# Proposal for amendments to the 06 and 07 series of amendments to UN Regulation No. 83 (Emissions of M1 and N1 vehicles) superseding ECE/TRANS/WP.29/GRPE/2020/2

# I. 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 3.2.12.2.5.5., 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 vVehicles 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 vV-chicles 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.

4a. On review of working document 2020/2 2 errors were identified. In the title of the 5<sup>th</sup> proposed amendment the paragraph number was incorrectly stated as 5.3.12.2.5.5. where it should have been 3.2.12.2.5.5., this has been corrected. The amendment to paragraph number 5.3.5.1. was included on the basis of incorrect information and has been removed from the paper.

- 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.
- 8. This document supersedes ECE/TRANS/WP.29/GRPE/2020/2.