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agenda item 8.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 48

(Installation of lighting and light-signalling devices)

Transmitted by the experts from the Netherlands and Germany

Note: The text reproduced below was prepared by the experts from the Netherlands and Germany in order to introduce the mandatory installation of automatic dedicated daytime running lamps in combination with an automatic operation of the dipped-beam headlamps. It is based on a document without a symbol (informal document No. GRE-55-6), distributed at the fifty-fifth GRE session (TRANS/WP.29/GRE/55, paras. 30 and 31). The modifications to the current text of the Regulation (up to Supplement 13 to the 02 series of amendments) are marked in **bold** or strikethrough characters.

Note: This document is distributed to the Experts on Lighting and Light-Signalling only.

A. PROPOSAL

Paragraph 4.2., amend to read:

"4.2. An approval number shall be assigned to each type approved. Its first two digits (at present **02 03**, corresponding to the **02 03** series of amendments) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign this number to another vehicle type or to the same vehicle type submitted with equipment not specified in the list referred to in paragraph 3.2.2. above, subject to the provisions of paragraph 7. of this Regulation."

Paragraph 6.2.7., amend to read:

"6.2.7. Electrical connections

....

Dipped-beam headlamps ~~may~~ **shall** be switched ON or OFF automatically. **They shall be switched ON when it is required to drive with the dipped-beam headlamps switched on due to low ambient lighting conditions (e.g. during nighttime driving conditions, reduced visibility, tunnels, etc..)**

However, it shall be always possible to ~~switch these dipped-beam headlamps ON and OFF manually~~ **override the automatic switching of the dipped-beam headlamps.**"

Paragraph 6.2.8., amend to read:

"6.2.8. Tell-tale

6.2.8.1. Closed-circuit T tell-tale optional mandatory.

6.2.8.2. However, i~~In the case where the whole beam or the kink of the elbow of the cut-off is moved to produce bend lighting, an operational~~ **operating** tell-tale is mandatory;

6.2.8.3. it shall be a flashing warning light which comes on i~~In the event of a malfunction of the displacement of the kink of the elbow of the cut-off~~ **it shall be a flashing warning light."**

Paragraphs 6.19., 6.19.1. and footnote 8/, amend to read:

"6.19. DAYTIME RUNNING LAMP 8/

6.19.1. Presence

~~Optional~~ **Mandatory** on motor vehicles. Prohibited on trailers.

8/ The ~~installation~~ **presence** (see also paragraph 5.22. of this Regulation) of this device may be forbidden on the basis of national regulations."

Paragraph 6.19.7., amend to read:

"6.19.7. Electrical connections

~~If installed,~~ The daytime running lamps shall be switched ON automatically when the device which starts and/or stops the engine is in a position which makes it possible for the engine to operate. It shall be possible to activate and deactivate the automatic switching ON of daytime running lamps without the use of tools.

The daytime running lamps shall switch OFF automatically when the headlamps are switched ON, except when the latter are used to give intermittent luminous warnings at short intervals.

Furthermore, the lamps referred to in paragraph 5.11. are not switched on when the daytime running lamps are switched ON."

Paragraph 12., amend to read:

"12. TRANSITIONAL PROVISIONS

12.1. As from the official date of entry into force of the ~~02~~ **03** series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approval under this Regulation as amended by the ~~02~~ **03** series of amendments.

12.2. As from ~~1 October 2002~~ **[24] months after the official date of entry into force of the 03 series of amendments**, Contracting Parties applying this Regulation shall grant ECE approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the ~~02~~ **03** series of amendments.

....

12.4. Until ~~1 October 2002~~ **[24] months after the official date of entry into force of the 03 series of amendments**, Contracting Parties applying this Regulation shall continue to grant approvals to those types of vehicles which comply with the requirements of this Regulation as amended by the preceding series of amendments.

