



Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Pollution and Energy****Eightieth session**

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Item 3(a) of the provisional agenda

Light vehicles: UN Regulations Nos. 68 (Measurement of the maximum speed, including electric vehicles), 83 (Emissions of M₁ and N₁ vehicles), 101 (CO₂ emissions/fuel consumption) and 103 (Replacement pollution control devices)**Proposal for amendments to the 06 and 07 series of amendments to UN Regulation No. 83 (Emissions of M₁ and N₁ vehicles)****Submitted by the expert from the International Organization of Motor Vehicle Manufacturers***

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) to complete the clarification of the basis of the petrol tank capacity restriction for mono fuel gas vehicles and address some administrative issues that have been highlighted during the transposition of WLTP. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

I.

* In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), 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.



Proposal

In the 06 and the 07 Series of Amendments

Add a new paragraph 5.3.9. to read:

“5.3.9. Vehicles that use a reagent for the exhaust after-treatment system shall meet the requirements described in Appendix 6 to this Regulation.”

Paragraph 5.3.1.2.1.2., amend to read:

“5.3.1.2.1.2. Notwithstanding the requirement of paragraph 5.3.1.2.1.1, **mono-fuel gas** vehicles ~~that can be fuelled with either petrol or a gaseous fuel, but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol~~ will be regarded for the Type I test as vehicles that can only run on a gaseous fuel.”

Paragraph 5.3.2.1.2., amend to read:

“5.3.2.1.2. Notwithstanding the requirement of paragraph 5.3.2.1.1, **mono-fuel gas** vehicles ~~that can be fuelled with either petrol or a gaseous fuel, but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol~~ will be regarded for the Type II test as vehicles that can only run on a gaseous fuel.”

Paragraph 5.3.3.1.2., amend to read:

“5.3.3.1.2. Notwithstanding the requirement of paragraph 5.3.3.1.1, **mono-fuel gas** vehicles ~~that can be fuelled with either petrol or a gaseous fuel, but where the petrol system is fitted for emergency purposes or starting only and which the petrol tank cannot contain more than 15 litres of petrol~~ will be regarded for the Type III test as vehicles that can only run on a gaseous fuel.”

Annex 1, paragraph 5.3.12.2.5.5., amend to read:

“3.2.12.2.5.5. Schematic drawing of the fuel tank with indication of **nominal** capacity and material:

Annex 7, paragraph 4.7.2., amend to read:

“4.7.2. The chamber shall have one or more fans or blowers of like capacity 0.1 to 0.5 ~~m³/min~~ **m³/sec** with which to thoroughly mix the atmosphere in the enclosure. It shall be possible to attain an even temperature and hydrocarbon concentration in the chamber during measurements. The vehicle in the enclosure shall not be subjected to a direct stream of air from the fans or blowers”

Annex 11, paragraph 3.1.1, amend to read:

“3.1.1. Access to the OBD system required for the inspection, diagnosis, servicing or repair of the vehicle shall be unrestricted and standardised. All emission-related fault codes shall be consistent with ~~paragraph 6.5.3.4.~~ **paragraph 6.5.3.5.** of Appendix 1 to this annex.

In the 06 Series of Amendments only

Paragraph 1. of Appendix 6, amend to read:

“1. Introduction

This ~~Annex~~ **appendix** sets out the requirements for vehicles that rely on the use of a reagent for the after-treatment system in order to reduce emissions. Every reference in this ~~Annex~~ **appendix** to 'reagent tank' shall be understood as also applying to other containers in which a reagent is stored

...”

Annex 1, paragraph 3. footnote **, amend to read:

*** ~~Mono-fuel gas v~~Vehicles can be fuelled with both petrol and a gaseous fuel but if the petrol system is fitted for emergency purposes or starting only and the petrol tank cannot contain more than 15 litres of petrol, they will be regarded for the test as vehicles which can only run a gaseous fuel.”

In the 07 Series of Amendments only

Paragraph 1. of Appendix 6, amend to read:

“1. Introduction

This appendix sets out the requirements for vehicles that rely on the use of a reagent for the after-treatment system in order to reduce emissions. Every reference in this ~~Annex~~ **appendix** to 'reagent tank' shall be understood as also applying to other containers in which a reagent is stored

...”

Annex 1, paragraph 3., footnote 8, amend to read:

“(8) ~~Mono-fuel gas v~~Vehicles can be fuelled with both petrol and a gaseous fuel but if the petrol system is fitted for emergency purposes or starting only and the petrol tank cannot contain more than 15 litres of petrol, they will be regarded for the test as vehicles which can only run a gaseous fuel.”

II. Justification

1. There is currently no reference to Appendix 6 in the ‘main body’ of UN Regulation No. 83 and therefore there is no way of knowing that the requirements of this appendix need to be followed when type approval testing such vehicles.
2. The definition of “mono-fuel gas vehicle” was clarified in working paper ECE/TRANS/WP.29/GRPE/2018/13 and published in UN Regulation No. 83 Revision 4 Amendment 12 and UN Regulation No. 83 Revision 5 Amendment 8.
3. A further reading of the Regulation however revealed that despite the existence of a definition, the content of this definition has been used in several places rather than using the defined term.
4. This proposal would replace those usages with the defined term.
5. 3 references to “Annex” should refer to “Appendix”
6. The specification of the blowers in a SHED facility have been incorrect for some considerable time. This was noticed in the development of UN GTR No. 15 and UN Regulation No. 83 should be consistent.
7. One reference in Annex 11 was found to be incorrect.