



World Blind Union
Union Mondiale Des Aveugles
Unión Mundial de Ciegos

World Forum for Harmonization of Vehicle Regulations (WP.29)
167th Session, 10-13 November 2015

The World Blind Union (WBU), as a United Nations accredited Non-Governmental Organization (NGO), has been following the work of the United Nations Economic Commission for Europe to develop a Regulation on quiet road transport vehicles (QRTV). This was developed by the Informal Working Group (IWG-QRTV) under the 1958 Agreement, and will be recommended by the Working Party on Noise (GRB) to WP.29 for action in March 2016 (see document ECE/TRANS/WP.29/GRB/2015/9, enclosed). WBU appreciates GRB's commitment in developing and proposing uniform provisions concerning the audibility of quiet road transport vehicles. However, we believe the proposed standard falls short of the following three essential requirements for an Acoustic Vehicle Alerting System (AVAS) which we feel are necessary for blind and other pedestrians to make safe crossing decisions:

1. A clearly audible minimum sound level of an AVAS that will enable blind and partially sighted pedestrians to detect the presence and direction of movement of an approaching quiet vehicle at a distance that is sufficient to ensure a safe crossing decision. The draft Regulation you will be considering in March 2016 proposes that an overall sound level of 50 DBA at a speed of 10 KPH, and 56 DBA at 20 KPH respectively. However, in the light of research conducted by Louisiana Tech University recently (see enclosed), there is every reason to doubt that the proposed AVAS standard will ensure sufficient audio warning to prevent a collision between a quiet car and the pedestrian. The results of the study showed that there was no statistical difference in the ability of test subjects to hear the quiet vehicle with or without the AVAS.
2. Sound at stationary. Awareness of the presence of a vehicle that may begin moving at any moment is essential for the safety of blind and partially sighted pedestrians. We note with deep concern that the draft Regulation permits but does not require an alert sound while the quiet vehicle is operating but stationary. Stationary quiet vehicles, e.g. when stopped at a traffic light or in a parking lot, may indeed start to

move at any time. If blind pedestrians are unaware of the presence of the quiet vehicle, the pedestrian may suddenly and unexpectedly step out in front of the vehicle. The WBU believes that it is essential that blind pedestrians need to have full information about all vehicles that are operational and in close proximity to the pedestrian.

Research supports the claim that a warning sound at stationary is essential for pedestrian safety. A study carried out by the University of Duisburg-Essen, Germany, concludes that "(...) there are special problems for blind people at crossings without signals, because standing cars (BEV, HEV or ICE with automatic start/stop) cannot be heard."

For this reason, WBU strongly believes that all quiet vehicles must be equipped with an alert sound at stationary to ensure pedestrians safety.

3. Prohibition of the "pause function": The draft Regulation permits the manufacturer to install a function by which the driver can temporarily turn off the warning sound. The AVAS is a safety device like airbags and brake lights. However, safety devices can only fulfil their proper function if they work automatically and cannot be manipulated by the driver. A driver cannot know at what moment he or she may encounter a pedestrian and when it might theoretically be "safe" to dispense with the warning sound. In fact, as some of you may know, there was an accident in Japan just last month where a blind man and his guide dog were struck and killed by a dump truck that was, reportedly, backing up without its back-up alarm on. The installation of a pause function must be prohibited.

The WBU is asking WP.29 to direct the GRB to reconsider the proposed DBA levels and to address our concerns about the need for sound at stationary and the need to prohibit the pause function.

Sincerely,



Dr. Fredric K. Schroeder
First Vice-President
World Blind Union