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# **COMMISSION DIRECTIVE 2001/116/EC**

of 20 December 2001

adapting to technical progress Council 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

(Text with EEA relevance)

(OJ L 18, 21.1.2002, p. 1)

# Corrected by:

<u>▶</u> <u>B</u>

►<u>C1</u> Corrigendum, OJ L 103, 19.4.2002, p. 32 (2001/116/EC)

#### **COMMISSION DIRECTIVE 2001/116/EC**

#### of 20 December 2001

adapting to technical progress Council 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

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to 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 (¹), as last amended by Directive 2000/40/EC of the European Parliament and of the Council (²), and in particular Article 13(2), thereof,

#### Whereas:

- (1) Directive 70/156/EEC and its Annexes have been amended several times and, since further amendments to the Annexes are to be made, they should be consolidated into a single text in the interests of clarity.
- (2) The provision concerning the necessary administrative documents for whole vehicle type-approval contained in those Annexes should apply to vehicles of category M<sub>1</sub> equipped with an internal combustion engine.
- (3) The Annexes to Directive 70/156/EEC, as amended by this Directive, also provide for the necessary administrative documents for whole vehicle type-approval for vehicles of other categories than M<sub>1</sub> Such approvals should, however, only be granted after the entry into force of a Directive repealing and replacing Directive 70/156/EEC and the entry into force of the amendments which are deemed necessary to the relevant separate Directives for the purposes of application to vehicles of some categories other than category M<sub>1</sub>.
- (4) It is also appropriate to provide for a uniform arrangement for attributing approval numbers.
- (5) Directive 70/156/EEC should be amended accordingly.
- (6) The measures provided for in this Directive are in accordance with the opinion of the Committee for Adaptation to Technical Progress established by Directive 70/156/EEC

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

Directive 1970/156/EEC is amended as follows:

## **▼**C1

 in Article 4(1), second subparagraph, the following is deleted: 'and shall be give a special approval number according to the provisions of Annex VII';

#### **▼**B

- 2. in Article 8(2)(c), sixth subparagraph, the following is deleted: 'and replace any special approval numbers by normal approval numbers';
- 3. the Annexes to Directive 70/156/EEC are replaced by the text in the Annex to this Directive.

<sup>(1)</sup> OJ L 42, 23.2.1970, p. 1.

<sup>(2)</sup> OJ L 292, 9.11.2001, p. 21.

#### Article 2

- 1. As regards vehicle type-approval, Member States shall apply Directive 70/156/EEC, as amended by this Directive, only for vehicles of category M, equipped with an internal combustion engine.
- 2. As regards vehicle type-approval of special purpose vehicles of category  $M_1$ , Member States shall, only at the request of the manufacturer, apply Article 4(1) of Directive 70/156/EEC, as amended by Directive 1998/14/EC( $^1$ ).
- 3. Article 10 of Directive 70/156/EEC, as amended by Directive 87/358/EEC (²), shall continue to apply to vehicle type-approval of vehicles other than those referred to in paragraph 1.

#### Article 3

- 1. As regards the issue of Certificates of Conformity subsequent to EC type-approvals, existing models may continue to be used until 30 June 2003
- 2. This Directive shall not invalidate any approval granted before its entry into force, nor prevent extension of such approvals under the terms of the Directive under which they were originally granted.

#### Article 4

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive before 1 July 2002. They shall forthwith inform the Commission thereof. They shall apply these provisions from 1 July 2002.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

## Article 5

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Communities.

#### Article 6

This Directive is addressed to the Member States.

<sup>(1)</sup> OJ L 91, 25.3.1998, p. 1.

<sup>(2)</sup> OJ L 192, 11.7.1987, p. 51.

# LIST OF ANNEXES

Annex I	Complete list of information for the purposes of vehicle EC type-approval
Annex II	Definition of vehicle categories and vehicle types
Annex III	Information document for the purpose of vehicle EC type-approval
Annex IV	List of requirements for the purposes of vehicle EC type-approval
Annex V	Procedures to be followed during vehicle EC type-approval
Annex VI	Vehicle EC type-approval certificate
Annex VII	EC type-approval certificate numbering system
Annex VIII	Test results
Annex IX	EC Certificate of conformity
Annex X	Conformity of production procedures
Annex XI	Nature of and provisions for special purpose vehicles
Annex XII	Small series and end-of-series limits
Annex XIII	List of EC type-approvals issued pursuant to separate Directives
Annex XIV	Procedures to be followed during multistage EC type-approval
Annex XV	Certificate of origin of the vehicle — Manufacturer's declaration of base/incomplete vehicle of category other than $\mathbf{M}_{_{1}}$ .

# ANNEX I (a)

# COMPLETE LIST OF INFORMATION FOR THE PURPOSES OF VEHICLE EC TYPE-APPROVAL

All information documents in this Directive and in separate Directives must consist only of extracts from, and adhere to the item numbering system of, this total list.

The following information, if applicable, must be supplied in triplicate and include a list of contents. Any drawings must be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, must show sufficient detail.

If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.

(For explanatory	notes, please refer to last page of this Annex)
0.	GENERAL
0.1.	Make (trade name of manufacturer):
0.2.	Type:
0.2.0.1.	Chassis:
0.2.0.2.	Bodywork/complete vehicle:
0.2.1.	Commercial name(s) (if available):
0.3.	Means of identification of type, if marked on the vehicle $(^b)$ :
0.3.0.1.	Chassis:
0.3.0.2.	Bodywork/complete vehicle:
0.3.1.	Location of that marking:
0.3.1.1.	Chassis:
0.3.1.2.	Bodywork/complete vehicle:
0.4.	Category of vehicle (5):
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport:
0.5.	Name and address of manufacturer:
0.6.	Location and method of attachment of statutory plates and location of vehicle identification number
0.6.1.	On the chassis:
0.6.2.	On the bodywork:
0.7.	In the case of components and separate technical units, location and method of affixing of the EC approval mark:
0.8.	Address(es) of assembly plant(s):
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle:
1.2.	Dimensional drawing of the whole vehicle:
1.3.	Number of axles and wheels:

1.3.1.	Number and position of axles with double wheels:
1.3.2.	Number and position of steered axles:
1.3.3.	Powered axles (number, position, interconnection):
1.4.	Chassis (if any) (overall drawing):
1.5.	Material used for the side-members (d): $\ldots \ldots \ldots$
1.6.	Position and arrangement of the engine:
1.7.	Driving cab (forward control or bonneted) (*):
1.8.	Driving position: left/right (¹)
1.8.1.	Vehicle is equipped to be driven in right-hand/left-hand traffic $(^1)$ .
1.9.	Specify if the motor vehicle is intended to tow semi-trailers or other trailers and, if the trailer is a semi-, drawbar or centre-axle trailer, specify vehicles specially designed for the controlled-temperature carriage of goods:
2.	MASSES AND DIMENSIONS (*) (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheel base(s) (fully loaded) (f):
2.1.1.	In the case of semi-trailers
2.1.1.1.	Distance between the axis of the fifth wheel kingpin and the rearmost end of the semi-trailer:
2.1.1.2.	Maximum distance between the axis of the fifth wheel kingpin and any point on the front of the semi-trailer:
2.1.1.3.	Semi-trailer special wheelbase (as defined in point 7.6.1.2 of Annex I to Directive 1997/27/EC of the European Parliament and of the Council (OJ L 233, 25.8.1997, p. 1)):
2.2.	In the case of semi-trailer towing vehicles
2.2.1.	Fifth wheel lead (maximum and minimum; indicate the permissible values in the case of an incomplete vehicle) $(\S)$ :
2.2.2.	Maximum height of the fifth wheel (standardised) ( $^{\rm h}$ ):
2.3.	Axle track(s) and width(s)
2.3.1.	Track of each steered axle (i):
2.3.2.	Track of all other axles (†):
2.3.3.	Width of the widest rear axle:
2.3.4.	Width of the foremost axle (measured at the outermost part of the tyres excluding the bulging of the tyres close to the ground):
2.4.	Range of vehicle dimensions (overall)
2.4.1.	For chassis without bodywork
2.4.1.1.	Length (i):
2.4.1.1.1.	Maximum permissible length:
2.4.1.1.2.	Minimum permissible length:
2.4.1.2.	Width ( <sup>k</sup> ):

