

**Economic and Social Council**Distr.: General
12 March 2019

Original: English

Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Pollution and Energy****Seventy-ninth session**

Geneva, 21-24 May 2019

Item 5 of the provisional agenda

UN Regulations Nos. 24 (Visible pollutants, measurement of power of C.I. engines (Diesel smoke)), 85 (Measurement of the net power), 115 (LPG and CNG retrofit systems), 133 (Recyclability of motor vehicles) and 143 (Heavy Duty Dual-Fuel Engine Retrofit Systems (HDDF-ERS))**Proposal for a new Supplement to UN Regulation No. 115
(LPG and CNG retrofit systems)****Submitted by the expert from Italy***

The text reproduced below was prepared by the expert from Italy with the aim to establish the conditions to consider direct and indirect injection vehicles as being part of the same approval family.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21 and Add.1, Cluster 3), 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.

GE.19-04003(E)



* 1 9 0 4 0 0 3 *

Please recycle The recycling symbol, consisting of three chasing arrows forming a triangle.



I. Proposal

Insert new paragraph 2.5.1.4. to read:

- "2.5.1.4. With regard to the requirement of paragraph. 2.5.1.1. (e), the family relation will be considered valid for both indirect and direct injection petrol vehicles if all the following conditions are satisfied:
- The retrofit system is "master-slave" according to the definition of paragraph. 2.1.5.;
 - The retrofit system operates in indirect (port fuel) gas injection mode on direct petrol injection vehicles;
 - At least one petrol direct injection vehicle has been tested as parent vehicle as defined in paragraph. 2.5."

Renumber paragraph 2.5.1.4. as 2.5.1.5.

II. Justification

This proposal amends UN Regulation No. 115 to list the conditions to be met by indirect and direct injection vehicles to be considered as belonging to the same vehicle family. Gasoline direct injection vehicles which operates in indirect gas injection should be listed in the same family as indirect gasoline injection vehicles, as the applied gas injection technology is the same and provided that at least one such vehicle is tested as parent vehicle according to the requirements of this Regulation.
