

PROPOSAL FOR AMENDMENTS TO REGULATION No. 49
(alignment of the scope with that of Regulation No. 83 implementing Euro 5/6)

1. SCOPE

- 1.1. ~~This Regulation applies to vehicles of categories M and N^{1/} and their engines, as shown in table A, with regard to the tests foreseen for these engines in table B. It also applies to the installation of these engines on vehicles.~~

Table A: APPLICABILITY

| Vehicle category ^{1/} | Maximum mass | Positive ignition engines | | | Compression ignition engines | |
|--------------------------------|--------------|---------------------------|---------------------------|---------------------------|------------------------------|---------|
| | | Petrol | NG ^(a) | LPG ^(b) | Diesel | Ethanol |
| M ₁ | ≤ 3.5 t | - | - | - | - | - |
| | > 3.5 t | - | R49 | R49 | R49 | R49 |
| M ₂ | - | - | R49 | R49 | R49 or R83 ^{(c)(d)} | R49 |
| M ₃ | - | - | R49 | R49 | R49 | R49 |
| N ₁ | - | - | R49 or R83 ^(d) | R49 or R83 ^(d) | R49 or R83 ^(d) | R49 |
| N ₂ | - | - | R49 | R49 | R49 or R83 ^{(c)(d)} | R49 |
| N ₃ | - | - | R49 | R49 | R49 | R49 |

^(a) Natural Gas.

^(b) Liquefied Petroleum Gas.

^(c) Regulation No. 83 applies only for vehicles with a reference mass ≤ 2,840 kg as an extension of an approval given for a vehicle of categories M₁ or N₁.^{1/}

^(d) "R49 or R83" means that manufacturers can obtain type approval according to this Regulation or to Regulation No. 83, see paragraph 1.2.

This Regulation shall apply to motor vehicles of categories M₁, M₂, N₁ and N₂ with a reference mass exceeding 2,610 kg and to all motor vehicles of categories M₃ and N₃.

At the request of the manufacturer, the type approval of a completed vehicle given under this Regulation shall be extended to its incomplete vehicle with a reference mass below 2,610 kg. Type approvals shall be extended if the manufacturer can demonstrate that all bodywork combinations expected to be built onto the incomplete vehicle increase the reference mass of the vehicle to above 2,610 kg.

At the request of the manufacturer, the type approval of a vehicle granted under this Regulation shall be extended to its variants and versions with a reference mass above 2,380 kg provided that it also meets the requirements relating to the measurement of greenhouse gas emissions and fuel consumption.

^{1/} As defined in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), (document TRANS/WP.29/78/Rev.1/Amend.2, as last amended by Amend.4).

Table A: APPLICABILITY

| Vehicle category <u>1/</u> | Positive-ignition engines | | | Compression-ignition engines | |
|----------------------------|---------------------------|---------------------------|---------------------------|------------------------------|---------|
| | Petrol | NG ^(a) | LPG ^(b) | Diesel | Ethanol |
| M ₁ | - | R49 | R49 | R49 | R49 |
| M ₂ | - | R49 | R49 | R49 or R83 ^{(c)(d)} | R49 |
| M ₃ | - | R49 | R49 | R49 | R49 |
| N ₁ | - | R49 or R83 ^(d) | R49 or R83 ^(d) | R49 or R83 ^(d) | R49 |
| N ₂ | - | R49 | R49 | R49 or R83 ^{(c)(d)} | R49 |
| N ₃ | - | R49 | R49 | R49 | R49 |

^(a) Natural Gas.

^(b) Liquefied Petroleum Gas.

^(c) Regulation No. 83 applies only for vehicles with a reference mass ≤ 2,610 kg as an extension of an approval given for a vehicle of categories M₁ or N₁. 1/

^(d) "R49 or R83" means that manufacturers can obtain type approval according to this Regulation or to Regulation No. 83, see paragraph 1.2.

Table B: REQUIREMENTS

| | Positive-ignition engines | | | Compression-ignition engines | |
|-----------------------|---------------------------|--------------------|--------------------|------------------------------|---------|
| | Petrol | NG | LPG | Diesel | Ethanol |
| Gaseous pollutants | - | Yes | Yes | Yes | Yes |
| Particulates | - | Yes ^(a) | Yes ^(a) | Yes | Yes |
| Smoke | - | - | - | Yes | Yes |
| Durability | - | Yes | Yes | Yes | Yes |
| In-service-conformity | - | Yes | Yes | Yes | Yes |
| OBD | - | Yes ^(b) | Yes ^(b) | Yes | Yes |

^(a) Only applicable to stage C in Table 2 of paragraph 5.2.1.

^(b) Application dates according to paragraph 5.4.2.

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:

- (a) compression-ignition engines to be mounted in vehicles of categories N₁, N₂ and M₂ 1/ fuelled with diesel;
- (b) positive-ignition engines fuelled with natural gas (NG) or liquefied petroleum gas (LPG) to be mounted in vehicles of category N₁. 1/
- (c) vehicles of categories N₁, N₂ and M₂ 1/ fitted with compression - ignition engines fuelled with diesel and vehicles of category N₁ 1/ fitted with positive-ignition engines fuelled with natural gas (NG) or liquefied petroleum gas (LPG).
