as well as key stakeholders, such professional staff organisations, the space and military communities and global partners.