2.4.1.2.1.	Maximum permissible width:
2.4.1.2.2.	Minimum permissible width:
2.4.1.3.	Height (in running order) ( ) (for suspensions adjustable for height, indicate normal running position):
2.4.1.4.	Front overhang (m):
2.4.1.4.1.	Approach angle (na): degrees.
2.4.1.5.	Rear overhang (n):
2.4.1.5.1.	$Departure \ angle \ (^{nb}): \qquad \qquad degrees.$
2.4.1.5.2.	Minimum and maximum permissible overhang of the coupling point (^nd): $ \qquad \qquad \dots $
2.4.1.6.	Ground clearance (as defined in point 4.5 of Section A of Annex II)
2.4.1.6.1.	Between the axles:
2.4.1.6.2.	Under the front axle(s):
2.4.1.6.3.	Under the rear axle(s):
2.4.1.7.	Ramp angle ( $^{nc}$ ): degrees.
2.4.1.8.	Extreme permissible positions of the centre of gravity of the body and/or interior fittings and/or equipment and/or payload:
2.4.2.	For chassis with bodywork
2.4.2.1.	Length $\langle l \rangle$ :
2.4.2.1.1.	Length of the loading area:
2.4.2.2.	Width ( <sup>k</sup> ):
2.4.2.2.1.	$Thickness\ of\ the\ walls\ (in\ the\ case\ of\ vehicles\ designed\ for\ controlled-temperature\ carriage\ of\ goods):$
2.4.2.3.	Height (in running order) $\langle ^l \rangle$ (for suspensions adjustable for height, indicate normal running position):
2.4.2.4.	Front overhang ( <sup>m</sup> ):
2.4.2.4.1.	Approach angle (na): degrees.
2.4.2.5.	Rear overhang (n):
2.4.2.5.1.	$\label{eq:Departure angle (nb): degrees.} Departure angle (nb): \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$
2.4.2.5.2.	Minimum and maximum permissible overhang of the coupling point (*nd*): $ \ldots \ldots $
2.4.2.6.	Ground clearance (as defined in point 4.5 of Section A of Annex II)
2.4.2.6.1.	Between the axles:
2.4.2.6.2.	Under the front axle(s):
2.4.2.6.3.	Under the rear axle(s):
2.4.2.7.	Ramp angle (nc): degrees.
2.4.2.8.	Extreme permissible positions of the centre of gravity of the payload (in the case of non-uniform load):

2.4.2.9.	Position of centre of gravity of the vehicle $(M_2$ and $M_3)$ at its technically permissible maximum laden mass in the longitudinal, transverse and vertical directions:
2.4.3.	For bodywork approved without chassis (vehicles $\mathrm{M}_2$ and $\mathrm{M}_3$ )
2.4.3.1.	Length (*):
2.4.3.2.	Width (k):
2.4.3.3.	Nominal height (in running order) $\langle  \rangle$ on intended chassis type(s) (for suspensions adjustable for height, indicate normal running position):
2.5	Mass of the bare chassis (without cab, coolant, oils, fuel, spare wheel, tools and driver):
2.5.1.	Distribution of this mass among the axles:
2.6.	Mass of the vehicle with bodywork and, in the case of a towing vehicle of a category other than $M_1$ , with coupling device, if fitted by the manufacturer, in running order, or mass of the chassis or chassis with cab, without bodywork and/or coupling device if the manufacturer does not fit the bodywork and/or coupling device (including liquids, tools, spare wheel, if fitted, and driver and, for buses and coaches, a crew member if there is a crew seat in the vehicle) (°) (maximum and minimum for each variant):
2.6.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point (maximum and minimum for each variant):
2.7.	Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle:
2.7.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point:
2.8.	Technically permissible maximum laden mass stated by the manufacturer (*) (*):
2.8.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point (*):
2.9.	Technically permissible maximum mass on each axle:
2.10.	Technically permissible maximum mass on each axle group:
2.11.	Technically permissible maximum towable mass of the motor vehicle in case of
2.11.1.	Drawbar trailer:
2.11.2.	Semi-trailer:
2.11.3.	Centre-axle trailer:
2.11.3.1.	Maximum ratio of the coupling overhang (P) to the wheel base:
2.11.3.2.	Maximum V-value: kN.
2.11.4.	Technically permissible maximum mass of the combination (*):
2.11.5.	Vehicle is/is not (¹) suitable for towing loads (point 1.2 of Annex II to Council Directive 77/389/EEC (OJ L 145, 13.6.1977, p. 41))
2.11.6	Maximum mass of unbraked trailer:
2.12.	Technically permissible maximum static vertical load/mass on the vehicle's coupling point
2.12.1.	Of the motor vehicle:

2.12.2.	Of the semi-trailer or centre-axle trailer:
2.12.3.	Maximum permissible mass of the coupling device (if not fitted by the manufacturer):
2.13.	Swept path:
2.14.	Engine power/maximum mass ratio:
2.14.1.	Engine power/technically permissible maximum laden mass of the combination ratio (as defined in point 7.10 of Annex I to Directive $97/27/EC$ ):
2.15.	eq:Hill-starting ability (solo vehicle) (+++):
2.16.	Intended registration/in service maximum permissible masses (optional: where these values are given, they shall be verified in accordance with the requirements of Annex IV to Directive $1997/27/EC$ ):
2.16.1.	Intended registration/in service maximum permissible laden mass (several entries possible for each technical configuration $(^{\ddagger})$ ):
2.16.2.	Intended registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point (several entries possible for each technical configuration (†*)):
2.16.3.	Intended registration/in service maximum permissible mass on each axle group (several entries possible for each technical configuration ( $^{\pm}$ )):
2.16.4.	Intended registration/in service maximum permissible towable mass (several entries possible for each technical configuration $(^{\ddagger})$ ):
2.16.5.	Intended registration/in service maximum permissible mass of the combination (several entries possible for each technical configuration (#)):
3.	POWER PLANT $(^{q})$ (In the case of a vehicle that can run either on petrol, diesel, etc., or also in combination with another fuel, items shall be repeated $(^{*})$
3.1.	Manufacturer:
3.1.1.	Manufacturer's engine code as marked on the engine:
3.2.	Internal combustion engine
3.2.1.	Specific engine information
3.2.1.1.	Working principle: positive ignition/compression ignition, four stroke/two stroke (1)
3.2.1.2.	Number and arrangement of cylinders:
3.2.1.2.1.	Bore ('):
3.2.1.2.2.	Stroke (*):
3.2.1.2.3.	Firing order:
3.2.1.3.	Engine capacity (*):
3.2.1.4.	Volumetric compression ratio (²):
3.2.1.5.	Drawings of combustion chamber, piston crown and, in the case of positive ignition engines, piston rings:
3.2.1.6.	Normal engine idling speed (2):
3.2.1.6.1.	High engine idling speed (²): min <sup>-1</sup>

3.2.1.7.	Carbon monoxide content by volume in the exhaust gas with the engine idling $(^2)$ : % as stated by the manufacturer (positive ignition engines only)
3.2.1.8.	Maximum net power (¹): kW at min¹ (manufacturer's declared value
3.2.1.9.	Maximum permitted engine speed as prescribed by the manufacturer: min
3.2.1.10.	Maximum net torque ('):
3.2.2.	Fuel: diesel oil/petrol/LPG/NG/ethanol
3.2.2.1.	RON, leaded:
3.2.2.2.	RON, unleaded:
3.2.2.3.	Fuel tank inlet: restricted orifice/label (¹)
3.2.3.	Fuel tank(s)
3.2.3.1.	Service fuel tank(s)
3.2.3.1.1.	Number, capacity, material:
3.2.3.1.2.	Drawing and technical description of the tank(s) with all connections and all lines of the breathin and venting system, locks, valves, fastening devices:
3.2.3.1.3.	Drawing clearly showing the position of the tank(s) in the vehicle:
3.2.3.2.	Reserve fuel tank(s)
3.2.3.2.1.	Number, capacity, material:
3.2.3.2.2.	Drawing and technical description of the tank(s) with all connections and all lines of the breathin and venting system, locks, valves, fastening devices:
3.2.3.2.3.	Drawing clearly showing the position of the tank(s) in the vehicle:
3.2.4.	Fuel feed
3.2.4.1.	By carburettor(s): yes/no (¹)
3.2.4.1.1.	Make(s):
3.2.4.1.2.	Type(s):
3.2.4.1.3.	Number fitted:
3.2.4.1.4.	Adjustments (2)
3.2.4.1.4.1.	Jets:
3.2.4.1.4.2.	Venturis: Or the curve of fuel delivery plotte
3.2.4.1.4.3.	Float-chamber level: against the air flow and setting required to keep to the curve
3.2.4.1.4.4.	Mass of float:
3.2.4.1.4.5.	Float needle:
3.2.4.1.5.	Cold start system: manual/automatic (1)
3.2 4.1.5.1.	Operating principle(s):
3.2.4.1.5.2.	Operating limits/settings $(^1)$ $(^2)$

