COMMISSION OF THE EUROPEAN COMMUNITIES

COM(76) 721 final Brussels, 6 January 1977

PROPOSAL FOR A COUNCIL DIRECTIVE

AMENDING DIRECTIVE 70/156/EEC ON THE APPROXIMATION OF THE LAWS OF THE MEMBER STATES RELATING TO THE TYPE-APPROVAL OF MOTOR VEHICLES AND THEIR TRAILERS

(submitted to the Council by the Commission)

EXPLANATORY MEMORANDUM

Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type approval of motor vehicles and their trailers has been in effect in the Member States of the Community as originally constituted since 11 August 1971 and in the new Member States since 1 January 1973 (Denmark) and 1 July 1973 (Ireland and the United Kingdom). The experience subsequently gained in the Community type approval of a vehicle under Directive 70/156/EEC has enabled certain situations which had not emerged clearly during the preparation of this directive and which are therefore not, or are not sufficiently covered by the Directive to be pinpointed. Since it has just put before the Council the final proposals for Directives which, once adopted by the Council, will enable full EEC type approval for motor vehicles to be introduced, the Commission feels that it is appropriate to amend Directive 70/156/EEC at this stage in order to adapt it to the experience required in respect of type approval. These amendments relate to (a) the legal part and (b) the technical annexes.

LEGAL PART

The following Articles of Directive 70/156/EEC are amended:

Article 4

Article 4 of Directive 70/156/EEC stipulates that the Member States must limit the verification of the conformity of production models with the approved prototype to spot checks. Experience has shown that this was unrealistic since the most important factor in ensuring constant manufacturing quality is first and foremost the equipment possessed by the industry. Article 4 is therefore being amended in such a way that when an application for type approval is made, a Member State must be satisfied that the manufacture filing the application is adequately equipped. This provision shall be set out in paragraph (2) of the Article in question.

Experience has also shown that certain items of vehicle equipment not produced by the manufacturer of the vehicle are currently unable to be submitted for type approval by their manufacturer unless fitted to a vehicle and on the initiative of the manufacturer of this vehicle.

Equipment of this type consists of independent technical units which

can be marketed as such provided that they are submitted for inspection by the competent authority on the basis of harmonized specifications. It therefore seemed appropriate to the Commission to introduce into the type approval procedure the possibility of the manufacturers of such equipment being able themselves to file the application for type approval with the competent authority without having to pass through the vehicle manufacturer, and thereby of obtaining free access to the market for their equipment as provided for in the directive on type approval.

This possibility is set out in the new paragraph (4) of Article 4.

Article 5

As in the case of the withdrawal of type approval, it is also provided that a Member State must likewise justify its refusal to approve.

Article 9

Article 9 of Directive 70/156/EEC contains the safeguard clause which can be invoked by a Member State which finds that a vehicle is a hazard to road safety although it complies with the requirements set out in the special directives. The current wording of this Article indicates no procedure for solving the problem. It is therefore proposed that this be replaced by a text which is more specific on this matter and because in any case already been introduced into directives recently adopted by the Council on other facets of the approximation of laws.

TECHNICAL ANNEXES

Article 11 of Directive 70/156/EEC stipulates that any changes necessary in order to adapt Annex 1 (model information document) and Annex II (EEC type approval certificate) may be submitted to the "committee" procedure referred to in Article 13 of the same Directive. However, rather than use this procedure in order to amend these Annexes, the Commission preferred to address to the Council a proposal for a Directive on these amendments in order not to scatter amendments relating to one and the same Directive among separate acts, since this would impair the clarity of the Directive.

The amendments proposed largely concerned terminology. Directive 70/156/EEC was adopted in 1970, whereas the majority of the special directives has been adopted subsequently. Therefore the wording of the certificates must be matched to that of the special directives. However, certain changes merit brief comment.

Fuel consumption

In its Recommendation 76/494/EEC of 4 May 1976 on the rational use of the energy consumed by road vehicles by means of improving driver behaviour the Council recommended — in Item 5 — that a test procedure should be defined at a Community level.

