Submitted by the expert from the Netherlands

Informal document **GRSP-67-12**
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agenda item 13)

Proposal for the 01 series of amendments to Regulation No. 134

Submitted by the expert from the Netherlands *

The text reproduced below was prepared by the expert from the Netherlands, aiming to update the official document ECE/TRANS/WP.29/GRSP/2020/10 in order to include the recommendations with regard to place and dimensions of the labels on vehicles. The modifications to the current text of ECE/TRANS/WP.29/GRSP/2020/10 are marked in blue

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update 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:

"Contents

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Regulation

Paragraph 4.2., amend to read:

"4.2. An approval number shall be assigned to each type approved **in accordance with Schedule 4 of the Agreement (E/ECE/TRANS/505/Rev.3).** ~~: its first two digits (00 for the Regulation in its initial form) 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 the same number to another vehicle or component type.~~"

Paragraph 7.1.1.2. shall read:

"7.1.1.2. Fuelling receptacle label: A label shall be affixed close to the fuelling receptacle; for instance inside a refilling hatch, showing the following information: fuel type (e.g. "CHG" for gaseous hydrogen or "LH2" for liquid hydrogen), MFP, NWP, date of removal from service of containers. In addition or on a separate label, the following information shall be permanently affixed on each container: Name of the Manufacturer, Serial Number, Date of Manufacture"

~~*Paragraphs 7.1.1.3. and 7.1.1.4. shall be renumbered as paragraphs 7.1.1.2. and 7.1.1.3*~~.

Insert a new paragraph 7.1.7. to read:

"7.1.7. Identification of hydrogen fuelled vehicles.

7.1.7.1. On vehicles of the categories M_2/N_2 and M_3/N_3, equipped with a compressed hydrogen system, labels shall be installed as specified in Annex 6

7.1.7.2. These 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~~) (if available, on a front door) and on top of the vehicle.

~~**7.1.7.3. A label shall be placed adjacent to the H_2 fill receptacle; for instance inside a refilling hatch, showing the following information: fuel type (using label shape and zones, colour definitions and pictogram as designated in Annex 6, MFP, NWP, date of removal from service of containers.**~~**"**

Insert new paragraphs 13, 13.1. to 13.4., to read:

"13. Transitional Provisions

13.1. **As from the official date of entry into force of the 01 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 01 series of amendments.**

13.2. **As from [1 September 2022,] Contracting Parties applying this UN Regulation shall not be obliged to accept UN type approvals to the ~~preceding series of amendments~~ original version of this Regulation that were first issued on or after [1 September 2022.]**

13.3. **Until [1 September 2024,] Contracting Parties applying this UN Regulation shall accept UN type approvals ~~to the preceding series of amendments~~ in its original form, that were first issued before [1 September 2022.]**

13.4. **As from [1 September 2024] Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the original version of this Regulation.**

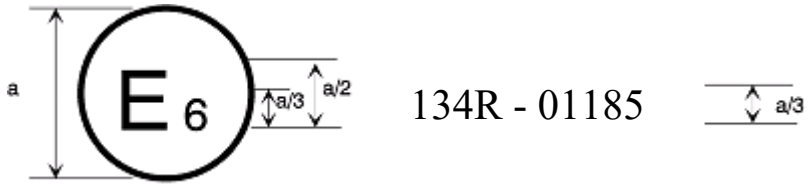
13.5. **Notwithstanding paragraphs 13.2 and 13.4, Contracting Parties applying this Regulation shall continue to accept type approvals issued according to this Regulation in its original form, for the vehicles/vehicle systems which are not affected by the changes introduced by the 01 series of amendments."**

Annex 2, amend to read:

“Annex 2

Arrangements of the approval marks

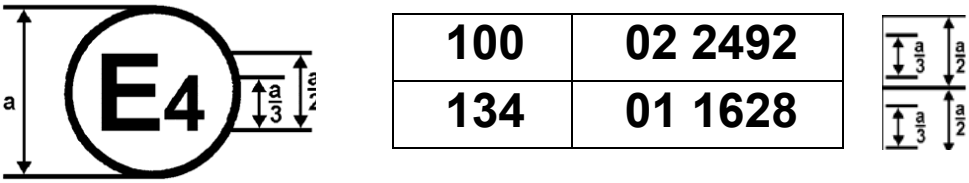
Model A
(See paragraphs 4.4. to 4.4.2. of this Regulation)



a = 8 mm min

The above approval mark affixed to a vehicle/ storage system/specific component shows that the vehicle/storage system/specific component type concerned has been approved in Belgium (E 6) for its the safety-related performance of hydrogen-fuelled vehicles pursuant to Regulation No. 134. The first two digits of the approval number indicate that the approval ~~was granted in accordance with the requirements of Regulation No. 134 in its original form~~ **already contained the 01 series of amendments at the time of approval.**

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 (E 4) pursuant to Regulations Nos. 134 and 100.* The approval number indicates that, at the dates when the respective approvals were granted, Regulation No. 100 was amended by the 02 series of amendments and Regulation No. 134 was ~~still in its original form~~. **amended by the 01 series of amendments.**”

* The latter number is given only as an example.

Introduce a new Annex 6 to read:

“Annex 6

Provisions for a label for ~~compressed~~ hydrogen vehicles of categories M_2/N_2 and M_3/N_3.

(Paragraph 7.1.7.1 ~~and 7.1.7.3.~~ 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

The left zone indicates the gas behaviour due to density

The right zone indicates the state of aggregation of stored gaseous fuel (this sample shows compressed gaseous hydrogen, for liquid hydrogen, the corresponding symbol shall be used)

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

Location of the sticker: front and rear, left side and right side (if available, on a front door), on top of the vehicle

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

Colours:

Background:	Light-blue, RGB code 0, 176, 240
Border:	white or white reflecting
Letters and symbols:	white or white reflecting

Dimensions:

Sticker width:	200 ~~110 – 150~~ mm (front and rear, left- and right side of vehicle)
	297 mm (top of vehicle)
Sticker height:	150 ~~80 – 110~~ mm (front and rear, left- and right side of vehicle)
	210 mm (top of vehicle)

II. Justification

1. Provisions for identification of Gaseous and Liquified fuels have been laid down in UN Regulations for LPG-fuelled M_2 and M_3 vehicles (UN Reg.67, par.17.1.8., including Annex 16 for details), and CNG/LNG-fuelled M_2 and M_3 vehicles (UN Reg.110, par.18.1.8., including Annex 6 and 7 for details).
2. The background for the additional labelling is to help emergency services to determine the approach of these vehicles in case of a fire. [In fire conditions it may be decided to cool the tanks or cylinders to prevent the activation of the TPRD's or if the fire is progressed beyond this stage to take measures to mitigate the effects of a flare or explosion. Compressed and liquefied gases behave differently in fire conditions.].
3. Extension of the scope to N_2/N_3 vehicles is necessary due to the wide variety of these vehicles nowadays, whereas in the past, they were usually equipped with a diesel powered driveline.
4. For the installation of labels this proposal seeks consistency with UN Reg.67 and UN Reg.110.
5. CTIF recommends to use symbols which are in line with International Standard **ISO 17840-4, Part 4 Propulsion energy identification**. (CTIF, historic French abbreviation for *"Comité Technique International de prevention et d'extinction de Feu"*).
6. For the appearance of the label, this proposal seeks consistency with the above mentioned ISO standard.
7. Location of stickers in line with recommendations from CTIF; sticker on top of vehicle is to be able to be identified by drones and in case a vehicle is tipped over.
8. Paragraph 7.1.7.3. removed and combined with updated paragraph 7.1.1.2.