



ENAIRE launches the new Multilateration Surveillance system at the Asturias Airport

 This is an investment in the most recent cutting-edge technology of over 600,000 euros.

20 September 2018

ENAIRE, the entity responsible for air navigation in Spain, has today put the new state-of-the-art Multilateration System into service at the Asturias Airport, after completing the work to replace the current system.

The new system, installed at the Airport and surrounding locations, caters for the needs of the air traffic controllers in the Asturias Airport tower and the ENAIRE Control Centre in Madrid.

This type of surveillance system is used to provide information on the position of each aircraft, its identification and the altitude at which it flies, thereby enabling the location and identification of all traffic operating within its scope.

The work consisted in renewing the existing system, which was put into service in 2006. The computer equipment supporting the system and its monitoring systems have been replaced, as well as the *hardware* linked to the aircraft transmission systems, and important installations have been carried out in both the control tower and the airfield. The antennas have also been adapted to the new transmission equipment and all the system's *software* has been renewed and correctly set.

The system was launched after checking all settings and final adjustments, the system having been tested on the ground and after finishing training courses for the technicians in charge of system maintenance and supervision.





This new facility boosts ENAIRE's international status as an air navigation operator in the surveillance field, in line with European requirements to progressively implement new technologies that improve European air traffic management.

Multilateration (MLAT) Systems

Besides radars, ENAIRE uses other surveillance systems at some airports to determine aircraft position, such as Multilateration Systems.

A Multilateration System consists of an array of receiving antennas spread over the airfield and data processing units. It works from radio signals emitted by aircraft and received by the aforementioned array of system antennas, which triangulate to determine the aircraft's position with high precision. This triangulation is performed by observing the difference in the time it takes for the signal emitted by the aircarft to reach the main servers and the signal received by each of the antennas.

The Asturias Airport Multilateration System consists of two parallel subsystems: an Airport surface surveillance subsystem (MLAT) and a subsystem that widens the range to cover areas adjacent to the Airport, supplementing the secondary radar range (widened area Multilateration System, known by the acronym Wam-Wide Area Multilateration).

About ENAIRE

The public corporate entity ENAIRE is a company designated by the Ministry of Public Works to manage the fourth largest airspace in Europe in terms of traffic through 5 control centres, 21 control towers and a network of air traffic infrastructure and equipment. In 2017 the air traffic managed by ENAIRE transported over 250 million passengers in 2 million flights.