

Word from the DSNA in France

The implementation of EGNOS procedures in France is now progressing at a regular pace. By the 1st of November 12, next AIRAC cycle publication date, 29 LPV procedures will support landing operations in France with an excellent quality of service. Of significance is also now the planning of publication of LPV procedures on military airports (3 LPV), designed to support transport category military aircraft. Finally it is worth noting that this AIRAC cycle will also see an LPV publication over a small airfield (la Roche sur Yon, runway 28), which aims to definitively replace an outdated ILS Cat I. This transition has been coordinated between the airport owner and its main users. This is the first example of such an ILS to EGNOS technological transition in Europe, and we expect this to be the beginning of a new era giving progressively a larger importance to EGNOS within our navigation infrastructure.

Benoît Roturier
GNSS Programme Manager / DSNA

CONTENT

- ⊕ Status of the EGNOS implementation in aviation
- ⊕ EGNOS System news
- ⊕ New LPV procedures in Germany
- ⊕ EGNOS projects in aviation: SHERPA
- ⊕ EDAS service evolution (EDAS v2)
- ⊕ Improvement in EGNOS User Support Website
- ⊕ EASA takes the lead for Certification oversight
- ⊕ EGNOS & GNSS events

..... ***EGNOS, IT'S THERE, USE IT!***

Status of the EGNOS implementation in aviation

EGNOS LPV procedures already published in Europe¹

Country	Airports	LPV Procedures	APV Baro Procedures ²
France	21	24	0
Switzerland	2	2	0
Guernsey	1	2	0
Germany	38	2 ³	82
Total	62	30	82

¹ Current publication status (November 2012)

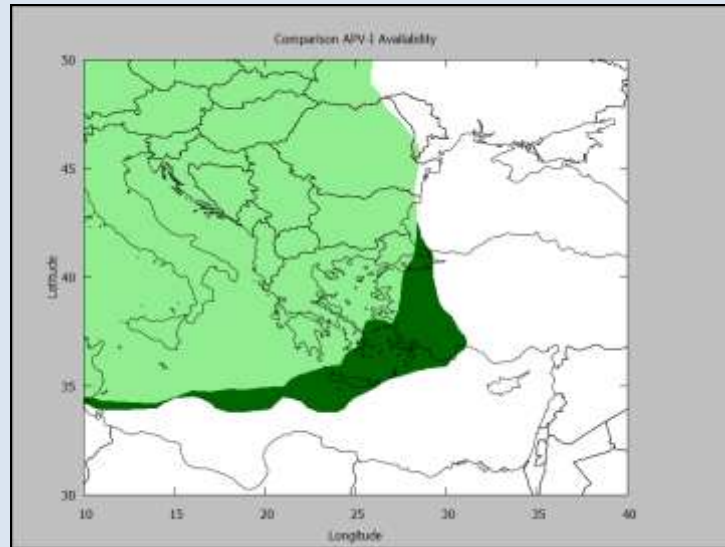
² Enabled to be flown with EGNOS vertical guidance

³ First LPV procedures published in Germany ! (October 2012)

EGNOS System news

→ Improved daily performances South East due to RIMS integration

The RIMS in Athens was fully integrated into the system last October 9th. The inclusion of this new RIMS has had a positive impact in the performances measured in the Mediterranean region close to Greece, improving, in general, the percentages of Availability and the values of continuity measured in this area.



APV-I Availability delta map 99% (zoom)

Germany starts EGNOS LPV procedures publication

The German Airport of Braunschweig-Wolfsburg has been the first one in this country to publish EGNOS LPV procedures (2). Let's remember that from December 15th 2011, aircraft may fly approach procedures with vertical guidance provided by **EGNOS** at 38 airports in Germany (mainly APV-Baro procedures).

Permission to use EGNOS in Germany has been granted by the Federal Supervisory Authority for Air Navigation Services (BAF).

Germany is the 4th country in Europe publishing EGNOS LPV procedures (after France, Switzerland and the State of Guernsey in the Channel Islands).

EGNOS projects in aviation



Workshop in Tallinn

A second SHERPA Workshop regarding “**APV Procedures Design**” was successfully held in Tallinn (Estonia) last September 13th at EANS (Estonian Air Navigation Services) headquarters. The European GNSS Agency (GSA), the whole SHERPA consortium and representatives of two external ANSPs (from Latvia and Austria) attended the event.

The Workshop provided initial guidance in the following areas:

- APV/LPV concept
- ICAO PANS-OPS LPV affected chapters (design criteria, database coding issues, obstacle evaluation and protection areas, data accuracy, charting, Channel Number assignment ...).

- Lessons learnt from previous projects, regarding limitations on database coding (i.e. discrepancies between PANS-OPS and ARINC 424 database standard).
- Specific issues to be addressed regarding data quality assurance.
- Overview of LPV procedure testing methodology.



EDAS Service Evolution (EDAS v2)

After the Declaration of the EDAS Service last July 2012, the activities planned towards the new EDAS v2 continue in the good track.

The new services that will be provided to EDAS v2 users are:



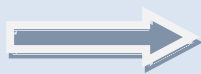
- FTP: Historical data from EGNOS and EDAS can be downloaded in different formats
- SiSNet: protocol defined by ESA for the distribution of EGNOS messages over the internet
- Ntrip: standard format for GNSS correction data dissemination over the internet
- Data Filtering: users will be able to subscribe only to certain Data groups (i.e. Group RIMS A)

Upgrade of EDAS Client Software: the client application that enables connection to EDAS Service Level 0, 1 and 2 and Data Filtering will now offer time stamping capabilities and a new graphical user interface.

EDAS v2 is forecast for the first quarter of 2013 although new services will be introduced gradually starting by the end of 2012.