It is therefore proposed that a new Item 3.2.3. (Fuel consumption) be introduced into the type approval certificates together with the reference "COMF". In (Item 3.2.10. of the information document) the manufacturer must state the fuel consumption of the type vehicle he is submitting for type approval. In order to measure this consumption he must use a harmonized method, in this case that recommended by the United Nations Economic Commission for Europe. By using the same method the appropriate authority is obliged to verify the accuracy of the information provided by the manufacturer during the checks involved in the granting of EEC type approval. This item of information in the type approval certificate, measured and verified in accordance with a common method, will enable the consumer to compare the consumption of equivalent models.

Introduction of some new items into the tupe approval certificates

Certain additions to the type approval certificate had been made necessary by Council Acts subsequent to Directive 70/156/EEC. For example: the rear fog lamp which has been made obligatory by Directive 70/756/EEC of 27 July 1976 on the fitting of lighting and light-signalling devices to motor vehicles and their trailers², has been introduced into item 10.2.11.

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¹ OJ L 140 of 28 May 1976, p. 14

² OJ L 262 of 27 September 1976, p. 1

as regards other items, it emerged from the examination of the type approval certificate that certain technical certificates existing in some Member States were not included in the type approval certificate, which, in fact, provides a list of the components or the characteristics of a vehicle which must be submitted to the approximation of the laws in order to enable EEC type approval to be introduced. These include inter alia the heating of the passenger compartment (item 9.7.6.) and wheel-fairings (mudguards) (item 9.9.) the Commission recently addressed relevant proposals for directives to the Council3.

On the other hand, although the laws of some Member States provide for requirements governing the front seats and in particular the driving seat of motor vehicles, it has been found that the existence of such laws has not given rise to barriers to trade. Therefore it is not necessary to prepare a directive and verification of conformity with the data on the dimensions of the driving seat provided by the manufacturer is sufficient.

The type approval certificate as set out in Annex II to this proposal for a directive reflects the situation as regards the national laws which must be approximated. It can be confirmed on the basis of this certificate that with regard to motor vehicles (Category M4: Vehicles for the carriage of persons and having a maximum of eight seats in addition to the driving seat) the Commission has laid before the Council all of the proposals for directives relating to the introduction of full EEC type approval.

CONSULTATION OF THE EUROPEAN PARLIAMENT AND THE ECONOMIC AND SOCIAL COMMITTEE

The opinion of these two bodies is required in accordance with the provisions of Article 100 (2)

(3)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission,

Having regard to the Opinion of the European Parliament,

Having regard to the Opinion of the Economic and Social Committee,

Whereas Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers has laid down the EEC type-approval procedure for vehicles built in compliance with the technical requirements set out in specific Directives and also the list of vehicle parts and characteristics covered by these Directives;

Whereas, in order to apply the said type-approval procedure correctly, the control of the conformity of production models should be extended to include the manufacturing quality control systems available to the manufacturer; whereas in order that the Member States may keep each other adequately informed, they should be obliged to give reasons for any refusal to approve and should notify the other Member States thereof under Article 5 of the said Directive; whereas, in order to improve the procedure relating to derogations from the principle of the free movement of goods, full reasons should be given in all cases where a vehicle, although conforming to the approved type, displays features likely to constitute a hazard to road safety;

¹⁾ OJ No L 42, 23.2.1970, p.1

Whereas, in order to take account of the situations resulting from the specific Directives adopted by the Council and of certain requirements specific to the motor vehicle sector which have emerged since the adoption of Directive 70/156/EEC, Annexes I and II relating to information documents and type-approval respectively, should be amended,

HAS ADOPTED THIS DIRECTIVE:

Artiole 1

Council Directive 70/156/EEC is hereby amended as set out in the following Articles.

Article 2

Article 4 shall be amended to read as follows:

- "1. A Member State shall approve all vehicle types which satisfy the following confitions:
 - a) the vehicle type must conform to the particulars in the information document:
 - b) the vehicle type must satisfy the checks listed in the model, referred to in Article 2 (b), of the type approval certificate.
- 2. A Member State shall, before granting type-approval, take the necessary measures to verify, in so far as is necessary and if need be in co-operation with the competent authorities of the other Member States, that production models conform to the approved prototype.
- 3. The Member State which has granted type approval shall take the necessary measures to verify, in so far as is necessary and if need be in co-operation with the competent authorities of the other Member States, that production models conform to the approved prototype.
- 4. Type-approval may be limited to types of vehicle parts or characteristics which form an independent technical unit, provided that the specific Directives expressly provide for this. In such a case, the detailed rules laid down in Articles 3 to 9 shall also apply.

