Economic Commission for Europe
Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

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Item 14.1 of the provisional agenda

Consideration and vote by AC.3 of draft UN GTRs
and/or draft amendments to established UN GTRs, if any:
Proposal for a new UN GTR

Request for the 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 submitted by the representatives of the European Union, Japan and the Republic of Korea to request the authorization to a Global Technical Regulation on Global Real Driving Emissions. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Executive Committee of the 1998 Agreement (AC.3) for consideration.

* 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 for the creation of a new IWG on Real Driving Emissions that will work under the auspices of GRPE with the following objective:

*Develop a UN GTR with a methodology for determining the real driving emissions of light duty vehicles based on the European RDE methodology appropriately adapted for specific regional 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) methodology. The methodology was implemented in European legislation in three steps starting between 2015 and 2017 (RDE1, RDE2 and RDE3). The consolidated text describing the methodology as it stands in Europe can be found in the Annex IIIa of the Regulation (EU) 2017/1151, in the following link: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02017R1151-20170727.

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.

4. The European Union is currently finalizing the last step of this methodology (RDE4), which is included in Annex IIIa of the recent proposal, currently undergoing public consultation (http://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-1297632_en). With this last step, the European methodology will be consolidated and finalized. Reviews of some technical elements, will still take place in the future.

5. Several countries have already adopted or plan to adopt similar RDE tests based on the methodology developed in Europe in regional legislation. Harmonization of such approaches is therefore desirable.

6. It is therefore appropriate to develop a global technical regulation that reflects the original methodology as this is reflected in point 2 above and further developed as in point 4 above. The methodology will need to be adapted accordingly in order to be able to be used in countries with different traffic patterns and other boundaries.

7. In order to develop the proposal an IWG on Real Driving Emissions is necessary.

III. Areas of work

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

A. Create a consolidated draft of the real driving emissions (RDE) procedure

9. The European technical working group on RDE-LDV has been working continuously since 2011 in order to develop the RDE procedure. Automotive industry, instrument manufacturers, technical experts, environmental NGOs and European legislators participated to the work of the group. The current level of maturity of the procedure is very good, especially following the work that took place in 2017 in order to improve the procedure and
evaluation methods. It is therefore appropriate to make use of the work already performed in this group in order to have a good base for the first draft of the RDE procedure.

10. The consolidated draft will therefore be created by using the current Annex IIIA of the European Regulation (EC) 2017/1151. The changes made in the current proposal for amendments to Annex IIIA will also be incorporated in the consolidated draft. The consolidated draft will be ready for the first meeting of the RDE IWG.

B. **Reviewing the consolidated draft**

11. The consolidated draft 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, in particularly taking into account regions that have already adopted the RDE methodology
   (c) Study the possibility to add further pollutants in the procedure

C. **Finalising a draft GTR on RDE**

12. The first part of the work will be finalized by the production of a draft RDE procedure.

13. The initial findings and recommendations will be compiled into a single report containing a first draft of the RDE procedure with the aim to present it to GRPE in January 2019. It is expected that the final draft of the procedure will be ready for presentation to the GRPE in June 2019.

IV. **Existing regulations**

14. UN Regulation No. 83 contains uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements. However this Regulation has no provisions for checking the real driving emissions of pollutants. The Working Party on Pollution and Energy (GRPE) is currently working on the inclusion of Real Driving Emission requirements aligned with those in force within the European Union.

V. **Timeline**

15. The timelines below are target timelines and will be submitted for approval by AC.3 in June 2018. 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 gtr on RDE by AC.3;
   (b) June 2018-January 2019: meetings of IWG and consolidation of draft UN GTR
   (c) January 2019: Draft gtr available, guidance on any open issues by GRPE;
   (d) January 2019-June 2019: Final drafting work on UN GTR text;
   (e) June 2019:
   (i) Transmission of the draft UN GTR as an official document twelve weeks before the June 2019 session of GRPE.
(ii) Endorsement of the draft UN GTR based on an informal document by GRPE;
(f) June 2019: Recommendation of the draft UN GTR by GRPE;