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.


Foreword

Regulation (EU) 2017/1151 introduced the emission class “Euro 6d-TEMP” for new light-duty vehicle type approvals since September 1st 2017. The emission limits are the same as specified in Regulation 715/2007/EC (Euro 6) but the new WLTC procedure shall be adopted for type I test.

UNECE Regulation n. 115 concerns the approval of retrofit systems to be installed in motor vehicles for the use of LPG or CNG in their propulsion system, including the measurement of emission in type I test in both gasoline and gas modes.

In this period, vehicles approved according to Euro 6d-TEMP class are put on the market and there will be an ever increasing request to retrofit these vehicles to CNG or LPG, with systems that shall be approved according to Regulation No. 115.

The experts from Italy recognise that Euro 6d-TEMP vehicles are already in the scope of Regulation n. 115, but the existing provisions refer to type I test with NEDC cycle. Therefore, Regulation n. 115 shall be updated in order to be aligned and consistent with WLTC test cycle. At the same time it is proposed to state that type approval of retrofit systems for Euro 6d-TEMP vehicles shall be possible until the publication of the amendment.

Proposal of amendment to Regulation No. 115

The Italian delegation is proposing to lead a task force which shall draw up an amendment to Regulation n. 115. The aim is to define the provisions regarding emissions of LPG and CNG retrofit systems for Euro 6d-TEMP vehicles. The contribution of all the GRPE members, including NGOs and Industry Association, is welcome. Since the Regulation (EU) 2017/1151 is already into force, the amendment shall be presented as a working document at latest for the January 2019 GRPE session.

Transitional provisions

Type approval of LPG and CNG retrofit systems for Euro 6d-TEMP vehicles is already possible, because Euro 6d-TEMP vehicles are into the scope of Regulation No. 115 (ref. par. 1.4). Existing provisions shall be satisfied, but, as stated before, current version of Regulation n. 115 refers to type I test methodology of Regulation n. 83 (NEDC). Par. 1.5 of Regulation No. 115 states that the emission performances of the retrofitted vehicle shall fulfil the provisions of the Regulation for which the type approval has been initially granted.

Therefore, 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 Euro 6d-TEMP vehicles regarding emissions shall be met using WLTC cycle in type I test. All references to NEDC methodology in current version of Regulation No. 115 shall be interpreted as WLTC methodology.

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