
Proposal for revised Terms of Reference and rules of procedure
for the informal working group on
Environmental and Propulsion Performance Requirements
of L-category vehicles (EPPR)

1. Procedural Background

The proposal to establish under the Working Party on Pollution and Energy (GRPE) an informal working group (IWG) on Environmental and Propulsion Performance Requirements for L-category (EPPR) was initiated by the European Union (EU). A mandate to start the activities of the IWG on EPPR was endorsed by the WP.29 at its November 2012 session (ECE/TRANS/WP.29/1099). The Executive Committee of the 1998 Agreement (AC.3) on its forty-fifth session (10-13 November 2015) adopted ECE/TRANS/WP.29/2015/113 (ECE/TRANS/WP.29/AC.3/36/Rev.1) whereby the European Union proposed changes to the proposal to develop amendments to UN Global Technical Regulation No. 2 and new regulations on environmental and propulsion performance requirements for light vehicles (ECE/TRANS/WP.29/AC.3/36). It was based on informal document WP.29-166-20, distributed at the 166th session (ECE/TRANS/WP.29/1116, para. 109). The mandate of the IWG on EPPR was extended until December 2020.

The goal of the informal group is to prepare and propose to GRPE draft texts of UN GTRs concerning L-category vehicles, including suggestions for the organization of future work. The IWG will also work on the transposition of the UN GTRs under its realm into UN Regulation under the 1958 agreement when appropriate.

2. Introduction

The IWG on EPPR has developed UN GTRs in the area of environmental requirements for L-category vehicles following the mandate approved by WP.29; namely the harmonisation of test procedures for two-wheeled vehicles equipped with conventional combustion engine technology with the view to include three-wheeled vehicles and other propulsion types in the next stage of work. The scope of discussions does not cover light four-wheeled vehicles on emission related UN GTRs. The working group is established under both the 1958 and 1998 Agreements to create the basis for the possible development of UN Regulations. All global partners and stakeholders are invited to join the group and share experiences regarding setting relevant regulatory requirements.

Since its first meeting in January 2013 the IWG has successfully completed the following technical regulatory texts (UN GTR):

- UN GTR No. 17: “Global technical regulation on the measurement procedure for two- or three-wheeled motor vehicles equipped with a combustion engine with regard to the crankcase and evaporative emissions”. Established in the Global Registry on 17 November 2016¹.
- UN GTR No. 18: “Global technical regulation on the measurement procedure for two- or three-wheeled motor vehicles with regard to on- board diagnostics”. Established in the Global Registry on 17 November 2016².
- UN GTR No. 2 Amendment 4: “Global Technical Regulation on the measurement procedure for two-wheeled motorcycles equipped with a positive or compression ignition engine with regard to the emissions of gaseous pollutants, CO2 emissions and fuel consumption - Amendment 4”. Established in the Global Registry on 13 November 2019³
- UN GTR No. 18 Amendment 1: “Global technical regulation on the measurement procedure for two- or three-wheeled motor vehicles with regard to on-board diagnostics”. Introduction of OBD II⁴. Established in the Global Registry on 11 November 2020
- UN GTR No. 23: “Global Technical Regulation on the measurement procedure for two- and three-wheeled vehicles equipped with a combustion engine with regard to durability of pollution-control devices”. Established in the Global Registry on 22 June 2022
- UN GTR No. 2 Amendment 5: “Global Technical Regulation on measurement procedure for two-wheeled motorcycles equipped with a positive or compression ignition engine with regard to the emissions of gaseous pollutants, CO2 emissions and fuel consumption – Amendment 5”. Established in the Global Registry on 22 June 2022

There is still work to be done by the IWG on EPPR in order to advance in the harmonisation of technical regulations concerning several aspects of L-category vehicles, as well as the conversion of these Global Technical Regulations into UN ECE Regulations under the 1958 Agreement.

At the 81st GRPE session held on June 2020, the mandate of the IWG on EPPR was extended for a further period until December 2025, in order to complete the development of these UN GTRs and to allow for the transposition of these technical regulations into UN ECE regulations under the 1958 Agreement. The Chairperson was taken by the representatives of the European Commission and the Vice-Chair was taken by the representatives of Japan.

