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Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Passive Safety****Seventy-third session**

Geneva, 15–19 May 2023

Item 10 of the provisional agenda

Regulation No. 100 (Electric power trained vehicles)**Proposal for the 04 Series of Amendments to
Regulation No. 100 (Electric power trained vehicles) *****Submitted by the expert from the Netherlands**

The text reproduced below was prepared by the expert from the Netherlands, aimed to an identification of buses and trucks equipped with an electric drivetrain which is consistent with existing regulated identification for Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG), Liquid Natural Gas (LNG) and Compressed Hydrogen (H₂) fuelled trucks and busses. The modifications to the current text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), 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

Contents, list of annexes, amend to read:

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Insert a new paragraph 5.5., to read:

- "5.5. Identification of electric power trained vehicles.**
- 5.5.1. On vehicles of the categories M₂/N₂ and M₃/N₃, equipped with a high voltage electric powertrain, labels shall be installed as specified in Annex 10.**
- 5.5.2. For hybrid electric vehicles running on diesel or gasoline, the high voltage powertrain shall be considered its first energy source, independent of the capacity of the REESS.**
- 5.5.3. The labels shall be installed on the front and rear of the vehicle and on the outside of the doors on the right-hand side (left-hand drive vehicles) and left-hand side (right-hand drive vehicles)."**

Paragraph 12.6., renumber as paragraph 12.10.

Insert new paragraphs 12.6. to 12.9., to read:

- "12.6. As from the official date of entry into force of the 04 series of amendments, no Contracting Party applying this UN Regulation shall refuse to grant or refuse to accept UN type approvals under this UN Regulation as amended by the 04 series of amendments.**
- 12.7. As from 1 September 2025, Contracting Parties applying this UN Regulation shall not be obliged to accept UN type approvals to the preceding series of amendments that were first issued on or after 1 September 2025.**
- 12.8. Until 1 September 2026, Contracting Parties applying this UN Regulation shall accept UN type approvals to the preceding series of amendments that were first issued before 1 September 2025.**
- 12.9. As from 1 September 2026, Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the preceding series."**

Annex 2, amend to read:

"Annex 2

Arrangements of the Approval Marks

Model A
(See paragraph 4.4. of this Regulation)

Figure 1



a = 8 mm min.

The approval mark in Figure 1 affixed to a vehicle shows that the road vehicle type concerned has been approved in the Netherlands (E 4), pursuant to Regulation No. 100, and under the approval number 042492. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 100 as amended by 04 series of amendments.

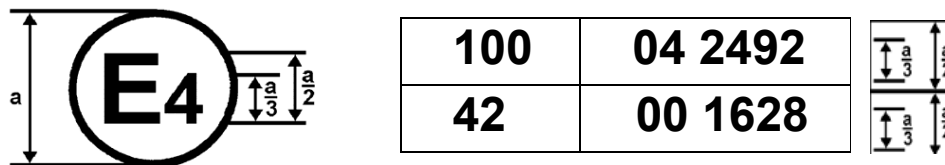
Figure 2



a = 8 mm min.

The approval mark in Figure 2 affixed to a REESS shows that the REESS type ("ES") concerned has been approved in the Netherlands (E 4), pursuant to Regulation No. 100, and under the approval number 042492. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 100 as amended by 04 series of amendments.

Model B
(See paragraph 4.5. of this Regulation)



a = 8 mm min.

The above approval mark affixed to a vehicle shows that the road vehicle concerned has been approved in the Netherlands (E4) pursuant to Regulations Nos. 100 and 42¹. The approval number indicates that, at the dates when the respective approvals were granted, Regulation No. 100 was amended by the 04 series of amendments and Regulation No. 42 was still in its original form."

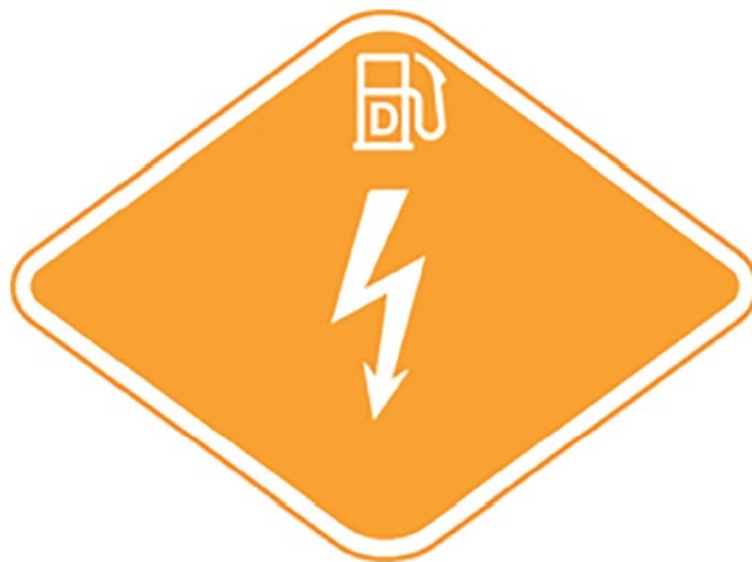
¹ The latter number is given only as an example.

Introduce a new Annex 10, to read:

"Annex 10

Provisions for a Label for Vehicles of Categories M₂/N₂ and M₃/N₃ Equipped with an Electric Power Train

(Paragraph 5.5.1 to 5.5.3. of this Regulation)



The label consists of a sticker which shall be weather resistant.

The centre zone indicates the first energy source.

The upper zone indicates the second energy source.

Layout and symbols shall be in accordance with ISO 17840-4:2018.

The colour and dimensions of the sticker shall fulfil the following requirements:

Colours:

Background:	Orange, RGB code 255, 165, 0
Border:	white or white reflecting
Letters:	white or white reflecting

Dimensions:

Sticker width:	110 – 150 mm
Sticker height:	80 – 110 mm"

II. Justification

1 Provisions for identification of gaseous and liquified fuels have been laid down in UN Regulations for LPG-fuelled M₂/N₂ and M₃/N₃ vehicles (UN Regulation No. 67, paragraph 17.1.8., including Annex 16 for details), CNG/LNG-fuelled M₂/N₂ and M₃/N₃ vehicles (UN Regulation No. 110, paragraph 18.1.8., including Annex 6 and 7 for the details) and Compressed Hydrogen-fuelled vehicles M₂/N₂ and M₃/N₃ vehicles (UN Regulation No. 134 paragraphs 7.1.7.1. and 7.1.7.3. including Annex 6 for the details).

2. The background for the additional labelling would help emergency services to determine how to approach these vehicles in case of a fire, especially the vehicle's REESS.

3. For the installation of labels, this proposal seeks consistency with UN Regulation Nos. 67, 110 and 134.
 4. CTIF ² recommends the use of symbols which are in line with the international standard **ISO 17840-4, Part 4 Propulsion energy identification**.
 5. For the appearance of the label, this proposal seeks consistency with the above mentioned ISO standard.
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² CTIF: historical abbreviation in French for "*Comité Technique International de prevention et d'extinction de Feu*".