Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations
Working Party on Noise
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Geneva, 22-25 January 2019
Item 7 (c) of the provisional agenda
Tyres: UN Regulation No. 117 (Tyre rolling resistance, rolling noise and wet grip)

Proposal for a Supplement to the 02 series of amendments to UN Regulation No. 117

Submitted by the expert from the Russian Federation*

This proposal aims at aligning the provisions of UN Regulation No. 117 on approval numbers and markings with the provisions of Schedule 4 to the revised 1958 Agreement, as requested by the Informal Working Group on the International Whole Vehicle Type Approval (IWG IWVTA) at the 175th session of the World Forum for Harmonization of Vehicle Regulations (WP.29) (ECE/TRANS/WP.29/1139, para. 67). It is based on the informal document GRB-68-19. The modifications are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3), 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 5. "Approval", amend to read:*

"5. Approval"

5.1. If the representative tyre size of the type of tyre submitted for approval pursuant to this Regulation meets the requirements of paragraphs 6. and 7. below, approval of that type of tyre shall be granted.

5.2. An approval number **according to Schedule 4 to the Revision 3 of the 1958 Agreement** shall be assigned to the type of tyre approved. The same Contracting Party may not assign the same number to another type of tyre.

5.2.1. Instead of granting the original type approval number pursuant to UN Regulation No. 117, upon the request of the manufacturer, the Type Approval Authority may grant the type approval number, which had been granted before to that type of tyre pursuant to UN Regulations Nos. 30 or 54 with the subsequent extension number.

5.2.2. The communication form mentioned in paragraph 5.3. below shall identify specific performance parameters of UN Regulation No. 117 by the following suffixes:

- **S** To identify additional conformity to the requirements on tyre rolling sound emissions;
- **W** To identify additional conformity to the requirements on tyre adhesion on wet surfaces;
- **R** To identify additional conformity to the requirements on tyre rolling resistance.

Taking into account that two stages are defined for rolling sound and rolling resistance specifications in paragraphs 6.1. and 6.3. below, S and R will be followed either by the suffix "1" for compliance to stage 1 or by the suffix "2" for compliance to stage 2.

5.3. Notice of approval or extension of approval or refusal of approval of a type of tyre 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 to the Regulation.

5.3.1. **With reference to paragraph 5.2.1. above**, tyre manufacturers are entitled to submit an application for extension of type approval to the requirements of other Regulations relevant to the tyre type. In that case, a copy of the relevant type approval communication(s), as issued by the relevant Type Approval Authority, shall be attached to the application for extension of approval. All applications for extension of approval(s) shall only be granted by the Type Approval Authority which issued the original approval for the tyre.
5.3.1.1. When extension of approval is granted to incorporate into the communication form (see Annex 1 to this Regulation) certification(s) of conformity to other Regulations, the approval number on the communication form shall be supplemented by suffix(es) to identify the given Regulation(s) and the technical prescriptions which have been incorporated by the extension of approval. In relation to each given suffix, *(all)* the specific type approval number(s) and the Regulation itself shall be added to item 9. of Annex 1 - Communication form.

5.3.1.2. The suffix(es) mentioned in paragraph 5.2.2. above shall be preceded by the two digits prefix **shall** identifying the series of amendments of the prescription on tyre performances for the relevant UN Regulation No. 117, e.g. 02S2 to identify the second series of amendments on tyre road rolling sound emissions at stage 2 or 02S1WR1 to identify the second series of amendments on tyre road rolling sound emissions at stage 1, tyre adhesion on wet surfaces and rolling resistance at stage 1 (see paragraph 6.1. below for stage 1 and stage 2 definitions). No identification to the series of amendments shall be required if the relevant Regulation is in its original form.

5.3.2. The following suffixes have been already reserved to identify specific Regulations on tyre performance parameters:

- **S** — To identify additional conformity to the requirements on tyre rolling sound emissions;
- **W** — To identify additional conformity to the requirements on tyre adhesion on wet surfaces;
- **R** — To identify additional conformity to the requirements on tyre rolling resistance.

Taking into account that two stages are defined for rolling sound and rolling resistance specifications in paragraphs 6.1. and 6.3. below, S and R will be followed either by the suffix “1” for compliance to stage 1 or by the suffix “2” for compliance to stage 2.

5.4. In the space referred to in paragraph 4.3. and in accordance with the requirements of paragraph 4.4. above there shall be affixed to every tyre size, conforming to the type of tyre approved under this Regulation, an international approval mark consisting of:

5.4.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval**12**; and

5.4.2. The part of the approval number specified in paragraph 3 Section 3 of Schedule 4 to the Revision 3 of the 1958 Agreement, which shall be placed close to the circle prescribed in paragraph 5.4.1. above either above or below the "E" or to the left or right of that letter.

5.4.3. ...

*(Footnote 12 remains unchanged).*

Annex 1 "Communication", amend to read:
"Annex 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 type of tyre with regard to "rolling sound emission level" and/or "adhesion performance on wet surfaces" and/or "rolling resistance" pursuant to UN Regulation No. 117

Approval No 3………………………… Suffix(es) 4 Extension No …………………

1. …

……………………

1 Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in this regulation).

2 Strike out what does not apply.

3 According to Schedule 4 to the Revision 3 of the 1958 Agreement.

4 According to paragraphs 5.2.2. and 5.3.1.2. of this Regulation."

II. Justification

1. In order to align the provisions of UN Regulation No. 117 on approval numbers and markings with the provisions of Schedule 4 to the revised 1958 Agreement, it is proposed to consider separately the type approval number mentioned in the communication form and the type approval marking, which includes a part of the type approval number and the suffixes that are not a part of type approval number, but part a of type approval marking.

2. Paragraph 5.2. now specifies that the type approval number shall be assigned according to Schedule 4 to the 1958 Agreement.

3. The new paragraph 5.2.1. clarifies two existing options for the type approval number pursuant to UN Regulation No. 117:
   • granting the original type approval number or
   • granting the type approval number, which had been granted before to that type of tyre pursuant to UN Regulation No. 30 or UN Regulation No. 54 with the subsequent extension number.
4. The new paragraph 5.2.2. stipulates the specific feature of UN Regulation No. 117 to identify specific performance parameters of UN Regulation No. 117 by the means of suffixes. However the content of this paragraph is not new: it is taken from the former paragraph 5.3.2.

5. The reference to paragraph 5.2.1. is added in paragraph 5.3.1.

6. Paragraph 5.3.1.1. now stipulates only the necessity to refer in item 9 of the communication form to the type approval granted before to the tyre type.

7. Paragraph 5.3.1.2. adds an additional suffix (not a prefix) related to the number of the series of amendments to UN Regulation No. 117 in the case, when the type approval number pursuant to UN Regulation No. 30 or UN Regulation No. 54 is used.

8. The provisions for type approval marking (paragraphs 5.4. to 5.6.) remain unchanged, except for the reference in paragraph 5.4.2. to the specific section of the type approval number instead of the entire number.

9. The modified communication form (Annex 1) now contains a separated space for suffix(es).

10. The new footnotes 3 and 4 are added to Annex 1 for the sake of clarity.

11. As a further development, a substitution of the current approval marks with the Unique Identifier, as stipulated in the Schedule 5 to the 1958 Agreement, is foreseen.