EUROPEAN TRUCK PLATOONING

How to foster this unique opportunity for efficient transport of tomorrow

This session is aiming at providing Members of the European Parliament a first insight on the perspectives of automated mobility applied to freight road transport. The European ITS stakeholder community (ERTICO), the automotive sector (ACEA), and the Conference of European road directors (CEDR) will present the Truck Platooning challenges at stake.

What is Truck platooning?

The progress of digital technologies of cooperative and automated vehicles is opening new perspectives for the freight road transport. Among them, the concept of truck platooning is progressing fast and addresses many major challenges of the long distance road freight transport: driver efficiency improvement and cost reduction, emission/decarbonisation, logistics chain improvement, road safety and infrastructure capacity.

The emerging technologies of cooperative and automated vehicles are concretely using radar, LIDAR and Wi-Fi allowing safe vehicle control and ensuring high reliability and safety. This allows safe driving in short following distance convoys (less than 10 meters instead of 50 meters usually allowed) at uniform and stabilized velocities.

However, some pending issues remain under investigation: user acceptance, impact on traffic and infrastructure, perception by the other users, operational and business models. The full implementation requires actions of all the stakeholders and technologies providers.

What are the benefits of the truck platooning concept?

Improved traffic safety
Truck platooning has the potential to increase traffic safety by reducing the number of head-tail collisions in case of emergency braking with a faster mutual reaction than the human one and improved compliance with speed limits. A full lateral and longitudinal path control will ensure a higher safety, and overtakings will be significantly reduced.
Improved throughput
Fuel savings and reduction of emissions are expected, both because of the drag forces cut off and of the stabilized velocities. However, exact fuel reduction depends on several factors, mainly the vehicle gaps.

Lower labour costs
Two potential reductions in labor costs could be expected in the future:
✓ Alternative use of driving time could allow additional tasks to be performed, and may increase driver efficiency,
✓ Alternative use of driving may lead to an increase of the work hours between two rests and less driver stress.

What are the concrete benefits of the large-scale European truck platooning challenge that took place in 2016 under the Dutch presidency?

Quoting Dutch Minister Schultz van Haegen, Minister of Infrastructure and the Environment, “The results of this first ever major trial in Europe are promising.” It was the first time that industry and national authorities provide joint effort together to make truck platooning on open road and real traffic.

Large scale cross-border demonstration took place under the Dutch presidency in 2016. The components were:
▪ Trucks in platoons formed by two or three single-brand trucks from the six European manufacturers (DAF, IVECO, VOLVO and SCANIA, MAN and DAIMLER) which started driving from Sweden and Germany to converge to Rotterdam on the 6 April 2016.
▪ Six participating countries among them Sweden, Germany, Belgium, and The Netherlands with their TEN-T corridors from Gothenburg, Munich, and Brussels to Rotterdam.

Next step and questions addressed to the Members of Parliament:

1. How to prevent a patchwork of local regulations and facilitate a harmonised exemption procedure allowing automated driving and accelerate large scale cross-border testing, on open roads, and along commercial routes?

2. How can the work of European Parliament in the field of robotics address specific issues of truck platooning?

3. At meta-level, the industry acknowledges the competitive advantages the truck-platooning could bring to the European markets and economy. How can European Parliament support the necessary steps to accelerate its implementation?