

Proposal for amendment to Regulation No. 117 - 02

(Uniform provisions concerning the approval of tyres with regard to rolling sound emissions and to adhesion on wet surfaces and/or to rolling resistance)

I. Proposal

Annexes of Contents, amend to read:

7. Procedures for snow performance testing **relative to snow tyre for use in severe snow conditions** 74

Paragraph 2.5, amend to read:

- 2.5. "Representative tyre size" means the tyre size which is submitted to the test described in Annex 3 to this Regulation with regard to rolling sound emissions, or Annex 5 for adhesion on wet surfaces or Annex 6 for rolling resistance to assess the conformity for the Type Approval of the type of tyre, or Annex 7 for ~~snow performance to assess~~ **use in severe snow conditions** ~~the category of use "snow"~~.

Paragraph .211, amend to read:

- 2.11. "Snow tyre" means a tyre whose tread pattern, tread compound or structure ~~are~~ **is** primarily designed to achieve in snow conditions a performance better than that of a normal tyre with regard to its ability to initiate, ~~or maintain or stop~~ vehicle motion.

Insert a new paragraph 2.11.1, to read

- "2.11.1 " Snow tyre for use in severe snow conditions ": means a snow tyre whose tread pattern, tread compound or structure is specifically designed to be used in severe snow conditions and that fulfils the requirements of paragraph 6.4."**

Paragraph 3.1.1, amend to read:

- 3.1.1. The performance characteristics to be assessed for the tyre type; "rolling sound emissions level" and/or "adhesion performance level on wet surfaces" and/or "rolling resistance level". Tyre "snow performance level" in cases of **"snow tyre for use in severe snow conditions"** ~~where the category of use is snow~~;

Paragraph 4.2.5, amend to read:

- 4.2.5. The inscription "TRACTION"¹¹ if the tyre is classified as **"traction tyre"**¹¹;

Paragraph 4.2.6, amend to read:

- 4.2.6. The inscription "M+S" or "M.S" or "M&S" **if the tyre is classified in the category of use "snow tyre"**. ~~in the case of a tyre designed to ensure in mud and fresh or melting snow a performance better than that of a normal tyre.~~

Insert a new paragraph 4.2.6.1, to read:

4.2.6.1 The "Alpine" symbol ("3-peak-mountain with snowflake" conforming to the symbol described in Annex 7 Appendix 1) is added if the snow tyre is classified as “snow tyre for use in severe snow conditions”.

Delete paragraph 4.2.7:

~~4.2.7. The "Alpine" symbol ("3-peak-mountain with snowflake" see Annex 7 Appendix 1) for all categories if the tyre is classified in the category of use "snow".~~

Renumber paragraph 4.2.8 to read 4.2.7

Table in paragraph 6.1.1, amend to read:

6.1.1.

<i>Stage 2</i>	
<i>Nominal Section Width</i>	<i>Limit dB(A)</i>
185 and lower	70
Over 185 up to 245	71
Over 245 up to 275	72
Over 275	74
The above limits shall be increased by 1 dB(A) for “snow tyre for use in severe snow conditions ”, extra load tyres or reinforced tyres, or any combination of these classifications.	

Tables in paragraph 6.1.2, amend to read:

6.1.2.

<i>Stage 1</i>	
<i>Category of use</i>	<i>Limit dB(A)</i>
Normal tyre	75
Snow (*) tyre	77
Special use tyre	78

~~(*) — Limit value applies also to tyres marked M+S only.~~

<i>Stage 2</i>			
<i>Category of use</i>		<i>Limit dB(A)</i>	
		<i>Other</i>	<i>Traction Tyres</i>
Normal tyre		72	[73]
Snow tyre		72	73
	Snow tyre for use in severe snow conditions	73	75
Special use tyre		74	75
In case of traction tyres, the above limits shall be increased by 1 dB(A) for category of use normal and special, and by 2 dB(A) for category of use snow tyres.			

Tables in paragraph 6.1.3, amend to read:

6.1.3.

<i>Stage 1</i>	
<i>Category of use</i>	<i>Limit dB(A)</i>
Normal tyre	76
Snow (*)tyre	78
Special use tyre	79

(*) — Limit applies also to tyres marked M+S only.

<i>Stage 2</i>			
<i>Category of use</i>		<i>Limit dB(A)</i>	
		<i>Other</i>	<i>Traction tyres</i>
Normal tyre		73	[75]
Snow tyre		73	75
	Snow tyre for use in severe snow conditions	74	76
Special use tyre		75	77
In case of traction tyres, the above limits shall be increased by 2 dB(A).			

Table in paragraph 6.2.1, amend to read:

6.2.1.