Since Japan discontinued its Vice-Chairmanship in July 2021, the Chair from the European Commission retired end of August 2021 and no candidate for these roles were submitted to the 84th GRPE session held

¹ <http://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29registry/ECE-TRANS-180a17e.pdf>

² <http://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29registry/ECE-TRANS-180a18e.pdf>

³ https://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29registry/ECE-TRANS-180a2am4e_for_submission.pdf

in November 2021, at that session “GRPE endorsed the representative of the Netherlands, and the representative of South Africa, as ad interim Co-Chairs of the IWG on EPPR until June 2022”, to help bridging towards a new leadership team. At the 86th GRPE session held in June 2022 the ad interim leadership team endorsement was extended with a further 6 months in order help bridging towards a new leadership team. At the 54th EPPR session the representative of the Netherlands, and the representative of South Africa submitted their willingness to continue as the leadership team for EPPR as Co-Chairs. During the 55th EPPR session the leadership team was elected with the representative of the Netherlands, and the representative of South Africa, as Co-Chairs of the IWG on EPPR. At the 87th GRPE session the election of the leadership team by the IWG on EPPR should be endorsed.

In order to reflect this decision, it is herewith proposed to revise the Terms of Reference contained in GRPE-86-27-Rev.3 as follows:

3. Terms of Reference:

The group shall focus its work on the following activities:

1. Durability testing of pollution control devices for L-category vehicles.
 - a. Revision of deterioration factors for mathematical test procedure of durability testing, as proposed by US and China; see DUR-18-01.
2. Potential alignment of the content of different UN GTRs, if needed.
3. Assessment and development of propulsion unit performance requirements for conventional L-cat vehicles equipped with combustion engines only, as well as for advanced concepts such as electric and hybrid electric powertrains. Unified rules and test procedures to measure power and torque for this wide range of propulsion technologies fitted on L-cat vehicles, as well as unified measurement of maximum design vehicle speed and/or power for L-cat vehicles should be developed and agreed upon.
4. Development of requirements for Battery Electric Vehicles (BEV) and Hybrid Electric Vehicles (HEV).
5. Extension to all possible fuels for both environmental and propulsion unit performance requirements: petrol, petrol-ethanol mixtures, diesel, biodiesel but also gaseous fuels such as CNG, LPG, Hydrogen and their blends
6. If considered appropriate, undertake an assessment of whether ‘light vehicle’ classification can be further optimised and refined for environmental requirements. The result shall be reported to WP.29.
7. Consideration for transposition of the various UN GTRs into UN Regulations under the 1958 Agreement.

The transposition of UN GTR No. 2 into a UN Regulation is considered by many stakeholders as of importance to advance in the harmonization process by allowing mutual recognition by the signatories of the 1958 Agreement. Therefore, such transposition will be considered in the work of the IWG on EPPR in the medium term. The transposition work will be, where possible, brought forward together with other activities; e.g. the assessment and development of propulsion unit performance requirements for L-cat vehicles.

4. Rules of the Procedures

1. The informal group is open to all participants of GRPE. A limitation of number of participants from any country and organization to participate in the informal group is not foreseen.
2. Chairperson(s), a Vice-Chairs and a Technical Secretary will govern the informal group.
3. The Co-Chairmanship is taken by the representatives of the Netherlands and of South Africa.
4. The Technical Secretary is taken by the representatives of IMMA. As needed, a Vice Technical Secretary can be identified to support the work.
5. The official language of the informal group will be English.
6. All documents and/or proposals shall be submitted to the Technical Secretary of the group in a suitable electronic format in advance of the meeting. The group may refuse to discuss any item or proposal which has not been circulated 5 working days in advance.
7. An agenda and related documents will be circulated to all members of the informal group at least two weeks in advance of all scheduled meetings.
8. The process will pursue consensus. When consensus cannot be reached, the Chairperson(s) of the group shall present the different points of view to GRPE.
9. The progress of the informal group will be reported to GRPE orally or as an informal document by the Chairperson(s) or another participant of the group.
10. All working papers should be distributed in digital form. A specific website created in the UNECE wiki pages (<https://wiki.unece.org/pages/viewpage.action?pageId=63308245>) is available and link will be notified to all related parties.

5. Timeline:

The plan below is indicative only. It will be regularly reviewed and updated to reflect the latest situation on progress and feasibility of the timeline.

(1) **2022-2025:** Meetings of the working group continued on the following activities:

- a. Power and Torque determination
- b. Battery Electric Vehicles (incl. range determination) ~~Deterioration Factors in UN GTR on Durability.~~

- c. **Deterioration Factors in UN GTR on Durability.** Revision of deterioration factors for mathematical test procedure of durability testing.
 - d. Transposition of UN GTR No. 2 into UN Regulation.
 - e. Other potential items
- (2) **January 2023:** Transmission to GRPE of the list of future activities with a planning and an ad interim report for the period from June 2020-January 2023.
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