

PASCAL project: results of 'Pilot 5' announced VULNERABLE USERS 84%: YES TO CONNECTED MOBILITY CONNECTED MOBILITY MAKES PEOPLE INDEPENDENT AND CUTS TRAVEL TIME CONSIDERABLY.

Concerns about interaction between CAVs and traditional mobility.

84% of the vulnerable users (*elderly, pregnant women, disabled, travellers with heavy luggage, parents with strollers*) believe that a connected transport environment will help them to use public transport more easily and independently; 90% consider important a high degree of autonomy in daily mobility; 62% think that connected transport environments will cut travel time by half and 47% are willing to pay for this type of service.

These are the essential indications of the **PAsCAL* Project "Pilot 5**", presented on Thursday 28 October, during the online event **Connected Autonomous Vehicles: Inclusivity and accessibility considerations**

The experiment was carried out with the **Apertum** application: a digital platform that recommends, in real time, the best routes and transfers - eliminating those that are not accessible - and warns of possible obstacles.

Participants used Apertum to follow four different activities within Madrid's complex and connected transport system and took part in a series of tests and focus groups to find out, based on their travel experiences, which user interface was the best and how useful the application was.

Three main critical issues emerged during the experiment:

- 1. Concerns about the interaction between CAVs and traditional mobility, for ethical reasons related to algorithm choices and decisions
- 2. CAV terminology too abstract
- 3. Lack of information on public transport accessibility

Navigation systems, ridesharing apps (Uber, taxi apps, etc.) and connected features (e.g. on buses: the next stop indicator), were the most familiar CAV features. Less user-friendly, however, are systems such as adaptive cruise control and automatic steering.



Finally, HMIs (human-machine interfaces) on board CAVs should be equipped with more user options (e.g. audio and voice activation), and to ensure the safety of visually impaired people nearby, vehicles should communicate with their environment by means of acoustic signals.

* 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.



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