



"The European Geostationary Navigation Overlay Service (EGNOS) is Europe's regional satellite-based augmentation system (SBAS). It is used to improve the performance of global navigation satellite systems (GNSSs), such as GPS and Galileo in the future. EGNOS was deployed to provide safety of life navigation services to aviation, maritime and land-based users".



EUSPA & 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 2024

QUESTIONNAIRE STRUCTURE

1.- Introduction and Classification

2.- Support in Developing Apps.

3.- EGNOS User Support Services

- Website
- Documentation
- Helpdesk

4.- EGNOS Services (Perceived Performance)

- Safety of Life (SoL)
- Open Service (OS)
- ESMAS
- EDAS

5.- EGNOS Value (by Market Segment)

- Aviation and UAS/Drones
- Rail
- Maritime

6.- EGNOS Market Development

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EGNOS

138

Respondents
64 EGNOS Users in 2023



2024

EGNOS USER SATISFACTION SURVEY

Infographic - main outcomes

All scores are based on EGNOS Users' answers.

8.6

Global Satisfaction Score

8.2 - 2023

10-point Scale.

88.0%

EGNOS satisfaction:
User Recommendation

85.6% - 2023

USER SATISFACTION SCORE PER MARKET SEGMENT



90 respondents

8.7 ▲ 2023
Aviation 8.5



6 respondents

7.7 ▲ 2023
Agriculture 7.3



7 respondents

9.2 ▲ 2023
Maritime 7.2



1 respondent

10 ▲ 2023
Rail 7.2



4 respondents

8.7 ▲ 2023
Road 8.1



11 respondents

8.4 ▼ 2023
Sur. & Map. 8.8



6 respondents

8.6 ▲ 2023
LBS 8.0
(Location Based-Services)



13 respondents indicated
"other" Market Segment.

Your SATISFACTION is our reason for being!

EGNOS SUPPORT



8.6

7.8

2023

Support Websites



8.4

8.5

2023

Documentation

EGNOS SERVICES

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



65 (47%)
EGNOS Users (*)

SoL

8.7

2023

8.0



46 (33%)
EGNOS Users (*)

OS

8.2

2023

8.4



44 (32%)
EGNOS Users (*)

EDAS

9.0

2023

7.8

Performance

2 users interested in ESMAS. They did not assess any ESMAS quantitative question.



Helpdesks

8.9

8.8

2023

9.0

EGNOS SoL
accuracy

2023

8.5

8.9

EGNOS SoL
availability

2023

8.1

8.5

EGNOS SoL
continuity

2023

7.7

8.5

EGNOS SoL
coverage

2023

7.4

7.8

EGNOS OS
accuracy

2023

8.0

8.4

EGNOS OS
availability

2023

8.7

8.1

EGNOS OS
coverage

2023

8.6

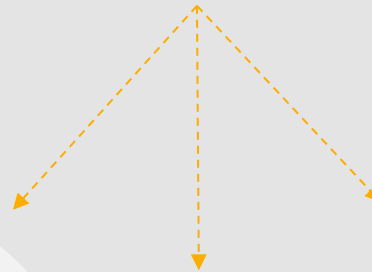


EGNOS

Positive comments from respondents



Have you perceived any changes with regards to the EGNOS services provision you use during the last year?



User Support Helpdesks

"EGNOS Helpdesk is good and useful."

"Thank you. I was ably helped."

ESSP support

"Great working together with the ESSP team. Great cooperation on various topics."

"I am very satisfied with the support and interaction."

"Everything has been excellent."



"Continuity of the EGNOS signal is at much higher level."



"A big improvement of SoL availability after the system version 2.4.2B introduction in November 2023."

"Better stability and availability."



EDAS service

"We are happy to use EDAS for our application."

"We are satisfied with the current EDAS service."





EGNOS



Recommendations identified from your feedback...

- ❑ **Create an acronyms page in the User Support Websites and reference it when using them.**
- *An EGNOS user (Receivers) proposes "Spell out your acronyms" as recommendation to improve the support in using EGNOS in the near, medium or longer term.*

**USER SUPPORT
WEBSITES**

*Action derived from the identified
recommendation...*

*Create an acronyms page in the User Support Websites and
reference it when using them.*



EGNOS



Recommendations identified from your feedback...

- ❑ **Include the exact coordinates and information related to the EGNOS GEOS / PRN in the User Support Websites.**

➤ *An EGNOS user from Aviation comments that "I had some difficulties to find the exact current coordinates (lat., long. and altitude) of the EGNOS satellites (PRN 123, 136)" on the Support Website.*

**USER SUPPORT
WEBSITES**

*Action derived from the identified
recommendation...*

*Include the exact coordinates and information related to the
EGNOS GEOS / PRN in the User Support Websites.*



EGNOS



Recommendations identified from your feedback...

- ❑ **Improve the notifications process when the system or services are degraded.**
- *2 EGNOS users from Aviation proposes "Improve communication in case of service outage or service degradation" and "Enhanced outage information".*
- *An EGNOS user from Surveying and Mapping comments that "Availability degradation information arrives too late".*

**EGNOS SUPPORT
DOCUMENTATION**

Action derived from the identified recommendation...

*Analyse the current notification scheme and develop / evolve
notifications to improve the usefulness from user perspective.*



EGNOS



Recommendations identified from your feedback...

- ❑ **Based on the current European current tractor fleet SBAS solutions, ensure EGNOS V3 does not limit the usage of EGNOS in old devices.**
- *An EGNOS user from Agriculture comments that "Most of the equipment in tractors is GPS-based and not compatible with Galileo, I am concerned about the future evolutions of EGNOS using Galileo instead of GPS and therefore exclude agriculture from using augmentation".*

**EGNOS OPEN SERVICE
(OS)**

Action derived from the identified recommendation...

Inform EGNOS OS users that current EGNOS receivers will remain usable to improve GPS performance after the release of EGNOS V3.



EGNOS



Recommendations identified from your feedback...

❑ **Avoid EDAS FTP gaps or enable a process to upload missing gaps in past days.**

➤ **An EGNOS user (EGNOS Developer) comments that** *"There are multiple data gaps in the data provided in the EDAS FTP service since August 2024. This often impedes the usage of EDAS data for evaluation of GNSS algorithms, which is the main goal of some tools using EDAS data. I would recommend fixing these data gaps".*

EGNOS DATA ACCESS
SERVICE (EDAS)

Action derived from the identified recommendation...

Study the feasibility of using an additional source of data (e.g. Archive Server) to manually upload data to FTP server.



EGNOS



Recommendations identified from your feedback...

- ❑ Integrity for ESMAS to ensure the trust in the navigation solution like it does for SOL for Aviation.
- *An EGNOS user from Maritime who is not currently using ESMAS but is interested in it, thinks that providing “Integrity” would be relevant.*

Action derived from the identified recommendation...

ESMAS evolutions to consider further integrity needs tailored to maritime users.

EGNOS SAFETY OF LIFE
(SoL) SERVICE FOR
MARITIME (ESMAS)



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THANK YOU FOR YOUR ATTENTION !



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



- Safety of Life
- Open Service
- ESMAS Service
- EDAS Service



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