

Design and implementation of a driver helper system for remote vehicle diagnostics and maintenance services¹

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MYCAREVENT is an Integrated Project co-financed by the European Union under the 6th Frame Program. Its main objectives are to provide applications to facilitate after-sales services in the automotive market, as well as the distribution of automotive manufacturers repair information among third party after-sales companies and organisms.

The role of Telefónica I+D in the project was to provide end user services to help integrating the driver in the chain of value of the roadside assistance market, by enabling him to perform a more active role in the event of a breakdown of his vehicle. Two services have been developed with this aim: the mobile document browser and the driver assistant: The mobile document browser allows users to review technical documentation from the manufacturer of his vehicle, while the driver assistant provides help in breakdown situations.

The driver helper system is permanently connected to the diagnostics interface of the vehicle, and alerts the driver when the vehicle is suffering any abnormal condition. It also provides an estimate on the severity of the failure contacting a remote expert system, and suggests the right actions to be taken next. In addition, the system offers the user a list of the closest workshops that are able to solve the problem, along with their position on a map, and the soonest time at which any of them can start the repairs in the vehicle.

The driver helper system is also connected to the roadside assistance call centre, so the assistance operators receive information about any broken vehicles on the road, including their exact location and the error codes issued by the diagnostics interface. This allows the operators to dispatch the right assistance patrols carrying the required spare parts and tools to perform the required operations on the vehicle. Attention times are thus reduced, service quality is improved, and costs lowered for RSA organizations.

Carlos Moliner Teruel born in Zaragoza, Spain, 1981. He holds a Computer Engineer degree by the University of Zaragoza. He started his career at Telefónica I+D in 2005 as a Software Engineer. He worked in the Digital Home division first and currently in the Networked Vehicle department.

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