Artiole 3

There shall be added to Article 5(1) the following sentence:
"T the case of refusal, they shall indicate the reasons therefor".

Article 4

Article 9 shall be amended to read as follows:

- "I. If a Member State finds on the basis of clear evidence that vehicles of a particular type are a hazard to road safety although they are accompaned by a properly issued certificate of conformity, then that State may, rpovidionally, refuse to register such vehicles of prohibit their sale, entry into service or use in its territory. It shall immediately inform the other Member States and Commission thereof, stating the grounds for its decision.
- 2. The Commission shall, within six weeks, consult the Member States concerned and shall thereafter deliver its opinion without delay and take all appropriate measures.
- 3. If the Commission is of the opinion that technical adaptations to the Directive are necessary, such adaptations shall be adopted in accordance with the procedure laid down in Article 13. In that event, the Member State which has adopted the protective measures may maintain them until the adaptations enter into force.

Article 5

Annexes I and II of Council Directive 70/156/EEC shall be replaced by the Annexes hereto.

Article 6

- 1. Member States shall put into force provisions containing the requirements needed in order to comply with this Directive within twelve months of its notification and shall forthwith inform the Commission thereof.
- 2. On notification of this Directive, Member States shall take steps to inform the Commission, in sufficient time for it to submit its comments, of any draft laws, regulations or administrative provisions which they intend to adopt in the field covered by this Directive.

Article 7

This Directive is addressed to the Member States.

ANNEX I

Model information documents (a) (b)

- O. GENERAL
- 0.1. Make(s)
- 0.2. Type and commercial description (mention any variants)
- 0.3. Sort
- 0.4. Category of vehicle (c)
- 0.5. Name and address of manufacturer
- 0.6. Name and address of manufacturer's authorized representative (if any)
- 0.7. Location of statutory plates and inscriptions and method of attachment
- 0.7.1. Location of the manufacturer plate
- 0.7.2. Location of the identification number of the vehicle
- 0.8. The serial numbers of the type for the identification of vehicle commence at N°.......
- 1. GENERAL CONSTRUCTIONS CHARACTERISTICS OF THE VEHICLE
 (attach three-quarter front and three-quarter rear photographs)
 (attach dimensional sketch of the whole vehicle)
- 1.1. Number of axles and wheels (if applicable, number of cater-pillars or tracks)
- 1.1.1. Number of axles with double wheels (if applicable)
- 1.2. Powered wheels (number, position, connection to other axles)
- 1.3. Chassis (if any) (overall sketch)
- 1.4. Material used for the side-members (c)
- 1.5. Position and arrangement of the engine
- 1.6. Driving cab (forward, semi-forward or normal)
- 2. WEIGHTS AND DIMENSIONS (c)
- 2.1. Wheel base(s) (fully loaded) (f)
- 2.1.1. In the case of semi-trailers: distance between the axis of the fifth wheel king pin and the foremost rear axle

- In the case of tractive units: 2.2.
- Fifth wheel lead of the semi-trailer (maximum end minimum) (g) 2.2.1.

-2-

- 2.2.2. Maximum height of the fifth wheel (standardised) (h)
- 2.2.3. Distance between the rear of the cab and the rear axle:
- 2.2.3.1. Distance between the rear of the cab and the rear axle(s) (in the case of a chassis with cab)
- Distance between the rear of the steering wheel and the 2.2.3.2. rear axle(s) (in the case of a bare chassis)
- Track of each axle (i) 2.3.
- 2.4. Maximum vehicle dimensions (overall) (i)

		Chassis	Chassis wi	th bodywork
		without bodywork	without fittings	with fittings
2.4.4.	Length (k) Width (l) Height (unladen) (m) Front overhang (n) Rear overhang (o) Ground clearance (laden to the technically permissible maximum weight) (p)			
2.4.7.	Distance between axles			

