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Item 5 of the provisional agenda

UN Regulation No. 34 (Prevention of fire risk)

Revised proposal for 04 Series of Amendments to UN Regulation No. 34

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers *

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) to remove the categories M₁ and N₁ from the scope of the regulation to avoid duplication with UN Regulations Nos. 94, 95 and 153. It is based on ECE/TRANS/WP.29/GRSG/2021/19 and GRSG-122-15 distributed at the 122nd session of the Working Party on General Safety Provisions (GRSG). The modifications to the current text of the UN Regulations 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 (part, V 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

Paragraphs 1., amend to read (footnote unchanged):

"1. Scope

This Regulation applies:

- 1.1. Part I: To the approval of vehicles of categories M, N and O* with regard to the tank(s) for liquid fuel **and to the approval of vehicles of categories M₁ and N₁, which are of a total permissible mass not exceeding 2.8 tonnes with regard to the installation of liquid fuel tanks.**
- 1.2. Part II (~~vacant~~) 1: ~~At the request of the manufacturer, to the approval of vehicles of categories M, N and O approved to Part I or IV of this Regulation fitted with liquid fuel tank(s) with regard to the prevention of fire risks in the event of a frontal and/or lateral collision as well as to the approval of vehicles of categories M₁ and N₁, which are of a total permissible mass exceeding 2.8 tonnes, and categories M₂, M₃, N₂, N₃ and O, fitted with tank(s) for liquid fuel, which have been approved to Part I or IV of this Regulation with regard to the prevention of fire risks in the event of a~~ **and/or** rear collision.

Part II 2: ~~To the approval of vehicles of categories M₁ and N₁, which are of a total permissible mass not exceeding 2.8 tonnes, fitted with liquid fuel tank(s) approved to Part I or IV of this Regulation with regard to the prevention of fire risks in the event of a rear collision.~~
- 1.3. Part III: To the approval of tanks for liquid fuel as separate technical units.
- 1.4. Part IV: To the approval of vehicles with regard to the installation of approved tanks for liquid fuel."

Paragraphs 2.1. to 2.1.2.4., amend to read:

- "2.1. Application for approval pursuant to Part I ~~and/or Part II~~ of this Regulation.
- 2.1.1. The application for approval of a vehicle type to Part I ~~or Part II~~ of this Regulation shall be submitted by the vehicle manufacturer or by his duly accredited representative.
- 2.1.2. It shall be accompanied by the undermentioned documents in triplicate and by the following particulars:
 - 2.1.2.1. A detailed description of the vehicle type with respect to the items specified in paragraph 4.2. ~~and/or 7.2.~~ The numbers and/or symbols identifying the engine type and the vehicle type shall be specified;
 - 2.1.2.2. Drawing(s) showing the characteristics of the fuel tank and specifying the material from which it is made;
 - 2.1.2.3. A diagram of the entire fuel feed systems, showing the site of each component on the vehicle; and
 - 2.1.2.4. ~~For application pursuant to Part II of this Regulation, a~~ **A** diagram of the electrical installation showing its siting and its mode of attachment to the vehicle."

Paragraphs 3.1. to 3.1.3., amend to read:

- "3.1. Approval pursuant to Part I ~~and/or Part II~~ of this Regulation.
- 3.1.1. If the vehicle submitted for approval pursuant to this Regulation meets the requirements of Part I ~~and/or Part II~~ below, approval of that vehicle type shall be granted.
- 3.1.2. **An approval number shall be assigned to each type approved in accordance with Schedule 4 of the Agreement (E/ECE/TRANS/505/Rev.3).** ~~Each type approved shall be assigned an approval number whose first two digits shall constitute the number of the most recent series of amendments incorporated in the Regulation on the date of issue of the approval. A Contracting Party may however assign the same approval number to several vehicle types as defined in paragraph 4.2. and/or 7.2. if the types are variants of the same basic model and provided that each type is separately tested and found to comply with the conditions of this Regulation.~~
- 3.1.3. Notice of approval or of refusal of approval of a vehicle type pursuant to this Regulation shall be communicated to the Parties to the Agreement which apply this Regulation by means of a form conforming to the model in Annex 1, Appendix 1 to this Regulation ~~and of drawings, giving the particulars referred to in paragraphs 2.1.2.2., 2.1.2.3. and 2.1.2.4. above (supplied by the applicant for approval) in a format not exceeding A 4 (210 x 297 mm) or folded to that format and on an appropriate scale.~~

Paragraph 3.1.4.2., amend to read:

- "3.1.4.2. The number of this Regulation, followed by "RI", if the vehicle is approved pursuant to Part I of the Regulation, ~~or by "RII 1" if the vehicle is approved pursuant to Parts I or IV and to Part II 1 of the Regulation, or by "RII 2" if the vehicle is approved pursuant to Parts I or IV and to Part II 2 of the Regulation,~~ a dash and the approval number to the right of the circle prescribed in paragraph 3.1.4.1.

