

HORIZON
2020

Advanced Multi-Constellation EGNSS Augmentation and Monitoring Network and its Application in Precision Agriculture

Fact Sheet

Project Information

AUDITOR

Grant agreement ID: 687367

[Project website](#) 

DOI

[10.3030/687367](https://doi.org/10.3030/687367) 

Project closed

EC signature date

1 December 2015

Start date

1 January 2016

End date

30 June 2018

Funded under

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space

Total cost

€ 1 157 736,25

EU contribution

€ 996 373,75

Coordinated by

ACORDE TECHNOLOGIES SA



Spain

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23 November 2018



Objective

The goal of AUDITOR is the implementation of novel precise-positioning techniques based on augmentation data in custom GNSS receivers to improve the performance of current augmentation services and reducing costs. These techniques are already patented by the consortium and proven to offer better accuracy with faster convergence times than solutions commercially available. More sophisticated atmospheric models will be implemented to provide better corrections of ionospheric errors and further increase accuracy. All these advances will be integrated in a software demonstrator that will use public data from GNSS networks to generate these correction data streams. These new receivers will enable cost-effective precision agriculture services to farmers, especially those with small and medium-sized businesses in areas of Europe.

The custom dual-frequency receiver module will follow an innovative approach by porting a GNSS software-defined receiver to an embedded system that will integrate hardware accelerators to enable real-time operation in a low power system. The form factor and capabilities of the resulting receiver will be comparable to those of existing professional receivers in the market, while retaining all the advantages of software receivers: modularity, scalability, upgradability, and flexibility. Besides providing multi-frequency multi-constellation support, this advanced receiver will allow very low level access to key internals even at sample level, enabling the integration of other complementary techniques like interference analysis and monitoring or authentication using remote servers for encrypted bands. The fact that the software layer will be the evolution of an existing and successful open-source project, GNSS-SDR, will allow GNSS developers and researchers to customize the code of the

receiver to tailor it to their own applications or test their algorithms using this flexible receiver module, from reflectometry to ultra-tight coupled GNSS/INS systems.

Fields of science (EuroSciVoc)

[natural sciences](#) > [computer and information sciences](#) > [software](#)

[social sciences](#) > [social geography](#) > [transport](#) > [navigation systems](#) > [satellite navigation system](#) > [global navigation satellite system](#)

[agricultural sciences](#) > [agriculture, forestry, and fisheries](#) > [agriculture](#)



Keywords

[GPS](#)

[augmentation](#)

[RTKlib](#)

[SDR](#)

[receivers](#)

[PPP](#)

[RTK open source](#)

Programme(s)

[H2020-EU.2.1.6. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space](#)

MAIN PROGRAMME

Topic(s)

[GALILEO-2-2015 - Small and Medium Enterprise \(SME\) based EGNSS applications](#)

Call for proposal

[H2020-Galileo-GSA-2014-2015](#) 

[See other projects for this call](#)

Sub call

H2020-Galileo-2015-1

Funding Scheme

[IA - Innovation action](#)

Coordinator



ACORDE TECHNOLOGIES SA

Net EU contribution

€ 195 387,50

Total cost

€ 279 125,00

Address

CALLE EL CASTRO 22N

39011 Santander

Spain

SME

Yes

Region

Noroeste > Cantabria > Cantabria

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Participants (6)



CENTRE TECNOLOGIC DE TELECOMUNICACIONS DE CATALUNYA

Spain

Net EU contribution

€ 188 625,00

Address

AVINGUDA CARL FRIEDRICH GAUSS 7 PARC MEDITERRANI DE TECNOLOGIA

08860 Castelldefels Barcelona

Region

Este > Cataluña > Barcelona

Activity type

Research Organisations

Links

- [Contact the organisation](#)
- [Website](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

€ 188 625,00



UNIVERSITAT POLITECNICA DE CATALUNYA

Spain

Net EU contribution

€ 199 636,25

Address

CALLE JORDI GIRONA 31
08034 Barcelona

Region

Este > Cataluña > Barcelona

Activity type

Higher or Secondary Education Establishments

Links

- [Contact the organisation](#)
- [Website](#)
- [Participation in EU R&I programmes](#)
- [HORIZON collaboration network](#)

Total cost

€ 199 636,25



TECHNISCHE UNIVERSITAET MUENCHEN

Germany

Net EU contribution

€ 118 875,00

Address

Arcisstrasse 21
80333 Muenchen 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 118 875,00



ALPHA CONSULTANTS S.R.L.

 Italy

Net EU contribution

€ 105 000,00

Address

VIA CIRENE 7

20135 Milano 

SME 

Yes

Region

Nord-Ovest > Lombardia > Milano

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 150 000,00



DRAXIS ENVIRONMENTAL SA

 Greece

Net EU contribution

€ 76 125,00

Address

THEMISTOKLI SOFOULI STR 54-56

54655 Thessaloniki 

SME 

Yes

Region

Βόρεια Ελλάδα > Κεντρική Μακεδονία > Θεσσαλονίκη

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

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Total cost

€ 108 750,00



STICHTING WAGENINGEN RESEARCH

 Netherlands

Net EU contribution

€ 112 725,00

Address

DROEVENDAALSESTEEG 4

6708 PB Wageningen 

Region

Oost-Nederland > Gelderland > Veluwe

Activity type

Research Organisations

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 112 725,00

Last update: 1 August 2024

Permalink: <https://cordis.europa.eu/project/id/687367>

European Union, 2025

