

CASE STUDY

Atlas: Autonomous vehicle technologies



Year: May 2016 - ongoing

Location: UK

Client: Innovate UK

Summary

As one of a consortium of experts collaborating on the Atlas feasibility study, we are exploring ways to provide and maintain a reliable, repeatable and safe navigation system for automated (driverless) vehicles.



CASE STUDY

The Challenge

We will apply our knowledge and the latest thinking to help the consortium to test and validate all the components required for an automated navigation system fit for the future – including on-vehicle hardware and software, mapping and navigation, communications connectivity and sensor/ data processing.

The project also has to consider how the data and systems can accommodate future developments in communications, urban planning and environmental constraints. It validates how the components would withstand loss in network coverage, sensor data transmission, unreliable mapping information and even cyber-attack.

"If we can understand how to create the digital infrastructure to support and optimise automated vehicle operation, then we really can put the UK at the forefront of connected and automated mobility." TRL CEO Rob Wallis



Our Approach

Our team of experts will test and scrutinise the assumptions related to the operation, performance and interfacing of current automated system development under real-world constraints. We will examine current state of the art technology and standards relating to the vehicles and to each of their operational systems. Where current standards don't exist, TRL will make suitable recommendations to the consortium.

The Results

The project, currently in its early stages, aims to deliver a comprehensive assessment of the practicalities and constraints of building a scalable and connected automated vehicle solution that will transform our transport system.

DATA:

- The consortium is funded by Innovate UK and includes Ordnance Survey, the Transport Research Laboratory (TRL), Sony Europe, the Royal Borough of Greenwich, Oxford Technical Solutions Ltd, Gobotix Ltd, and the Satellite Applications Catapult.