Paragraphs 3.2.2. and 3.2.3., amend to read:

- "3.2.2. **An approval number shall be assigned to each type approved in accordance with Schedule 4 of the Agreement (E/ECE/TRANS/505/Rev.3).** ~~Each type approved shall be assigned an approval number whose first two digits shall constitute the number of the most recent series of amendments incorporated in the Regulation on the date of issue of the approval.~~
- 3.2.3. Notice of approval or of refusal of approval of a type of tank pursuant to this Regulation shall be communicated to the Contracting Parties to the Agreement which apply this Regulation by means of a form conforming to the model in Annex 1, Appendix 2 to this Regulation ~~and of drawings, giving the particulars referred to in paragraphs 2.2.2.1. and 2.2.2.2. above (supplied by the applicant for approval) in a format not exceeding A 4 (210 x 297 mm) or folded to that format and on an appropriate scale."~~

Paragraph 3.3.2. and 3.3.3., amend to read:

- "3.3.2. **An approval number shall be assigned to each type approved in accordance with Schedule 4 of the Agreement (E/ECE/TRANS/505/Rev.3).** ~~Each type approved shall be assigned an approval number whose first two digits shall constitute the number of the most recent series of amendments incorporated in the Regulation on the date of issue of the approval. A Contracting Party may however assign the same approval number to several vehicle types as defined in paragraph 12.2. if the types are variants of the same basic model and provided that each type is separately tested and found to comply with the conditions of this Regulation.~~

- 3.3.3. Notice of approval or of refusal of approval of a vehicle type pursuant to this Regulation shall be communicated to the Contracting Parties to the Agreement which apply this Regulation by means of a form conforming to the model in Annex 1, Appendix 1 to this Regulation ~~and of drawings, giving the particulars referred to in paragraphs 2.3.2.1., 2.3.2.2. and 2.3.2.3. above (supplied by the applicant for approval) in a format not exceeding A 4 (210 x 297 mm) or folded to that format and on an appropriate scale.~~"

Paragraphs 4. to 4.2.3., amend to read:

"4. Definitions

For the purposes of this Part of the Regulation:

- 4.1. "Approval of a vehicle" means the approval of a vehicle type with regard to the liquid fuel tanks.
- 4.2. "Vehicle type" means vehicles which do not differ in such essential respects as:
- 4.2.1. **The structure, shape, dimensions and materials (metal/plastic) of the tank(s)** ~~The manufacturer's type designation;~~
- 4.2.2. In vehicles of category M₁ the position of the tank(s) in the vehicle in so far as it has a negative effect on the requirements of paragraph 5.10.; **and**
- 4.2.3. The characteristics and siting of the fuel feed system (pump, filters, etc.)."**

Paragraph 4.5., amend to read:

- "4.5. "Capacity of the fuel tank" means the fuel tank capacity as specified by the manufacturer; ~~and.~~"

Part II-1 (the title), shall be deleted.

Paragraphs 7. to 7.4., amend to read:

"7. (Vacant) Definitions

~~—————~~ For the purposes of this Part of the Regulation:

- 7.1. ~~—————~~ "Approval of a vehicle" means the approval of a vehicle type with regard to the prevention of fire risks;
- 7.2. ~~—————~~ "Vehicle type" means vehicles which do not differ in such essential respects as:
- 7.2.1. ~~—————~~ The structure, shape, dimensions and materials (metal/plastic) of the tank(s);
- 7.2.2. ~~—————~~ In vehicles of category M₁,¹ the position of the tank(s) in the vehicle in so far as it has a negative effect on the requirements of paragraph 5.10.;
- 7.2.3. ~~—————~~ The characteristics and siting of the fuel feed system (pump, filters, etc.); and
- 7.2.4. ~~—————~~ The characteristics and siting of the electrical installation in so far as they have an effect on the results of the collision tests prescribed in this Regulation;
- 7.3. ~~—————~~ "Transverse plane" means the vertical transverse plane perpendicular to the median longitudinal plane of the vehicle;
- 7.4. ~~—————~~ "Unladen mass" means the mass of the vehicle in running order, unoccupied and unladen but complete with fuel, coolant, lubricants, tools and a spare wheel (if provided as standard equipment by the vehicle manufacturer);"

Paragraphs 8. to 8.1.1., amend to read:

"8. Requirements for the installation of liquid fuel tanks

The requirements specified in this section may be applied, at the request of the manufacturer, to vehicles of categories M₂, N₂, M₃, N₃ and O as well as to vehicles of categories M₁ and N₁, which are of a total permissible mass exceeding 2.8 tonnes.

