



## EASA Safety Information Bulletin

**SIB No.:** 2011-24R1  
**Issued:** 11 June 2012

**Subject:** **European Geostationary Navigation Overlay Service (EGNOS) Availability**

**Ref. Publication:** ESSP EGNOS Service Notice (SN) [002, Rev. 2.0](#) dated 23 April 2012 and SN [003, Rev. 1.1](#) dated 3 April 2012.

**Applicability:** All aircraft certified for conducting RNAV/GNSS approaches to LPV minima, or LNAV/VNAV minima when guidance is based on SBAS/GNSS altitude, in European airspace.

Some acronyms used in this SIB:

ESSP = European Satellite Services Provider

GNSS = Global Navigation Satellite System

ICAO = International Civil Aviation Organization

LPV = Localiser Performance with Vertical Guidance

LNAV = Lateral Navigation

RNAV = Area Navigation

SBAS = Satellite Based Augmentation System

VNAV = Vertical Navigation

**Description:** The EGNOS Safety of Life (SoL) service was declared operational on 02 March 2011, allowing the use of EGNOS in critical phases of flight.

Sometime after the declaration, it became apparent that EGNOS occasionally, but more frequently than anticipated at the time of SoL declaration, transmitted incoherent data in the messages containing information on the position and orbits of the geostationary satellites (i.e. in order to use a SBAS satellite for ranging, similar to the operation of a GPS satellite).

A new EGNOS release has been introduced into service that, among other improvements, intends to solve the incoherency in the messages containing information on the position and orbits of the geostationary satellites. After the deployment of the new release, ESSP has confirmed that the identified problem is corrected (see ESSP SN 003). Additionally, available results after the deployment have shown an improvement of the EGNOS Signal-In-Space (SIS) performances with respect to previous deployed version.

This is information only. Recommendations are not mandatory.

Despite these corrections and improvements, the EGNOS SIS is not fully compliant yet with the ICAO Annex 10 requirements related to continuity of service and availability for APV SBAS approaches in the EGNOS Service Area.

The European airspace regulators have therefore been reminded by the Competent Authority for the EGNOS service provider about the ICAO recommendation to put in place operational mitigations for all SBAS approaches as long as EGNOS does not fully comply with the ICAO standards for continuity of service.

ESSP, industry and authorities are actively developing solutions to improve the continuity of service.

**Recommendation(s):** The situation described in the section above may result in an increased probability of having loss of integrity monitoring alerts or loss of navigation alerts in the cockpit while performing a SBAS based approach. This could result in loss of VNAV function (with reversion to LNAV function only) and, potentially, followed by loss of LNAV function. Consequently, it may not be possible to perform or to continue an approach based on GNSS.

EASA recommends pilots and operators to consider that the SBAS/GNSS based VNAV and, potentially, LNAV functions may suddenly become unavailable while conducting an SBAS based approach.

Pilots and operators should ensure the availability of the necessary contingency procedures and/or of the alternate approach procedures, to be used in case of loss of GNSS navigation.

**Contacts:** For further information contact the Safety Information Section, Executive Directorate, EASA. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).

The referenced ESSP EGNOS Services Notes can also be downloaded from [http://www.essp-sas.eu/service\\_notices](http://www.essp-sas.eu/service_notices).

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