



The voice of blind and partially sighted people in Europe

European Blind Union response to the European Commission's public consultation on technical specifications for automated vehicles

EBU Position Paper | May 2022

Aim of the consultation

The European Commission indicates: “From mid-2022, new EU rules will apply (Regulation 2019/2144) governing modern technologies used in vehicles, to improve road safety and reduce pollution. This initiative introduces specific requirements for automated and fully automated (‘driverless’) vehicles and the systems they employ, to ensure that they are safe to use. (...) The Commission would like to hear your views.”

Response

There is no mention of **vulnerable road users** in the draft implementing regulation of Regulation 2019/2144 nor in the annex thereto. Vulnerable road users are mentioned in Appendix 1 to Part 1 of Annex 3—Principles to be followed to derive scenarios relevant for the ODD of the ADS 1—article 2.1.1 (“ODD analysis”), where it is said: “An ODD [operational design domain, author’s note] may consist of scenery elements (e.g., physical infrastructure), environmental conditions, dynamic elements (e.g., traffic, vulnerable road users).”

The “may” is ambiguous here and we would like to point out the following:

As driverless vehicles are likely to progressively become more frequent in the streets and roads of Europe, they are expected to obey the same principles as conventional cars. **Like drivers**, they should be able to adapt to weaker participants in the traffic, especially to consider the presence of pedestrians with a visual impairment.

Drivers are required to **understand the white cane** as a symbol and an automated vehicle should therefore do so as well. Consequently, to be allowed to use public streets, a driverless vehicle must be able to recognize the white cane, just like any traffic sign. This should be laid down explicitly in the technical regulations on connected and autonomous cars (CAV).

All types of white canes and other possible visible signs of a person with visual impairment, under the applicable legislation, should be recognized as well. It should not matter that a visually impaired pedestrian is simply holding their cane or raising or waving it, even if the latter facilitates identification.

It should also be possible to detect the white cane **even when it is partially hidden** behind some person or object. Since a driverless vehicle is connected, it should be able to communicate with other vehicles—driverless or equipped with the necessary IT—to share information about the presence of a visually impaired person in the area.

Recognition through a digital signal conveyed for instance by a smartphone or a microchip, if applicable, could also be used, but **only as a complement**.

Also as a complementary feature, the driverless vehicle being electric and therefore equipped with Acoustic vehicle alert system (AVAS), the sound level of AVAS could be raised when the presence of a pedestrian with visual impairment is detected, to alert that person (although this would require careful testing to make sure the result is not a source of confusion about the speed and distance of the vehicle).

In any case, it is a matter of principle that it should be **driverless vehicles to adapt by design to road users, specially to vulnerable pedestrians, and not the contrary**. The technique of driverless vehicles may not interfere with the fundamental rights of safety and independent personal mobility guaranteed by articles 14 and 20 of the UN Convention on the Rights of Persons with

Disabilities and articles 6 and 26 of the Charter of Fundamental Rights of the EU. It should on the contrary lead to increased protection of these rights.

About EBU

The European Blind Union (EBU) – **Interest Representative Register number 42378755934-87** – is a non-governmental, non-profit making European organisation founded in 1984. It is one of the six regional bodies of the World Blind Union, and it promotes the interests of blind and partially sighted people in Europe. It currently operates within a network of 41 national members including organisations from 25 European Union member states, candidate countries and other countries in geographical Europe.

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