3.2.4.2.	By fuel injection (compression ignition only): yes/no (¹)
3.2.4.2.1.	System description:
3.2.4.2.2.	Working principle: direct injection/pre-chamber/swirl chamber (1)
3.2.4.2.3.	Injection pump
3.2.4.2.3.1.	Make(s):
3.2.4.2.3.2.	Type(s):
3.2.4.2.3.3.	$eq:maximum fuel delivery (1) (2): mm^3/stroke or cycle at a pump speed of: min^-1 or, alternatively, a characteristic diagram:$
3.2.4.2.3.4.	Injection timing $(^2)$ :
3.2.4.2.3.5.	Injection advance curve (²):
3.2.4.2.3.6.	Calibration procedure: test bench/engine (¹)
3.2.4.2.4.	Governor
3.2.4.2.4.1.	Туре:
3.2.4.2.4.2.	Cut-off point
3.2.4.2.4.2.1.	Cut-off point under load: min <sup>-1</sup>
3.2.4.2.4.2.2.	Cut-off point without load: min <sup>-1</sup>
3.2.4.2.5.	Injection piping
3.2.4.2.5.1.	Length: mm
3.2.4.2.5.2.	Internal diameter: mm
3.2.4.2.6.	Injector(s)
3.2.4.2.6.1.	Make(s):
3.2.4.2.6.2.	Type(s):
3.2.4.2.6.3.	Opening pressure (²): kPa or characteristic diagram (²):
3.24.2.7.	Cold start system
3.2.4.2.7.1.	Make(s):
3.2.4.2.7.2.	Type(s):
3.2.4.2.7.3.	Description:
3.2.4.2.8.	Auxiliary starting aid
3.2.4.2.8.1.	Make(s):
3.2.4.2.8.2.	Type(s):
3.2.4.2.8.3.	System description:
3.2.4.2.9.	Electronic control unit
3.2.4.2.9.1	Make(s):

3.2.4.2.9.2	Description of the system:	
3.2.4.3.	By fuel injection (positive ignition only): yes/no (¹)	
3.2.4.3.1.	Working principle: intake manifold (single-/multi-point $(^{l})$ ),	direct injection/other (specify) (1):
3.2.4.3.2.	Make(s):	
3.2.4.3.3.	Type(s):	
3.2.4.3.4.	System description	
3.2.4.3.4.1.	Type or number of the control unit:	
3.2.4.3.4.2.	Type of fuel regulator:	
3.2.4.3.4.3.	Type of air-flow sensor:	
3.2.4.3.4.4.	Type of fuel distributor:	
3.2.4.3.4.5.	Type of pressure regulator:	In the case of systems other than
3.2.4.3.4.6.	Type of micro switch:	continuous injection give equivalent details.
3.2.4.3.4.7.	Type of idling adjustment screw:	
3.2.4.3.4.8.	Type of throttle housing:	
3.2.4.3.4.9.	Type of water temperature sensor:	
3.2.4.3.4.10.	Type of air temperature sensor:	
3.2.4.3.4.11.	Type of air temperature switch:	
3.2.4.3.5.	Injectors: opening pressure (²): or char	racteristic diagram: (²):
3.2.4.3.6.	Injection timing:	
3.2.4.3.7.	Cold start system	
3.2.4.3.7.1.	Operating principle(s):	
3.2.4.3.7.2.	Operating limits/settings (¹) (²):	
3.2.4.4.	Feed pump	
3.2.4.4.1.	Pressure (²) kPa or characterists	ic diagram (²):
3.2.5.	Electrical system	
3.2.5.1.	Rated voltage:	V, positive/negative ground (1)
3.2.5.2.	Generator	
3.2.5.2.1.	Type:	
3.2.5.2.2.	Nominal output: VA	
3.2.6.	Ignition	
3.2.6.1.	Make(s):	
3.2.6.2.	Type(s):	
3.2.6.3.	Working principle:	

3.2.6.4.	Ignition advance curve (2):
3.2.6.5.	Static ignition timing (2): degrees before TDC
3.2.6.6.	Contact-point gap (²):
3.2.6.7.	Dwell-angle (²): degrees
3.2.7.	Cooling system: liquid/air (¹)
3.2.7.1.	Nominal setting of the engine temperature control mechanism
3.2.7.2.	Liquid
3.2.7.2.1.	Nature of liquid:
3.2.7.2.2.	Circulating pump(s): yes/no (¹)
3.2.7.2.3.	Characteristics: or
3.2.7.2.3.1.	Make(s):
3.2.7.2.3.2.	Type(s):
3.2.7.2.4.	Drive ratio(s):
3.2.7.2.5.	Description of the fan and its drive mechanism:
3.2.7.3.	Air
3.2.7.3.1.	Blower: yes/no (¹)
3.2.7.3.2.	Characteristics: or
3.2.7.3.2.1.	Make(s):
3.2.7.3.2.2.	Type(s):
3.2.7.3.3.	Drive ratio(s):
3.2.8.	Intake system
3.2.8.1.	Pressure charger: yes/no (¹)
3.2.8.1.1.	Make(s):
3.2.8.1.2.	Type(s):
3.2.8.1.3.	Description of the system (e.g. maximum charge pressure: kPa; wastegate if applicable):
3.2.8.2.	Intercooler: yes/no (¹)
3.2.8.3.	Intake depression at rated engine speed and at 100 % load
	minimum allowable:
	maximum allowable:
3.2.8.4.	Description and drawings of inlet pipes and their accessories (plenum chamber, heating device, additional air intakes, etc.):
3.2.8.4.1.	Intake manifold description (include drawings and/or photos):
3.2.8.4.2.	Air filter, drawings: or

3.2.8.4.2.1.	Make(s):
3.2.8.4.2.2.	Type(s):
3.2.8.4.3.	Intake silencer, drawings: or
3.2.8.4.3.1.	Make(s):
3.2.8.4.3.2.	Type(s):
3.2.9.	Exhaust system
3.2.9.1.	Description and/or drawing of the exhaust manifold:
3.2.9.2.	Description and/or drawing of the exhaust system:
3.2.9.3.	Maximum allowable exhaust back pressure at rated engine speed and at 100 % load: $\dots \dots kPa$
3.2.9.4.	Exhaust silencer(s): For front, centre, rear silencer: construction, type, marking; where relevant for exterior noise: reducing measures in the engine compartment and on the engine:
3.2.9.5.	Location of the exhaust outlet:
3.2.9.6.	Exhaust silencer containing fibrous materials:
3.2.10.	Minimum cross-sectional areas of inlet and outlet ports:
3.2.11.	Valve timing or equivalent data
3.2.11.1.	Maximum lift of valves, angles of opening and closing, or timing details of alternative distribution systems, in relation to dead centres:
3.2.11.2.	Reference and/or setting ranges (¹)
3.2.12.	Measures taken against air pollution
3.2.12.1.	Device for recycling crankcase gases (description and drawings):
3.2.12.2.	Additional anti-pollution devices (if any, and if not covered by another heading)
3.2.12.2.1.	Catalytic converter: yes/no (¹)
3.2.12.2.1.1.	Number of catalytic converters and elements:
3.2.12.2.1.2.	Dimensions, shape and volume of the catalytic converter(s):
3.2.12.2.1.3.	Type of catalytic action:
3.2.12.2.1.4.	Total charge of precious metals:
3.2.12.2.1.5.	Relative concentration:
3.2.12.2.1.6.	Substrate (structure and material):
3.2.12.2.1.7.	Cell density:
3.2.12.2.1.8.	Type of casing for the catalytic converter(s):
3.2.12.2.1.9.	Location of the catalytic converter(s) (place and reference distance in the exhaust line):
3.2.12.2.1.10.	Heat shield: yes/no (¹)
3.2.12.2.2.	Oxygen sensor: yes/no (1)

