Economic Commission for Europe
Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

184th session
Geneva, 22-24 June 2021
Item 4.9.4 of the provisional agenda

1958 Agreement:
Consideration of draft amendments to existing
UN Regulations submitted by GRBP

Proposal for Supplement 3 to UN Regulation No. 124
(Replacement wheels for passenger cars)

Submitted by the Working Party on Noise and Tyres*

The text reproduced below was adopted by the Working Party on Noise and Tyres (GRBP) at its seventy-third session (ECE/TRANS/WP.29/GRBP/71, para. 18). It is based on ECE/TRANS/WP.29/GRBP/2021/7. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration at their June 2021 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20), para 20.51), 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.
Paragraph 1., amend to read (footnote 1 remains unchanged):

"1. This Regulation covers new replacement wheels designed for vehicles of categories M₁, M₂G, N₁, N₂G, O₁ and O₂.¹

It does not apply to original equipment wheels or vehicle manufacturer’s replacement wheels as defined in paragraphs 2.3., 2.4.1. It does not apply to “Special wheels”, as defined in paragraph 2.5., which shall remain subjected to national approval.

It does not apply to wheels with less than three-wheel fixing components (studs or nuts) which are not identical replacement wheels.

This Regulation comprises requirements for wheel manufacture and installation."

Annex 6

Paragraph 4., amend to read:

"Necessary tests:

<table>
<thead>
<tr>
<th>Number of wheels to be tested</th>
<th>Rotating bending test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short test</td>
</tr>
<tr>
<td>Minimum PCD</td>
<td>1</td>
</tr>
<tr>
<td>Maximum PCD</td>
<td>1</td>
</tr>
<tr>
<td>If only one PCD</td>
<td>2</td>
</tr>
<tr>
<td>If a type comprises more than two versions with different PCD, additional tests on each version with PCD different to tested version:</td>
<td></td>
</tr>
<tr>
<td>PCD difference to a tested version ≤ 6.5 mm</td>
<td>-</td>
</tr>
<tr>
<td>PCD difference to a tested version &gt; 6.5 mm</td>
<td>1</td>
</tr>
<tr>
<td>Insert variation up to 2 mm</td>
<td>-</td>
</tr>
<tr>
<td>From 2 mm to 5 mm</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 5 mm</td>
<td>1</td>
</tr>
</tbody>
</table>

""

Paragraph 6.5., amend to read:

"6.5. The replica replacement wheels and pattern part replacement wheels shall satisfy the following tests:

As an alternative to the test specifications in paragraph 6.5.1.1., the endurance life of replica replacement wheels can be proven in comparison to the endurance life of the vehicle manufacturer’s replacement wheels.

The rotation bending tests on two load levels have to be performed according Annex 6 as well as rolling test according to Annex 7. These tests have always to be performed in comparison of the replica replacement wheels to the vehicle manufacturer’s replacement wheels until the required limits or failure of the wheels.

Replica replacement wheels must achieve in every level at least the results or better of the vehicle manufacturer's replacement wheels.

The tests requirements of the vehicle manufacturer regarding vehicle manufacturer’s replacement wheels can be applied instead of test requirement 6.5.1.1. These testing requirements have to be disclosed in order to enable the verifiability. The assignment to the wheel load released by the vehicle manufacturer must be given."