"Autonomous vehicles and road safety: towards new training modules for drivers and driving instructors". - Brussels, 16 May 2019









# Current and potential safety issues related to the introduction of autonomous vehicles

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#### **Main Associates:**















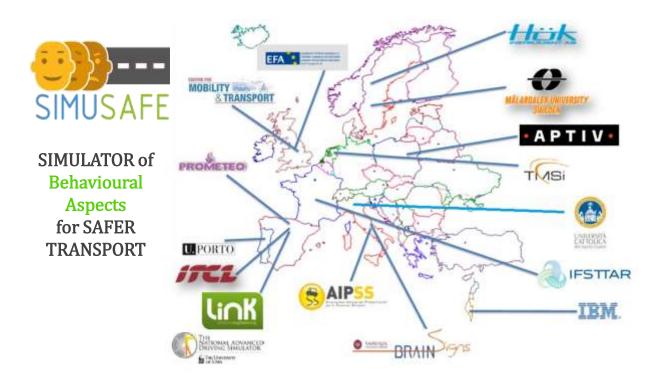


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Proceedings of 7th Transport Research Arena TRA 2018, April 16-19, 2018, Vienna, Austria

Current and potential negative effects of autonomous vehicles

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https://www.researchgate.net/publication/325398583\_Current\_and\_potential\_negative\_effects\_of\_autonomous\_vehicles

## The main current issue



# Driving an autonomous vehicle (even in partial automation) implies a <u>degradation of human driving skills</u><sup>1</sup>

- 1)
  Michigan Department of Transportation (MDOT): Impact of Automated Vehicle Technologies on Driver Skills June 2016
  http://www.cargroup.org/wp-content/uploads/2017/02/IMPACT-OF-AUTOMATED-VEHICLE-TECHNOLOGIES-ON-DRIVER-SKILLS.pdf
- S. Pettigrew et Al. -The Potential Implications of Autonomous Vehicles in and around the Workplace Aug 2018- doi: 10.3390/ijerph15091876

## The main current issue



When a person used to run an autonomous car drives a "normal" one, he/she becomes a danger on the road.

The more an autonomous car is driven

The higher is the automation level

the higher is the danger when driving a "normal" car OR in case of a system's disengagement

People flying to another location and renting a car, need to use temporarily another car, etc.

### **OUR PROPOSAL**



Compulsory register of automated cars owners (at Member State level), starting from SAE 2



Compulsory periodic driving test with a "normal" car

### **NEED OF NEW SKILLS**

- ➤ There is a need of new driving skills, taking into account nonconnected users and people unable to properly use the new technologies.
- Drivers need to clearly understand advantages and limits of ADAS and should clearly know what they can (and cannot!) do at each SAE level
- > Driving Intructors should therefore have adequate teaching skills.

Advanced driving simulators can play an important role and help saving money and time

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# Thank you for your attention!



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http://simusafe.eu

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