3.2.12.2.2.1.	Туре:
3.2.12.2.2.2.	Location:
3.2.12.2.2.3.	Control range:
3.2.12.2.3.	Air injection: yes/no (¹)
3.2.12.2.3.1.	Type (pulse air, air pump, etc.):
3.2.12.2.4.	Exhaust gas recirculation: yes/no (¹)
3.2.12.2.4.1.	Characteristics (flow rate, etc.):
3.2.12.2.5.	Evaporative emissions control system: yes/no (¹)
3.2.12.2.5.1.	Detailed description of the devices and their state of tune:
3.2.12.2.5.2.	Drawing of the evaporative control system:
3.2.12.2.5.3.	Drawing of the carbon canister:
3.2.12.2.5.4.	Mass of dry charcoal:
3.2.12.2.5.5.	Schematic drawing of the fuel tank with indication of capacity and material:
3.2.12.2.5.6.	Drawing of the heat shield between tank and exhaust system:
3.2.12.2.6.	Particulate trap: yes/no (¹)
3.2.12.2.6.1.	Dimensions, shape and capacity of the particulate trap:
3.2.12.2.6.2.	Type and design of the particulate trap:
3.2.12.2.6.3.	Location (reference distance in the exhaust line):
3.2.12.2.6.4.	Method or system of regeneration, description and/or drawing:
3.2.12.2.7.	On-board-diagnostic (OBD) system: yes/no (¹)
3.2.12.2.7.1.	Written description and/or drawing of the MI:
3.2.12.2.7.2.	List and purpose of all components monitored by the OBD system:
3.2.12.2.7.3.	Written description (general working principles) for
3.2.12.2.7.3.1.	Positive-ignition engines (1)
3.2.12.2.7.3.1.1.	Catalyst monitoring (1):
3.2.12.2.7.3.1.2.	Misfire detection (1):
3.2.12.2.7.3.1.3.	Oxygen sensor monitoring $(^1)$ :
3.2.12.2.7.3.1.4.	Other components monitored by the OBD system $(^1)$ :
3.2.12.2.7.3.2.	Compression-ignition engines (1)
3.2.12.2.7.3.2.1.	Catalyst monitoring (1):
3.2.12.2.7.3.2.2.	Particulate trap monitoring (1): $\ldots \ldots \ldots \ldots$
3.2.12.2.7.3.2.3.	Electronic fuelling system monitoring $(^1)$ :

3.2.12.2.7.3.2.4.	Other components monitored by the OBD system (1):
3.2.12.2.7.4.	Criteria for MI activation (fixed number of driving cycles or statistical method):
3.2.12.2.7.5.	List of all OBD output codes and formats used (with explanation of each):
3.2.12.2.8.	Other systems (description and operation):
3.2.13.	Location of the absorption coefficient symbol (compression ignition engines only):
3.2.14.	Details of any devices designed to influence fuel economy (if not covered by other items):
3.2.15.	LPG fuelling system: yes/no (¹)
3.2.15.1.	EC type-approval number according to Council Directive $70/221/\text{EEC}$ (OJ L 76, 6.4.1970, p. 23) (when the Directive will be amended to cover tanks for gaseous fuels.):
3.2.15.2.	Electronic engine management control unit for LPG fuelling
3.2.15.2.1.	Make(s):
3.2.15.2.2.	Type(s):
3.2.15.2.3.	Emission-related adjustment possibilities:
3.2.15.3.	Further documentation
3.2.15.3.1.	Description of the safeguarding of the catalyst at switch-over from petrol to LPG or back:
3.2.15.3.2.	System lay-out (electrical connections, vacuum connections compensation hoses, etc.):
3.2.15.3.3.	Drawing of the symbol:
3.2.16.	NG fuelling system: yes/no (1)
3.2.16.1.	EC type-approval number according to Directive $70/221/EEC$ (when the Directive will be amended to cover tanks for gaseous fuels):
3.2.16.2.	Electronic engine management control unit for NG fuelling
3.2.16.2.1.	Make(s):
3.2.16.2.2.	Type(s):
3.2.16.2.3.	Emission-related adjustment possibilities:
3.2.16.3.	Further documentation
3.2.16.3.1.	Description of the safeguarding of the catalyst at switch-over from petrol to NG or back:
3.2.16.3.2.	System lay-out (electrical connections, vacuum connections compensation hoses, etc.):
3.2.16.3.3.	Drawing of the symbol:
3.3.	Electric motor
3.3.1.	Type (winding, excitation):
3.3.1.1.	Maximum hourly output:
3.3.1.2.	Operating voltage: V
3.3.2.	Battery

3.3.2.1.	Number of cells:
3.3.2.2.	Mass: kg
3.3.2.3.	Capacity:
3.3.2.4.	Position:
3.4.	Other engines or motors or combinations thereof (particulars regarding the parts of such engines or motors):
3.5.	CO <sub>2</sub> emissions/fuel consumption (") (manufacturer's declared value)
3.5.1.	mass emissions
3.5.1.1.	CO <sub>2</sub> mass emissions (urban conditions):
3.5.1.2.	${\sf CO}_2$ mass emissions (extra-urban conditions):
3.5.1.3.	CO <sub>2</sub> mass emissions (combined): g/km
3.5.2.	Fuel consumption
3.5.2.1.	Fuel consumption (urban conditions):
3.5.2.2.	Fuel consumption (extra-urban conditions): $\dots \dots \dots \dots 1/100 \text{ km/m}^3/100 \text{ km } (^1)$
3.5.2.3.	Fuel consumption (combined):
3.6.	Temperatures permitted by the manufacturer
3.6.1.	Cooling system
3.6.1.1.	Liquid cooling
	Maximum temperature at outlet:
3.6.1.2.	Air cooling
3.6.1.2.1.	Reference point:
3.6.1.2.2.	Maximum temperature at reference point:
3.6.2.	Maximum outlet temperature of the inlet intercooler:
3.6.3.	Maximum exhaust temperature at the point in the exhaust pipe(s) adjacent to the outer flange(s) of the exhaust manifold:
3.6.4.	Fuel temperature
	minimum:
	maximum: K
3.6.5.	Lubricant temperature
	minimum:
	maximum:
3.7.	Engine-driven equipment
	Maximum permissible power absorbed by the engine-driven equipment as specified in and under the operating conditions of Council Directive 80/1269/EEC (OJ L 375, 31.12.1980, p. 46), Annex I, point 5.1.1, at each engine speed as defined in point 4.1 in Annex III to Council Directive 88/77/EEC (OJ L 36, 9.2.1988, p. 33).

3.7.1.	Idling: kW
3.7.2.	Intermediate:
3.7.3.	Rated:kW
3.8.	Lubrication system
3.8.1.	Description of the system
3.8.1.1.	Position of lubricant reservoir:
3.8.1.2.	Feed system (by pump/injection into intake/mixing with fuel, etc.) (1)
3.8.2.	Lubricating pump
3.8.2.1.	Make(s):
3.8.2.2.	Type(s):
3.8.3.	Mixture with fuel
3.8.3.1.	Percentage:
3.8.4.	Oil cooler: yes/no (¹)
3.8.4.1.	Drawing(s): or
3.8.4.1.1.	Make(s):
3.8.4.1.2.	Type(s):
3.9.	$\ensuremath{GAS}$ FUELLED ENGINES (In the case of systems laid-out in a different manner, supply equivalent information).
3.9.1.	Fuel: LPG/NG-H/NG-L/NG-HL (¹)
3.9.2.	Pressure regulator(s) or vaporiser/pressure regulator(s) (1)
3.9.2.1.	Make(s):
3.9.2.2.	Type(s):
3.9.2.3.	Number of pressure reduction stages:
3.9.2.4.	Pressure in final stage
	minimum: kPa
	maximum: kPa
3.9.2.5.	Number of main adjustment points:
3.9.2.6.	Number of idle adjustment points:
3.9.2.7.	EC type-approval number according to / /EC:
3.9.3.	Fuelling system: mixing unit/gas injection/liquid injection/direct injection $(^1)$
3.9.3.1.	Mixture strength regulation:
3.9.3.2.	System description and/or diagram and drawings:
3.9.3.3.	EC type-approval number according to//EC:
3.9.4.	Mixing unit

