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World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

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Item 6 (a) of the provisional agenda

UN Regulation No. 48 (Installation of lighting and light-signalling devices):

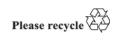
Proposals for amendments to the latest series of amendments

Proposal for a new supplement to UN Regulation No. 48

Submitted by the International Association of the Body and Trailer Building Industry*

The text reproduced below was prepared by the expert from the International Association of the Body and Trailer Building Industry (CLCCR), introducing amendments to UN Regulation No. 48 to permit the installation of manoeuvring lamps on trailers. The modifications to the existing text are marked in bold for new and strikethrough for deleted characters.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2022 as outlined in proposed programme budget for 2022 (A/76/6 (Sect.20), para 20.76), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.





I. Proposal

Paragraph 6.26.1, amend to read:

"6.26.1. Presence

Optional on motor vehicles and on trailers of category O₃ and O₄.

Paragraph 6.26.2, amend to read:

"6.26.2. Number

Motor vehicles - One or two (one per side)

Trailers - Maximum of six (maximum of 3 per side)"

"6.26.4. Position

Motor vehicles – No special requirement.

Trailers - Manoeuvring lamps shall be mounted symmetrically on each side of the trailer. If the structure or design make it impossible to comply with such a requirement, the lamps shall be mounted as symmetrically as practicable."

Paragraph 6.26.7, amend to read:

"6.26.7. Electrical Connections

Motor vehicles - Manoeuvring lamps shall be so connected that they cannot be switched ON unless the—main-beam headlamps or the dipped-beam headlamps of the motor vehicle are switched ON at the same time.

The manoeuvring lamp(s) shall be switched ON automatically for slow manoeuvres up to 15km/h provided that one of the following conditions is fulfilled:

- (a) Prior to the vehicle being set in motion for the first time after each manual activation of the propulsion system; or
- (b) Reverse gear is engaged; or
- (c) A camera based system which assists parking manoeuvres is operating.

The manoeuvring lamps shall be automatically switched OFF if the forward speed of the vehicle exceeds 15 km/h and they shall remain switched OFF until the switch ON conditions are met again.

Trailers - Manoeuvring lamps shall be so connected that they cannot be activated unless the position lamps of the trailer are switched ON at the same time and shall take their input speed directly from the trailer.

The manoeuvring lamp(s) shall be switched ON automatically for slow manoeuvres up to 15 km/h provided that one of the following conditions is fulfilled:

- (a) Prior to the trailer being set in motion for the first time after each manual activation of the vehicle propulsion system; or
- (b) The reverse lamp is switched ON; or
- (c) A camera-based system which assists parking manoeuvres is operating.

The manoeuvring lamps shall be automatically switched OFF if the forward speed of the trailer exceeds 15 km/h and they shall remain switched OFF until the switch ON conditions are met again."

II. Justification

- 1. This proposal to amend UN Regulation No. 48 (Installation of lighting and light-signalling devices) submitted by the expert from CLCCR intends to improve the all-round visibility of trailers and vehicle combinations so to mitigate the risk of low-speed manoeuvring accidents in low light conditions.
- 2. Background supporting information
- 2.1. Workplace transport safety: a brief guide (Health & Safety Executive (HSE), series code INDG199(rev2), United Kingdom of Great Britain and Northern Ireland)¹ (excerpts):
- (a) Every year, there are over 5000 accidents involving transport in the workplace. About 50 of these result in people being killed (www.hse.gov.uk/statistics). The main causes of injury are people falling off vehicles, or being struck or crushed by them.
- (b) Lighting

Every workplace should have suitable and sufficient lighting, particularly in areas where:

- Vehicles manoeuvre, or pedestrians and vehicles circulate and cross.
- Loading and unloading takes place.
- (c) Safe site (activity) Reversing

Around a quarter of all deaths involving vehicles at work occur as a result of reversing. It also results in considerable damage to vehicles, equipment and property.

The most effective way of reducing reversing incidents is to remove the need to reverse by, for example, using one-way systems. Where this is not possible, sites should be organised so that reversing is kept to a minimum.

Where reversing is necessary, consider the following:

- Install barriers to prevent vehicles entering pedestrian zones.
- Plan and clearly mark designated reversing areas.
- Keep people away from reversing areas and operations.
- Use portable radios or similar communication systems.
- Increase drivers' ability to see pedestrians.
- Install equipment on vehicles to help the driver
- 2.2. A guide to workplace transport safety (Health & Safety Executive (HSE), series code HSG136 (3rd Edition), United Kingdom of Great Britain and Northern Ireland)¹ (excerpts):

Vehicle visibility and reversing aids

- It is important that drivers are able to see clearly around their vehicle, so they
 can see hazards and avoid them.
- Vehicles should also be clearly visible to pedestrians and other vehicles in the
 workplace, so consider fitting, for example, additional lights, reflectors and
 flashing (or rotating) beacons (as well as horns for drivers to warn others that
 they are approaching).
- 3. UN Regulation No. 48 does not allow the installation of manoeuvring lamps on trailers at the point of type approval. Manoeuvring lamps are used to provide supplementary

¹ Contains public sector information published by the Health and Safety Executive and licensed under the Open Government Licence.

illumination to the side of the vehicle to assist during slow-speed manoeuvres. The current regulation only permits them to be installed on 'motor vehicles' – not trailers.

- 4. An increasing number of companies and freight operators across the EU are installing manoeuvring lamps to trailers and vehicle combinations as a 'post-registration' installation, to provide better all-round visibility for the driver (and other workers) when in close proximity to low-speed manoeuvring vehicles. This is particularly relevant when reversing with a long trailer.
- 5. CLCCR proposes to amend the regulation to allow manoeuvring lamps to be installed on both motor vehicles and category O_3 and O_4 trailers for the benefit of greater visibility. The proposal requires the trailer manoeuvring lamps to be automatically switched off if the forward trailer speed exceeds 15 km/h, and to remain switched off until certain conditions for activation are met again. To ensure vehicle combination compatibility, the lamps are required to take their speed input directly from the trailer (and not the towing vehicle).
- 6. O_1 and O_2 trailers have been left out of this first step as they are unlikely to have the on-board speed sensing necessary to meet the requirements specified above. Visibility is less of an issue on these typically shorter trailers. A successful introduction of manoeuvring lamps on O_3 and O_4 category trailers may prompt a future revision.

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