

Supporting material to ETRTO working documents

81st GRBP session (February 2025)

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1. Elements triggering ETRTO amendment proposals

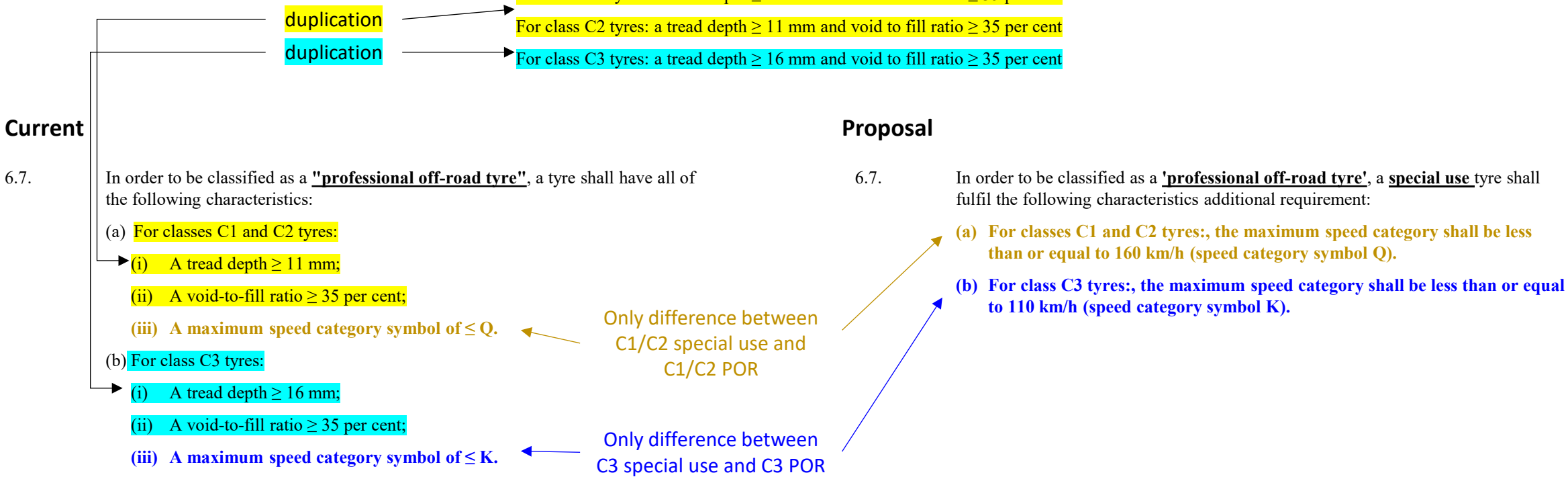
| R30 | R54 | R75 | R117.02 | R117.04 | R142 | R108.01 | R109.01 | R172 |
|----------------------|-----------------------------------|------------------------------------|--|-------------------|--|--|------------------------------------|-------------------------|
| GRBP-81-05e-Rev.1 | GRBP-81-06e-Rev.1 | GRBP-81-07e-Rev.1 | GRBP-81-08e-Rev.1 | GRBP-81-09e-Rev.1 | GRBP-81-10e-Rev.1 | GRBP-81-11e-Rev.1 | GRBP-81-12e-Rev.1 | GRBP-81-XX |
| ZRF marking | | M/C suffix | ISO/ASTM references | | | | | new c3 SRTT siped |
| | Free Rolling Tyre front axle, FRT | | | | Free Rolling Tyre, front axle, FRT | | Free Rolling Tyre, front axle, FRT | |
| | | | | | | traction tyres | traction tyres | |
| | | | tyre for use in severe snow conditions | | Normal tyre snow tyre snow tyre for use in severe snow conditions | Normal tyre snow tyre snow tyre for use in severe snow conditions | | |
| principal grooves | principal grooves | principal grooves | principal grooves | | | principal grooves | principal grooves | |
| tread groove | | | tread groove | | | tread groove | tread groove | |
| tread depth | | | | | | tread depth | | |
| secondary grooves | secondary grooves | | | | | secondary grooves | | |
| ISO/ASTM references | | | | | | | | |
| POR | POR | | POR | | | | POR | POR |
| section width | section width | section width | | | | section width | | |
| overall width | | overall width | | | | | | |
| Dmax snow | Dmax snow | | | | | | | |
| nominal rim diameter | nominal rim diameter | nominal rim diameter | | | | nominal rim diameter | nominal rim diameter | |
| | | Tyre section width specifications | | | | | | |
| | | Tyre outer diameter specifications | | | | | | |
| | | centrifugal radius | | | | | | |
| | | category of use | | | | | | |
| | | | transitional provisions | | | | | transitional provisions |
| | | | | | contents and paragraph titles | | | |
| | | | | scope | | | | |
| | | | | | table load-capacity variation with speed | | | |

2. On POR requirements (R117.02)

2.15. "Professional off-road tyre" is a special use tyre primarily used for service in severe off-road conditions.