# **▼**<u>B</u>

3.9.4.1.	Number:
3.9.4.2.	Make(s):
3.9.4.3.	Type(s):
3.9.4.4.	Location:
3.9.4.5.	Adjustment possibilities:
3.9.4.6.	EC type-approval number according to/ EC:
3.9.5.	Inlet manifold injection
3.9.5.1.	Injection: single point/multipoint (¹)
3.9.5.2.	Injection: continuous/simultaneously timed/sequentially timed (1)
3.9.5.3.	Injection equipment
3.9.5.3.1.	Make(s):
3.9.5.3.2.	Type(s):
3.9.5.3.3.	Adjustment possibilities:
3.9.5.3.4.	EC type-approval number according to/ EC:
3.9.5.4.	Supply pump (if applicable)
3.9.5.4.1.	Make(s):
3.9.5.4.2.	Type(s):
3.9.5.4.3.	EC type-approval number according to/ EC:
3.9.5.5.	Injector(s)
3.9.5.5.1.	Make(s):
3.9.5.5.2.	Type(s):
3.9.5.5.3.	EC type-approval number according to/ EC:
3.9.6.	Direct injection
3.9.6.1.	Injection pump/pressure regulator (¹)
3.9.6.1.1.	Make(s):
3.9.6.1.2.	Type(s):
3.9.6.1.3.	Injection timing:
3.9.6.1.4.	EC type-approval number according to/ EC:
3.9.6.2.	Injector(s)
3.9.6.2.1.	Make(s):
3.9.6.2.2.	Type(s):
3.9.6.2.3.	Opening pressure or characteristic diagram (²):
3.9.6.2.4.	EC type-approval number according to / /EC:

3.9.7.	Electronic control unit (ECU				
3.9.7.1.	Make(s):				
3.9.7.2.	Type(s):				
3.9.7.3.	Adjustment possibilities: .				
3.9.8.	NG fuel-specific equipment				
3.9.8.1.	Variant 1 (only in the case of	of approvals of engines for	r several specific fuel com	positions)	
3.9.8.1.1.	Fuel composition:				
	methane (CH <sub>4</sub> ):	basis: % mole	min % mole	max % mole	
	ethane (C <sub>2</sub> H <sub>6</sub> ):	basis: % mole	min % mole	max % mole	
	propane (C <sub>3</sub> H <sub>8</sub> ):	basis: % mole	min % mole	max % mole	
	butane (C <sub>4</sub> H <sub>10</sub> ):	basis: % mole	min % mole	max % mole	
	C <sub>5</sub> /C <sub>5+</sub> :	basis: % mole	min % mole	max % mole	
	oxygen (O <sub>2</sub> ):	basis: % mole	min % mole	max % mole	
	inert (N <sub>2</sub> , He etc.):	basis: % mole	min % mole	max % mole	
3.9.8.1.2.	Injector(s)				
3.9.8.1.2.1.	Make(s):				
3.9.8.1.2.2.	Type(s):				
3.9.8.1.3.	Others (if applicable):				
3.9.8.1.4.	Fuel temperature				
	minimum:			K	
	maximum:			K	
	at pressure regulator final sta	age for gas fuelled engine	5.		
3.9.8.1.5.	Fuel pressure				
	minimum:			kPa	
	maximum:			kPa	
	at pressure regulator final sta	age, NG fuelled gas engine	es only.		
3.9.8.2.	Variant 2 (only in the case of approvals for several specific fuel compositions)				
4.	TRANSMISSION (*)				
4.1.	Drawing of the transmission:				
4.2.	Type (mechanical, hydraulic, electric, etc.):				
4.2.1.	A brief description of the electrical/electronic components (if any):				
4.3.	Moment of inertia of engine	flywheel:			
4.3.1.	Additional moment of inerti	a with no gear engaged:			

4.4.	Clutch (type):				
4.4.1.	Maximum torque conversion:				
4.5.	Gearbox				
4.5.1.	Type (manual/automatic/0	CVT (continuously variabl	e transmission)) (¹)		
4.5.2.	Location relative to the en	ngine:			
4.5.3.	Method of control:				
4.6.	Gear ratios				
	Gear	Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)	Final drive ratio(s) (ratio of gearbox output shaft to driven wheel revolutions)	Total gear ratios	
	Maximum for CVT (1)				
	1				
	2				
	3				
	Minimum for CVT (1)				
	Reverse				
	(¹) Continuously variable trai	nsmission			
4.7.	Maximum vehicle speed (in km/h) ( $^{w}$ ):				
4.8.	Speedometer (in the case of tachograph give approval mark only)				
4.8.1.	Method of operation and description of drive mechanism:				
4.8.2.	Instrument constant:				
4.8.3.	Tolerance of the measuring mechanism (pursuant to point 2.1.3 of Annex II to Council Directive 1975/443/EEC (OJ L 196, 26.7.1975, p. 1)):				
4.8.4.	Overall transmission ratio (pursuant to point 2.1.2 of Annex II to Directive 75/443/EEC) or equivalent data:				
4.8.5.	Diagram of the speedome	eter scale or other forms of	of display:		
4.9.	Differential lock: yes/no/o	ptional (¹)			
5.	AXLES				
5.1.	Description of each axle:				
5.2.	Make:				
5.3.	Type:				
5.4.	Position of retractable axle(s):				
5.5.	Position of loadable axle(s	s):			

6.	SUSPENSION
6.1.	Drawing of the suspension arrangements:
6.2.	Type and design of the suspension of each axle or group of axles or wheel:
6.2.1.	Level adjustment: yes/no/optional (¹)
6.2.2.	A brief description of the electrical/electronic components (if any): $\dots \dots \dots \dots$
6.2.3.	Air-suspension for driving axle(s): yes/no (1)
6.2.3.1.	Suspension of driving axle(s) equivalent to air-suspension: yes/no (1)
6.2.3.2.	Frequency and damping of the oscillation of the sprung mass:
6.3.	Characteristics of the springing parts of the suspension (design, characteristics of the materials and dimensions):
6.4.	Stabilisers: yes/no/optional (¹)
6.5.	Shock absorbers: yes/no/optional (¹)
6.6.	Tyres and wheels
6.6.1.	Tyre/wheel combination(s) (for tyres indicate size designation, minimum load-capacity index, minimum speed category symbol; for tyres of category Z intended to be fitted on vehicles whose maximum speed exceeds $300 \text{ km/h}$ equivalent information shall be provided; for wheels indicate rim size(s) and off-set(s))
6.6.1.1.	Axles
6.6.1.1.1.	Axle 1:
6.6.1.1.2.	Axle 2:
	etc.
6.6.1.2.	Spare wheel, if any:
6.6.2.	Upper and lower limits of rolling radii
6.6.2.1.	Axle 1:
6.6.2.2.	Axle 2:
	etc.
6.6.3.	Tyre pressure(s) as recommended by the vehicle manufacturer: $ \qquad \qquad k Pa$
6.6.4.	Chain/tyre/wheel combination on the front and/or rear axle that is suitable for the type of vehicle, as recommended by the manufacturer:
6.6.5.	Brief description of temporary use spare unit (if any):
7.	STEERING
7.1.	Schematic diagram of steered axle(s) showing steering geometry:
7.2.	Transmission and control
7.2.1.	Type of steering transmission (specify for front and rear, if applicable):
7.2.2.	Linkage to wheels (including other than mechanical means; specify for front and rear, if applicable):