Improvement in EGNOS User Support Website

One of ESSP main objective is to offer EGNOS users precise and useful information regarding EGNOS performance and availability. That is the reason why the [EGNOS User Support website](#) managed by ESSP continues to improve its content and functionality. This last month a new section has been put in place for Aviation users, containing a real-time map where to consult EGNOS availability in the different European airports with EGNOS-based approach procedures published⁴ and trends of evolution of performances. This evolution is part of an overall plan to improve the EGNOS User Support Website to better fit user needs and to provide with additional information for each EGNOS Service and for different user communities.



EASA takes the lead for Certification oversight

As requested by Commission Implementing Regulation (EU) No. 1034/2011 of 17 October 2011 on Safety Oversight in air traffic management and air navigation services, the European Aviation Safety Agency (**EASA**) took over the on-going oversight of EGNOS service provider (ESSP) from the French National Supervisory Authority as of November 7th.

⁴ This information is only provided for further awareness but should be never used for flight planning purposes.

EGNOS and GNSS recent events



The ION annual meeting took place in Nashville (USA), from September 17th to 21th.

EGNOS & Galileo were represented in a stand provided by the EC and supported by ESSP and GSA staff, all along with Galileo Services, the European organization that puts together multiple agents involved in this future constellation.

Regarding the Conference, representatives from the different GNSS programmes gave updated information on the status of their respective programmes: EGNOS-GALILEO; GPS-WAAS; Beidou; SDCM; etc. ESSP presented the Paper “*The EGNOS NOTAM Proposals Service*” to explain how this notification service is provided to the airports with published SBAS procedures.



ESSP members attending the ION GNSS 2012

EGNOS Workshop on Maritime applications Brussels, October 2

The EC organized this Workshop with the objective of bringing together private and institutional stakeholders and promoting the use of EGNOS for the maritime sector. Several initial projects were presented in this sector and the need of standardization was very much highlighted. Other subjects discussed within the Workshop were a presentation on market survey; trials results in France (EGNOS versus IALA DGPS that showed similar performances) and Germany (test on certified receivers).

Galileo Project Special Panel Rome, October 4

The Panel was organized within the ESTEL Conference in Rome. Chaired by the GSA, it offered an overview on the different EGNOS applications projects (Aviation, maritime, Rail, Road, Agriculture & Mapping) and presented a roadmap for future Galileo Services.

www.estelconference.org

Gian Gherardo Calini from the GSA coordinated the experts' speeches on the different EGNOS/ Galileo applications



**Working Meeting
Prague, October 17**



The consortium met in Prague, which headquarters have been recently moved to this city. The GSA supported the meeting, emphasizing in the need of developing the GNSS user segment in Europe and work together with Galileo Services members. It was also announced the gradual competences' transfer from the EC to the GSA, who will be in charge from now on of the operations and service provision management of Galileo and EGNOS.

EGNOS and GNSS up-coming events

- **European Space Solutions** (December 3-5, London)



This is a Conference, Exhibition and Support event all in one. It will bring businesses and the public sectors together with users and developers to explore how space can make a real difference to the lives and livelihoods of people across.

Regarding EGNOS & Galileo, there will be a stand hold by ESSP to provide an onsite **Help Desk** for EGNOS / Galileo application developers. ESSP will also participate in the LBS User Forum on December 5th and as speaker in the Special Session GNSS for Aviation on December 4th.

In parallel to the Fair, the European Space Expo will open its doors at St. James Park from December 3rd to the 9th. A giant tent offering citizens a wide vision on how European Space programmes and its flagship projects for satellite navigation (Galileo & EGNOS) and earth monitoring (GMES) are improving life on Earth.



To attend to this exciting event please fill in the **free** registration: www.space-solutions.eu

More info on EGNOS

www.essp-sas.eu



EGNOS Service Provider Website. Info on the EGNOS system, news on the service. Status on EGNOS implementation in Aviation. Projects. Events. Others.

egnos-user-support.essp-sas.eu

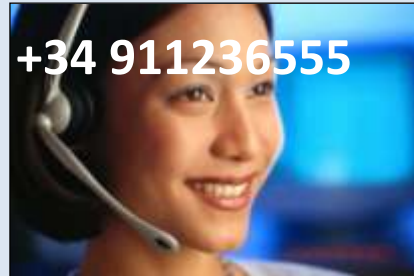
Information on past and current EGNOS performances. Signal in Space (SIS) status. Forecast on SIS availability. EDAS information and registration.

egnos-portal.gsa.europa.eu

EGNOS applications. Developers platform. Business support.

  **For questions & information: EGNOS HELPDESK**

egnos-helpdesk@essp-sas.eu



Disclaimer: EGNOS is a complex technical system and the users have certain obligations to exercise due care in using the EGNOS services. Before any use of the EGNOS services, all users should review the EGNOS SoL Service Definition Document (“SDD”) and/or EGNOS Open Service SDD (both available on the ESSP SAS website <http://www.essp-sas.eu/>) in order to understand if and how they can use these EGNOS services, as well as to familiarise themselves with their respective performance level and other aspects the services may offer. Use of an EGNOS service implies acceptance of its corresponding SDD specific terms and conditions of use, including liability.

In case of doubt the users and other parties should contact the ESSP SAS helpdesk at egnos-helpdesk@essp-sas.eu. Aviation Users may also contact their National Supervisory Authority.

Data and information (the “Data”) provided in this document are for information purpose only. ESSP SAS disclaims all warranties of any kind (whether express or implied) to any party and/or for any use of the Data including, but not limited to, their accuracy, integrity, reliability and fitness for a particular purpose or user requirements.

Text and pictures that are part of the Data may be protected by property rights. Any use shall require the prior written agreement of ESSP SAS.