

PRESS RELEASE



5 April 2016

Details revealed of Ricardo contribution to *EcoTwin* truck platooning project

Ricardo plc
Shoreham Technical Centre,
Old Shoreham Road,
Shoreham-by-Sea,
West Sussex,
BN43 5FG, UK

On the eve of the first European Truck Platooning Challenge of the *EcoTwin* project – commencing in Westerlo, Belgium – Ricardo’s roles in ensuring compliance with safety standards and in overall project management, can be disclosed for the first time

As a significant transportation initiative of its European Union Presidency from January to June 2016, the Netherlands is leading a European Truck Platooning Challenge. This will involve various brands of automated trucks driving in platoons on public highways from several European cities to the Netherlands. The aim of the Challenge is to bring platooning one step closer to implementation, with the vision that truck platooning could soon become a reality in Europe.

It was revealed in a press release by DAF Trucks on 22 March that Ricardo was a participant in the *EcoTwin* project, alongside DAF, TNO and NXP. Ricardo contributed in two fields of this project – safety support and project management on behalf of TNO – details of which can now be revealed.

Functional safety compliance with current combined standards

Harmonised as well as national legislation for autonomous transport is still in development. Those safety standards that are currently available exist for specific fields of application, such as for road vehicles, railway applications, tractors, and machinery used for agriculture and forestry. These and other safety standards share a common origin: the general safety standard IEC 61508.

Based in Utrecht, the Netherlands business of Ricardo Rail has its origins in Dutch Railways and, as such, has extensive expertise and knowledge of railway standards and regulations. There are clear synergies that Ricardo is able to bring to autonomous



Ricardo plc
Shoreham Technical Centre,
Old Shoreham Road,
Shoreham-by-Sea,
West Sussex,
BN43 5FG, UK

road transportation and other intelligent transport systems projects arising from the highly complementary skills and experience of both its rail business and its automotive and commercial vehicles teams.

For the *EcoTwin* project, Ricardo used a range of functional safety standards considered to be the most relevant for autonomous transport systems. These included ISO 26262 (Road vehicles – Functional safety), CENELEC standards, EN 50126 (The Specification and Demonstration of Reliability, Availability, Maintainability and Safety), EN 50128 (Communications, signalling and processing systems. Software for railway control and protection systems), and EN 50129 (Communications, signalling and processing systems. Safety related electronic systems for signalling). Based upon these existing standards, Ricardo outlined and supported the safety approach for the *EcoTwin* project, and analysed the risks and failure modes and compiled the evidence of the safe application of driverless solutions. A white paper on this work is available on request.

Subsequently, Ricardo provided support in meetings and discussions with RDW, the Netherlands Vehicle Authority, in the mobility chain as well as with ERTICO, a platform for the co-operation of all relevant stakeholders to develop and deploy intelligent transportation systems standards in Europe.

“Ricardo is proud to take part in the first steps towards aligned European standards for autonomous transport systems”, commented Richard Laan, Ricardo steering group member of the *EcoTwin* project.

Project management

In addition to its functional safety responsibilities, Ricardo performed the complete project management of the *EcoTwin* project on behalf of TNO, which included teambuilding of all four partners, and co-ordination of the planning, progress as well as communications. “Close co-operation of all parties involved was the main success factor in this exceptional project”, says Lizet Elshof, Ricardo project manager of *EcoTwin*, “and everyone acknowledged the relevancy of the other each other’s contributions.”

Ends



Ricardo plc

Shoreham Technical Centre,
Old Shoreham Road,
Shoreham-by-Sea,
West Sussex,
BN43 5FG, UK

NOTES TO EDITORS:

Ricardo plc is a global, world-class, multi-industry consultancy for engineering, technology, project innovation and strategy. Our people are committed to providing outstanding value through quality engineering solutions focused on high efficiency, low emission, class-leading product innovation and robust strategic implementation. With a century of delivering excellence and value through technology, our client list includes the world's major transportation original equipment manufacturers, supply chain organizations, energy companies, financial institutions and governments. Guided by our corporate values of respect, integrity, creativity & innovation and passion, we enable our customers to achieve sustainable growth and commercial success. For more information, visit www.ricardo.com.

Ricardo Rail is the rail consultancy and assurance business of Ricardo. It provides expert independent assurance and consultancy services to organisations across the industry to help develop, assure and improve the safety, quality and performance of the world's rail systems. Ricardo Rail has an international reach and presence through a network of 17 regional offices across Europe, Asia and the Middle East, with a team of over 450 rail engineers and specialists. Further information is available at <http://rail.ricardo.com/>.

Media contacts:

Anthony Smith
Ricardo Media Office
Tel: +44 (0)1273 382710
E-mail: media@ricardo.com