7.2.2.1.	A brief description of the electrical/electronic components (if any):
7.2.3.	Method of assistance (if any):
7.2.3.1.	Method and diagram of operation, make(s) and type(s):
7.2.4.	Diagram of the steering equipment as a whole, showing the position on the vehicle of the various devices influencing its steering behaviour:
7.2.5.	Schematic diagram(s) of the steering control(s):
7.2.6.	Range and method of adjustment (if any), of the steering control:
7.3.	Maximum steering angle of the wheels
7.3.1.	To the right: degrees; number of turns of the steering wheel (or equivalent data):
7.3.2.	To the left: degrees; number of turns of the steering wheel (or equivalent data):
8.	BRAKES
	The following particulars, including means of identification, where applicable, are to be given:
8.1.	Type and characteristics of the brakes (as defined in Annex I, point 1.6 to Council Directive 1971/320/EEC (OJ L 202, 6.9.1971, p. 37)) with a drawing (e.g. drums or discs, wheels braked, connection to braked wheels, make and type of shoe/pad assemblies and/or linings, effective braking areas, radius of drums, shoes or discs, mass of drums, adjustment devices, relevant parts of the axle(s) and suspension):
8.2.	Operating diagram, description and/or drawing of the following braking systems (as defined in Annex I, point 1.2 to Directive 71/320/EEC) with, for example, transmission and control (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 or equivalent components in the case of electrical braking systems)
8.2.1.	Service braking system:
8.2.2.	Secondary braking system:
8.2.3.	Parking braking system:
8.2.4.	Any additional braking system:
8.2.5.	Break-away braking system:
8.3.	Control and transmission of trailer braking systems in vehicles designed to tow a trailer:
8.4.	Vehicle is equipped to tow a trailer with electric/pneumatic/hydraulic (¹) service brakes: yes/no (¹)
8.5.	Anti-lock braking system: yes/no/optional (¹)
8.5.1.	For vehicles with anti-lock systems, description of system operation (including any electronic parts), electric block diagram, hydraulic or pneumatic circuit plan:
8.6.	Calculation and curves according to the Appendix to point 1.1.4.2 of Annex II to Directive 71/320/EEC (or the Appendix to Annex XI, if applicable):
8.7.	Description and/or drawing of the energy supply (also to be specified for power-assisted braking systems):

8.7.1.	In the case of compressed-air braking systems, working pressure $p_2$ in the pressure reservoir(s): $\ \ldots \ .$
8.7.2.	In the case of vacuum braking systems, the initial energy level in the reservoir(s):
8.8.	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:
8.9.	Brief description of the braking systems (according to point 1.6 of the Addendum to Appendix 1 of Annex IX to Directive 71/320/EEC):
8.10.	If claiming exemptions from the Type I and/or Type II or Type III tests, state the number of the report in accordance with Appendix 2 of Annex VII to Directive $71/320/EEC: \dots$
8.11.	Particulars of the type(s) of endurance braking system(s):
9.	BODYWORK
9.1.	Type of bodywork:
9.2.	Materials used and methods of construction:
9.3.	Occupant doors, latches and hinges
9.3.1.	Door configuration and number of doors:
9.3.1.1.	Dimensions, direction and maximum angle of opening:
9.3.2.	Drawing of latches and hinges and of their position in the doors:
9.3.3.	Technical description of latches and hinges:
9.3.4.	Details (including dimensions) of entrances, steps and necessary handles where applicable:
9.4.	Field of vision (Council Directive 77/649/EEC) (OJ L 267, 19.10.1977, p. 1))
9.4.1.	Particulars of the primary reference marks in sufficient detail to enable them to be readily identified and the position of each in relation to the others and to the R-point to be verified:
9.4.2.	Drawing(s) or photograph(s) showing the location of component parts within the 180° forward field of vision:
9.5.	Windscreen and other windows
9.5.1.	Windscreen
9.5.1.1.	Materials used:
9.5.1.2.	Method of mounting:
9.5.1.3.	Angle of inclination:
9.5.1.4.	EC type-approval number(s):
9.5.2.	Other windows
9.5.2.1.	Materials used:
9.5.2.2.	EC type-approval number(s):
9.5.2.3.	A brief description of the electrical/electronic components (if any) of the window lifting mechanism:

9.5.3.	Opening roof glazing
9.5.3.1.	Materials used:
9.5.3.2.	EC type-approval number(s):
9.5.4.	Other glass panes
9.5.4.1.	Materials used:
9.5.4.2.	EC type-approval number(s):
9.6.	Windscreen wiper(s)
9.6.1.	Detailed technical description (including photographs or drawings):
9.7.	Windscreen washer
9.7.1.	Detailed technical description (including photographs or drawings) or, if approved as separate technical unit, EC type-approval number:
9.8.	Defrosting and demisting
9.8.1.	Detailed technical description (including photographs or drawings):
9.8.2.	Maximum electrical consumption:
9.9.	Rear-view mirrors (state for each mirror)
9.9.1.	Make:
9.9.2.	EC type-approval mark:
9.9.3.	Variant:
9.9.4.	Drawing(s) showing the position relative to the vehicle structure:
9.9.5.	Details of the method of attachment including that part of the vehicle structure to which it is attached:
9.9.6.	Optional equipment which may affect the rearward field of vision:
9.9.7.	A brief description of the electronic components (if any) of the adjustment system:
9.10.	Interior fittings
9.10.1.	Interior protection for occupants (Council Directive 74/60/EEC (OJ L 38, 11.2.1974, p. 2))
9.10.1.1.	Layout drawing or photographs showing the position of the attached sections or views:
9.10.1.2.	Photograph or drawing showing the reference line including the exempted area (Annex I, point 2.3.1 to Directive 74/60/EEC):
9.10.1.3.	Photographs, drawings and/or an exploded view of the interior fittings, showing the parts in the passenger compartment and the materials used (with the exception of interior rear view mirrors), arrangement of controls, roof and opening roof, backrest, seats and the rear part of seats (Annex I, point 3.2 to Directive 74/60/EEC):
9.10.2.	Arrangement and identification of controls, tell-tales and indicators
9.10.2.1.	Photographs and/or drawings of the arrangement of symbols and controls, tell-tales and indicators: .
9.10.2.2.	Photographs and/or drawings of the identification of controls, tell-tales and indicators and of the vehicle parts mentioned in Council Directive 78/316/EEC (OJ L 81, 28.3.1978, p. 3) where relevant:

#### 9.10.2.3. Summary table

The vehicle is equipped with the following controls, indicators and tell-tales pursuant to Annexes II and III to Directive 78/316/EEC:

# Controls, tell-tales and indicators for which, when fitted, identification is mandatory, and symbols to be used for that purpose

Symbol No	Device	Control/ indicator available (¹)	Identified by symbol (¹)	Where (²)	Tell-tale available (¹)	Identified by symbol (¹)	Where (²)
1	Master light	OK (10)					
2	Dipped-beam headlamps						
3	Main-beam head lamps						
4	Position (side) lamps						
5	Front fog lamps						
6	Rear fog lamp						
7	Headlamp levelling device						
8	Parking lamps						
9	Direction indicators						
10	Hazard warning						
11	Windscreen wiper						
12	Windscreen washer						
13	Windscreen wiper and washer						
14	Headlamp cleaning device						
15	Windscreen demisting and defrosting						
16	Rear window demisting and defrosting						
17	Ventilating fan						
18	Diesel pre-heat						
19	Choke						
20	Brake failure						
21	Fuel level						
22	Battery charging condition						
23	Engine coolant temperature						

<sup>(</sup>¹) x = yes; -= no or not separately available; o = optional. (²) d = directly on control, indicator or tell-tale; c = in close vicinity.

