Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations

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Item 18.8 of the provisional agenda
Progress on the development of new global technical regulations
and of amendments to established global technical regulations:
Global technical regulation No. 16 (Tyres)

Request for authorization to develop the Amendment 2
to global technical regulation No. 16 (Tyres)

Submitted by the representative from the Russian Federation*

The text reproduced below is based on the informal document WP.29-170-13,
presented at the 170th session of the World Forum for the harmonization of vehicle
regulations. It is submitted to the World Forum for Harmonization of Vehicle Regulations
(WP.29) and to the Executive Committee (AC.3) for consideration at their March 2017
sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2016–2017
(ECE/TRANS/254, para. 159 and ECE/TRANS/2016/28/Add.1, cluster 3.1), the World Forum will
develop, harmonize and update Regulations in order to enhance the performance of vehicles. The
present document is submitted in conformity with that mandate.
Authorization to develop the Amendment 2 to global technical regulation No. 16 (Tyres)

A. Objective

1. The objective of this proposal is to develop, in the framework of the 1998 Agreement, an amendment to UN Global Technical Regulation (GTR) No. 16 on tyres aimed at further harmonization of its provisions and adaptation of UN GTR No. 16 to the technical progress.

B. Background

2. UN GTR No. 16 on tyres was established in the Global Registry on 13 November 2014. The informal working group on the Tyre GTR was challenged by reaching harmonization of technical provisions making those acceptable both for type approval and self-certification compliance assessment systems.

3. The draft Amendment No. 1 to UN GTR No. 16, subject to consideration and vote by AC.3 at its November 2016 session, was developed with the purpose of its adaptation to the technical progress by including the newly developed provisions to wet grip performance, rolling resistance and qualification for use at severe snow conditions both for passenger car (PC) and light truck / commercial (LT/C) tyres, recently adopted within UN Regulation No. 117.

4. In the initial version of UN GTR No. 16, the harmonized requirements apply only to tyres for passenger cars. The following table describes the non-harmonized tests applicable to LT/C tyres (para. 23 of Part I of UN GTR No. 16).

<table>
<thead>
<tr>
<th>LT/C tyres</th>
<th>C type tyres</th>
<th>LT type tyres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test name</td>
<td>Paragraphs related to Regulation No. 54</td>
<td>Paragraphs related to FMVSS 139</td>
</tr>
<tr>
<td>Marking and tread wear indicators</td>
<td>3.2., 3.3. and 3.4.</td>
<td>3.2., 3.3. and 3.4.</td>
</tr>
<tr>
<td>Physical dimensions</td>
<td>3.21.</td>
<td>3.20.</td>
</tr>
<tr>
<td>High speed test</td>
<td>3.16.</td>
<td>3.19.</td>
</tr>
<tr>
<td>Endurance test</td>
<td>3.16.</td>
<td>3.17.</td>
</tr>
<tr>
<td>Low pressure test</td>
<td>None</td>
<td>3.18.</td>
</tr>
<tr>
<td>Wet grip test</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Run flat test</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Strength test</td>
<td>None</td>
<td>3.14.</td>
</tr>
<tr>
<td>Bead unseating test</td>
<td>None</td>
<td>3.15.</td>
</tr>
<tr>
<td>Rolling sound emissions</td>
<td>3.8.</td>
<td>None</td>
</tr>
</tbody>
</table>

5. The Amendment No. 2 to UN GTR No. 16 addresses the harmonization of Physical Dimensions Test ("phase 2A") and High Speed Test ("phase 2B").
6. The Amendment No. 2 to UN GTR No. 16 will also cover the most recent updates of UN Regulations Nos. 30 and 54 as well as FMVSS of the United States.

7. The Government of the Russian Federation with reference to the statement made at the 165th WP.29 session in March 2015 (ECE/TRANS/WP.29/1114, para. 39) assumes the duties of the technical sponsor and will lead the development of the Amendment No. 2 to UN GTR No. 16.

C. Subject of amendment

8. The Amendment No. 2 to UN GTR No. 16 shall include amendment of Part II - Text of the global technical regulation:
   
   (a) Addition of new definitions (Section 2);
   
   (b) Harmonization of the Load Range concept in relationship to Inflation Pressure (Section 2);
   
   (c) Alignment of the provisions for tyre marking and physical dimensions of PC tyres with the most recent developments in UN Regulations Nos. 30 and 54 (Sections 3.3 and 3.5);
   
   (d) Harmonization of FMVSS 139 requirements relative to UNECE PSI index (Sections 3.14 and 3.15);
   
   (e) Deletion of provisions for physical dimensions of LT/C tyres based on FMVSS 139 (Section 3.20) an UN Regulation No. 54 (Section 3.21) and addition of new harmonized provisions for physical dimensions of LT/C tyres (new Section 3.20);
   
   (f) Deletion of provisions for high speed test for LT/C tyres based on FMVSS 139 (Section 3.19) and UN Regulation No. 54 (Section 3.16) and addition of new harmonized provisions for high speed test for LT/C tyres (new Section 3.16);
   
   (g) Updates of the Annexes 3 and 6 with regard to the most recent developments in UN Regulations Nos. 30 and 54.

9. Other topics to be discussed within the informal working group for the Phase 2 of development of UN GTR No. 16
   
   (a) Consideration of feasibility of harmonization of endurance test for LT/C tyres (Sections 3.16 and 3.17);
   
   (b) Consideration of feasibility of development of provisions for global tyre marking.

D. Organization of process and timeline

10. For the development of the Amendment No. 2 to UN GTR No. 16 the informal working group (IWG) as a sub group of GRRF will be established. For practical reasons this IWG shall be considered as the reinstated IWG on Tyre GTR. The Terms of Reference and the Rules of Procedure of this IWG were endorsed by GRRF at its 82nd session on September 2016. The IWG meetings primarily shall be organized in conjunction with the GRRF regular sessions. The IWG will be chaired by the UN GTR No. 16 technical sponsor (Russian Federation). ETRTO will act as a Secretary.
11. The proposed action plan:
   
   (a) January 2017: Introduction and consideration of the proposal for phase 2A at the eighty-third GRRF session as an informal document;
   
   (b) September 2017: Introduction and consideration of the proposal for phase 2B at the eighty-fourth GRRF session as an informal document;
   
   (c) February 2018: Submitting to the GRRF the consolidated working document. Consideration of remaining issues (if any) at the eighty-fifth GRRF session;
   
   (d) June 2018: Adoption of the proposal by AC.3, if no remaining issues had existed;
   
   (e) November 2018: Adoption of the proposal by AC.3, if all remaining issues had been solved.

12. The progress of works will be reported to AC.3 at its sessions in 2017 and 2018.