OICA-CLEPA comments on ECE/TRANS/WP29/GRRF/2017/24

ECE/TRANS/WP29/GRRF/2017/24 proposes amendments of UN R131 to change the requirements for the manual deactivation means.

The manual deactivation means as permitted by UNECE R 131, para 5.4 was intensively discussed during the work of the informal working group AEBS/LDWS. The final conclusion was to permit the vehicles to be equipped with a deactivation means. The base for the decision was based on the argumentation below, which has been confirmed by experience.

- The issue of AEBS exemption on vehicles equipped with front mounted equipment was repeatedly presented by Industry at GRRF 76 to 79. The issue could not be sorted out and no exemptions were accepted. Consequently the need for a deactivation switch remains. Indeed, for these applications like snow plows, winches, pumps, crane legs (and their necessary support frames), the signal of the AEBS sensor may be disturbed or completely blocked.
- Mechanical impact on the AEBS sensor resulting from light collisions, stones chipping the sensor or accidents with small animals may disturb the adjustment of the AEBS sensor. This may result in an increase of the probability of false warnings. To give the driver the chance to carry on his tour, the deactivation means is necessary.
- From a general standpoint, existing AEBS are mainly beneficial for vehicles which are primarily used in highway conditions. The probability of inadequate warning is increasing with the traffic density and complexity (e.g. in urban areas), or with the number and variety of stationary objects present on the sides of narrow and curvy countryside roads (e.g. milk collectors in farms, which also may sometime drive off road). Too frequent warnings may be annoying for the driver and may decrease his confidence in these systems. In addition AEBS is intended to support drivers during their monotonic trips on highways, where drivers may become drowsy. In urban areas or on narrow countryside roads, traffic situations are changing dynamically, keeping drivers attentive. Thus a system deactivation in such situations won’t impair the positive impact of AEBS on safety in a significant manner. Drivers should have the possibility to deactivate AEBS in those situations.

Increasing experience with AEBS has shown some more reasons to permit manual deactivation: situations in car wash lines, entry to and exit from ferries, hauling of broken down vehicles are examples.

Currently installed AEBS fulfils UN R131 and systems were developed on the basis of the requirements of that regulation. The permission of a manual deactivation means is a important technical input for designing the entire architecture and for adjusting the underlying algorithms. The proposed changes to the regulation may lead to a conservative strategy on AEBS intervention. Consequently the general AEBS efficiency may be decreased, for the sake of specific cases.

Commercial vehicles are used for nearly unlimited different purposes (and traffic situations), and vehicles often need to be designed and adapted to fit to their purpose. The manual deactivation means gives manufacturers the necessary flexibility to use AEBS series products, and drivers the chance to deactivate the system if it is in contradiction to a specific use case.

Statistical data collected in the field show that AEBS is seldomly deactivated by the driver: data available from a vehicle manufacturer shows that AEBS is deactivated less than 1% of the total driving time of the considered vehicle fleet (corresponding to around 120,000,000 km). OICA is willing to share its expertise and field experience to help CPs to conduct such an analysis of accidents statistics, or to share data.