- Weight of the bare chassis (without cab, coolant, oils, fuel, 2.5. spare wheel, tools or driver)
- Distribution of this weight among the axles 2.5.1.
- Weight of the vehicle with bodywork in running order, or 2.6. weight of the chassis with cab if the manufacturer does not fit the bodywork (including coolant, oils, fuel, tools, spare wheel and driver) (q)
- Distribution of this weight among the axles (distribution 2.6.1. among axles and load on the fifth wheel king pin in the case of a semi-trailer)
- Technically permissible maximum laden weight stated by the 2.7. manufacturer
- Distribution of this weight among the axles (distribution 2.7.1. among axles and load on the fifth wheel king pin in the case of a semi-trailer)

- 2.8. Technically permissible maximum weight on each axle stated by the manufacturer (distribution among axles and load on the fifth wheel king pin in the case of a semi-trailer)
- 2.9. The technically permissible maximum laden weight of the trailer stated by the manufacturer and, where applicable maximum weight on the fifth wheel, if the vehicule is used as as drawing vehicle.
- 2.10. Maximum vertical load at the coupling point (hook or special threepoint coupling system)
- 3. ENGINE (r)
 (drawings, diagrams, plans and photographs of the engine and of the engine compartment)
- 3.1. Manufacturer
- 3.2. Combustion engine:
- 3.2.1. Name
- 3.2.2. Type (positive-ignition, diesel, etc.) cycle
- 3.2.3. Number and arrangement of cylinders
- 3.2.4. Bore, stroke and capacity of cylinders
- 3.2.5. Maximum power at ... rpm (s)
- 3.2.6. Maximum torque at ... rpm (s)
- 3.2.7. Normal fuel
- 3.2.8. Fuel tank (capacity and position)
- 3.2.9. Reserve fuel tank (capacity and position)
- 3.2.10. Fuel consumption (t)
- 3.2.11. Fuel supply system (type)
- 3.2.12. Supercharger (if fitted)
 (type, control, supercharging pressure)
- 3.2.13. Governor (if fitted) (operating principles)
- 3.2.14. Electrical system (voltage, positive or negative earth)

- 3.2.15. Generator (type and nominal output)
- 3.2.16. Ignition (type of equipment, type of advance setting)
- 3.2.17. Suppression of radio interference (description).
- 3.2.18. Cooling system (air, water)
- 3.2.19. Sound level
- 3.2.20. Exhaust system (sketch)
- 3.2.21. Measures taken against air pollution
- 3.3. Electric motor:
- 3.3.1. Type (series, winding)
- 3.3.2. Hourly maximum output and operating voltage
- 3.3.3. Battery (number of cells, weight, capacity in amp-hours and position)
- 3.4. Engines or motors other than electric or combustion (particulars regarding the parts of such engines or motors)
- 4. TRANSMISSION (u) (Sketch of the transmission plus drawing)
- 4.1. Type (mechanical, hydraulic, electric, etc.)
- 4.2. Clutch (type)
- 4.2.1. Weight of clutch
- 4.3. Gearbox (type, direct engagement, method of control)
- 4.3.1. Weight of gearbox
- 4.4. Transmission from engine to gearbox, rear axle(s), transfer or intermediate gears if fitted
- 4.5. Gear ratio, with or without transfer box(es)

Gear	Internal gearbox ratios	Final drive ratio	Total gear ratios
1			
2			
3			·
_ •••			
Reverse			

4.6. Vehicle speed attained at an engine speed of 1000 rpm with the tyres normally fitted (6.1) (circumference of tyres when laden is metres (v)

Gear	Speed in km/h					
1 2 3 Reverse						

- 4.7. Maximum vehicle speed in top gear (in km/h) (v)
- 4.8. Thrust (and transmission of braking forces)
- 4.9. Speedometer equipment
- 4.10. Differential lock (if fitted)
- 4.11. Reverse

