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High-Level Dialogue on Connected and Automated Transport

Background Paper

"Removing Barriers for Connected and Automated Vehicle (CAV) testing"

For the expert discussions

18 June 2024, Ghent, Belgium

Introduction

Enabling Open Road tests in a cross-border set-up and impact monitoring of CAD in real life conditions has been on the agenda since the very first HLD meetings. However, to achieve this, the instalment of adequate (testing) 'permission schemes' and an amendment to ruling (national) traffic regulations are required - allowing CAVs to hit the public road, in either a particular or more general context and/or for specific (research) purposes.

It is important to understand that whereas tests on public roads and related data collection truly are pivotal for closely interlinked system development, pre-deployment and type-approval related activities, such tests equally are needed to gather insights into real impacts and to feed policy preparation.

Testing permits

To deploy an automated vehicle, a homologation or type approval is required. However, to obtain a vehicle type approval, it is necessary to first develop, test and improve the system to be homologated and to issue the imposed self-declaration – which already (in the first step) requires a (national) *testing permit* that allows for tests and evidence-gathering about the vehicle's behavior in real-life conditions.

Once this stage is achieved, the type-approval authority needs to receive evidence of the vehicle's safe behavior on open roads, which (again) requires a national testing permit - to deploy a vehicle that has not yet been approved.

The interrelation of procedures and tests can be depicted as follows:

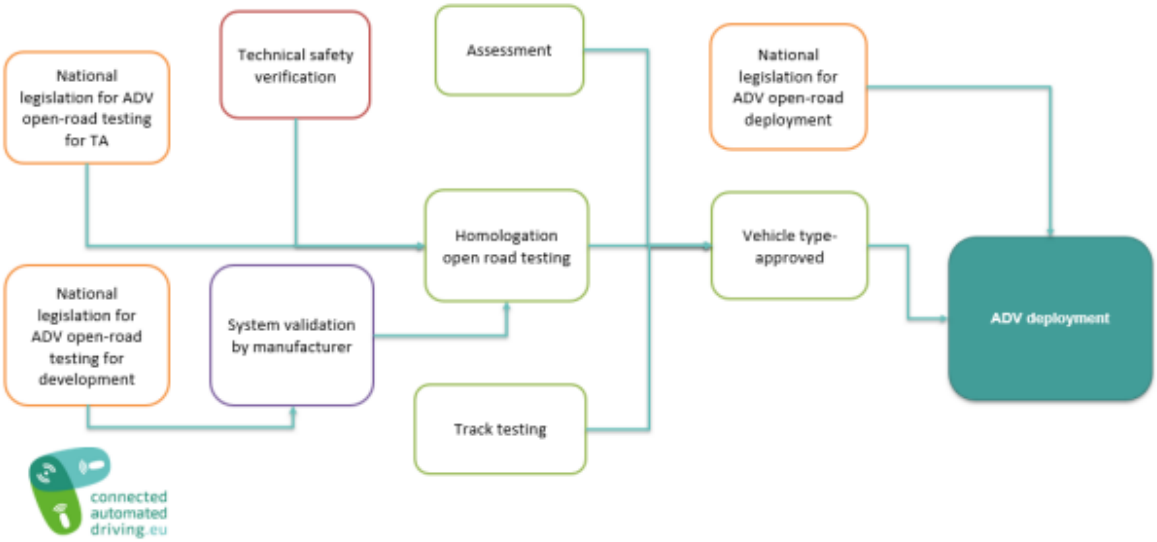

Figure 1: Framework for development, certification and deployment of Automated Driving Vehicles (FAME project)

The FAME project among others aims at developing recommendations for a harmonization across Europe of the requirements for obtaining a national *testing permit*.

Traffic regulations:

(National) traffic regulations need to be amended to accommodate for 'the system' to be in control of the vehicle, taking over the role and responsibilities of the (human) driver, and for accommodating a potential 'driverless vehicle' to be operated or to operate on the public road.

The aim of the 'Removing barriers' session under the umbrella of the HLD is:

- To provide insight into the **various testing-related activities impacting CAV development, type approval and (pre-)deployment**, and their interrelation, and to discuss a **European-wide harmonization of requirements applied**
- To discuss and learn how traffic regulations need to be amended to accommodate for CAV testing and deployment
- To explore opportunities for a **European-wide alignment of type approval processes** required for the (broader) deployment of Connected and Automated Vehicles

Agenda

11:00-12:10: Introduction - the challenges in testing and (pre-) deployment of CAVs

- Introduction – clarification of terms, challenges and their interconnection
- The OEM perspective
- Achievements and work ongoing / the EC perspective
- Testimonies from leading MS:

- France
- Germany

Afternoon break-out sessions (expert-level)

14:55- 16:05: Testing permits – in collaboration with the EU-funded FAME project

- Introduction / recapitulation
- Pre-homologation permits
- Recommendations for a EU framework for testing on public roads (FAME)
- Interactive discussion
- Conclusions and the way forward

16:35 – 17:45: Traffic regulations & Type Approval

- Testimonies from leading MS:

- Germany
- MS (tbc)

- Type approval - EU 2022/1426 & Implementation guidance
- The US/ Technology companies perspective (tbc)
- Q&A