



## **EGNOS APV-I and HEDGE projects implementation in Poland**

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The implementation of the EGNOS system to APV-I precision approach operations, according to ICAO requirements in Annex 10. This need many analysis accuracy, integrity, continuity and availability SIS (Signal in Space) to define useful and certification EGNOS like SBAS (Satellite Based Augmentation System) in aviation, especially in landing. Also, the project will try to exploit the excellent accuracy performances of EGNOS to analyse the implementation of GLS (GNSS Landing System) approaches (Cat I-like approached using SBAS, with a decision height of 200 ft), Chelm Town located near Polish-Ukrainian border is also at the east border of planned EGNOS coverage for ECAC states. In this place there is a navigation center with EGNOS and EUPOS receivers. The starting of the project is close to October 2008. According to current EGNOS programme schedule, the project activities will be done with EGNOS system v2.2, which is the version released for civil aviation certification. Therefore, the project will allow to demonstrate the feasibility of the EGNOS certifiable version for civil applications. Other project that we will present in our article is HEDGE (Helicopters Deploy GNSS in Europe).

The project objectives are to achieve the following by the end of the project:

- To develop the helicopter SOAP (SBAS Offshore Approach Procedure) procedure (and necessary avionics) and then to successfully demonstrate it to the user community.
- To develop helicopter PINS (Point in Space) procedures for mountain rescue and HEMS (Helicopter Emergency Medical Services), and to then successfully demonstrate them to the user community.
- To demonstrate EGNOS (European Geostationary Navigation Overlay Service) APV (approach with vertical guidance) approaches to general aviation in Spain, Poland and Greece.
- To develop an integrated navigation/surveillance concept and demonstrate it in Greece.