

## PRESS RELEASE

### CONNECTED AND AUTONOMOUS VEHICLES (CAV): THE THEORETICAL-PRACTICAL TRAINING METHOD DEVELOPED BY THE PAsCAL PROJECT PROVES TO BE EFFECTIVE

*Driving training is confirmed to be essential for the  
comprehension, acceptance and transition towards CAV*

Training is one of the key factors that can substantially change drivers' behavior and acceptance of Connected and Autonomous Vehicles (CAV).

This is the precondition that led to the development of the **theoretical-practical instructional method of the PAsCAL\* project** (\*<https://www.pascal-project.eu/>), aimed at the different categories of drivers: novice unskilled drivers, experienced drivers, professional drivers and driving trainers.

The path of construction and verification ended on February 2022 with practical driving tests at the ACI Sara Safe Driving Center of Lainate, with a total of 91 participants: 79 members of the Italian Army (Alpine Brigade "Taurinense" and NATO Command of Milan) and 12 civilians.

Watch the video <https://youtu.be/Ws7PzL1PMs0>

The method consists of well-structured modules, including a dedicated theoretical approach on CAVs and practical lessons based on the features of the Home Study Simulator\*\*. It was developed by taking into account:

\*\* the features developed in the HSS are divided between Urban and Motorway scenarios, in order to test two different levels of automation in 2 autonomous driving modes, ECO or SPORT mode.

- the experiences and the observations gathered thanks to the HSS driving simulator, through tests carried out by RED Driving School (UK) and ACI Ready2GO (Italy), and the review of past researches.
- the teaching knowledge developed over time by the trainers of the driving schools' network of ACI Ready2Go (Italy) and RED (UK).

The tests were conducted

- in Italy during the summer of 2021, with 230 participants from the provinces of Modena, Savona and Lecco.
- In the UK during fall 2021, with open days for novice and experienced drivers at the RED National Training Centre in Donington throughout 6 weekends.

**Both simulations showed that**, despite being an essential element in the training process, **the Simulator per se cannot train drivers in advanced levels of autonomous driving**. This instrument needs to be integrated with a deep knowledge of the on board systems and a practical course that concretely allows drivers to experiment and test their abilities at the wheel.

The virtual simulation and the practical driving tests in a safe environment confirmed **the efficiency of the method composed of theoretical modules** (including the taxonomy of the levels of automated driving, legal aspects, explanations of the additional dedicated features available on CAVs and key principles on driver behavior) **and practical modules** (including several scenarios of different situations that can typically occur in urban and highway environments, where the resuming of control of the vehicle is essential).

**A relevant tool that may effectively support the delicate transition process** towards a new way of driving, in which Connected and Autonomous Vehicles will be increasingly involved.

*\* PAsCAL- acronym for "Enhance driver behaviour and Public Acceptance of Connected and Autonomous vehicles" is an European project aimed to develop a multidimensional map of public acceptance of higher levels of Connected and Autonomous Vehicles (CAV), pointing out any critical issues on the matter, particularly investigating the new "driver" needs considering different modes and mobility services. PAsCAL's goal is to create a "Guide2Autonomy" (G2A), a set of guidelines and recommendations aimed at accelerating the user-friendly evolution of connected automated vehicles and transport systems. - Flyer ([https://www.aci.it/fileadmin/documenti/ACI/Iniziativa\\_e\\_progetti/PAsCAL\\_Flyer\\_2020\\_bis.pdf](https://www.aci.it/fileadmin/documenti/ACI/Iniziativa_e_progetti/PAsCAL_Flyer_2020_bis.pdf))*



***This project was founded under the EU "Horizon 2020" Research and Innovation Program with the Financing Agreement N. 815098***

---