

**INFORMAL GROUP ON GASEOUS FUEL VEHICLES
Within the UN GRPE (WP29)
PROPOSED AMENDMENT**

Name of Organisation submitting Amendment/Work Item

European Commission

Person submitting Item

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Regulation name and reference number

REGULATION N. 115 (retrofit)

Name of Amendment/Work Item

Comments in *red italic* to the proposed Amendment to the Total Hydrocarbon Emissions Limit Value for Natural Gas Vehicles and the switch over time limit.

6.1.2.4.1.6 **Subject to the requirements of paragraph 6.1.2.4.1.8. the tests shall be repeated three times with each reference LPG.** The parent vehicle(s), **equipped with the retrofit system**, shall comply with the limit values according to the type approval of the original vehicle(s) including the deterioration factors applied during the type approval of the original vehicle(s).

If the parent vehicle(s) complies with Regulation No. 83, 05 series of amendments, or with Directive 98/69/EC, or with Regulation No. 49, 04 series of amendments, or with Directive 1999/96/EC, during the type 1 test the vehicle shall use *only* petrol for a maximum of 90 seconds when operating in gas mode. In the other cases, this period shall not exceed 60 seconds.

*'The definition of a Bi- fuelled vehicle in the (EC) regulation 692/2008 is: 'bi fuel vehicle' means a vehicle with two separate fuel storage systems that can run part-time on two different fuels and is designed to run on **only one fuel at a time**; The definition in R83 is slightly different " "Bi-fuel vehicle" means a vehicle that can run part-time on petrol and also parttime on either LPG or NG" As we have the strict definition in the EC regulation I would not like to make this change in R115 at this stage.*

From the proposal

6.2.2.4.1.6.1. For the purpose of section 6.2.2.4.1.6, the HC value shall be the equivalent THCe as defined below. The hydrocarbon emissions shall be measured as NMHC and CH₄. The methods of measurement for Methane and NMHC shall be those defined in Regulation No. 83, 06 series of amendments. The THCe (THC equivalent) value is calculated as follows:

$$\text{THCe} = K * \text{CH}_4 + \text{NMHC}$$

Where K = 0,55.

6.2.2.4.1.7. Notwithstanding the requirements of paragraph 6.2.2.4.1.6, for each pollutant or combination of pollutants, one of the three test results may exceed, by not more than 10 per cent, the limit prescribed, provided the arithmetical mean of the three results is below the prescribed limit. Where the prescribed limits are exceeded for more than one pollutant, it is immaterial whether this occurs in the same test or in different tests.

As been said before both at the GRPE meeting in January and at the last meeting this could maybe be a solution for this problem but we have not seen the backing data to justify this. I understand the rational but if no data is presented this to me would be understood as a more lenient requirement for those cars which I don't believe can be accepted by the Commission. When also future 06 series of amendments to R83 is included this will also create a loophole for OEMs not to certify vehicles according to R83 but use this route instead. As this proposal would apply both to Euro 4, 5 and 6 I see the problem even greater as the limits in Reg 692/2008 are clearly outspoken as NMHC and THC. Before this can be proposed I would say we need some justifying test results that to my understanding is not on the table at the moment. Without a strong justification I would say the proposal will not fly