



EGNOS
EGNOS, it's there. Use it.

GSA & ESSP

**launched the EGNOS survey
intended to measure EGNOS user
satisfaction and gather valuable
suggestions to improve the quality
of the EGNOS services.**

*Thank you for your collaboration. Your opinion
is essential to improve the EGNOS services!*



**YOUR SATISFACTION is our
reason for being!**



USER SATISFACTION SURVEY 2014

QUESTIONNAIRE STRUCTURE

A.- EGNOS user support services

1. EGNOS Service Provider and framework
2. EGNOS user support services:
 - Website
 - Documentation
 - Helpdesk

B.- EGNOS performance

1. Area of application:
 - Agriculture
 - Aviation
 - Maritime
 - Road
 - Rail
 - Surveying & mapping
 - Other
2. EGNOS services:
 - Safety of Life (SoL)
 - EDAS
 - Open Service (OS)

C.- General GNSS market



"The European Geostationary Navigation Overlay Service (EGNOS) provides an augmentation service to the Global Positioning System (GPS) Standard Positioning Service (SPS). Presently, EGNOS augments GPS using the L1 (1575.42 MHz) Coarse/Acquisition (C/A) civilian signal function by providing correction data and integrity information for improving positioning, navigation and timing services over Europe".



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Global Navigation
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EGNOS USERS Satisfaction Survey

Results



EGNOS SUPPORT



7.1
Support Website



7.9
Documentation



8.0
Helpdesk

The Global Satisfaction Score shows a good level of satisfaction with respect to EGNOS in general terms.



7.6
Global
Satisfaction
Score

(*) All scores are out of 10 points.

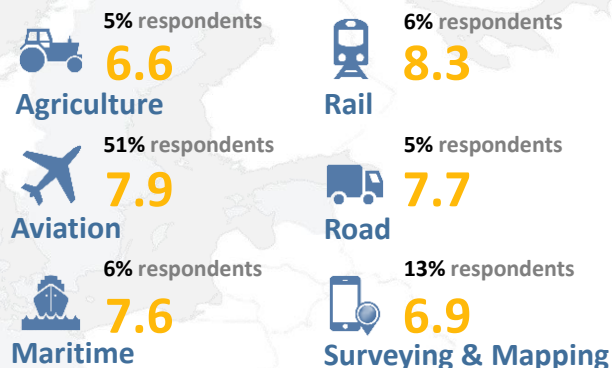
EGNOS SERVICES

- **SoL** (Safety of Life) service is based on integrity data provided through the EGNOS satellite signals.
- **OS** (Open Service) is provided openly and is freely accessible without any direct charge.
- **EDAS** (the EGNOS Data Access Service) allows users to plug into EGNOS ground infrastructure to receive the data collected, generated and delivered by the EGNOS system. EDAS therefore provides the opportunity to deliver EGNOS data to users who cannot always view the EGNOS satellites (such as in urban canyons) or to support a variety of other value added services, applications and research programs.

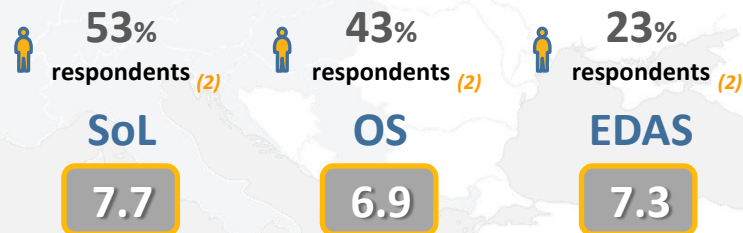
(2) Each respondent can use more than one service.

USER SATISFACTION SURVEY 2014

USER SATISFACTION SCORE PER DOMAIN ⁽¹⁾



(1) The 14% of respondents are users from "other" domains.



8.6 EGNOS SoL accuracy	7.9 EGNOS SoL availability	7.2 EGNOS SoL continuity	7.0 EGNOS SoL coverage
6.8 EGNOS OS accuracy	7.3 EGNOS OS availability	6.6 EGNOS OS coverage	7.4 EDAS service



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Recommendations derived from your feedback...

AWARENESS / COMMUNICATION

- ❑ Increase user awareness about the EGNOS services and activities. As well as on the EGNOS Service provision scheme and actors.
- ❑ Improve awareness on the EGNOS information sources available and improve accessibility / usability of the available sources (e.g. mobile app).
- ❑ Provide more practical / customized / specific information in different fairs and workshops and implement the co-marketing concept.

