AGREEMENT

CONCERNING THE ADOPTION OF UNIFORM TECHNICAL PRESCRIPTIONS FOR WHEELED VEHICLES, EQUIPMENT AND PARTS WHICH CAN BE FITTED AND/OR BE USED ON WHEELED VEHICLES AND THE CONDITIONS FOR RECIPROCAL RECOGNITION OF APPROVALS GRANTED ON THE BASIS OF THESE PRESCRIPTIONS */

(Revision 2, including the amendments that entered into force on 16 October 1995)

Addendum 100: Regulation No. 101

Revision 2 - Amendment 1

Supplement 7 to the original version of the Regulation - Date of entry into force: 18 June 2007

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF PASSENGER CARS POWERED BY AN INTERNAL COMBUSTION ENGINE ONLY, OR POWERED BY A HYBRID ELECTRIC POWER TRAIN WITH REGARD TO THE MEASUREMENT OF THE EMISSION OF CARBON DIOXIDE AND FUEL CONSUMPTION AND/OR THE MEASUREMENT OF ELECTRIC ENERGY CONSUMPTION AND ELECTRIC RANGE, AND OF CATEGORIES M1 AND N1 VEHICLES POWERED BY AN ELECTRIC POWER TRAIN ONLY WITH REGARD TO THE MEASUREMENT OF ELECTRIC ENERGY CONSUMPTION AND ELECTRIC RANGE

UNITED NATIONS

*/ Former title of the Agreement:


GE.07-
Paragraph 1., amend to read (footnote 1/ not amended):

"1. SCOPE

This Regulation applies to vehicles of categories M_{1} and N_{1} with regard to:
(a) the measurement of the emission of carbon dioxide (CO_{2}) and fuel consumption and/or to the measurement of electric energy consumption and electric range of vehicles powered by an internal combustion engine only or by a hybrid electric power train,
(b) and to the measurement of electric energy consumption and electric range of vehicles powered by an electric power train only.

It does not apply to a category N_{1} vehicle if both:
(a) the engine type fitted to that type of vehicle has received type-approval pursuant to Regulation No. 49, and
(b) the total annual worldwide production of N_{1} vehicles of the manufacturer is less than 2,000 units."

Insert new paragraphs 2.7. and 2.8., to read:

"2.7. "Lorry" means a motor vehicle of category N_{1} which is designed and constructed exclusively or principally for conveying goods.

2.8. "Van" means a lorry with the cab integrated into the body."
Paragraphs 7.1. to 7.1.3., amend to read (inserting a reference to new footnote 4/):

"7.1. Vehicles powered by an internal combustion engine only, except vehicles equipped with a periodically regenerating emission control system

The type approval can be extended to vehicles from the same type or from a different type differing with regard to the following characteristics of Annex 4 if the CO₂ emissions measured by the technical service do not exceed the type approved value by more than 4 per cent for vehicles of category M₁ and 6 per cent for vehicles of category N₁:

7.1.1. Reference mass.

7.1.2. Maximum authorized mass.

7.1.3. Type of bodywork:
(a) for M₁: saloon, hatchback, station wagon, coupé, convertible, multipurpose vehicle 4/
(b) for N₁: lorry, van."

Insert new footnote 4/, to read:

"4/ As defined in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3) (TRANS/WP.29/78/Rev.1/Amend.2)."

Paragraph 7.2., amend to read:

"7.2. Vehicles powered by an internal combustion engine only and equipped with a periodically regenerating emission control system

The type approval can be extended to vehicles from the same type or from a different type, differing with regard to the characteristics of Annex 4, given in paragraphs 7.1.1. to 7.1.5. above, but not exceeding the family characteristics of Annex 10, if the CO₂ emissions measured by the technical service do not exceed the type approved value by more than 4 per cent for vehicles of category M₁ and 6 per cent for vehicles of category N₁, and where the same Kᵢ factor is applicable.

The type approval can be extended also to vehicles from the same type, but with a different Kᵢ factor, if the corrected CO₂ value measured by the technical service does not exceed the type approved value by more than 4 per cent for vehicles of category M₁ and 6 per cent for vehicles of category N₁."
Paragaphs 7.4. to 7.4.3., amend to read:

"7.4. Vehicles powered by a hybrid electric power train

The type approval can be extended to vehicles from the same type or from a different type differing with regard to the following characteristics of Annex 4 if the CO₂ emissions and the electric energy consumption measured by the technical service do not exceed the type approved value by more than 4 per cent for vehicles of category M₁ and 6 per cent for vehicles of category N₁:

7.4.1. Reference mass.

7.4.2. Maximum authorized mass.

7.4.3. Type of bodywork:
(a) for M₁: saloon, hatchback, station wagon, coupé, convertible, multipurpose vehicle
(b) for N₁: lorry, van."

