Submitted by the secretariat

Informal document **GRPE-78-10**
78th GRPE, 8-11 January 2019
agenda item 3(a)

Proposal for Corrigendum 1 to Revision 5 – Amendment 8 to UN Regulation No. 83 (Emissions of M_1 and N_1 vehicles)

I. Proposals

Annex 7, paragraph 7.4.4.3., correct to read:

"7.4.4.3. At the request of the manufacturer an alternative purge ~~tat~~ **test** procedure can be used, if the procedure has been presented to and has been accepted by the Technical Service during the type approval procedure."

Annex 8, paragraph 3.2.1., correct to read:

"3.2.1. Start of engine, start of the sampling and the operation of the first cycle shall be in accordance with ~~Table 1~~ **Table A4a/1** and Figure A4a/1 in Annex 4a to this Regulation."

Appendix 1 to Annex 11, paragraph 6.5.3.5., correct to read:

"6.5.3.5. When a fault is registered, the manufacturer shall identify the fault using an appropriate ISO/SAE controlled fault code specified in one of the standards listed in paragraph 6.5.3.2.(d) of this appendix relating to "emission related system diagnostic trouble codes". If such identification is not possible, the manufacturer may use manufacturer controlled diagnostic trouble codes according to the same standard. The fault codes shall be fully accessible by standardised diagnostic equipment complying with the provisions of ~~paragraph 6.5.3.2.~~ **paragraph 6.5.3.3.** of this ~~annex~~ **appendix**.

The vehicle manufacturer shall provide to a national standardisation body the details of any emission-related diagnostic data, e.g. PID's, OBD monitor Id's, Test Id's not specified in the standard listed in paragraph 6.5.3.2.(a) of this appendix but related to this Regulation."

Annex 14, paragraph 3.1.1., correct to read:

"3.1.1. Two tests shall be performed under the following conditions:

Condition A: Test shall be ~~carried out~~ **started** with a fully charged electrical energy/power storage device.

Condition B: Test shall be ~~carried out~~ **started** with an electrical energy/power storage device in minimum state of charge (maximum discharge of capacity)**.**

The profile of the State of Charge (SOC) of the electrical energy/power storage device during different stages of the Type I test is given in Appendix 1 to this annex."

Annex 14, paragraph 3.2.1., correct to read:

"3.2.1. Two tests shall be performed under the following conditions:

3.2.1.1. Condition A: Test shall be ~~carried out~~ **started** with a fully charged electrical energy/power storage device.

3.2.1.2. Condition B: Test shall be ~~carried out~~ **started** with an electrical energy/power storage device in minimum state of charge (maximum discharge of capacity)~~.~~

and carried out with an operating mode keeping the vehicle in charge-sustaining operating condition, that being an operating condition in which the energy/power stored in the energy/power storage device may fluctuate but, on average, is maintained at a neutral charging balance level while the vehicle is driven.

3.2.1.3. **In agreement with the ~~responsible~~ type approval authority and justified by the manufacturer, the following operation modes shall not be considered for the purpose of testing:**

- Operating modes, such as 'charge mode', which are not limited to vehicle propulsion but which, in addition to vehicle propulsion, are charging the energy power/storage device in order to facilitate locally emission-free driving (e.g. under urban conditions)~~, such as 'charge mode'~~;

- Operating modes for vehicle maintenance, such as 'maintenance mode';

- Operating modes for special limited purposes and not intended for daily operation, such as 'mountain mode'.

On the basis of information provided by the manufacturer, the Technical Service shall make sure that the emission limits specified in Table 1 in paragraph 5.3.1.4. of this Regulation are not exceeded in all hybrid modes, with the exception of the 'maintenance mode'.

~~The operating mode switch shall be positioned according to Table A14/1.~~

~~Table A14/1~~

~~*Hybrid modes*~~ / ~~*Battery state of charge*~~	~~*- Pure electric*~~ ~~*- Hybrid*~~ ~~*Switch in position*~~	~~*- Pure fuel consuming*~~ ~~*- Hybrid*~~ ~~*Switch in position*~~	~~*- Pure electric*~~ ~~*- Pure fuel consuming*~~ ~~*- Hybrid*~~ ~~*Switch in position*~~	~~*- Hybrid mode n*[1]~~ ~~...~~ ~~*- Hybrid mode m*[1]~~ ~~*Switch in position*~~
~~Condition A Fully charged~~	~~Hybrid~~	~~Hybrid~~	~~Hybrid~~	~~[2]Mostelectric hybrid mode~~
~~Condition B Min. state of charge~~	~~Hybrid~~	~~Fuel consuming~~	~~Fuel consuming~~	~~Most fuel consuming mode[3]~~

~~*Notes:*~~

~~[1] For instance: sport, economic, urban, extra-urban position ...~~

~~[2] *Most electric hybrid mode:* The hybrid mode which can be proven to have the highest electricity consumption of all selectable hybrid modes when tested in accordance with condition A of paragraph 4. of Annex 8 to Regulation No. 101, to be established based on information provided by the manufacturer and in agreement with the technical service.~~

~~[3] *Most fuel consuming hybrid mode:* The hybrid mode which can be proven to have the highest fuel consumption of all selectable hybrid modes when tested in accordance with condition B of paragraph 4. of Annex 8 to Regulation No. 101, to be established based on information provided by the manufacturer and in agreement with the technical service.~~

3.2.1.4. The operating mode shall be selected as described in paragraphs 3.2.1.4.1. to 3.2.1.4.2.2. inclusive.

3.2.1.4.1. Operating mode selection for Condition A

3.2.1.4.1.1. If there is a single operating mode under condition A that is always selected when the vehicle is switched on regardless of the operating mode selected when the vehicle was previously shut down, and which cannot be switched to another mode without an intentional action of the driver or be redefined, this single operating mode shall be selected.

3.2.1.4.1.2. If there is no single operating mode under condition A that is always selected when the vehicle is switched on, the most electric energy consuming mode shall be selected.

3.2.1.4.2. Operating mode selection for Condition B

3.2.1.4.2.1. If there is a single operating mode under condition B that is always selected when the vehicle is switched on regardless of the operating mode selected when the vehicle was previously shut down, and which cannot be switched to another mode without an intentional action of the driver or be redefined, this single operating mode shall be selected.

3.2.1.4.2.2. If there is no single operating mode under condition B that is always selected when the vehicle is switched on, the most fuel consuming mode shall be selected."

II. Justification

Omissions in ECE/TRANS/WP.29/2018/148 adopted in the November session of WP.29 have been noticed and needed to be corrected.