5. AXLES AND WHEELS

- 6. SUSPENSION (overall sketch of the suspension arrangements)
- 6.1. Tyres (dimensions and characteristics)
- 6.2. Type and design of the suspension of each axle or wheel
- 6.2.1. Vehicles of category Ma
- 6.2.2. Vehicles others than category Ma
- 6.3. Characteristics of the springing parts of the suspension (design, characteristics of the materials and dimensions)
- 6.4. Stabilisers (w)
- 6.5. Shock absorbers (w)
- 7. STEERING (sketch)
- 7.1. Type of mechanism and linkage to wheels, method of assistance if any (method and diagram of operation make and type if any) and steering effort on the steering wheel
- 7-2. The behaviour of the steering mechanism in the event of an impact
- 7.3. Maximum turning angle of the wheels:
- 7.3.1. to the right ... (degrees): number of turns of the steering wheel
- 7.3.2. to the left ... (degrees) : number of the steering wheel ...
- 7.4. Minimum turning circle (x)

- 7.4.1. to the right
- 7.4.2. to the left
- 8. BRAKES (overall sketch and operating sketch) (y)
- 8.1. Service braking device
- 8.2. Secondary braking device
- 8.3. Parking braking device
- 8.4. Additional braking device, if fitted (including retarder)
- 8.5. Automatic braking device which functions in the event of a coupling breakage (in the case of a trailer or semi-trailer)
- 8.6. Calculation of the braking system: determination of the ratio between the total braking forces at the circumference of the wheels and the force applied to the braking control
- 8.7. Outside sources of energy, if any (characteristics, capacity of energy reservoirs, max. and min. pressure, pressure gauge and device showing excessive drop of pressure on the dashboard, vacuum reservoirs and supply valve, supply compressors, compliance with provisions regarding pressure equipment)
- 8.8. Vehicles designed to pull a trailer:
- 8.8.1. trailer braking device
- 8.8.2. connections couplings, safety devices
- 9. BODYWORK (overall dimensional sketch of the interior and the exterior)
- 9.1. Type of bodywork
- 9.2. Materials used and methods of construction
- 9.3. Doors (number, dimensions, direction of opening, latches and hinges)
- 9.4. Field of vision
- 9.5. Windscreen and other windows (number and position, materials used)
- 9.5.1. Angle of inclination of the windscreen
- 9.6. Window wiper
- 9.7. Window washer

- 9.8. Defrosting and demisting
- 9.9. Rear-view mirrors
- 9.10. Interior fittings
- 9.10.1. Interior parts of the passenger compartment other than the interior rear-view mirror(s), lay-out of contracts, roof or sliding roof, the backrest and rear part of seats
- 9.10.2. Accessibility and identification of controls, tell-tales and indicators
- 9.10.3. Seats (number, location and characteristic)
- 9.10.4. Dimension of the driver seat
- 9.10.4.1.Width (z)
- 9.10.4.2 Length (z¹)
- 9.10.4.3 Height to roof (z^2)
- 9.10.4.4 Distance from lower rim of steering wheel to seatback (z^3)
- 9.10.4.5 Distance from lower rim of steering wheel to cushion (z4)
- 9.10.5. Strength of seats and of their anchorages
- 9.10.6. Interior heating
- 9.10.7. Safety belts and other retention devices (number and location)
- 9.10.8. Anchorages for safety belts (number and location)
- 9.11. External projections
- 9.12. Wheel guards
- 9.13. Space for mounting and fixing of the rear registration plate
- 9.14. Rear protection devices
- 10. LIGHTING AND LIGHT SIGNALLING DEVICES
- 10.1. Installation of devices (exterior vehicle sketches giving dimensions and position of the illuminating surfaces of all devices; colour of lights)
- 10.2. Characteristic of devices
- 10.2.1. Driving light
- 10.2.2. Passing light
- 10.2.3. Front fog light
- 10.2.4. Reverse light
- 10.2.5. Direction indicator light
- 10.2.6. Hazard warning signal
- 10.2.7. Stop lights

10.2.8.	Rear registration plate light
10.2.9.	Front position light
10.2.10.	Rear position light
10.2.11.	Rear fog light
10.2.12.	Parking light
10.2.13.	Outline marker lights
10.2.14.	Reflectors
10.3.	Headlight wipers
11.	CONNECTIONS BETWEEN DRAWING VEHICLES AND TRAILERS OR SEMI-TRAILERS

12.	MISCELLANEOUS
12.1.	Audible warning devices:
12.1.1.	Normal
12.1.2.	Special
12.2.	Special provisions for public transport vehicles
12.3.	Special provisions for taxis
12.4.	Special provisions for goods vehicles
12.5.	Devices to prevent unauthorized use of the vehicle
12.6.	Towing hook
12.7.	Trailer leg
12.8.	Swept path
12.9.	Engine power/maximum weight ratio in $(x \text{ W/kg})$ and hill-starting ability

NOTES

Further information, drawings, diagrams, photographs, etc. may be requested in the separate Directives.

