**Proposal** **for** **a new Supplement to the 01 series of amendments**

**to Regulation No. 101 (CO2 emissions/fuel consumption)**

This document proposes to amend the charger requirement and the measurement method of REESS current for a hybrid electric power trainin order to align UN Regulation No. 101 with proceeding and procedures described in UN Regulation No. 154. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

In Annex 8,

*Delete paragraph 3.2.2.5. and paragraph 3.2.2.5.1.*

*Insert* *new paragraph 3.2.2.5. and paragraph 3.2.2.5.1.,* to read:

**"3.2.2.5. Application of a normal charge**

**Normal charging is the transfer of electricity to an electrified vehicle with a power of less than or equal to 22 kW.**

**Where there are several possible methods to perform a normal AC charge (e.g. cable, induction, etc.), the charging procedure via cable shall be used.**

**Where there are several AC charging power levels available, the highest normal charging power shall be used. An AC charging power lower than the highest normal AC charging power may be selected if recommended by the manufacturer and by approval of the responsible authority.**

**3.2.2.5.1. Charging procedure**

**The REESS shall be charged at an ambient temperature compromised between 20°C and 30°C with the on-board charger if fitted.**

**In the following cases, a charger recommended by the manufacturer and using the charging pattern prescribed for normal charging shall be used if:**

**(a) No on-board charger is fitted, or**

**(b) Charging time exceeds maximum time defined in paragraph 5.2.2.2.**

**The procedures in this paragraph exclude all types of special charges that could be automatically or manually initiated, e.g. equalization charges or servicing charges.**

 **The car manufacturer shall declare that during the test, a special charge procedure has not occurred."**

*Appendix 2, insert new* *paragraph 2.*, to read:

**"2. External REESS current measurement"**

*Paragraph 2.,* renumber 2.1.

*Paragraph 2.1.,* renumber 2.1.1.

*Paragraphs 2.1.1. to 2.1.3.,* renumber 2.1.1.1 to 2.1.1.3.

*Paragraph 2.2.* renumber 2.1.2.

*Paragraph 3.* renumber 2.2.

*Insert new paragraph 3.,* to read:

**"3. Vehicle on-board REESS current data**

 **As an alternative to paragraph 2. of this appendix, the manufacturer may use the on-board current measurement data. The accuracy of these data shall be demonstrated to the approval authority."**

**II. Justification**

1. UN GTR No. 15 (WLTP) has introduced the same requirements for the application of a normal charge, and the measurement method of REESS current between HEV and PEV.
2. However, Supplement 11 in UN Regulation No. 101 has introduced these requirements only for PEV in UN GTR No. 15 (WLTP).
3. This amendment introduces these requirements for HEV in the same way as for PEV.