

PROJECT

OPTEPLA

Open OBDII Telematics Platform - OPTEPLA

Funding: European (Horizon 2020)

Duration: Jun 2015 - Nov 2015

Status: Complete with results

Total project cost: €71,429

EU contribution: €50,000



Call for proposal: H2020-SMEINST-1-2015

[CORDIS RCN : 197038](#)

Objectives:

The EU is pursuing the political aim to reduce CO2 emissions by 40%, to reduce the number of deaths by car accidents by half and to support methods for more effective use of cars and automobile fleets. The proposed project will provide effective support in reaching these ambitious goals.

With OPTEPLA we want to develop an open telematics platform based on the OBDII standard. It consists of a small and cost effective OBDII device for the transmission of the entirely available electronic vehicle data and an open data platform, which receives, formats and analyses these data. There is currently no technical solution in the aftermarket, by which for any car manufacturer and for every installed controller device the communications data produced can be exported to an internet environment.

For commercialization third party developers will build upon the technology innovative telematics applications such as remote diagnostics and predictive maintenance systems, intelligent driving assistance systems, mapping of CO2 or fine dust concentrations or remote opening/closing car door technology. This technology will be very simple to retrofit to most vehicles. In a development period of only two years, telematics applications based on this platform could quickly experience widespread use and help to make vehicular traffic in the EU significantly safer, more environmentally friendly and more efficient.

In the feasibility study of phase 1 we want to find out whether it is technically and economically possible to integrate the complex logic of an integrated vehicle diagnostic system into a miniaturized OBD connector and to reduce its manufacturing costs from currently €120 to less than €10. The expected outcome of the feasibility study is to allow the company to validate its business concept and to make evidence-based decisions about its product viability and market opportunities.

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:

Autoaid Gmbh

Address:

Wattstr. 10
13355 Berlin
Germany

EU Contribution: €50,000

Technologies:

Freight transport technologies
Logistic-oriented telematic services

Development phase: Research/Invention

Key Results:

Periodic Reporting for period 1 - OPTEPLA (Open OBDII Telematics Platform - OPTEPLA)

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- A small and cost effective OBDII device (dongle) for the acquisition and transmission of the entire dataset produced by vehicle' electronics and built-in sensors and
- An open data platform, which receives, formats and analyses these data making them available to third parties that can develop added value applications and services based on this data, generating an open-data-based service ecosystem.

Currently there is no technical solution in the aftermarket, by which any car manufacturer/model and for every installed electronic control unit (ECU) the communications data can be acquired and exported to an internet environment.

Third party developers will develop innovative connected car applications such as remote car diagnostics and predictive maintenance systems, intelligent driving assistance systems, mapping of CO2 emissions or fine dust concentrations or remote opening/closing car door technology, etc.

Thanks to this technology it will be very simple and cost-efficient to retrofit most of the existing vehicles in Europe (all vehicles that include OBDII, i.e. around 90% of EU passenger cars) allowing them to fully benefit from a wide variety of telematics services.

In the feasibility study of phase 1 AUTOAID has confirmed the following aspects that were considered critical for successful commercialisation of OPTEPLA:

- Feasibility: It is confirmed that it is technically and economically possible to integrate the complex logic of an integrated vehicle diagnostic system into a miniaturized OBDII connector and to reduce its manufacturing costs from currently 120 EUR to less than 10 EUR. AUTOAID will develop and commercialise two different models responding to different customer needs and requirements:
- Bluetooth version: Connectivity depends on the cell phone presence in the car. Very low hardware cost (Commercial price: 10€) and basic functionality (service subscription cost: 19€/year)
- SIM card version: Device permanently and independently connected to the cloud platform. Low hardware cost (Commercial price: 18 €) and full functionality (service subscription cost: 39€/year).

Competitors:

- Existing competitors face the tremendous complexity beyond the normed OBDII standard derived by the different manufacturer specific protocols and individual diagnostic data needed for each carmaker and model
- Current OBDII dongles are either application-specific closed environments or cannot read the whole communication dataset produced by the car. Therefore, none of existing OBDII dongles offer the possibility to widely retrofit the EU carpark but only a limited subset and with limited functionality since they cannot acquire the whole car dataset.
- OPTEPLA will reduce dongle price by 60-80% with respect to comparable competitors.
- Market readiness: AUTOAID has reached pre-commercial agreements with some of the most representative stakeholders (car workshops and insurance companies) and potential large scale buyers (car renting and car sharing companies) therefore confirming the willingness to buy our product/service.
- FTO and other market barriers: AUTOAID has confirmed freedom to operate as well as elaborated a market introduction plan to overcome potential market barriers.

OPTEPLA will critically contribute to reduce CO2 emissions, reduce the number of deaths by car accidents and to support methods for more effective use of cars and automobile fleets. As consequence of SME instrument phase 1, AUTOAID has confirmed the business opportunity and therefore decided to proceed with phase 2 submission that shall cover the last steps towards market readiness and

commercial exploitation of the OPTEPLA dongle and platform that should reach the market by 2018.

Once in the market we expect to reach commercial agreements with stakeholders such as insurance companies, car rental/sharing companies

STRIA Roadmaps: Cooperative, connected and automated transport

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Environmental/Emissions aspects, Safety/Security, Digitalisation

Geo-spatial type: Other