12.5. ECE approvals granted under this Regulation before ~~1 October 2002~~ **[24] months after the official date of entry into force of the 03 series of amendments** and all extensions of such approvals, including those to a preceding series of amendments to this Regulation granted subsequently, shall remain valid indefinitely. When the vehicle type approved to the preceding series of amendments meets the requirements of this Regulation as amended by the ~~02~~ **03** series of amendments, the Contracting

Party which granted the approval shall notify the other Contracting Parties applying this Regulation thereof.

- 12.6. No Contracting Party applying this Regulation shall refuse national type approval of a vehicle type approved to the ~~02~~ **03** series of amendments to this Regulation.
- 12.7. Until ~~1 October 2002~~ **[24] months after the official date of entry into force of the 03 series of amendments**, no Contracting Party applying this Regulation shall refuse national type approval of a vehicle type approved to the preceding series of amendments to this Regulation.
- 12.8. From ~~1 October 2003~~ **[36] months after the official date of entry into force of the 03 series of amendments**, Contracting Parties applying this Regulation may refuse first national registration (first entry into service) of a vehicle which does not meet the requirements of the ~~02~~ **03** series of amendments to this Regulation.

.... "

Annex 2, amend to read:

"Annex 2

ARRANGEMENTS OF APPROVAL MARKS

Model A

(See paragraph 4.4. of this Regulation)

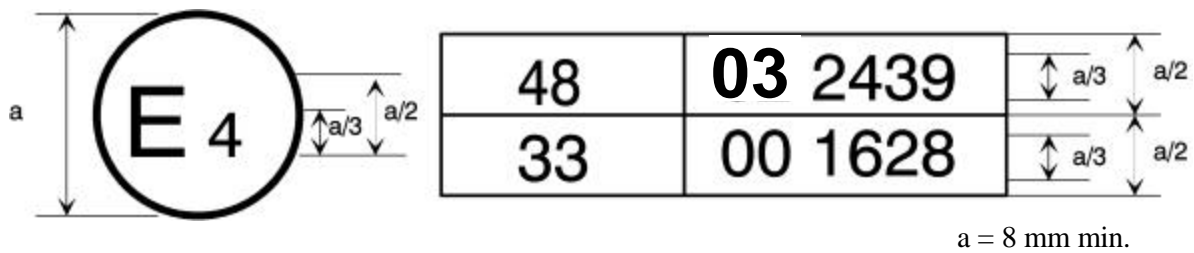


a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to the installation of lighting and light-signalling devices, been approved in the Netherlands (E4) pursuant to Regulation No. 48 as amended by the ~~02~~ **03** series of amendments. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 48 as amended by the ~~02~~ **03** series of amendments.

Model B

(see paragraph 4.5. of this Regulation)



The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E4) pursuant to Regulation No. 48 as amended by the 02 03 series of amendments and Regulation No. 33. ^{1/} The approval number indicates that, at the dates when the respective approvals were given, Regulation No. 48 was amended by the 02 03 series of amendments and Regulation No. 33 was still in its original form.

^{1/} The second number is given merely as an example."

B. JUSTIFICATION

General

This proposal is intended to introduce the mandatory installation of automatic dedicated daytime running lamps (DRL) in combination with an automatic operation of the dipped-beam headlamps.

The European Union study (IR 4, DRL Project: DRL implementation scenarios; Report for WP4 and the Final Report) has concluded that the preferable policy option for DRL implementation is the technical measure of automatic dedicated DRL for new cars, combined with a behavioural measure requiring the mandatory use of low beams (dipped-beam headlamps) for existing cars.

The technical part of the preferable policy option is therefore automatic dedicated DRL (Regulation No. 87) for new cars. This should be combined with automatic switching dipped-beam headlamps and switched-off taillights.

The most important reasons, and background, for this technical measure are:

- Accident reduction and consequently reduction of number of casualties.
- Cost-benefit analysis.
- Less increase of energy consumption than with behavioural measure.
- Less increase of CO₂ emission than with behavioural measure.
- No masking of stop lamps.
- Prevent drivers from forgetting to switch on the dipped-beam headlamps under reduced visibility conditions, hence avoiding the possible glaring other road-users.