SUPPORT TO IMPLEMENTATION

- ❑ Increase the GSA and ESSP support to use EGNOS in users' application(s).
- ❑ Increase customized support offered to EGNOS users depending on the type of organisation.
- ❑ Analyse the reasons of low satisfaction levels on EGNOS services and the classification per country or organisation type.



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Recommendations derived from your feedback...

SUPPORT WEBSITE

- ❑ Overall EGNOS User Support Website improvement.
- ❑ Better categorization of Service Notices in the website.

HELPDESK

- ❑ Improve EGNOS Helpdesk quality and increase awareness & communication on its functionalities (a deeper analysis of the user's question, questions and user post-tracking, more detailed information, improve speed and quality of responses, etc.).

DOCUMENTATION

- ❑ Improve the SDDs in layout, frequency and services continuity information and provide customize contents for new operations (LPV-200, LP, RNP0.3).
- ❑ Provide more information / documentation related to EGNOS Projects funded by GSA / EC and their main results and applications.
- ❑ Improve Service Implementation Roadmaps to include new operations (LPV-200, LP, etc.) and consolidate the consistency & dependencies of all ESSP's roadmaps.
- ❑ Improve EGNOS Performance Reports (customizable performance graphics, improve performance maps resolution, more information on EDAS-based positioning performance, etc.).
- ❑ Improve the EGNOS Notifications Service (information more understandable and more fitted to user needs, notifications customized per site impacted, Include more information besides PRN number and time, etc.).



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Recommendations derived from your feedback...

**EGNOS SoL
PERFORMANCE**

- ❑ Ensure EGNOS APV-I availability and continuity in the SoL Service Area with special effort in the boundaries and the north and south of Europe.
- ❑ Extend the geographical coverage to Canary Island, the north of Africa and the Middle East regions.
- ❑ Analyse the capability of EGNOS to meet the performance requirements for the implementation of EGNOS Cat-I (autoland) operations [HAL=40m, VAL=10m and continuity of $2 \times 10^{-7} / 150 \text{sec}$]. LPV-200 actually considers VAL of 35m.

**EGNOS SoL
AVIATION**

- ❑ Increase communication and awareness on the benefits of EGNOS for aviation including the generation/update of guidance material for operators and ANSPs.
- ❑ Increase support to rotorcraft users and analyse current promulgation criteria for private heliports.
- ❑ Analyse ways to support implementation of LPVs at private airports with no lighting or no ATC.
- ❑ Increase support to aviation users to better anticipate impact of LPV-200 and provide them with additional information on EGNOS LPV STCs available or third parties that could support their implementation based on EGNOS.



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Recommendations derived from your feedback...

EGNOS SoL MARITIME

- ❑ Analyse the possibility to transmit EGNOS corrections via IALA beacons, Automatic Identification System (AIS) or VHF Data Exchange System (VDES).
- ❑ Continue the support provided in different projects aimed at defining the appropriate service provision framework for EGNOS in the maritime domain.

EGNOS SoL RAIL

- ❑ Analyse how current EGNOS performance could support *Safety Integrity Levels (SIL)* rail requirements.

EGNOS OS

- ❑ Overall improvement of availability and accuracy and extend the geographical coverage to northern Europe, Africa, Middle East and ENPI South region.
- ❑ Increase awareness of the EGNOS Time Service and about its use and potential applications.
- ❑ Improve support provided to agriculture users by providing them with more customized information (e.g. maps) and customized means (e.g. not used to speak English).

EGNOS EDAS

- ❑ Improve the quality of data provided by the EDAS Services.
- ❑ Improve EDAS services to provide more selective data filtering and to ensure better consistency between DGNSS and RTK data. In addition deployment of correction needs to be fast.
- ❑ Improve the EDAS Client SW to provide additional information (e.g. statistical data) and increase its robustness.



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...and we are working on your suggestions. Some of them have already been implemented/launched...

- ❑ The EGNOS User Support Website has been completely redesigned and restructured!
- ❑ Innovative ways to present the information to users are being defined.
- ❑ The EGNOS Multimodal Adoption (EMA) action plan for 2015 considers user recommendations to foster the EGNOS adoption in all market segments.
- ❑ Different action plans are being developed or updated in order to improve the way EGNOS is promoted and documented.



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Join us in Copenhagen for further information!!

29 - 30 Sept 2015

Copenhagen

The **EGNOS**
Service Provision
workshop

Save the date!!

29 - 30 Sept 2015



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