

“Is our current driving training and testing system ready for preparing all drivers (Novice as well as experienced) to drive autonomous features in modern cars? -An opinion piece based on professional practice and literature review”

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Author: Dr Anuraj Varshney, Consultant Practitioner, South East DriveAbility, DProf, MA, OTR (USA), PgCLT,

With the emergence of many new, automated features in modern cars, an important question is that as a society, are the tests and training we provide for new and experienced drivers up to date for these new technologies?

Our current driver training and testing system appears to be outdated when it comes to preparing all drivers to use autonomous features in modern cars. When it comes to learning to drive a manual car, there appears to be different training programmes across Europe; e.g. in the UK all drivers must pass a theory test which assesses drivers’ knowledge on highway codes and hazard perception followed by a practical on-road test. The on-road test assesses drivers’ abilities in different road and traffic conditions. There is an additional feature of testing driver’s abilities to follow directions using an in – car navigation system(1). Fully automated cars will not be available for a while(2) and in the interim most drivers will have to adapt to using semi-automated features in cars (Level 2, 3 & 4 of automation) (3). Drivers of level 3 and 4 automated vehicles will be required to takeover driving control when needed. Evidence suggests that taking vehicle control on demand from technologies is challenging for drivers if not properly trained(4).

In many countries’ drivers are required to take a driving test for a manual car once and their driving licence is valid until their seventieth birthday with a photo card license renewal every ten years thereafter (5). This can be challenging for drivers as they may not be familiar with new technology available in modern cars. The lack of clear strategy to deal with such potential challenges can lead to drivers being poorly prepared for automation in new cars and may lead to serious road safety issues. Recently, there has been an increase in research focusing on driver training for automated vehicles; these studies suggest a training programme for automated vehicles may need to include a curriculum teaching the mechanism of automation, automation’s capabilities and limitations, what is expected of drivers whilst automation is engaged and finally how to take back control when needed(6).

There is a need for leadership by international organisations such as CIECA, to commission a working group to develop a fit for purpose, universal driver training programme and advise policy makers to implement such a programme to prepare drivers for this next frontier in vehicle technology.

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