# Controls, tell-tales and indicators for which, when fitted, identification is optional, and symbols which must be used if they are to be identified Control/ indicator Identified Identified Symbol No Tell-tale Device Where (2) by symbol (1) Where (2) by symbol (¹) available (¹) available (1) Parking brake Rear window wiper Rear window washer 4 Rear window wiper and washer Intermittent windscreen wiper Audible warning device (horn) Front hood (bonnet) Rear hood (boot) Seat belt 10 Engine oil pressure Unleaded petrol x = yes; - = no or not separately available; o = optional. d = directly on control, indicator or tell-tale; c = in close vicinity. 9.10.3. Seats 9.10.3.1. 9.10.3.2. Position and arrangement: 9.10.3.2.1. 9.10.3.2.2. Seat(s) designated for use only when the vehicle is stationary: 9.10.3.3. 9.10.3.4. Characteristics: for seats not EC type-approved as components, description and drawings of 9.10.3.4.1. the seats and their anchorages: ..... 9.10.3.4.2. 9.10.3.4.3. the displacement and locking systems: 9.10.3.4.4. the seat belt anchorages (if incorporated in the seat structure):

9.10.3.4.5.	the parts of the vehicle used as anchorages:
9.10.3.5.	Coordinates or drawing of the R-point (*)
9.10.3.5.1.	Driver's seat:
9.10.3.5.2.	All other seating positions:
9.10.3.6.	Design torso angle
9.10.3.6.1.	Driver's seat:
9.10.3.6.2.	All other seating positions:
9.10.3.7.	Range of seat adjustment
9.10.3.7.1.	Driver's seat:
9.10.3.7.2.	All other seating positions:
9.10.4.	Head restraints
9.10.4.1.	$Type(s) \ of \ head \ restraints: \ integrated/detachable/separate \ (^1)$
9.10.4.2.	EC type-approval number(s), if available:
9.10.4.3.	For head restraints not yet approved
9.10.4.3.1.	A detailed description of the head restraint, specifying in particular the nature of the padding material or materials and, where applicable, the position and specifications of the braces and anchorage pieces for the type of seat for which approval is sought:
9.10.4.3.2.	In the case of a 'separate' head restraint
9.10.4.3.2.1.	A detailed description of the structural zone to which the head restraint is intended to be fixed:
9.10.4.3.2.2.	Dimensional drawings of the characteristic parts of the structure and the head restraint:
9.10.5.	Heating systems for the passenger compartment
9.10.5.1.	A brief description of the vehicle type with regard to the heating system if the heating system uses the heat of the engine cooling fluid:
9.10.5.2.	A detailed description of the vehicle type with regard to the heating if the cooling air or the exhaust gases of the engine are used as heat source, including
9.10.5.2.1.	layout drawing of the heating system showing its position in the vehicle:
9.10.5.2.2.	layout drawing of the heat exchanger for heating systems using the exhaust gases for heating, or of the parts where the heat exchange takes place (for heating systems using the engine cooling air for heating):
9.10.5.2.3.	sectional drawing of the heat exchanger or the parts respectively where the heat exchange takes place indicating the thickness of the wall, used materials and characteristics of the surface:
9.10.5.2.4.	Specifications shall be given for further important components of the heating system such as, for example, the heater fan, with regard to their method of construction and technical data:
9.10.5.3.	Maximum electrical consumption:
9.10.6.	Components influencing the behaviour of the steering mechanism in the event of an impact (Council Directive $74/297/\text{EEC}$ ) (OJ L 165, 20.6.1974, p. 16))
9.10.6.1.	A detailed description, including photograph(s) and/or drawing(s), of the vehicle type with respect to the structure, the dimensions, the lines and the constituent materials of that part of the vehicle forward of the steering control, including those components designed to contribute to the absorption of energy in the event of an impact against the steering control:

9.10.6.2.	Photograph(s) and/or drawing(s) of vehicle components other than those described in 9.10.6.1 as identified by the manufacturer in agreement with the technical service, as contributing to the behaviour of the steering mechanism in case of impact:
9.10.7.	Burning behaviour of materials used in the interior construction of certain categories of motor vehicles (Directive $95/28/EC$ of the European Parliament and of the Council (OJ L 281, 23.11.1995, p. 1))
9.10.7.1.	Material(s) used for the interior lining of the roof
9.10.7.1.1.	Component EC type-approval number(s), if available:
9.10.7.1.2.	For materials not approved
9.10.7.1.2.1.	Base material(s)/designation:
9.10.7.1.2.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.1.2.3.	Type of coating (1):
9.10.7.1.2.4.	Maximum/minimum thickness:
9.10.7.2.	Material(s) used for the rear and side walls
9.10.7.2.1.	Component type-approval number(s), if available:
9.10.7.2.2.	For materials not approved
9.10.7.2.2.1.	Base material(s)/designation:
9.10.7.2.2.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.2.2.3.	Type of coating (1):
9.10.7.2.2.4.	Maximum/minimum thickness:
9.10.7.3.	Material(s) used for the floor
9.10.7.3.1.	Component EC type-approval number(s), if available:
9.10.7.3.2.	For materials not approved
9.10.7.3.2.1.	Base material(s)/designation:
9.10.7.3.2.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.3.2.3.	Type of coating (1):
9.10.7.3.2.4.	Maximum/minimum thickness:
9.10.7.4.	Material(s) used for the upholstery of the seats
9.10.7.4.1.	Component EC type-approval number(s), if available:
9.10.7.4.2.	For materials not approved
9.10.7.4.2.1.	Base material(s)/designation:
9.10.7.4.2.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.4.2.3.	Type of coating (¹):
9.10.7.4.2.4.	Maximum/minimum thickness:

9.10.7.5.	Material(s) used for the heating and ventilation pipes
9.10.7.5.1.	Component EC type-approval number(s), if available:
9.10.7.5.2.	For materials not approved
9.10.7.5.2.1.	Base material(s)/designation:
9.10.7.5.2.2.	Composite/single (1) material, number of layers (1):
9.10.7.5.2.3.	Type of coating (1):
9.10.7.5.2.4.	Maximum/minimum thickness:
9.10.7.6.	Material(s) used for luggage racks
9.10.7.6.1.	Component EC type-approval number(s), if available:
9.10.7.6.2.	For materials not approved
9.10.7.6.2.1.	Base material(s)/designation:
9.10.7.6.2.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.6.2.3.	Type of coating (1):
9.10.7.6.2.4.	Maximum/minimum thickness:
9.10.7.7.	Material(s) used for other purposes
9.10.7.7.1.	Intended purposes:
9.10.7.7.2.	Component EC type-approval number(s), if available:
9.10.7.7.3.	For materials not approved
9.10.7.7.3.1.	Base material(s)/designation:
9.10.7.7.3.2.	Composite/single (¹) material, number of layers (¹):
9.10.7.7.3.3.	Type of coating (¹):
9.10.7.7.3.4.	Maximum/minimum thickness:
9.10.7.8.	Components approved as complete devices (seats, separation walls, luggage racks, etc.)
9.10.7.8.1.	Component EC type-approval number(s):
9.10.7.8.2.	For the complete device: seat, separation wall, luggage racks, etc. (1)
9.11.	External projections (Council Directive $74/483/\text{EEC}$ (OJ L 266, 2.10.1974, p. 4) and 1992/114/EEC (OJ L 409, 31.12.1992, p. 17))
9.11.1.	General arrangement (drawing or photographs) indicating the position of the attached sections and views:
9.11.2.	Drawings and/or photographs, for example, and where relevant, of the door and window pillars, air-intake grilles, radiator grille, windscreen wipers, rain gutter channels, handles, slide rails, flaps, door hinges and locks, hooks, eyes, decorative trim, badges, emblems and recesses and any other external projections and parts of the exterior surface which can be regarded as critical (e.g. lighting equipment). If the parts listed in the previous sentence are not critical, for documentation purposes they may be replaced by photographs, accompanied if necessary by dimensional details and/or text:

9.11.3.	Drawings of parts of 74/483/EEC:			cordance with Annex I,	point 6.9.1 to Directive		
9.11.4.	Drawing of bumpers:	Drawing of bumpers:					
9.11.5.	Drawing of the floor	Drawing of the floor line:					
9.12.	Safety belts and/or ot	Safety belts and/or other restraint systems					
9.12.1.	Number and position	Number and position of safety belts and restraint systems and seats on which they can be used:					
			Complete EC type-approval mark	Variant, if applicable	Belt adjustment device for height (indicate yes/no/optional)		
		(L					
	First row of seats	⟨c					
		R					
		(L					
	Second row of seats (1)	₹c					
	sents ()	R					
	(1) The table may be ex	(L = left-hand side, R = right-hand side, C = centre) (¹) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.					
9.12.2.	Nature and position o	Nature and position of supplementary restraint systems (indicate yes/no/optional):					
			Front airbag	Side airbag	Belt pre-loading device		
		L					
	First row of seats	{ C					
		R					
	0 1 6	L					
	Second row of seats (1)	{ C					
		(R					
	(1) The table may be ex	(L = left-hand side, R = right-hand side, C = centre)  (¹) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.					
9.12.3.	Number and position (OJ L 24, 30.1.1976,	of :	safety belt anchorages an ), (i.e. EC type-approval n	d proof of compliance wumber or test report): .	vith Directive 76/115/EEC		
9.12.4.	A brief description of	A brief description of the electrical/electronic components (if any):					
9.13.	Safety belt anchorage	s					
9.13.1.			rings of the bodywork sh ges including the R-points		dimensions of the actual		
9.13.2.	Drawings of the belt			vehicle structure where the	ney are attached (with the		

