

Economic and Social Council

Distr.: General 24 July 2013

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on General Safety Provisions

105th session Geneva, 8–11 October 2013 Item 9 of the provisional agenda Regulation No. 110 (CNG vehicles)

Proposal for amendments to Regulation No. 110 (CNG vehicles)

Submitted by the expert from the European Association of Automotive Suppliers *

The text reproduced below was produced by the expert from the European Association of Automotive Suppliers (CLEPA) to introduce type approval provisions for fuel selection systems. It supersedes ECE/TRANS/WP.29/GRSG/2013/11. The modifications to the current text of UN Regulation No. 110, including the 01 series of amendments, are marked in bold for new or strikethrough for deleted characters.

Please recycle

In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Part II of the Regulation

Paragraph 17.10.2., amend to read:

"17.10.2. Vehicles with more than one fuel system shall have a fuel selection system—to ensure that no more than one fuel at the same time is supplied to the engine for more than 5 seconds—which shall prevent both a flow of gaseous fuel into the petrol or diesel tank and a flow of petrol or diesel into the gaseous fuel tank, even in the case of a fault of the fuel selection system.

"Dual fuel" vehicles, using diesel as the primary fuel for igniting the air/gas mixture, are allowed in cases where these engines and vehicles meet mandatory emission standards."

Insert a new paragraph 17.10.3., to read:

"17.10.3. The measures shall be demonstrated during the type approval."

Paragraph 17.10.3. (former), renumber as paragraph 17.10.4.

II. Justification

- 1. Mixed fuel operation can provide advantages for bi-fuel vehicles. There is no safety risk in running in a mixed fuel operation mode. However, for safety reasons, it shall be ensured that there is no flow of one fuel into the other fuel tank. Therefore, this proposal clarifies the restrictions for mixed fuel operation by prohibition of a flow of gaseous fuel into the petrol or diesel tank and by prohibition of a flow of petrol or diesel into the gaseous fuel tank. This restriction shall be ensured under all temperature and pressure conditions, even in case of a single fault.
- 2. UN Regulation No. 110 regulates only safety issues. The requirements for mandatory emission requirements are part of UN Regulation No. 83 (e.g. on mixed fuel operation).

2