

First for France EGNOS Aircraft Landing

Pau Pyrénées in southern France has become Europe's first airport to use the new EGNOS Safety-of-Life Service, to guide aircraft in for landing using only this highly accurate space navigation signal. On 2nd March the EGNOS Safety-of-Life Service was officially made available for the safety-critical task of providing vertical guidance to aircraft on final approach.

This represents the culmination of 15 years work by ESA, the European Commission, the EGNOS Operator and Infrastructure Group - a club of seven European Air Navigation Service Providers - and Eurocontrol, the European Organisation for the Safety of Air Navigation.

Eurocontrol is now working with the air navigation service providers in Europe, the airspace users and the national civil aviation authorities to promote the use of EGNOS. France's Directorate General for Civil Aviation (DGAC) is among their most active partners.

"Before a suitably equipped aircraft can perform EGNOS-based approaches to any runway, a dedicated approach procedure has to be published," explained Benoit Roturier of DGAC. "We aim to publish as many procedures as we can. By 2020, all of France's approximately 100 airports should be EGNOS-capable. From the point of view of navigation strategy we see many benefits, notably improving safety on smaller runways, where no vertically guided approach is available. For instance, the availability of EGNOS-based approaches should prevent such serious accidents as the crash in 1992 involving an Airbus 320 near Strasbourg. EGNOS is capable of providing reliable vertical guidance everywhere, without any additional local ground-based infrastructure."

Clermont-Ferrand Airport in central France is also set to start using EGNOS - serving mainly business aircraft - while Marseilles Airport should also join them, chosen because it is used by Eurocopter for helicopter certification.

Le Bourget Airport is also scheduled to be equipped with EGNOS by the time the Paris Air Show starts in June.

The European Geostationary Navigation Overlay System (EGNOS) combines geostationary satellites with a network of ground stations to sharpen the accuracy of and integrity of GPS signals across Europe.

Today France is one of the the European states with the most runways equipped with instrument landing system (ILS) infrastructure, but over time the aim would be to rationalise deployment of this expensive equipment, gradually replacing ILS with EGNOS-based procedures offering more or less the same level of performance.

France aims to target regional airports and smaller airlines serving business travellers first - the same development strategy that has worked well for the Wide Area Augmentation System, the US equivalent of EGNOS.

Beluga planes used for transporting Airbus aircraft parts between industrial sites all over Europe will be the first large EGNOS-equipped aircraft, with their first certification flights due to take place later this spring.

"Airbus Transport became interested because their planes go to smaller runways that are not always ILS-equipped, and they use Pau for training," explained Mr Roturier. "The main Airbus company also plans to equip its new A-350 line with EGNOS. The next phase on the avionics side, aiming at expanding the range of EGNOS-equipped users, would be to look at retrofitting existing aircraft."