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Progress on the development of new UN GTRs and
of amendments to established UN GTRs:
Global Real Driving Emissions

Authorization to develop a new UN GTR on Global Real Driving Emissions

Submitted by the representatives of the European Union, Japan and the Republic of Korea *

The text reproduced below was prepared by the representatives of the European Union, Japan and the Republic of Korea to develop a new UN GTR on Global Real Driving Emissions. It was adopted by the Executive Committee (AC.3) of the 1998 Agreement at its June 2018 session (ECE/TRANS/WP.29/1139, para. 163). It is based on ECE/TRANS/WP.29/2018/80 as amended by Annex V of the report. This authorization is transmitted to the Working Party on Pollution and Energy (GRPE). This document, if adopted, shall be appended to the UN GTR in accordance with the provisions of paragraphs 6.3.4.2., 6.3.7. and 6.4. of the 1998 Agreement.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3.1), 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.

I. Mandate and Objectives

1. In the framework of the 1998 Agreement the main objective of this proposal is to seek authorization to prepare a new UN GTR on Global Real Driving Emissions in the Informal Working Group (IWG) that will work under the auspices of GRPE for the purpose of:

Developing a methodology for determining the real driving emissions of light duty vehicles based on globally harmonized traffic conditions and boundaries.

II. Introduction

- 2. The European Union has developed a new methodology for testing vehicle emissions during real driving, the so called Real Driving Emissions (RDE). It was implemented in three regulatory acts between 2015 and 2017. The consolidated text describing the methodology can be found in the Annex IIIa of the Regulation (EU) 2017/1151, http://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02017R1151-20170727.The latest step in RDE methodology, in –service conformity (RDE4), is currently undergoing the regulatory scrutiny.
- 3. The European Union proposed the inclusion of the RDE annex (i.e. the consolidated Annex IIIA of Regulation (EC) 2017/1151) in the Compendium of Candidate UN Global Technical Regulations in the framework of the 1998 Agreement (ECE/TRANS/WP.29/2018/79).
- 4. Japan has also proposed its own version of the RDE methodology for inclusion in the Compendium of Candidate UN Global Technical Regulations in the framework of the 1998 Agreement (ECE/TRANS/WP.29/2018/81).
- 5. Several Contracting Parties have already adopted or plan to adopt RDE tests.
- 6. It is therefore appropriate to consider harmonization of approaches and work on the development of a global technical regulation. The methodology to be elaborated will need to take into account different traffic patterns and varying boundary conditions in Contracting Parties.
- 7. In order to develop a proposal for a global technical regulation, an Informal Working Group will need to be established.

III. Areas of work

8. The group shall focus its work in the following areas:

A. Create a consolidated draft report on the global real driving emissions (RDE) procedure

- 9. With activities starting in 2011, the current level of maturity of the RDE tests in the EU is very high, especially following the work that took place in 2017 with a view to improve the procedure and evaluation methods. It is therefore appropriate to make use of the work already performed and experience gained in the development of RDE procedure in the course of work that will be carried out by the IWG.
- 10. Similarly, account should be taken of the experience in this respect gathered by other Contracting Parties who have developed or explore the possibility to develop RDE tests.

11. Existing rules, experience gained while working on RDE tests as well as newly available knowledge and information to be provided by the Contracting Parties, will serve as the basis for the development of the first draft of a UN GTR by the RDE IWG.

B. Reviewing the consolidated draft report

- 12. The draft report will be reviewed with the following objectives:
- (a) Identify areas for further technical improvements with particular focus in the evaluation methods
- (b) Study the areas that need to be reviewed in order to adapt them to reflect regional needs, particularly taking into account regions that have already adopted the RDE methodology
 - (c) Evaluate the possibility to add further issues in a second phase of the project

C. Finalising a draft UN GTR on RDE

- 13. The first part of the work will be finalized by the preparation of a draft Global RDE procedure.
- 14. The initial findings and recommendations will be compiled into a single report which constitutes the first draft UN GTR on the Global RDE procedure with the aim to present it to GRPE in January 2019. It is intended to submit a final draft UN GTR for presentation to the GRPE in May 2019.

IV. Existing regulations

15. UN Regulation No. 83 and UN GTR No. 15 contain uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine and/or fuel requirements. However none of these UN Regulations currently have provisions for checking the real driving emissions of pollutants.

V. Timeline

- 16. The timelines below are target timelines. The plan will be regularly reviewed and updated to reflect progress and feasibility of the timeline.
- (a) June 2018: Approval of the authorization to develop a UN GTR on Global RDE by AC.3 and to establish an IWG;
 - (b) June 2018-May 2019: meetings of IWG and consolidation of draft UN GTR
- (c) January 2019: Informal draft UN GTR available, guidance on any open issues by GRPE;
 - (d) January 2019-March 2019: Final drafting work on UN GTR text;
 - (i) Transmission of the draft UN GTR as an official document twelve weeks before the May 2019 session of GRPE.
 - (ii) May 2019: Endorsement of the draft UN GTR based on an informal document by GRPE;

(e) November 2019: Recommendation of the draft UN GTR by GRPE to WP29/AC.3; consideration of the need to extend the mandate of the RDE IWG to work on additional items $\frac{1}{2}$