Insert new paragraphs 7.5. to 7.6.3., to read:

"7.5. Extension of approval of vehicles of category N₁ within a family, if powered by an internal combustion engine only or by a hybrid electric power train

7.5.1. For vehicles of category N₁ that are approved as members of a vehicle family using the procedure in paragraph 7.6.2., the type-approval can be extended to vehicles from within the same family only if the technical service estimates that the fuel consumption of the new vehicle does not exceed the fuel consumption of the vehicle on which the family's fuel consumption is based.

Approvals may also be extended to vehicles which:
(a) are up to 110 kg heavier than the family member tested, provided that they are within 220 kg of the lightest member of the family,
(b) have a lower overall transmission ratio than the family member tested due solely to a change in tyre sizes, and
(c) conform with the family in all other respects.

7.5.2. For vehicles of category N₁ that are approved as members of a vehicle family using the procedure in paragraph 7.6.3., the type-approval can be extended to vehicles from within the same family without additional testing only if the technical service estimates that the fuel consumption of the new vehicle falls within the limits made up of those two vehicles in the family that have the lowest and the highest fuel consumption, respectively.
7.6. Approval of vehicles of category $N_1$ within a family, if powered by an internal combustion engine only or by a hybrid electric power train

Vehicles of category $N_1$ can be approved within a family as defined in paragraph 7.6.1, using one of the two alternative methods described in paragraphs 7.6.2 and 7.6.3.

7.6.1. $N_1$ vehicles may be grouped together into a family for the purposes of this Regulation if the following parameters are identical or within the specified limits:

7.6.1.1. Identical parameters are:
(a) manufacturer and type as defined in Annex 4, item 2.,
(b) engine capacity,
(c) emission control system type,
(d) fuel system type as defined in Annex 4, item 6.7.2.

7.6.1.2. The following parameters have to be within the following limits:
(a) transmission overall ratios (no more than 8 per cent higher than the lowest) as defined in Annex 4, item 6.10.3.,
(b) reference mass (no more than 220 kg lighter than the heaviest),
(c) frontal area (no more than 15 per cent smaller than the largest),
(d) engine power (no more than 10 per cent less than the highest value).

7.6.2. A vehicle family, as defined in paragraph 7.6.1., can be approved with CO$_2$ emission and fuel consumption data that are common to all members of the family. The technical service must select for testing the member of the family which the service considers to have the highest CO$_2$ emission. The measurements are performed as described in paragraph 5. and Annex 6, and the results according to the method described in paragraph 5.5. are used as type-approval values that are common to all members of the family.

7.6.3. Vehicles that are grouped in a family as defined in paragraph 7.6.1 can be approved with individual CO$_2$ emission and fuel consumption data for each of the family members. The technical service selects for testing the two vehicles, which the service considers to have the highest and the lowest CO$_2$ emissions respectively. The measurements are performed as described in paragraph 5. and Annex 6. If the manufacturer's data for these two vehicles falls within the tolerance limits described in paragraph 5.5., the CO$_2$ emissions declared by the manufacturer for all members of the vehicle family can be used as type-approval values. If the manufacturer's data do not fall within the tolerance limits, the results according to the method described in paragraph 5.5. are used as type-approval values and the technical service shall select an appropriate number of other family members for additional tests."
Annex 4.

The title, amend to read (inserting a new reference to footnote 6/):

"COMMUNICATION 6/"

Insert new footnote 6/, to read:

"6/ For vehicles that are approved within a family according to paragraph 7.6., this communication must be supplied for each individual member of the vehicle family."

Item 6.3., amend to read (inserting a new reference to footnote 7/):

"6.3. Type of body:

6.3.1. For M_1: saloon, hatchback, station wagon, coupé, convertible, multipurpose vehicle 2/ 7/

6.3.2. For N_1: lorry, van. 2/"

Insert new footnote 7/, to read:

"7/ As defined in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3) (TRANS/WP.29/78/Rev.1/Amend.2)."

Item 7., amend to read:

"7. Type-approval values."