

PROJECT

MFDS

Multi-Functional Detective System (MFDS) - Advanced, 'Intelligent Transport System' creating smarter and safer European roads

Funding: European (Horizon 2020)

Duration: Aug 2017 - Oct 2017

Status: Complete

Total project cost: €71,429

EU contribution: €50,000



[CORDIS RCN : 211257](#)

Objectives:

Wilhelm Schröder GmbH has developed the 'Multi-Functional Detection System' (MFDS), a highly versatile 'Intelligent Transport System' that will make EU roads better integrated, safer, intelligent and environmentally friendly. MFDS is a unique, affordable and unrestricted telematics technology with several functions: wrong-way driver detection, traffic congestion detection, vehicle counting by vehicle classification and parking accounting. The core innovation of the MFDS is its capability to complete all functions simultaneously in a single system that is low-cost to procure and install with low-power usage.

An MFDS unit consists of a detection of 6 delineators (pillars) that distributes a secure radio field across the target path; objects within the field are passively detected and classified with 100% precision. Data obtained is immediately communicated to motorists via an LED lighting interface built into the delineators as well as being securely provided via cloud to the relevant officials via system interfaces to warn motorists in a wider perimeter with other means.

With our initial target market in the EU, during Phase 1 and Phase 2 we plan to market to road operators in target countries with the intention to generate pre-sales that will enable our target volume sales once Phase 3 is reached in 2020. Once commercialised, we plan for 6,500+ unit sets to be deployed by 2024.

The principle project objective is to enhance MFDS and demonstrate to the target market the efficiency and environmental improvements our technology offers over state-of-the-art alternatives. This Feasibility Study will allow us to complete a market study and use customer feedback to develop the project concept; identify strategic Phase 2 collaborators; scope the legislative pathway; plan the technical and commercial work to be completed during Phase 2 and produce a fully elaborated business plan to be used as the basis of a Phase 2 application.

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:

Wilhelm Schroder Gmbh

Address:

RAMMBERGER WEG 5-10

58849 HERSCHEID

Germany

EU Contribution: €50,000

Technologies:

Road and traffic management systems
Visual and data analysis of traffic

Development phase: Validation

STRIA Roadmaps:

Cooperative, connected and automated transport, Network and traffic management systems, Smart mobility and services

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport
Societal/Economic issues, Environmental/Emissions aspects,

Transport policies: Safety/Security

Geo-spatial type: Other