

PROJECT

PROSPECT

PROactive Safety for PEdestrians and CyclisTs

Funding: European (Horizon 2020)

Duration: May 2015 - Oct 2018

Status: Complete

Total project cost: €6,931,979

EU contribution: €6,931,978



Call for proposal: H2020-MG-2014_TwoStages

[CORDIS RCN : 193275](#)

Objectives:

The past decade has seen significant progress on active pedestrian safety, as a result of advances in video and radar technology. In the intelligent vehicle domain, this has recently culminated in the market introduction of first-generation active pedestrian safety systems, which can perform autonomous emergency braking (AEB-PED) in case of critical traffic situations. PROSPECT will significantly improve the effectiveness of active VRU safety systems compared to those currently on the market. This will be achieved in two complementary ways: (a) by expanded scope of VRU scenarios addressed and (b) by improved overall system performance (earlier and more robust detection of VRUs, proactive situation analysis, and fast actuators combined with new intervention strategies for collision avoidance).

PROSPECT targets five key objectives:

1. Better understanding of relevant VRU scenarios
2. Improved VRU sensing and situational analysis
3. Advanced HMI and vehicle control strategies
4. Four vehicle demonstrators, a mobile driving simulator and a realistic bicycle dummy demonstrator
5. Testing in realistic traffic scenarios and user acceptance study

The consortium includes the majority of European OEMs (Audi, BMW, DAIMLER, TME and Volvo Cars) currently offering AEB systems for VRU. They are keen to introduce the next generation systems into the market. BOSCH and CONTI will contribute with next generation components and intervention concepts. Video algorithms will be developed by UoA and DAIMLER. Driver interaction aspects (HMI) are considered by UoN and IFSTTAR. Euro NCAP test labs (IDIADA, BAST, TNO) will define and validate test procedures and propose standardization to Euro NCAP and UN-ECE. Accident research will be performed by Chalmers, VTI and BME, based on major in-depth accident databases (GIDAS and IGLAD) and complemented by East Europe data. The work will be done in cooperation with experts in Japan (JARI, NTSEL) and the US (VTTI, UMTRI, NHTSA).

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Idiada Automotive Technology Sa

Address:

L Albornar
43710 Santa Oliva

Spain

EU Contribution: €590,400

Partner Organisations:

Robert Bosch Gmbh

Address:

Robert-Bosch Platz
70839 Gerlingen-Schillerhoehe
Germany

Organisation Website:

<http://www.bosch.com>

EU Contribution: €937,500

Volvo Personvagnar Ab

Address:

Avd 50090 Hb3S
405 31 Goteborg
Sweden

EU Contribution: €308,375

4A Engineering Gmbh

Address:

INDUSTRIEPARK 1
8772 TRABOCH
Austria

EU Contribution: €376,250

Nederlands Organisation For Applied Scientific Research

Address:

Schoemakerstraat 97
6060 DELFT
Netherlands

Organisation Website:

<http://www.tno.nl>

EU Contribution: €90,303

Toyota Motor Engineering & Manufacturing Europe

Address:

Bourgetlaan 60
1140 EVERE (BRUXELLES)
Belgium

Organisation Website:

<http://www.toyota.eu>

EU Contribution: €381,600

4A Engineering Gmbh

Address:

INDUSTRIEPARK 1
8772 TRABOCH
Austria

EU Contribution: €0

Budapest University Of Technology And Economics

Address:

Muegyetem rakpart 3.
BUDAPEST
1111
Hungary

Organisation Website:

<http://www.bme.hu>

EU Contribution: €150,000

Statens Geotekniska Institut

Address:

Olaus Magnus Vag 35
58193 Linkoping
Sweden

Organisation Website:

<http://www.vti.se>

EU Contribution: €163,338

Daimler Ag

Address:

Mercedesstrasse
70327 Stuttgart
Germany

Organisation Website:

<http://www.daimler.com>

EU Contribution: €660,375

Continental Teves Ag & Co. Ohg

Address:

GUERICKESTRASSE 7
60488 FRANKFURT AM MAIN
Germany

Organisation Website:

<http://www.continental-corporation.com>

EU Contribution: €814,938

Audi Aktiengesellschaft

Address:

-
85045 Ingolstadt
Germany

EU Contribution: €426,884

The University Of Nottingham**Address:**

University Park
Nottingham
NG7 2RD
United Kingdom

EU Contribution: €300,625**Institut Francais Des Sciences Et Technologies Des Transports, De L'amenagement Et Des Reseaux****Address:**

2, Avenue Du General Malleret-Joinville
94114 Arcueil
France

EU Contribution: €367,518**Bundesanstalt Für Strassenwesen (Federal Highway Research Institute)****Address:**

Brüdenstrasse 53
51427 BERGISCH GLADBACH
Germany

Organisation Website:

<http://www.bast.de>

EU Contribution: €385,148**Bayerische Motoren Werke Ag****Address:**

Petuelring 130
80809 MUNICH
Germany

Organisation Website:

<http://www.bmwgroup.de>

EU Contribution: €218,111**Universiteit Van Amsterdam****Address:**

SPUI 21
1012WX AMSTERDAM
Netherlands

Organisation Website:

<http://www.uva.nl>

EU Contribution: €450,625**Chalmers Tekniska Hoegskola Ab****Address:**

-
41296 GOTHENBURG
Sweden

Organisation Website:

<http://www.chalmers.se>

EU Contribution: €309,991

Technologies:

Safety systems
Vulnerable road users' protection systems

Development phase: Research/Invention

STRIA Roadmaps: Cooperative, connected and automated transport

Transport mode: Road transport

Transport sectors: Passenger transport

Transport policies: Safety/Security, Digitalisation

Geo-spatial type: Urban