For each item for which drawings or photographs must be attached, give numbers of the corresponding attached documents.

- (a) If a part has been type-approved that part need not be described if reference is made to such approval. Similarly, a part need not be described if its construction is clearly apparent from the attached diagrams or sketches.
- (b) The measure units to be used, are those given in the Council Directives 71/354/EEC(1) and 76/770/EEC(2)
- (c) Classified according to the following international categories:
 - 1. Category M: Motor vehicles having at least four wheels, or having three wheels when the maximum weight exceeds 5 t, and used for the carriage of passengers.
 - Category M1: Vehicle used for the carriage of passengers and comprising no more than eight seats in addition to the driver's seat.
 - Category M2: Vehicles used for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum weight not exceeding 5 t.
 - comprising more than eight seats in addition to the driver's seat, and having a maximum weight exceeding 5 t.
 - 2. Category N: Motor vehicles having at least four wheels, or having three wheels when the maximum weight exceeds 1 t, and used for the carriage of goods.
 - Category N1: Vehicles used for the carriage of goods and having a maximum weight not exceeding 3.5 t.
 - Category N2: Vehicles used for the carriage of goods and having a maximum weight exceeding 3.5 but not exceeding 12 t.
 - Category N3: Vehicles used for the carriage of goods and having a maximum weight exceeding 12 t.
 - 3. Category 0: Trailers (including semi-trailers)
 - Category 01: Trailers with a maximum weight hot exceeding 0.75 t.
 - Category 02: Trailers with a maximum weight exceeding 0.75t but not exceeding 3.5 t.
 - Category 03: Trailers with a maximum weight exceeding 3.5t but not exceeding 10 t.
 - Category 04: Trailers with a maximum weight exceeding 10 t.

⁽¹⁾ OJ L 243 of 29.10. 1971

⁽²⁾ OJ L 262 of 27.9.1976

- (d) If possible, Euronorm name. Where applicable, give :
 - description of the material,
 - yield point,
 - ultimate tensile stress.
 - elongation (as a %)
 - Brinell hardness.

At dimensions of vehicle a tolerance of 0 to +0.8% is permitted and at weights a tolerance of 0 to +2.%

- (e) Where there is one version with a normal cab and another with a couchette cab, both sets of weights and dimensions are to be stated.
- (f) ISO Recommendation (1) R 612, term Nº 3
- (g) " " term N° 36
- (h), " " term N° 38
- (i) " " term N° 2
- (j) Where the vehicle submitted for type approval has no bodywork, the maximum and minimum dimensions stated by the manufacturer are to be entered in the second column and the third column is to be left blank.
- (k) ISO Recommendation R 612, term Nº 11
- (1) " term N° 15
- (m) " term N° 16
- (n) " term N* 21
- (o) n n n term N* 22
- (p) " term N• 8
- (q) The mass of the driver is assessed at 75 kg.
- (r) If the engine does not have reciprocating pistons, a general description must be given.
- (s) Measured according to recommendation A (69) "Measure method "ECE" for the power of the engine" of the Economic Commission for Europe(2)
- (t) Measured according to the recommendation ... "Measure method "ECE" for the fuel consumption of motor-vehicles" of the Economic Commission for Europe (3)
- (u) The specified particulars are to be given for any proposed variants.
- (v) A 5 % tolerance is permitted.