Also many other reports speak in favour of DRL, e.g.: BAST "BAST Comments to the EU Study"; 2005. SWOV R-97-36 "The Safety Effects of Daytime Running Lights"; 1997, etc.

Specific amendments

Paragraph 4.2.

It is suggested to introduce this proposal as a new series of amendments, since it involves significant changes in the installation requirements. With this proposal, dedicated daytime running lamps (Regulation No. 87-lamps) will no longer be optional, but become a mandatory installation requirement. This would result in a major technical amendment being made to this Regulation.

Paragraph 6.2.7.

This proposal is intended to introduce the mandatory installation of automatic dedicated daytime running lamps in combination with an automatic operation of the dipped-beam headlamps. Therefore, it is proposed to change the current optional requirement, which allows automatic switching of the dipped-beam headlamps, into a mandatory requirement. In order to prevent drivers from forgetting to switch-on dipped-beam headlamps under reduced visibility conditions, automatic dedicated DRL should be combined with automatic dipped-beam activation. Preferably at a predetermined reduced level of ambient light intensity. However, specific photometrics are usually not part of Regulation No. 48.

Furthermore, the current provision for manual override is preserved with only slightly different wording. This is taking into account the comments made by some GRE-delegates, that with the current text there seemed to be a lack of clarity, which could have lead to a possible contradiction.

Paragraph 6.2.8.

In order for the driver to know which lamps are switched on (dipped-beam headlamps or the dedicated daytime running lamps) at least one tell-tale is necessary. Theoretically, this could be either a tell-tale for the dipped-beam headlamps or for the dedicated daytime running lamps. In this proposal, the choice was made to mandate the tell-tale for the dipped-beam headlamps. This way the driver will at least be informed actively when the "lights are on". In the absence of this active warning, the driver can rightfully assume that the dedicated daytime running lamps are on. It is evident that a tell-tale for both lamps would be the ideal situation. However, the experts of the Netherlands and Germany have taken into account the concerns expressed by industry, in particular by some vehicle manufacturers, related to their problems of finding sufficient space for these extra required tell-tales and the additional costs.

Paragraph 6.19.1.

As mentioned before, this proposal is intended to introduce the mandatory installation of automatic dedicated daytime running lamps in combination with an automatic operation of the dipped-beam headlamps. The paramount reason is the accident reduction and consequent reduction of number of casualties. The EU Study (IR 4, DRL Project: DRL implementation scenarios; Report for WP4 and the Final Report) has concluded that the preferable policy option for DRL implementation is the technical measure of automatic dedicated DRL for new cars, combined with a behavioural measure requiring the mandatory use of low beams (dipped-beam headlamps) for existing cars. DRL may very well be one of the most powerful measures to

improve road safety, that can be achieved with vehicle lighting today. Furthermore, the results of the EU Study show that this measure is absolutely cost-beneficial.

Footnote 8/

Some concerns were risen regarding a possible legal contradiction between the current footnote 8/ and the proposed mandatory presence of the daytime running lamps. With the proposed re-wording of footnote 8/, this is resolved. Particular attention is drawn to the (for many years) already existing paragraph 5.22. of this Regulation, which clarifies whether a lamp is deemed present or not. In practice it means that the vehicle as produced by the manufacturer will be physically equipped with daytime running lamps, but a country having national regulations which forbid their presence will require removal of more than only the light source(s), e.g. removal of wires, connectors or suchlike, from these lamps.

Paragraph 6.19.7.

In order to reduce pollution and bulb consumption, automatic dedicated daytime running lamps should be combined with switched-off position lamps (and side lamps, if applicable). This will also prevent the possible "masking" of brake lamps. Therefore, the additional provision is proposed.

Paragraph 12.

For the sake of road safety the proposed measure, i.e. the mandatory installation of automatic dedicated daytime running lamps in combination with an automatic operation of the dipped-beam headlamps, should actually be implemented "immediately". However, for practical reasons it is more reasonable to introduce it "as soon as possible". The proposed 24 months will in practice mean a lead time of at least 3 to 4 years.

Annex 2

The same justification as for paragraph 4.2.

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