At the request of the manufacturer, the requirements specified in this section may be applied to vehicles of other categories than M₁ and N₁, which are of a total permissible mass not exceeding 2.8 tonnes.

- 8.1. Fuel installation
- 8.1.1. ~~(vacant) The vehicles shall be approved according to either Part I or IV of this Regulation."~~

Paragraph 9., amend to read:

"9. (Vacant) Tests on the vehicle

~~— In the frontal impact test against a barrier carried out by the procedure specified in Annex 3 to this Regulation, in the lateral impact test performed according to the procedure described in Annex 4 of Regulation No. 95, 01-series of amendments, and in the rear end impact test carried out by the procedure specified in Annex 4 hereto;~~

- ~~9.1. — No more than a slight leakage of liquid in the fuel installation shall occur on collision;~~
- ~~9.2. — If there is continuous leakage in the fuel installation after the collision, the rate of leakage shall not exceed 30 g/min; if the liquid from the fuel installation mixes with liquids from the other systems, and if the several liquids cannot be easily separated and identified, the continuous leakage shall be evaluated from all the fluids collected;~~
- ~~9.3. — No fire maintained by the fuel shall occur.~~
- ~~9.4. — During and after the impacts described in paragraph 9. above, the battery shall be kept in position by its securing device.~~
- ~~9.5. — At the request of the manufacturer, the frontal collision test set out in Annex 3 of this Regulation can be replaced by the test procedure described in annex 3 of Regulation No. 94, 01-series of amendments."~~

Part II-2, shall be deleted.

Paragraph 13.1., amend to read:

- "13.1. The requirements stated in paragraphs 5.4., 5.5., 5.6., 5.7., 5.8., 5.10., and 5.11. above shall be complied with. **Vehicles of categories M₁ and N₁, which are of a total permissible mass not exceeding 2.8 tonnes, shall additionally comply with paragraph 8.**"

Paragraph 14.2., shall be deleted.

Paragraph 14.3. (former), renumber as paragraph 14.2. and amend to read:

- "14.2. Notice of confirmation, **extension, or refusal** of approval ~~or of refusal of approval, specifying the modifications~~ shall be communicated by the procedure specified in paragraphs 3.1.3., 3.2.3. or 3.3.3. above to the Contracting Parties to the Agreement which apply this Regulation."

Insert new paragraph 14.3., to read:

- "14.3. **The Type Approval Authority issuing the extension of approval shall assign a series number to each communication form drawn up for such an extension.**"

Paragraph 15., amend to read:

"15. Conformity of production

The conformity of production procedures shall comply with those set out in the Agreement, **Schedule 1 (E/ECE/TRANS/505/Rev.3) Appendix 2 (E/ECE/324 E/ECE/TRANS/505/Rev.2)**, with the following requirements:

- 15.1. Every vehicle or tank bearing an approval mark as prescribed under this Regulation shall conform to the vehicle type approved and satisfy the requirements of the respective Parts above.
- ~~15.2. In order to verify conformity as prescribed in paragraph 15.1. above, a sufficient number of serially produced vehicles or tanks bearing the approval mark required by this Regulation shall be subjected to random checks.~~
- ~~15.3. As a general rule, the conformity of the vehicle or tank with the approved type shall be checked on the basis of the description given in the approval form and its annexes. However, the vehicle or tank shall if necessary be subjected to the checks prescribed in paragraph 6. above."~~

Paragraph 16., amend to read:

"16. Penalties for non-conformity of production

- 16.1. **The approval granted in respect of a vehicle type pursuant to this Regulation may be withdrawn if the requirements laid down in paragraph 15.1. above is not complied with.** ~~The approval granted in respect of a type of vehicle or tank pursuant to this Regulation may be withdrawn if the requirement laid down in paragraph 15.1. above is not complied with or if the vehicle has failed to pass the checks prescribe in paragraph 9. above.~~
- 16.2. **If a Contracting Party to the Agreement which applies this Regulation withdraws an approval it has previously granted, it shall forthwith notify the other Contracting Parties applying this Regulation by means of a copy of the approval form bearing at the end, in large letters, the signed and dated annotation "APPROVAL WITHDRAWN".** ~~If a Contracting Party to the Agreement which applies this Regulation withdraws an approval it has previously granted, it shall forthwith notify the other Parties to the Agreement which apply this Regulation thereof by means of a copy of the communication form conforming to the model in Annexes 1 or 2 to this Regulation."~~

Paragraphs 17.1 to 17.6., shall be deleted.

