

Proposed amendments to ECE 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**

A. PROPOSAL

Paragraph 1.4., amend to read:

"1.4. This Regulation applies to retrofit systems intended to be fitted on vehicles of categories M,N & **3-wheelers**.

The modified vehicle shall remain conform to all the provisions of the Regulation for which the type approval has been initially granted."

Paragraph 2.1.3., amend to read:

"2.1.3. "A vehicle is considered mono-fuel", when it is equipped with a petrol tank of capacity ≤ 5 litres for M & N categories of vehicles & ≤ 3 litres for 3 wheelers or national requirements may be applicable, that can only be used to "limp-home".

Paragraph 2.4.1., amend to read:

"2.4.1. According to this Regulation, "a member of the family" is a vehicle equipped with retrofit system type of which type approval is requested and sharing the following essential characteristics with its parent one
or **"a member of the family" shall be as defined in the national requirements.**"

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B. JUSTIFICATION

Paragraph 1.4.:

Paragraph 1.4. is only applicable to the vehicles of category M and N. We feel that it should also cater for 3-wheelers as in Asian countries the 3-wheeler population is quite large. Most of the Asian countries are making it mandatory to retrofit CNG/LPG on in-use 3-wheelers to reduce pollution. Indian regulation is available for such retrofitment of CNG/LPG system on in-use 3-wheelers (The Automotive Research Association of India-ARAI has played a major role in formulating the code of practice and regulation).

Paragraph 2.1.3.,

As per paragraph 2.1.3., the petrol tank capacity is 15 litres for M and N categories of vehicles for limp-home operation and such vehicles are considered as mono-fuel. Our comment is that it should be country specific because in Indian legislation, there are different capacities prescribed, i.e. 5 litres for 4-wheelers, 3 litres for 3-wheelers.

Paragraph 2.4.1.,

As per paragraph 2.4.1., the vehicle is defined to belong to "a member of the family" if the vehicle is manufactured by the same manufacturer. In Indian legislation, for flexibility, differentiation is made between gasoline and diesel base vehicles (before conversion) and not on OE manufacturer of the vehicle. For in-use gasoline vehicle, extension of type-approval is granted for vehicles if their engine cubic capacity (displacement) is within ± 25 per cent of the already type-approved vehicle. In case of diesel vehicles, every make and model of vehicle is subjected to type Approval and no Type Approval Extension is granted.