6.6. In order to be classified as a "special use tyre" a tyre shall have a block tread pattern in which the blocks are larger and more widely spaced than for normal tyres and have the following characteristics:

- For class C1 tyres: a tread depth ≥ 11 mm and void to fill ratio ≥ 35 per cent
- For class C2 tyres: a tread depth ≥ 11 mm and void to fill ratio ≥ 35 per cent
- For class C3 tyres: a tread depth ≥ 16 mm and void to fill ratio ≥ 35 per cent



2. On POR requirements (R117.04)

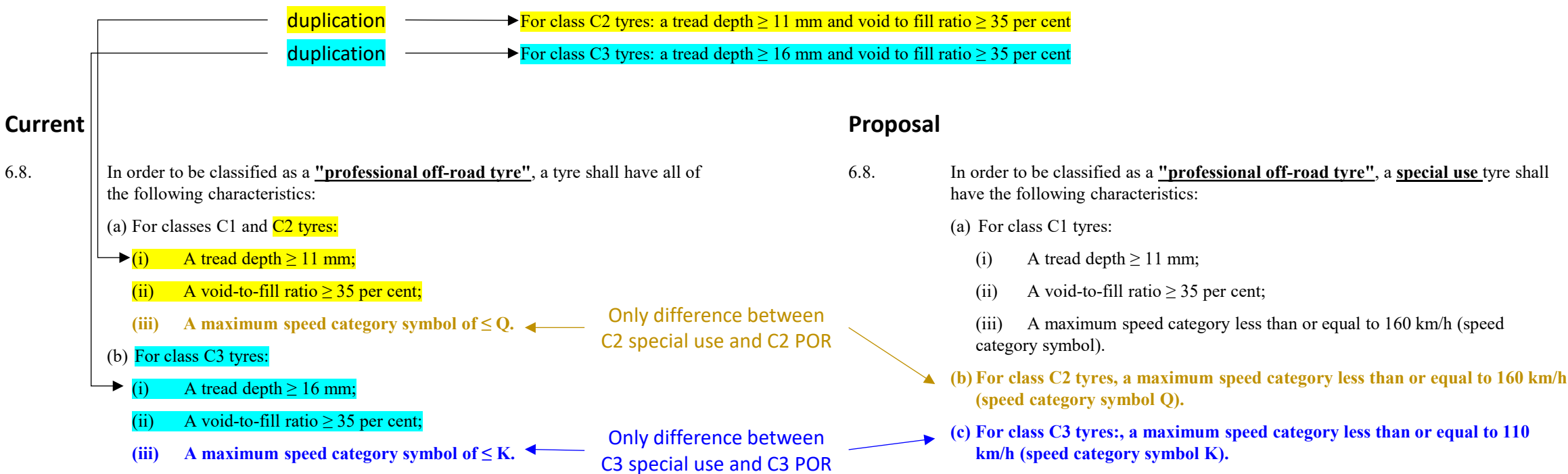
2.15. "Professional off-road tyre" is a special use tyre primarily used for service in severe off-road conditions.

6.7. In order to be classified as a "special use tyre" a tyre shall have a block tread pattern in which the blocks are larger and more widely spaced than for normal tyres and have the following characteristics:

For class C1 tyres: a tread depth ≥ 9 mm and void to fill ratio ≥ 30 per cent

For class C2 tyres: a tread depth ≥ 11 mm and void to fill ratio ≥ 35 per cent

For class C3 tyres: a tread depth ≥ 16 mm and void to fill ratio ≥ 35 per cent



3. On principal groove revised definitions

Tyre tread patterns depend on the application and on the type of vehicle

→ Principal groove definition cannot be the same in all tyre related regulations

No circumferential grooves

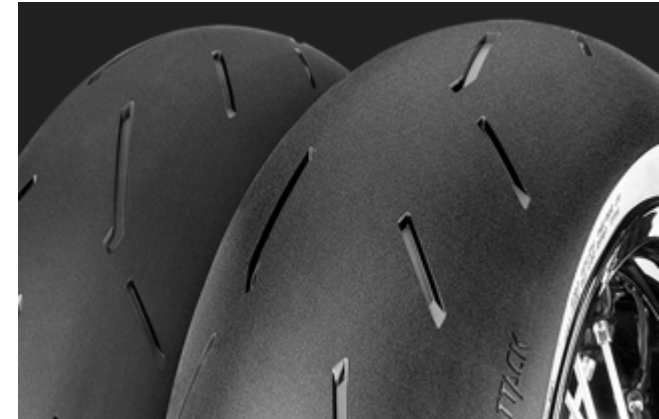


UN R30

UN R54

UN R75

Few grooves in the central zone



UN R75

3. On principal groove revised definitions

| Current definition | | Proposed definition |
|---|-----------|--|
| "Principal groove" means the wide grooves situated in the central zone of the tread. | UNR75 | "Principal grooves" means the wide tread grooves of the tyre. |
| - | UNR54 | "Principal grooves" means the wide tread grooves positioned in the central zone of the tyre tread. The central zone is the area on the tread which comprises of 75 per cent of the width of the tread measured symmetrically from the centre line. |
| "Principal grooves" means the wide circumferential grooves positioned in the central zone of the tyre tread, which have the tread-wear indicators located in the base. | UNR30 | |
| | UNR108 | |
| "Principal grooves" means the wide circumferential grooves positioned in the central zone of the tyre tread, which, in the case of passenger and light truck (commercial) tyres, have the treadwear indicators located in the base. | UNR109 | |
| | UNR117.02 | |
| | UNR117.04 | "Principal grooves" means the wide tread grooves positioned in the central zone of the tyre tread, as defined in Annex 9 to this Regulation. |

Thank you