THE FUTURE OF TRANSPORT

CASE STUDY

MOVE_UK – Connected Validation of Advanced Driver Assistance Systems (ADAS) Systems

Year: Ongoing

Location: UK

Client: Innovate UK, Department for Transport, Centre for Connected and Autonomous Vehicles

Summary

TRL is a key participant in MOVE_UK, a project jointly funded by government and industry. The MOVE_UK team will trial a new 'connected validation' methodology for Advanced Driver Assistance Systems (ADAS). Our work will seek to achieve more efficient validation of ADAS, without compromising safety, all while assessing how this method could be used in the type-approval of autonomous vehicles.

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CASE STUDY

The Challenge

The technological race to develop and launch automated driving systems is gathering speed, but traditional methods for developing, testing and validating vehicle safety systems are not keeping pace with the increasing complexity of these systems. It is not possible to design physical tests for every situation that a car might encounter on the road.

To respond to this challenge, the MOVE_UK consortium has come together to develop innovative solutions and methodologies designed to speed up the validation, evaluation and approval process for automated driving systems by analysing data sourced from vehicles in the real world.

Our Approach

TRL, together with partners Bosch, Jaguar Land Rover, Direct Line Group, The Floow and the Royal Borough of Greenwich, will conduct live trials of automated driving systems using a fleet of five Land Rover passenger vehicles.

Sensor and automated driving data will be transmitted to TRL's data hub, where partners will evaluate the performance of the driving system and model changes to the control software. The work will be carried out in the UK Smart Mobility Living Lab in the Royal Borough of Greenwich.

"This project will create a unique, data-driven evidence base to support an improved, more efficient and safe validation methodology for ADAS making full use of the real world UK Smart Mobility Living Lab in Greenwich" – Paul Zanelli, Director Engineering and Technology

The Results

Our results will provide essential insight into the development of accelerated validation and approval methods for automated driving systems, as well as providing evidence for those developing new approaches to vehicle regulation. The information will help us develop applications for autonomous vehicle data in the 'smart city', including new ways to improve safety, services and information for residents and managing environmental impact.

This work will also help our project partners to predict how driverless technologies will change their businesses in the future, providing insight to respond to these challenges. Ultimately, the MOVE_UK project is seeking to bring new technology to market in a more efficient manner, with a lower cost and improved safety.

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