⁽¹⁾ Edition 1967

⁽²⁾ Ref.:

⁽³⁾ Ref.:

- (w) Only state whether fitted.
- (x) ISO Recommendation R 612, term Nº 30
- (y) The following particulars are to be given for each braking system:
 - type and characteristics of brakes (dimensional sketch) (drums or discs, wheels braked, linkage with wheels braked, friction surfaces, their properties and effective areas, radius of drums, shoes or discs, weight of drums, adjustment devices);
 - transmission and control (sketch) (construction, adjustment, lever ratios, accessibility of control and its position, ratchet controls in the case of mechanical transmission, characteristics of the main parts of the linkage, cylinders and control pistons, brake cylinders).
 - (z) Measured on a line perpendicular to the longitudinal median plane of the vehicle and passing through the H point. The H point shall be determined as set out in Annex IV of Directive 74/60/EEC (OJ N° L 38 of 11.2.1974)
 - (z¹) Distance between two planes perpendicular to the longitudinal median plane of the vehicle, passing the outher part of the cushion and the intersection point between the cushion and the seatback, respectively.
- (z²) The vertical distance between the roof and the cushion, measured on a line passing the lower rim of the steering wheel. If the seat is adjustable in height, it must be locked in its lowest position.
- (z³) Measured on line perpendicular to the seat back. If the seat back is adjustable it must be locked in the position as rear as possible. If the seat is adjustable in the longitudinal direction it must be locked in its median position.
- (z⁴) Measured on a line perpendicular to the cushion. If the seat is adjustable in the longitudinal direction, it must be locked in its median position.

ANNEX II

EEC type-approval certificate

A. GENERAL

Type-approval certificates issued under the EEC type-approval are to be completed as follows:

- 1. Fill in the relevant sections of the type-approval certificate, given under B of this Annex, on the basis of the particulars in the information document after verification of such particulars.
- 2. Enter the abbreviation(s) printed against each item of the model type-approval certificate after completing the relevant checks and tests:

"CONF" : check that the relevant part or characteristic conforms to the particulars in the information document;

"SD" : check that the part or characteristic in question conforms to the harmonised requirements adopted in implementation of the relevant separate Directive;

"COM" : laying down a communication, which is annexed to the type-approval certificate;

"R" : compile the test report to be attached to the type-approval certificate;

"S" : check that a sketch and/or diagram has been attached.

B. MODEL OF TYPE-APPROVAL CERTIFICATE FOR A VEHICLE

- O. GENERAL
- 0.1. Make(s)
- O.2. Type and commercial description (mention any variants)
- 0.3. Sort
- 0.4. Category of vehicle
- 0.5. Name and address of manufacturer
- 0.6. Name and address of manufacturer's authorised representative (if any)
- 0.7. Location of statutory plates and inscriptions and method of attachment

0.8. The serial numbers of the chassis of the type for identification of the vehicle,

1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE	VEHICLE
1.1.	Chassis (if any)	CONF
2.	WEIGHTS AND DIMENSIONS (in mm and kg)	SD - COM - R - S
2.1.	Fifth wheel lead of the semi-trailer , (maximum and minimum)	CONF
2.2.	Technically permissible maximum laden weight of the vehicle	CONF
2.2.1.	Distribution of this weight among the axles (distribution among axles and load on the fifth wheel king pin in the case of a semi-trailer)	CONF
2.3.	Technically permissible maximum weight on each axle (distribution among axles and load on the fifth wheel king pin in the case of a semi-trailer)	CONF
2.4.	The technically permissible maximum weight of the trailer and where applicable, the maximum weight on the fifth wheel, if the vehicle is used as a drawing vehicle.	CONF
3.	ENGINE	•
3.1.	Manufacturer	
3.2.	Combustion engine :	
3.2.1.	Maximum power at rpm	CONF
3.2.2.	Liquid fuel tanks	SD
3.2.3.	Fuel consumption	CONF
3.2.4.	Electrical system	CONF
3.2.5.	Suppression of radio interference	SD - COM - R - S
3.2.6.	Permissible sound level and exhaust system	SD - R - S
3.2.7.	Air pollution:	
3.2.7.1	• Vehicles equipped with a positive- ignition engine	SD - ÇOM - R - S

