Submitted by the expert from European Commission and France

Informal document GRBP-75-39
(75th GRBP, 8-11 February 2021,
agenda item 11)

Terms of Reference of the Task force on Tyres' abrasion (TF TA)

A. Introduction

1. Microplastics are synthetic polymers released from a wide range of sources. They can be introduced in the environment intentionally or unintentionally, and they affect all environmental compartments, including air, water, soils / sediments and biota. A European Commission study[1], reported that automotive tyres are the highest contributor of unintentionally released microplastics in the environment.

Tyre wear is caused by the friction process between tyres and the road surface; therefore, tyre wear is emitted wherever vehicles travel. Tyre abrasion (i.e. the amount of tyre material released per km travelled) is a metric that could be applied to define tyre wear, allowing for the classification and type approval of tyres based on their environmental impact.

2. During the 185th WP29, the European Commission emphasised the need to work on tyres' microplastic emissions following the priorities set out in the EU Work Programme – UNECE Activities 2022-2023 Proposals under the responsibility of DG-GROW (Informal Document WP.29-185-17). In parallel, the GRPB and GRPE working parties in their Work Programmes identified the need to consider the development of a tyre abrasion test method with the aim of controlling and mitigating tyre wear particles – and thus the release of microplastics in the environment.

3. It was agreed to create a Task Force (TF) to work on the development of a standardized methodology for measuring and limiting tyre abrasion.

4. This proposal establishes the Terms of Reference for the TF Tyre Abrasion (TF TA).

5. The aim of the group is to prepare and to propose a new UN Regulation or a new requirement to UN Regulation No. 117 under the 1958 Agreement for the type approval of tyres. The group will report and consult with both GRPE and GRBP.

B. Objectives

1. The UN Regulation will address the tyres abrasion performance by determining a standardized measurement method which will allow for the quantification of the microplastic emissions in the environment. At the same time, the TF TA will investigate the correlation between abrasion rate and durability and consider the inclusion of both abrasion rate and durability in the proposed UN Regulation.

2. The future UN Regulation will apply to new pneumatic tyres.

3. TF TA shall:

   A. Develop a procedure for measuring the abrasion of tyres: Test conditions and methods;

[1] Investigating Options for Reducing Releases in the Aquatic Environment of Microplastics Emitted by (but not intentionally added in) Products – Report for DG-ENV of the European Commission

B. Rate the abrasion performance of a wide range of tyres available in the market
C. Define abrasion limits for tyres in order to limit the emission of microplastics to the environment
D. Assess potential correlation between abrasion performance and durability of tyres.
E. Develop a UN Regulation (or addition to UN Regulation No 117) for the type approval of tyres in respect to their abrasion

4. TF TA shall work in the framework of the 1958 Agreement and shall report to both GRBP and GRPE.

C. Rules of Procedure

1. TF TA shall be open to all participants of GRBP and GRPE.

2. TF shall be co-chaired by the European Commission and France.

3. The Technical Secretary is taken by the representative of ETRTO.

4. The working language will be English.

5. The process will pursue consensus. When consensus cannot be reached, the co-chairs of the group shall present the different points of view to GRBP.

6. The progress of the informal group will be reported to GRBP and GRPE as an informal document by one of the co-chairs.

7. All documents and/or proposals must be submitted to the co-chairs and the secretary of TF in a suitable electronic format at least one week before a scheduled meeting.

8. An agenda and the latest draft document will be circulated to all members of TF in advance of all scheduled meetings.

9. All IWG documentation will be made available on the dedicated ECE website.

D. Timeline

1. The aim of TF is to present an informal document for consideration during the 78th GRBP in September 2023 (submitted for information to the 88th GRPE in June 2023). The final objective of TF is to present a working document for consideration during 79th GRBP in January 2024 (submitted for feedback to the 89th GRPE in January 2024).