

## **Proposal for revised Terms of Reference of the Informal Working Group on Wet Grip Performance for Tyres in a Worn State**

The proposed amendments to Terms of Reference of the IWG WGWT, submitted by the experts of the IWG WGWT, are marked in bold, for new or strike-through for deleted characters. This proposal is based on the documents GRBP-74-42.

### **I. Proposal**

#### **A. Introduction**

1. At the sixty-ninth session of the Working Party on Noise (GRB), it was pointed out that the wet grip performance of tyres decreases with tyre wear, so the current testing (performed on new tyres) does not represent the worst-case situation. The process of adapting the requirements on tyres should continue, in particular to ensure that tyre performance is also assessed, if relevant, at the end of a tyre's life (in worn state) and to promote the idea that tyres should meet the requirements throughout their life and not be replaced prematurely. UN Regulation No. 117 now contains detailed provisions on noise, rolling resistance and wet grip performance of tyres that can be amended to take into account some other prescriptions.
2. An informal working group was created in 2019 to define prescriptions for wet grip performance of tyres in worn state (IWG WGWT).
3. This proposal establishes the updated Terms of Reference for the IWG WGWT.
4. The aim of the group is to propose an amendment to UN Regulation No. 117 under the 1958 Agreement.

#### **B. Objectives**

5. The scope and purpose are based on ECE/TRANS/WP.29/GRB/2019/6, ECE/TRANS/WP.29/GRBP/70, para. 18 and ECE/TRANS/WP.29/GRBP/71 para. 16.
6. The future amendment to UN Regulation No. 117 will apply to new pneumatic tyres of class C1 and will address also the suitable requirements to those of classes C2 and C3.
7. IWG WGWT shall:
  - Consider the scope and elaborate the target;
  - For tyres of Class C1
    - Evaluate the method for preparing a tyre to be tested in worn state at its type-approval;
    - Define the test conditions;
    - Describe the test methods;
    - Define the type-approval thresholds of tyre wet grip performance in worn state.
    - Introduce “Moulded SRTT<sub>worn</sub>”
    - Improve the precision of test procedure by **using the moulded** ~~removing the buffing variation of the buffed~~ SRTT<sub>worn</sub>

- Address the suitable requirements for tyres of classes C2 and C3
8. IWG WGWT shall work in the framework of the 1958 Agreement and shall report to GRBP.

### C. Rules of Procedure

9. IWG WGWT shall be open to all participants of the Working Party on Noise and Tyres (GRBP).
10. IWG shall be co-chaired by France and the European Commission. The European Tyre and Rim Technical Organisation (ETRTO) shall act as Secretary.
11. The working language will be English.
12. All documents and/or proposals must be submitted to the Secretary of IWG in a suitable electronic format at least one week before a scheduled meeting.
13. An agenda and the latest draft document will be circulated to all members of IWG in advance of all scheduled meetings.
14. All IWG documentation will be made available on the dedicated ECE website.

### D. Timeline

15. IWG shall aim to present
- ~~— a working document on wet grip of tyres of class C1 in worn state for adoption at the seventy-fourth session of GRBP in September 2021,~~
  - a progress report and an informal document at the seventy-fifth session of GRBP in February 2022 to complete the working document (GRBP/2021/12) submitted for adoption during seventy-fourth session of GRBP
  - ~~a~~ two working documents for adoption at the seventy-sixth session of GRBP in September 2022 at the latest
    - on wet grip of tyres of classes C2 and C3 in worn state
    - on wet grip of tyres of class C1 in worn state to supplement the initial proposal (GRBP/2021/12) to improve the precision of test procedure ~~by removing the buffing variation of the buffed worn SRTT~~ with the introduction of moulded SRTT worn **and to refine the C1 threshold for clusters if any.**
  - **An informal document at the 78<sup>th</sup> session of GBRP in September 2023 and a working document for adoption at the 79<sup>th</sup> session of GRBP in January 2024 at the latest on wet grip of C1 class tyres in worn state to improve the precision of test procedure.**

## II. Justification

Paragraphs B5 and B6: Wet grip performance of C2 and C3 tyres in worn state is also important for vehicles safety. It is also of relevance to the Regulation (EU) 2019/2144 (General Safety Regulation), which includes in its requirements the wet grip of such tyres at worn state with reference to UNECE Regulation No 117. IWG WGWT was informed on this proposal at its 16th session of 19/11/2020.

Paragraph B.7: the IWG has developed the test procedure for wet grip of class C1 in worn state through test campaign. However, the precision of developed test procedure for wet grip of class C1 in worn state can be further improved. IWG agreed to continue the activity for the additional assessment in IWG to improve the precision of test procedure. An important item is the introduction of “Moulded SRTT worn” instead of “Buffed SRTT worn” in order to eliminate the variation by influence of buffing process to SRTT.

Paragraph D15: the IWG has presented a working document to the 74<sup>th</sup> GRBP (September 2021) for the work scope on C1 class tyres. An additional assessment on the reference tyre is requested to improve the precision of the wet grip measurement; therefore, the IWG WGWT will assess and test a moulded “worn” SRTT and introduce the relevant provisions through amendment in the regulation, as necessary. Subsequently, two working documents a) on C2 and C3 class tyres and b) on moulded “worn” SRTT provisions are aimed to be submitted by the 76<sup>th</sup> GRBP (September 2022) at the latest.

These documents will thus include the provisions on wet grip of tyres in worn state, which are in relevance to both UNECE Regulation No 117 and to the Regulation (EU) 2019/2144.

**The IWG agreed to work on the improvement of the test precision based on an additional test campaign in 2023.**

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