Insert new paragraphs 17.1 to 17.6., to read:

- "17.1. As from the official date of entry into force of the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this Regulation as amended by the 04 series of amendments.**
- 17.2. As from 1 September 2026, Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments, first issued after 1 September 2026.**
- 17.3. Contracting Parties applying this Regulation shall continue to accept type approvals issued according to the 02 and 03 series of amendments to this Regulation first issued before 1 September 2026.**
- 17.4 Contracting Parties applying this Regulation may grant type approvals according to any preceding series of amendments to this Regulation.**
- 17.5. Contracting Parties applying this Regulation shall continue to grant extensions of existing approvals to any preceding series of amendments to this Regulation.**
- 17.6. Notwithstanding the transitional provisions above, Contracting Parties who start to apply this Regulation after the date of entry into force of the most recent series of amendments are not obliged to accept type approvals which were granted in accordance with any of the preceding series of amendments to this Regulation / are only obliged to accept type approval granted in accordance with the 04 series of amendments."**

Paragraph 18, amend to read:

"18. Names and addresses of Technical Services conducting approval tests, and of Type Approval Authorities

The Contracting Parties to the Agreement which apply this Regulation shall communicate to the Secretariat of the United Nations the names and addresses of the Technical Services **responsible for** conducting approval tests and of the Type Approval Authorities which grant approval and to which forms certifying approval or refusal or withdrawal of approval, issued in other countries, are to be sent."

Annex 1, Appendix 1, amend to read:

"Annex 1 - Appendix 1

Communication

(Maximum format: A4 (210 x 297 mm))



issued by : Name of administration:

Concerning:² Approval granted
 Approval extended
 Approval refused
 Approval withdrawn
 Production definitively discontinued

of a vehicle type with regard:² To the tank for liquid fuel
~~To the prevention of fire risks in the event of frontal / lateral / rear² collision~~
 Pursuant to Regulation No. 34.

Approval No..... Extension No.:

1. Trade name or mark of the power-driven vehicle:
 ...

9. (vacant) Description of the impact tests:
 ...

19. **The index to the information package lodged with the Type Approval Authority, which may be obtained on request, is attached. The following documents, bearing the approval number shown above, are annexed to this communication:**

~~Drawings and layout diagrams of the fuel tank, the fuel installation, the electrical installation, and other components of importance for the purposes of this~~

¹ Distinguishing number of the country which has granted/extended/refused/withdrawn/ the approval (see approval provisions in the Regulation).
² Strike out what does not apply.

Regulation."

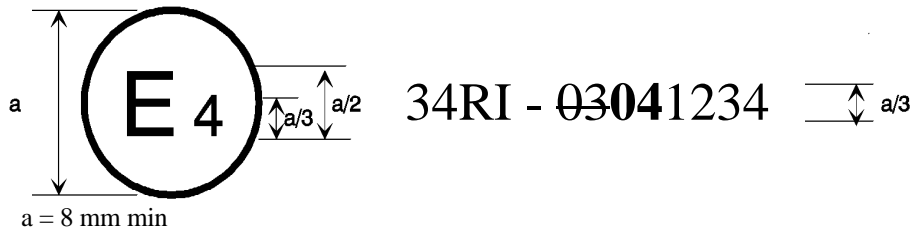
Annex 2, amend to read (footnote unchanged):

"Annex 2

Arrangements of approval marks

Model A

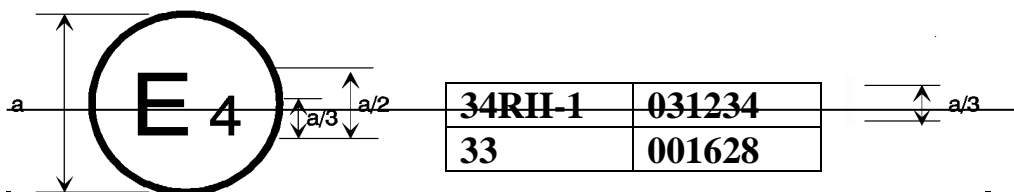
(See paragraph 3.1.4. of this Regulation)



The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E4) pursuant to Part I of Regulation No. 34 under approval No. 02041234. The first two digits (0304) of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 34 as amended by the 03 04 series of amendments."

