



Precise and Robust Positioning for Automated Road Transports

Fact Sheet

Project Information

PRoPART

Grant agreement ID: 776307

[Project website](#)

DOI

[10.3030/776307](https://doi.org/10.3030/776307)

Project closed

EC signature date

21 November 2017

Start date

1 December 2017

End date

30 November 2019

Funded under

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies – Space

Total cost

€ 3 502 075,75

EU contribution

€ 2 968 128,26

Coordinated by

RISE RESEARCH INSTITUTES
OF SWEDEN AB



Sweden

Objective

The objective of the project 'PRoPART' is the development and demonstration of a high availability positioning solution for connected automated driving applications. It aims to develop and enhance an existing RTK (Real Time Kinematic) software solution developed by Flowscape, by exploiting the distinguished features of Galileo signals as well as combining it with other positioning and sensor technologies. Besides the use of vehicle on board sensors, 'PRoPART' will also use a low-cost Ultra Wideband (UWB) ranging solution for redundancy and robustness in areas where the coverage of GNSS is poor e.g. in tunnels or in urban canyons. In order to define the correct requirements for the PRoPART combined positioning solution, a

cooperative automated vehicle application will be defined and developed. The vehicle application will rely on the high availability positioning solution and use it to couple its ADAS system with V2X and aggregate information received from other connected vehicles and Road Side Units (RSU). As there will be a transition period where a lot of vehicles are neither connected nor automated, solutions having high impact during low penetration are in focus. Therefore 'PRoPART' will implement an RSU with high precision positioning and use both UWB as well as a traffic monitoring to supply ranging, object perception and EGNSS RTK correction data via ETSI ITS-G5 to the connected automated vehicle so it can make safe decisions based on robust data. This means that 'PRoPART' also will implement perception layer sensor fusion that uses information collected in the LDM (Local Dynamic Map) as well as information from both the on board vehicle sensors and the high availability positioning solution. We will also exploit possibilities to distribute EGNSS RTK correction data from the RSU to the vehicle.

Fields of science (EuroSciVoc)

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

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > [sensors](#)



Keywords

[EGNSS](#)

[EGNSS Receiver](#)

[Real Time Kinematic](#)

[RTK](#)

[Galileo E1](#)

[Galileo E5](#)

[Connected Automated Driving](#)

[Ultra Wideband](#)

[UWB](#)

[Sensor Fusion](#)

[ETSI ITS-G5](#)

[Hybrid Communication](#)

[C-ITS](#)

[V2I](#)

[Road Side Unit](#)

Programme(s)

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

[H2020-EU.3.4.2.2. - Substantial improvements in the mobility of people and freight](#)

[H2020-EU.3.4.1.2. - Developing smart equipment, infrastructures and services](#)

[H2020-EU.2.1.6.3. - Enabling exploitation of space data](#)

[H2020-EU.2.1.6.1.2. - Boost innovation between space and non-space sectors](#)

Topic(s)

[GALILEO-1-2017 - EGNSS Transport applications](#)

Call for proposal

[H2020-GALILEO-GSA-2017](#)

[See other projects for this call](#)

Sub call

H2020-GALILEO-GSA-2017-1

Funding Scheme

[IA - Innovation action](#)

Coordinator



RISE RESEARCH INSTITUTES OF SWEDEN AB

Net EU contribution

€ 433 972,50

Total cost

€ 682 784,50

Address

BRINELLGATAN 4

501 15 Borås

 **Sweden** 

Region

Södra Sverige > Västsverige > Västra Götalands län

Activity type

Research Organisations

Links

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

Participants (8)

 THIRD-PARTY 

ASTAZERO AB

 Sweden

Net EU contribution

€ 248 812,00

Address

.
501 15 Boras 

Region

Södra Sverige > Västsverige > Västra Götalands län

Activity type

Research Organisations

Links

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

Total cost

€ 248 812,00



SCANIA CV AB

 Sweden

Net EU contribution

€ 405 978,13

Address

VAGNMAKARVAGEN 1
151 87 Sodertalje 

Region

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

€ 579 968,75



FLOWSCAPE AB

Sweden

Net EU contribution

€ 0,00

Address

ARNE BEURLINGS TORG 9A
164 40 Kista

SME

Yes

Region

Östra Sverige > Stockholm > Stockholms län

Links

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

Total cost

No data



FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN
FORSCHUNG EV

Germany

Net EU contribution

€ 633 900,00

Address

HANSASTRASSE 27C
80686 Munchen 

Region

Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

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

Total cost

€ 633 900,00



ASOCIACION CENTRO TECNOLOGICO CEIT

 Spain

Net EU contribution

€ 405 566,25

Address

PASEO MANUEL DE LARDIZABAL 15
20018 San Sebastian 

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Research Organisations

Links

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

Total cost

€ 405 566,25



BASELABS GMBH

 Germany

Net EU contribution

€ 231 875,00

Address

TECHNOLOGIE-CAMPUS 6

09126 Chemnitz 

Region

Sachsen > Chemnitz > Chemnitz

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 331 250,00



COMMSIGNIA Korlatolt Felelossegu Tarsasag



Hungary

Net EU contribution

€ 277 375,00

Address

SZECHENYI UTCA 14

7252 ATTALA 

SME 

Yes

Region

Dunántúl > Dél-Dunántúl > Somogy

Activity type

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

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 396 250,00



WAYSURE SWEDEN AB

 Sweden

Net EU contribution

€ 330 649,38

Address

DROTTNING KRISTINAS VAG 53

114 28 Stockholm 

SME 

Yes

Region

Östra Sverige > Stockholm > Stockholms län

Links

[Contact the organisation](#) 

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

[HORIZON collaboration network](#) 

Total cost

€ 472 356,25

Last update: 12 September 2023

Permalink: <https://cordis.europa.eu/project/id/776307>

European Union, 2025