3.2.7.2	• Vehicles equipped with diesel engine	SD - COM - R - S
4.	TRANSMISSION	
4.1.	Maximum speed	CONF
4.2.	Speedometer equipment	SD
4.3.	Reverse	SD
5.	AXLES AND WHEELS	CONF
	· 	
	and Day (Take	i i
6.	SUSPENSION	
6.1.	Tyres	SD '
6.2. 6.2.1.	Characteristics of the suspension Vehicles of the M ₁ category	CONF
6.2.2.	Vehicles others than the M category	SD
7•	STEERING	
7.1.	Type of mechanism and linkage, method	
	of assistance and steering effort on the steering wheel	SD
7.2.	The behaviour of the steering mecha-	
,	nism in the event of an impact	SD - COM - R - S
7.3.	Diameter of minimum turning circle	CONF
7.3.1.	To the right	
7.3.2.	To the left	
8.	BRAKES	SD - COM - R - S
9.	BODYWORK	· · · · · · · · · · · · · · · · · · ·
9.1.	Doors	SD
9.2.	Field of vision	SD - COM - R - S
9.3.	Windscreen and other windows	SD - COM
9.4.	Window wiper and washer	SD - COM - R - S
9.5.	Defrosting and demisting	SD - COM - R - S
9.6.	Rear-view mirrors	SD
9.7.	Interior fittings	•
9.7.1.	Interior parts of the passenger compartment (other than the interior	
	rear-view mirrors), layout of contracts,	
	rcof or sliding roof, the backrest and rear part of seats	SD - COM - R - S
		· · · · · · · · · · · · · · · · · · ·

9.7.2.	Accessiblity and identification of contr tell-tales and indicators		•	COM	***	R	-	s
9.7.3.	Seats (number, location and characteristic)	CO	NF					
9.7.4.	Dimensions of the driver seat	CO	NF					
9.7.5.	Strength of seats and of their anchorages	SD) <u> </u>	COM	-	R		s
9.7.6.	Interior heating	SD	,	COM		s		
9.7.7.	Safety belts and other retention devices	SD		COM	dure	R	***	s
9.7.8.	Anchorages for safety belts			COM				
9.8.	External projections	SD	-	COM		R	•••	s
9.9.	Wheel guards	SD		COM	-	s		
9.10.	Space for mounting and fixing of the rear registration plate	SD	j					
9.11.	Rear protection devices	SD	1					
10.	LIGHTING AND LIGHT SIGNALLING DEVICES					• .		
10.1.	Installation of devices	SD	-	COM	-	R	***	S
10.2.	Characteristic of devices							
10.2.1.	Main - beam headlamps	SD						
10.2.2.	Dipped- beam headlamps	SD						
10.2.3.	Front fog lamps	SD						
10.2.4.	Reverse lamps	SD						
10.2.5.	Direction indicator lamps	SD						
10.2.6.	Hazard warning signal	SD						
10.2.7.	Stop lamps	SD	1					•
10.2.8.	Rear registration-plate lamps	SD						
10.2.9.	Front position lamps	SD						

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10.2.10.	Rear position lamps		SD					
	Rear fog lamps		SD					
	Parking lamps	•	SD					
	End-outlight marker lamps		SD					
	Reflex reflectors		SD					
	Headlight wipers		CONF					
11.	CONNECTIONS BETWEEN DRAWING AND TRAILERS OR SEMI-TRAILERS	VEHICLES ERS	SD					
				,				
12.	MISCELLANEOUS							
12.1.	Audible warning devices		SD	1				
12.2.	Special provisions for publ port vehicles	lic trans-		- COM				
12.3.	Special provisions for tax:	is	SD	- COM	-	R	-	S
12.4.	Special provisions for good vehicles	is	SD	- COM	-	R	-	s
12.5.	Devices to prevent unauthor of the vehicle	rized use	SD	- COM	- ,	R	-	S
12.6.	Towing hook		SD	1				
12.7.	Trailer leg		SD					
12.8.	Swept path		SD					
12.9.	Engine power/maximum weigh (x W/kg) and hill-starti ability	t ratio in ng	SD					
								

The checks carried out at the request of the manufacturer, show that the vehicle specified above, which has been submitted as a series prototype, satisfies all requirements in respect of each and every item in this certificate.

(place) (date)

(Signature)