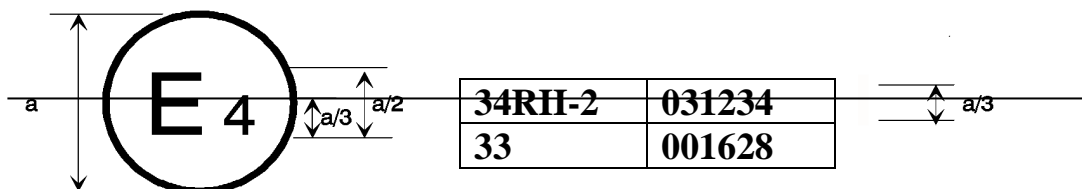
Model B (vacant)

(See paragraph 3.1.5. of this Regulation)



a = 8 mm minimum

The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E 4) pursuant to Regulations Nos. 34 Parts I or IV and II-1 and 33.* The approval numbers indicated that, at the date when the respective approvals were given, Regulation No. 34 included the 0304 series of amendments and Regulation No. 33 was still in its original form.



The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E 4) pursuant to Regulations Nos. 34 Parts I or IV and II-2 and 33.* The approval numbers indicated that, at the date when the respective approvals were given, Regulation No. 34 included the 03 series of amendments and Regulation No. 33 was still in its original form."

Model C

(See paragraph 3.2.4. of this Regulation)

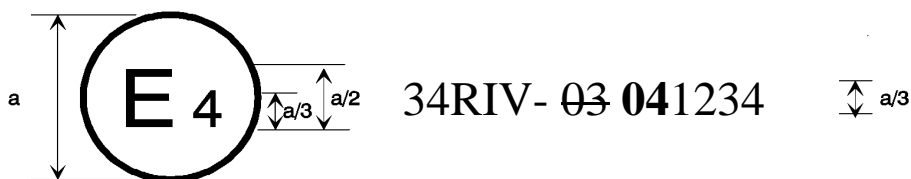


a = 8 mm min

The above approval mark affixed to a fuel tank shows that the type concerned was approved in the Netherlands (E4) pursuant to Part III of Regulation No. 34, for a universal use including its accessories, under approval No. 03 041234. The first two digits (03 04) of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 34 as amended by the 03 04 series of amendments.

Model D

(See paragraph 3.3.4. of this Regulation)



a = 8 mm min

The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E4) pursuant to Part IV of Regulation No. 34 under approval No. 03 041234. The first two digits (03 04) of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 34 as amended by the 03 04 series of amendments.

Model E

(See paragraph 3.3.5. of this Regulation)



a = 8 mm min.

The above approval mark affixed to a vehicle shows that the type concerned was approved in the Netherlands (E4) pursuant to Regulations Nos. 34 Part IV and 33.* The approval numbers indicated that, at the date when the respective approvals were given, Regulation No. 34 included the 03 04 series of amendments and Regulation No. 33 was still in its original form."

Annex 3., shall be deleted.

Insert new Annex 3, to read:

"Annex 3 (vacant)"

Annex 4., shall be deleted.

Insert new Annex 4, to read:

* The second number is given merely as an example.

"Annex 4 (vacant)"

II. Justification

1. This proposal is aimed at transferring the fuel installation requirements currently included in Part II-1 and Part II-2 into Part I and Part IV, and to withdraw Part II-1 and Part II-2. Part II-1 and Part II-2 are assumed to address the fuel system safety in the events of collisions.
 2. With this proposal, duplication of the requirements about fire risks in the events of collisions for M₁ and N₁ vehicles, currently required both in UN Regulation No. 34 Part II-2 and in UN Regulations Nos. 94, 95 and 153, can be avoided.
 3. Although Part II-1 of UN Regulation No.34 applies to vehicles of categories M₂, M₃, N₂, N₃, this Part II-1 is optional for manufacturers and there are no crash test procedures that can adequately be applied to the vehicle of such categories. Accordingly, Part II-1 has not been effectively used as safety requirements in the event of collisions for these vehicles.
 4. On the other hand, the requirements for fuel installation (paragraph 8.1.) were included in Part II-1 and Part II-2. Those requirements are not necessarily related to the collisions and therefore it is proposed to transfer them into Part I and Part IV to be applicable to all vehicles.
 5. Although this proposal does not change the stringency of the technical requirements, it is necessary to consider it as a new series of amendments for administrative reasons. Accordingly, existing approvals to 02 or 03 series of amendments should continue to be accepted by the contracting parties.
 6. Administrative provisions are updated to align with the Revision 3 of the 58 Agreement.
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