

# Legal Framework for the introduction of autonomous buses in Belgium.

Vision of the federal Service for  
Mobility and Transport.



# International Convention on road traffic vs automated driving

- Article 8.1

*“Every moving vehicle or combination of vehicles shall have a driver.”*

- Article 1, (v)

*“Driver” means any person who drives a motor vehicle or other vehicle (including a cycle), or who guides cattle, singly or in herds, or flocks, or draught, pack or saddle animals on a road;*

- Article 8.6

*“A driver of a vehicle shall at all times minimize any activity other than driving. Domestic legislation should lay down rules on the use of phones by drivers of vehicles. In any case, legislation shall prohibit the use by a driver of a motor vehicle or moped of a hand-held phone while the vehicle is in motion.”*

- Article 39.1

*“Every motor vehicle, every trailer and every combination of vehicles in international traffic shall satisfy the provisions of Annex 5 to this Convention. It shall also be in good working order.”*

# International Convention on road traffic vs automated driving - Achievements

- April 2014 : Global Forum adopts amendments of Article 8 and 39 of the 1968 Convention on Road Traffic (23 March 2016 into force);

*“8.5bis. Vehicle systems which influence the way vehicles are driven shall be deemed to be in conformity with paragraph 5 of this Article and with paragraph 1 of Article 13, when they are in conformity with the conditions of construction, fitting and utilization according to international legal instruments concerning wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles\**

*Vehicle systems which influence the way vehicles are driven and are not in conformity with the aforementioned conditions of construction, fitting and utilization, shall be deemed to be in conformity with paragraph 5 of this Article and with paragraph 1 of Article 13, when such systems can be overridden or switched off by the driver.”*

# International Convention on road traffic vs automated driving - Achievements

*“39.1. Every motor vehicle, every trailer and every combination of vehicles in international traffic shall satisfy the provisions of Annex 5 to this Convention. It shall also be in good working order. When these vehicles are fitted with systems, parts and equipment that are in conformity with the conditions of construction, fitting and utilization according to technical provisions of international legal instruments referred to in Article 8, paragraph 5bis of this Convention, they shall be deemed to be in conformity with Annex 5.”*

# International Convention on road traffic vs automated driving - Achievements

April 2016 : Experiments.

- *“Decision” of the global forum for road traffic safety:*

*“there is no need for amendments of the conventions of 49 and 68 for experiments with automated vehicles under the condition that a person is ready and able to take control of the vehicle (in or outside the vehicle).”*

- *Possibility to exempt from highway code for experiments (BE, 2018)*

# International Convention on road traffic vs automated driving - Achievements

March 2017 : other activities than driving

“Decision” of the global forum for road traffic safety:

“When the vehicle is driven by vehicle systems that do not require the driver to perform the driving task, the driver can engage in activities other than driving as long as:

Principle 1: these activities do not prevent the driver from responding to demands from the vehicle systems for taking over the driving task, and

Principle 2: these activities are consistent with the prescribed use of the vehicle systems and their defined functions.”

# International Convention on road traffic vs automated driving - Achievements

- October 2018 : Global Forum adopts resolution on the deployment of highly and fully automated vehicles in road traffic. ,

## *IV. Recommendations for automated driving systems in highly and fully automated vehicles*

- make road safety a priority;
- endeavour to safely tolerate errors of the vehicles' users, inside and outside of the vehicle, and of other road users in order to minimize potential effects of such errors;
- comply with traffic rules;
- Only operate within their ODD.

# International Convention on road traffic vs automated driving - Achievements

## *V. Recommendations for users of automated driving systems in highly and fully automated vehicles*

- be aware and informed of their proper use prior to starting the journey;
- meet the requirements for their safe use and follow the procedures for their use;
- understand if, and when, it is necessary to exercise dynamic control to complete a journey. If the user is required to exercise dynamic control, or chooses to do so, they must:
  - hold the necessary driving permits;
  - comply with traffic rules.
  - act lawfully at all times so as not to compromise road safety regardless of whether they or automated driving systems are exercising the dynamic control.



# International Convention on road traffic vs automated driving - In progress

- Two discussion papers (prepared by het informal working group – March 2019 start discussion by the Global Forum):
  - Driver outside the vehicle
  - Other activities than driving, principles set by the Global Forum for Road Traffic Safety:
    - Principle 1: “these activities do not prevent the driver from responding to demands from the vehicle systems for taking over the driving task”
    - Principle 2 “these activities are consistent with the prescribed use of the vehicle systems and their defined functions”
- Amendment of the Convention(s) – decision September 2019 (exemption)

# Conclusions + future actions

- Experiments with “autonomous” busses = possible (driver – operator);
- Regular use of “autonomous” busses – not yet possible;
- 2 (x2) step approach:
  1. Exemption to be introduced in the international convention on road traffic of 1968;
  2. Amend the Belgian highway code accordingly (national vehicle approval);
  3. Update the international convention on road traffic in function of the new emerging technologies;
  4. Amend the Belgian highway code accordingly (type approved vehicles).