Proposal for amendments to Regulation No. 115 (Uniform provisions concerning the approval of: I. Specific LPG (liquefied petroleum gases) retrofit systems to be installed in motor vehicles for the use of LPG in their propulsion system II. Specific CNG (compressed natural gas) retrofit systems to be installed in motor vehicles for the use of CNG in their propulsion system)

The text reproduced below was prepared by the expert from Italy.

This document addresses the need to align Regulation No.115 to the new WLTC test cycle, defined in the GTR n.15 and in the Commission Regulation (EU) 2017/1151 and later modifications.

Foreword

Informal document GRPE 76-02e was presented by the expert from Italy in the 76th session of GRPE, January 2018, starting the discussion about the necessity to update UNECE Regulation n. 115 with new WLTC test cycle.

GRPE invited the expert from Italy and interested experts to consider developing a proposal for amendments to UN Regulation No. 115. The target should be to present a working document at latest in January 2019 session of GRPE. Italy is planning to lead a meeting with all interested parties. Before that, expert from Italy decided to pre-analyse the main topics to be addressed.

The results of this pre-analysis are presented in this informal document to the GRPE.

Proposal of amendment to Regulation No. 115

The basic principle introduced and accepted in 76th session of GRPE is that retrofitted vehicles should be tested in gas mode with the same cycle of the original approval. This requires the following update in UNECE R115:

Definitions:

In order to improve the readability of the document, new definitions for the WLTC and NEDC should be added in Paragraph 2- Definitions.

Test procedures:

In the definition of the applicable tests a clear reference to WLTC should be made for those vehicles that are type approved in petrol mode according to this cycle.

A new paragraph should deal with specific provisions for WLTC test cycle in petrol and in gas mode, leaving unchanged the provision for previous NEDC vehicles.

Regarding the repetition of Type 1 test, the workflow specified in relevant regulations should be adopted. One of the topic that should be taken into consideration is the 'dCO2' factor that could be excluded due to the CO2 performances of gaseous fuels. This would result in a maximum of two tests for each reference fuel that can be reduced to one test under specific conditions, as lower are the emission results.

Any other business

The above mentioned group will evaluate any other need related to the new test methodology.

Transitional provisions

Until the entry into force of the amendment to Regulation No. 115, the requirements for the approval of LPG and CNG retrofit systems for light duty vehicles originally approved with WLTC methodology shall be met using WLTC cycle in type I test, as agreed in 76th session of GRPE.