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EUROPEAN COMMISSION ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Consumer goods
Automotive industry

Brussels, 12 May 2005 F5 D(2005)

COMMISSION WORKING DOCUMENT TO GRPE

Subject: Scope of ECE Regulations No. 49 and 83.

1. Background

In the last meeting of GRPE the European Commission presented a document intended to clarify the scope of Regulations under the 1958 Agreement covered by that group. In the meeting, it was stated that Regulations No. 49 and 83 represented a special complexity due to two facts:

- (1) Changes in the scope had been introduced several times in successive amendments.
- (2) Relationship between the two Regulations.

The chairman of GRPE made a recommendation to set up a small working group, involving interested people from Member States and organisations, to deal with this matter.

On 14 March 2005 a working group with representatives from the European Commission, U.K., Sweden, Spain, Italy and the Netherlands met in Brussels to discuss the issue. The representative of France sent some comments before the meeting, and the representative of IMMA indicated his agreement with the document.

The following proposals are now made to GRPE.

2.- REGULATION ECE No. 49

Proposal

Paragraph 1., amend to read:

1. SCOPE

1.1. This regulation applies to vehicles of categories M and N and their engines, as shown by table A, with regard to the tests foreseen for these vehicles in table B.

Table A. APPLICABILITY

		Positive-Ignition Engines			Compression-Ignition Engines		
	Max. Weight	Petrol	NG (2)	LPG (3)	Diesel	NG (2)	Ethanol
M1	≤ 3.5 t	-	-	-	-	-	-
	> 3.5 t	-	49	49	49	49	49
M2	-	-	49	49	49//83 (1)	49	49
M3	-	-	49	49	49	49	49
N1	-	-	49//83	49//83	49//83	49//83	49
N2	-	-	49	49	49//83 (1)	49	49
N3	-	-	49	49	49	49	49

49//83 = Manufacturers can obtain type approval according to this Regulation or Reg. 83, see under "Equivalent approvals".

- (1) Regulation No. 83 applies only for vehicles with a reference mass \leq 2840 Kg as an extension of an approval given for an engine used in vehicles of categories M1 or N1.
- (2) Natural Gas.
- (3) Liquefied Petroleum Gas.

Table B. REQUIREMENTS

	Positive-Ignition Engines			Compression-Ignition Engines		
	Petrol	NG (2)	LPG (3)	Diesel	NG (2)	Ethanol
Gaseous pollutants	-	Yes	Yes	Yes	Yes	Yes
Particulates	-	-	-	Yes	-	-

1.2. EQUIVALENT APPROVALS

The following do not need to be approved according to this Regulation if they are part of a vehicle approved according to Regulation No. 83:

- compression-ignition engines to be mounted in vehicles of sub-categories N₁, N₂ and M₂ fuelled with diesel and compression-ignition engines fuelled with Natural Gas to be mounted in vehicles of sub-category N₁
- positive-ignition engines fuelled with Natural Gas or LPG to be mounted in vehicles of sub-category N_1

3.- REGULATION ECE No. 83

Proposal

Paragraph 1., amend to read:

1. SCOPE

This regulation applies to vehicles of categories M and N as shown by table A, with regard to the tests foreseen for these vehicles in table B.

Table A. APPLICABILITY

	Max. Weight	Petrol	Diesel	NG (2)	LPG (3)
M1	≤ 3.5 t	83	83	83	83
	> 3.5 t	83	-	-	-
M2	-	83	49//83 (1)	-	-
M3	-	83	-	-	-
N1	-	83	49//83	49//83	49//83
N2	-	83	49//83 (1)	-	-
N3	-	83	-	-	-

49//83 = Manufacturers can obtain type approval according to this Regulation or Reg. 49.

- (1) Regulation No. 83 applies only for vehicles with a reference mass \leq 2840 Kg as an extension of an approval given for an engine used in vehicles of categories M1 or N1.
- (2) Natural Gas.
- (3) Liquefied Petroleum Gas.

Table B. REQUIREMENTS

	Positive-igni	Compression-ignition engined vehicles of			
Requirements	petrol fuelled vehicle	elled bi-fuel vehicle mono-ruel		categories M ₁ and N ₁ including hybrid vehicles	
Gaseous pollutants	Yes (max. mass ≤ 3.5 t)	Yes (test with both fuel types) (max. mass $\leq 3.5 \text{ t}$)	Yes $(max. mass \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	
Particulates	-	-	-	Yes $(\max. \max \le 3.5 t)$	
Idle emissions	Yes	Yes (test with both fuel types)	Yes	-	
Crankcase emissions	Yes	Yes (test only with petrol)	Yes	-	
Evaporative emissions	Yes $(max. mass \le 3.5 t)$	Yes (test only with petrol) (max. mass ≤ 3.5 t)	-	-	
Durability	Yes $(max. mass \le 3.5 t)$	Yes (test only with petrol) (max. mass ≤ 3.5 t)	Yes $(\max. \max \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	
Low temperature emissions	Yes $(max. mass \le 3.5 t)$	Yes (max. mass ≤ 3.5 t) (test only with petrol)	-	-	
In-use conformity	Yes $(max. mass \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	Yes. $(\max. \max \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	
On-board diagnostics	Yes $(max. mass \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	Yes $(\max. \max \le 3.5 t)$	Yes (max. mass $\leq 3.5 \text{ t}$)	

4.- REMAINING QUESTIONS

The group considered that the issue of "dual-fuel" (diesel + gas) has to be taken into account in the near future, as engines with this technology are already in the market.

The necessity for the introduction of definitions, e.g. for mono-fuel, LPG, NG, dual-fuel engines, etc was discussed and the Commission will be in contact with car manufacturers and fuel associations in order to get common definitions.
