

## **This proposal is modifying ECE/TRANS/WP.29/GRPE/2018/14 (R83)**

The text below has been prepared by the expert of the Netherlands as modification to Working Document ECE/TRANS/WP.29/GRPE/2018/14, this being the proposal of the expert from the International Organization of Motor Vehicle Manufacturers (OICA) to clarify the rules related to the selection of driving modes for testing of OVC-HEV vehicles with a mode selection switch within the 06 and 07 series of amendments to Regulation No. 83. The modifications to the proposal are marked in italic bold for new or strikethrough for deleted characters.

### **Proposal**

**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’.*

### **Justification**

- The presence of a 'charge mode' for OVC-HEVs is favourable in order to facilitate locally emission-free driving where the effect is greatest, such as in city centres;
- The current OICA working document is clarifying the rules regarding the selection of the driving modes for the testing of OVC-HEVs equipped with a mode selection switch. The proposal aims to prevent the 'charge mode' from being used during testing as the 'most fuel consuming mode', resulting in an increased CO<sub>2</sub> emission test result. Such a CO<sub>2</sub> penalty would unnecessarily penalise a 'charge mode', including the risk that OEMs would no longer equip plug-in hybrids with such a mode;
- Although the OICA working document is already more robust and less open to potential misinterpretations than the previous informal document (GRPE-76-04), we propose three additional modifications to harmonise the text with R83 and to even further prevent potential misuse or misinterpretation:
  1. Opposite to the text of GTR-15 (WLTP), within R83 it is common to use the term 'type approval authority' rather than 'responsible authority';
  2. To avoid the risk that a vehicle would be equipped with for instance a special 'sport' or 'race' mode, while naming it 'charge mode', it is better to clarify the intention and purpose of such a 'charge mode';
  3. It is necessary to unambiguously ensure that the criteria emissions limits always need to be met for each driving mode. The new addition is based on the principles in section 3.4.1. of Annex 14 on NOVC-HEVs and section 2.6.6.4 of Annex 6 of GTR-15.