<i>Category of use</i>		<i>Wet grip index (G)</i>
Normal tyre		≥ 1.1
Snow tyre		≥ 1.1
	“Snow tyre for use in severe snow conditions ” and with a speed symbol (“R” and above, including “H”) indicating a maximum permissible speed greater than 160 km/h	≥ 1.0
	“Snow tyre for use in severe snow conditions ” and with a speed symbol (“Q” or below excluding “H”) indicating a maximum permissible speed not greater than 160 km/h	≥ 0.9
Special use tyre		Not defined

Table in paragraph 6.3.1 and 6.3.2, amend to read:

6.3.1. The maximum values for stage 1 for the rolling resistance coefficient shall not exceed the following (value in N/kN is equivalent to value in kg/tonne):

<i>Tyre class</i>	<i>Max value (N/kN)</i>
C1	12.0
C2	10.5
C3	8.0
For “snow tyre for use in severe snow conditions ”, the limits shall be increased by 1 N/kN.	

6.3.2. The maximum values for stage 2 for the rolling resistance coefficient shall not exceed the following (value in N/kN is equivalent to value in kg/tonne):

<i>Tyre class</i>	<i>Max value (N/kN)</i>
C1	10.5
C2	9.0
C3	6.5
For “snow tyre for use in severe snow conditions ”, the limits shall be increased by 1 N/kN.	

Paragraph 6.4, amend to read:

- “6.4. In order to be classified as a **“snow tyre for use in severe snow conditions”** **the tyre shall meet the performance requirements of paragraph 6.4.1.**
~~in the category of use "snow tyre", a~~ **The tyre is required shall to meet**
~~performance requirement~~ **these requirements** based on a test method of **Annex 7** by which:
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- of ~~a~~**the** candidate tyre is compared to that of a standard reference tyre.
The relative performance shall be indicated by a snow index.”

Annex 1

Footnote 7 of paragraph 14.1, amend to read:

14.1. A list of documents in the approval file deposited at the Administration services having delivered the approval and which can be obtained upon request ³.

³ In the case of **“snow tyre for use in severe snow conditions”** ~~category of use "Snow"~~ a test report according to appendix 2 of Annex 7 shall be submitted.

Annex 7

Title of annex 7, amend to read:

Procedures for snow performance testing **relative to snow tyre for use in severe snow conditions**

Paragraph 1 of Annex 7, amend to read:

1. Specific definitions for snow test when different ~~of~~**from** existing ones

Paragraph 2 of annex 7, amend to read:

2. Spin traction method for Class C1 and C2 tyres (**traction force test per paragraph 6.4 (b)**)

Annex 7

Appendix 1, amend to read:

“Minimum 15 mm base and 15 mm height, placed adjacent to the M+S inscription, ~~if marked~~”.

II. Justification

The ETRTO proposals to align the definitions of UN Reg. 30 and 54 and the ones of UN Reg. 117 (documents TRANS/WP.29/GRRF/2011/13 and 14) raised comments from France. The following items were listed in document GRRF-71-31 and need to be clarified:

1- *Definition:*

Document TRANS/WP.29/GRRF/2011/13 proposes for regulation ECE N° 30 the same definition as in regulation ECE N° 117 (see: ECE/TRANS/WP.29/2010/63) but:

- *the regulatory markings are not identical (only M+S ... for one and M+S + 3-Peak mountain symbol for the other one)*
- *and the technical specification are not identical (no test for one and a snow grip test in the other one)*

2- *Category of use:*

A tyre with only M+S marking in Regulation ECE 117-02 will be approved for the category of use as a “normal tyre” whilst the same tyre will be approved as a “snow tyre” in Regulation ECE 30

3- *Technical regulatory requirements:*

The consequence of the above consideration is that the tyre having a M+S mark (ECE 30 approval) is considered to comply for wet grip performance of normal tyre in Regulation ECE 117-02 (wet grip index: 1.1) and wet grip performance of snow tyre in Regulation ECE 117-01 (wet grip index: 0.9 or 1.0)

In order to resolve these issues, a group of Contracting Parties and experts from the industry met twice and agreed on the principle to amend Regulation 117.02 and to introduce the same concept of “snow tyre” definitions as defined in the gtr on tyres.

2.50 "Snow tyre" means a tyre whose tread pattern and whose structure are designed to enhance traction in mud and fresh or melting snow and performance better than that of an ordinary (road-type) tyre. The tread pattern of a snow tyre generally consists of groove (rib) and/or solid-block elements more widely spaced than on an ordinary (road-type) tyre. These tyres are labelled on at least one sidewall with the letters "M" and "S" (e.g., MS, M/S, M&S, M+S, etc.);

2.51 "Snow tyre for use in severe snow conditions" distinguished by a three-peaked mountain snowflake (alpine) symbol on the sidewall next to the M+S mark. Together, these marks indicate snow traction performance relative to ASTM E1136-10 standard reference test tyre (SRTT). An example of the symbol is shown below;

All the proposal for changes were made to keep the basic definition of “snow tyre” with the marking “M+S” and to introduce a more precise definition for the “snow tyre” for use in severe snow conditions and capable to fulfil the requirements when tested according to annex 7.

In addition to the above the following change has been proposed:

Paragraph 2.11: “Stop” is deleted to align this definition with the one of the European GSR 661/2009.