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(Fiftieth session, 10 - 12 September 2001,  
agenda item 6.3.)

**PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 30**  
(Pneumatic tyres)

Transmitted by the Expert from the United Kingdom

Note: The text reproduced below was prepared by the expert from the United Kingdom in order to amend the marking of high speed tyres to give better information to the consumers. It is based on the text of a document distributed without a symbol (informal document No. 12) during the forty-ninth session of GRRF (TRANS/WP.29/GRRF/49, para. 66).

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Note: This document is distributed to the Experts on Brakes and Running Gear only.

**A. PROPOSAL**

Paragraph 2.29.1., amend to read:

" .....

Speed category symbol	Maximum speed (km/h)
.....	.....
Y	300
Z1	310
Z2	320
Z3	330
Z4	340
"Zn"	"300 + 10n"

NOTE: Tyres designed for use at speeds greater than 300km/h shall be marked with a speed category symbol "Z" followed by a numerical suffix indicating the maximum speed capability of the tyre. The suffix number shall be sequential, beginning with "1" and each step shall represent a 10km/h increment."

Paragraph 2.31.2., amend to read:

"2.31.2. for speeds higher than 210km/h the maximum load rating will vary linearly between that given by the load indices given in the two service descriptions marked on the tyre and will depend on the actual speed at which the tyre is required to operate between the speed category symbols marked in the two service descriptions."

Paragraphs 2.31.3. and 2.31.4., shall be deleted.

Paragraph 2.31.5. (former), renumber as paragraph 2.31.3.

Paragraph 2.31.6. (former), shall be deleted.

Insert a new paragraph 2.32., to read:

"2.32. "Service Description" means the association of the load index with a speed symbol, for example, 91H."

Paragraph 3.1.3.4., amend to read:

"3.1.3.4 for radial ply tyres designed for speeds greater than 300km/h, the letter "R" placed in front of the rim diameter code symbol shall be replaced by "ZR"."

Paragraph 3.1.4., amend to read:

"3.1.4 an indication of the service description for the tyre (see paragraph 2.32)."

Paragraph 3.1.4.1., amend to read:

"3.1.4.1. in the case of tyres with a maximum speed capability of 240 km/h (speed symbol V) the tyre shall be marked with a load index corresponding to the load capacity at 210km/h and the speed symbol "H". This shall be followed by the nearest lower load index corresponding to 91 per cent of the load capacity at 210 km/h when rounded to a whole number based on the principle that when the first figure after the decimal point is "4" or less, the number shall be rounded down and when "5" or greater the number shall be rounded up. Figures after the first figure following the decimal point shall be ignored.

Example: 185/65 R14 91H/88V"

Insert new paragraphs 3.1.4.2. to 3.1.4.4., to read:

"3.1.4.2. in the case of tyres with a maximum speed capability of 270 km/h (speed symbol W) the tyre shall be marked with a load index corresponding to the load capacity at 240km/h and the speed symbol "V" followed by a load index corresponding to 85 per cent of the load capacity at 240 km/h when rounded to a whole number based on the principle that when the first figure after the decimal point is "4" or less, the number shall be rounded down and when "5" or greater the number shall be rounded up. Figures after the first figure following the decimal point shall be ignored.

Example: 185/65 R14 91V/85W

3.1.4.3. in the case of tyres with a maximum speed capability of 300 km/h (speed symbol Y) the tyre shall be marked with a load index corresponding to the load capacity at 270 km/h and the speed symbol "W" followed by a load index corresponding to 85 per cent of the load capacity at 270 km/h when rounded to a whole number based on the principle that when the first figure after the decimal point is "4" or less, the number shall be rounded down and when "5" or greater the number shall be rounded up. Figures after the first figure following the decimal point shall be ignored.

Example: 185/65 R14 91W/85Y

3.1.4.4. in the case of tyres with a maximum speed capability greater than 300 km/h, the tyre shall be marked with a load index corresponding to the load capacity at 300 km/h and the speed symbol Y followed by a load index corresponding to the load capacity at the maximum speed capability of the tyre and the corresponding speed symbol, Z1, Z2, Z3 and so on, for example:

245/50 ZR17 91Y/88Z2

indicating a tyre with a load capacity corresponding to a load index 91 at 300km/h and a load capacity corresponding to a load index 88 at the maximum speed capability of the tyre of 320 km/h."

Paragraph 4.1.15., should be deleted.

Paragraph 5.3.1., should be deleted.

Paragraph 6.2.1.1., amend to read:

"6.2.1.1 Where application is made for tyres identified by means of the code "ZR" within the size designation (tyres suitable for speeds greater than 300 km/h), the above load/speed test is to be carried out on one tyre at the load and speed conditions indicated by the first service description. In addition a further test shall be carried out on a second sample tyre of the same type, at the load and speed conditions given by the second service description.

Both tests may be carried out on the same sample tyre if the tyre manufacturer agrees."

Paragraph 6.2.2.1., amend to read:

"6.2.2.1 However, a tyre marked with a service description which includes either a speed category symbol "Y" or "Z" ("Z1", "Z2" and so on) and which after completing the relevant test exhibits superficial blistering of the tyre tread caused by the specific test equipment and conditions, is deemed to have passed the test."

Annex 7,

Paragraph 2.6.1., amend to read:

" ..... equal to 80 per cent of the maximum load rating given by the load index in the second service description."

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## **B. JUSTIFICATION**

The present method of marking of the service description of high speed tyres, where the load index does not relate to the load capacity at the marked speed symbol, does not give sufficient, transparent, information to the consumer as to the capability of the tyre. The proposed amendment would give the true capability of the tyre at two speed symbols. The values of 91 per cent and 85 per cent are the figures used currently for the reduction in load capacity to be calculated for the maximum speed capability of the tyre and the proposal of rounding down to the nearest lower whole load index number would make very little difference in the new equivalent load capacity. For example, a present tyre rated as 91V would have a load capacity of  $615 \times 0.91 = 559.65$  kg at 240 km/h. Rounding this to 660 kg would correspond to a load index of 88. A tyre rated as 91W would have a load capacity of  $615 \times 0.85 = 522.75$  kg at 270 km/h. Rounding this to 523 kg would correspond to the nearest lower load index of 85 giving an equivalent load capacity of 515 kg, a "loss" of 8 kg against the present system.

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