Additional prescriptions to regulation UN 117

worn tyre for wet-grip performances
Ongoing tests - FRANCE
Impact of the Buffing profiles

9 tyres tested
- New tyres state VS wear tyres profiles under 2 sizes.

![Bar chart showing wet braking performance for different years and tyre sizes.]

- 205/55R16 91V
- 195/65R15 91H

10/09/2019 WGWT worn tyre UN117
Is this method representative of a natural wear?

Detailed with tyre size:

Loss of braking performance of worn tire (buffed or naturally worn) versus new tire (%)

- 185/65R14
- 205/55R16
- 195/65R15
- 235/65R16

The buffed tyre performance is very close to the naturally worn tyre.
Life test Study: New tyres VS Worn tyres (France)

Program:
- 2 tyres sizes (2 vehicles),
- for each vehicles 2 tyres references (Premium & Quality)

3 steps:
- Tests according to R117 as New states (trailer method)
- Wear on vehicle for up to 20,000 km per tyres (total of 4 Tyres references)
- Tests according to R117 as « Worn states ». For WG 2 tests proceed:
  - Brand New ASTM16 & test with a worn ASTM16 according to candidates states. (trailer method)

Study Schedule 2019

Tyre Selection
March 2019

R117 tests as new
May 2019

Tyre wear on Vehicle
From June 2019

R117 test as Worn
From Oct to Nov 2019

Report
January 2020
Life test Study: New tyres VS Worn tyres (France)

Tyres Selection:
- **Vehicle A**: 195/55R20 95H - Tall & narrow (1 Premium tyre & 1 Quality tyre)
- **Vehicle B**: 235/50R18 101V - SUV & Allroad (1 Premium tyre & 1 Quality tyre)

Status:

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<th>Tread-depth measurements (New)</th>
<th>WG test &quot;as new&quot; (Trailer Method)</th>
<th>Wear life 20 000km (on vehicle)</th>
<th>WG test &quot;as worn 20 000km&quot; (Trailer Method)</th>
<th>Tread-depth measurements (Worn)</th>
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<td>Tall &amp; Narrow</td>
<td>Candidate #1 195/55R20 - 95H</td>
<td>x</td>
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<td>x</td>
<td>October 2019</td>
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<td></td>
<td>Candidate #2 195/55R20 - 95H</td>
<td>x</td>
<td>From mid-Sept.</td>
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<td><strong>Vehicle B</strong></td>
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<td>SUV &amp; All Road</td>
<td>Candidate #3 235/50R18 - 101V</td>
<td>x</td>
<td></td>
<td>x</td>
<td>October 2019</td>
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<td>Candidate #4 235/50R18 - 101V</td>
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<td>SRTT16&quot;</td>
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<td>N/A</td>
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<tr>
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<td>Worn (Buffed)</td>
<td>x</td>
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<td>December 2019</td>
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- **Done**
- **In progress**
- **Next step**
When could we apply the new amendment of regulation UN 117?

1. From the date of entry into force of the new amendment:

   Voluntary application (upon the wish of the tire manufacturer):

   69th GRB (2019) [Entry into force 2021*]

   - [73th GRB (2021)] Adoption
   - [WP29 (January 2021)] Vote

2. Mandatory date for **new type of tyre (GSR2)** upon the request of CP’s:

   [1st September 2026*] – **European Safety Regulation : mid 2024**

3. Mandatory date for **new tyre** upon the request of CP’s:

   [1st September 2029*] – **European Safety Regulation : mid 2026**

* ECE/trans/wp29/grb/2019/6
THANK YOU FOR YOUR ATTENTION