

Proposal for Supplement 1 to the 00 series of amendments to Regulation No. 130

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers

(The modifications to the current text of the Regulation are marked in **bold** characters)

I. Proposal

Paragraph 1, amend to read (addition of a reference to a new footnote No.2 and of a new footnote No.2):

"1. Scope and purpose

This Regulation applies to the lane departure warning system of vehicles of category M₂, N₂, M₃ and N₃.^{1,2}

¹ As defined in section 2 of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.2, para.2)

² **Contracting Parties applying this Regulation on a mandatory basis may exempt from mandatory application of this Regulation vehicle categories from the following list, taking into account e.g.:**

- **the results of studies indicating that implementation of such kind of systems is technically not always feasible on certain vehicles (e.g. due to technical and physical constraints which make it impossible to install the lane departure detection equipment in a way that would ensure its reliable functioning),**
- **that some specific vehicle categories would seldom be used in the conditions where those systems become effective, or**
- **for other appropriate reasons like particular usage related to the dedicated purpose of the vehicle.**

List of vehicle categories:

- (1) **category N 2 tractor for semi-trailer with a maximum mass between 3,5 tonnes and 8 tonnes;**
- (2) **categories M₂ and M₃ vehicles of Class A, Class I and Class II;**
- (3) **category M₃ articulated buses of Class A, Class I and Class II;**
- (4) **off-road vehicles of categories M₂, M₃, N₂ and N₃ as referred to in paragraphs 2.8.1.2. and 2.8.1.3. of R.E.3.;**
- (5) **special purpose vehicles of categories M₂, M₃, N₂ and N₃ as referred to in paragraph 2.5 of R.E.3.;**
- (6) **vehicles of categories M₂, M₃, N₂ and N₃ with more than three axles and a maximum wheel diameter code exceeding 19.5 and with a maximum mass exceeding 25 t."**

II. Justification

OICA believes that including the exemptions as a footnote in the UN regulation gives a valuable recommendation to the Contracting Parties applying this regulation that a proper cost/benefits analysis can provide relevant data for a consistent and appropriate political decision. As information, the EU decided on exemptions on the basis of different contributions, which led to the exemptions of the vehicles listed below.

LDWS is most efficient for "long distance trucks and coaches" travelling on highways.

LDWS is primarily designed to support the driver during monotone driving conditions on highways.

Category N2 tractor for semi-trailer with a maximum mass between 3,5 tonnes and 8 tonnes;
These vehicles are typical vehicles not much distributed because they have particular utilizations. Due to this rarity it is currently difficult to equip them with AEBS in an economically efficient way.

Categories M₂ and M₃ vehicles of Class A, Class I and Class II;

Category M₃ articulated buses of Class A, Class I and Class II

Vehicles of Class A, I and II are predominantly driven in city conditions. City driving mostly occurs below 60 km/h (the activation speed of LDWS). Due to often stop & go the driver is very active and drowsiness due to monotone driving is not expected.

Off-road vehicles are designed to drive under off-road conditions where there is no lane marking. Not only LDWS is useless in off-road conditions, but in addition a high rate of manual or automatic LDWS deactivation is expectable which can lead to loss of driver's acceptance, even in normal road conditions. Due to the technical environment specific to off-road vehicles (thickness of windshield, split windshields, asymmetrical cabs, front hood vehicles etc.) robust and reliable sensor integration is not always possible.

Special purpose vehicles of categories M₂, M₃, N₂ and N₃ as referred to in paragraph 2.5 of R.E.3.;

Robust sensor installation on special purpose vehicles is often not possible (snow plows, external devices etc.). Typically, these vehicles have a low mileage for a high number of operating hours: monotone driving is not to be expected. As a consequence, the deactivation rate can be such that it can considerably-reduce the acceptance of the system.

Vehicles of categories M₃, N₂ and N₃ with more than three axles and a maximum wheel diameter code exceeding 19.5 and with a maximum mass exceeding 25 t

Vehicles with more than 3 axles in the EU are often construction vehicles, which are seldom used on highways and rarely in conditions where LDWS would be the most efficient. Moreover, the environment conditions for these construction vehicles may negatively affect the sensors, in a similar way as for off road vehicles. 4 axle vehicles in Japan are mostly used for long haulage transport, thus are excluded from the recommendation.