9.13.3.	Description of the types (**) of safety belt authorised for fitting to the anchorage with which the vehicle is equipped:					
				Anchorage location		
				Vehicle structure	Seat structure	
	First row of seats	(Lower anchorages	outboard inboard			
	Right-hand seat	Upper anchorages	mboard			
	Centre seat	Lower anchorages	{right left			
		Upper anchorages				
		Lower anchorages	{ outboard inboard			
	Left-hand seat	Upper anchorages				
	Second row of seats (	(1) (Lower	outboard			
	Right-hand seat	anchorages	inboard			
		Upper anchorages				
	Centre seat	Lower anchorages	{right {left			
		Upper anchorages				
	Left-hand seat	Lower anchorages	outboard inboard			
		Upper anchorages				
	(1) The table may be three seats across	extended as necessary for v the width of the vehicle.	ehicles with more than	two rows of seats or i	f there are more than	
9.13.4.		articular type of safety lergy dissipating device:			ne seat backrest or	
9.14.	Space for mountir where applicable)	ng rear registration plat	es (give range where	appropriate, draw	rings may be used	
9.14.1.	Height above road surface, upper edge:					
9.14.2.	Height above road surface, lower edge:					
9.14.3.		tre line from the longitu				
9.14.4.	Distance from the	left vehicle edge:				

9.14.5.	Dimensions (length x width):
9.14.6.	Inclination of the plane to the vertical:
9.14.7.	Angle of visibility in the horizontal plane:
9.15.	Rear underrun protection (Directive 70/221/EEC)
9.15.0.	Presence: yes/no/incomplete (¹)
9.15.1.	Drawing of the vehicle parts relevant to the rear underrun protection, i.e. drawing of the vehicle and/or chassis with position and mounting of the widest rear axle, drawing of the mounting and/or fitting of the rear underrun protection. If the underrun protection is not a special device, the drawing must clearly show that the required dimensions are met:
9.15.2.	In case of a special device, full description and/or drawing of the rear underrun protection (including mountings and fittings), or, if approved as separate technical unit, EC type-approval number:
9.16.	Wheel guards (Council Directive 78/549/EEC (OJ L 168, 26.6.1978, p. 45))
9.16.1.	Brief description of the vehicle with regard to its wheel guards:
9.16.2.	Detailed drawings of the wheel guards and their position on the vehicle showing the dimensions specified in Figure 1 of Annex I to Directive 78/549/EEC and taking account of the extremes of tyre/wheel combinations:
9.17.	Statutory plates (Council Directive 76/114/EEC (OJ L 24, 30.1.1976, p. 1))
9.17.1.	Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the vehicle identification number:
9.17.2.	Photographs and/or drawings of the official part of the plates and inscriptions (completed example with dimensions):
9.17.3.	Photographs and/or drawings of the vehicle identification number (completed example with dimensions):
9.17.4.	Manufacturer's declaration of compliance with the requirement of point 1.1.1 of Annex II to Directive $76/114/\text{EEC}$
9.17.4.1.	The meaning of characters in the second section and, if applicable, in the third section used to comply with the requirements of section 5.3 of ISO Standard 3779 $-$ 1983 shall be explained:
9.17.4.2.	If characters in the second section are used to comply with the requirements of section 5.4 of ISO Standard 3779 — 1983 these characters shall be indicated:
9.18.	Suppression of radio interference
9.18.1.	Description and drawings/photographs of the shapes and constituent materials of the part of the body forming the engine compartment and the part of the passenger compartment nearest to it:
9.18.2.	Drawings or photographs of the position of metal components housed in the engine compartment (e.g. heating appliances, spare wheel, air filter, steering mechanism, etc.):
9.18.3.	Table and drawing of radio-interference control equipment:
9.18.4.	Particulars of the nominal value of the direct current resistance, and, in the case of resistive ignition cables, of their nominal resistance per metre:

9.19.	Lateral protection (Council Directive 89/297/EEC (OJ L 124, 5.5.1989, p. 1))
9.19.0.	Presence: yes/no/incomplete (¹)
9.19.1.	Drawing of the vehicle parts relevant to the lateral protection, i.e. drawing of the vehicle and/or chassis with position and mounting of the axle(s), drawing of the mountings and/or the fittings of lateral protection device(s). If the lateral protection is achieved without lateral protection device(s) the drawing must clearly show that the required dimensions are met:
9.19.2.	In the case of lateral protection device(s), full description and/or drawing of such device(s) (including mountings and fittings) or its/their component EC type-approval number(s):
9.20.	Spray-suppression system (Council Directive 91/226/EEC (OJ L 103, 23.4.1991, p. 5))
9.20.0.	Presence: yes/no/incomplete (1)
9.20.1.	Drawing of the vehicle parts relevant to the lateral protection, i.e. drawing of the vehicle and/or chassis with position and mounting of the axle(s), drawing of the mountings and/or the fittings of lateral protection device(s). If the lateral protection is achieved without lateral protection device(s) the drawing must clearly show that the required dimensions are met:
9.20.2.	Detailed drawings of the spray-suppression system and its position on the vehicle showing the dimensions specified in the figures in Annex III to Directive 91/226/EEC and taking account of the extremes of tyre/wheel combinations:
9.20.3.	EC type-approval number(s) of spray-suppression device(s), if available:
9.21.	Side-impact resistance. (Directive $96/27/EC$ of the European Parliament and of the Council (OJ L 169, 8.7.1996, p. 1))
9.21.1.	A detailed description, including photographs and/or drawings, of the vehicle with respect to the structure, the dimensions, the lines and the constituent materials of the side walls of the passenger compartment (exterior and interior), including specific details of the protection system, where applicable:
9.22.	Front underrun protection
9.22.1.	Drawing of the vehicle parts relevant to the front underrun protection, i.e. drawing of the vehicle and/or chassis with position and mounting and/or fitting of the front underrun protection. If the underrun protection is no special device, the drawing must clearly show that the required dimensions are met:
9.22.2.	In the case of special device, full description and/or drawing of the front underrun protection (including mountings and fittings), or, if approved as a separate technical unit, EC type-approval number:
10.	LIGHTING AND LIGHT SIGNALLING DEVICES
10.1.	Table of all devices: number, make, model, EC type-approval mark, maximum intensity of main-beam headlamps, colour, tell-tale:
10.2.	Drawing of the position of lighting and light signalling devices:
10.3.	For every lamp and reflector specified in Council Directive $76/756/EEC$ (OJ L 262, 27.9.1976, p. 1) supply the following information (in writing and/or by diagram)
10.3.1.	Drawing showing the extent of the illuminating surface:
10.3.2.	Method used for the definition of the apparent surface (point 2.10 of the documents referred to in Annex II to Directive 1976/756/EEC, item 1):
10.3.3.	Axis of reference and centre of reference:
10.3.4.	Method of operation of concealable lamps:
10.3.5.	Any specific mounting and wiring provisions:

10.4.	Dipped beam lamps: normal orientation as per point 6.2.6.1 of the documents referred to in Ann II to Directive 1976/756/EEC, point 1	ex		
10.4.1.	Value of initial adjustment:			
10.4.2.	Location of indication:			
10.4.3.	Description/drawing (¹) and type of headlamp levelling device (e.g. automatic, stepwise manually adjustable, continuously manually adjustable):			
10.4.4.	Control device:  Applicable only for vehicles with headlamp levelling device			
10.4.5.	Reference marks:			
10.4.6.	Marks assigned for loading conditions:			
10.5.	A brief description of electrical/electronic components other than lamps (if any):			
11.	CONNECTIONS BETWEEN TOWING VEHICLES AND TRAILERS AND SEMI-TRAILERS			
11.1.	Class and type of the coupling device(s) fitted or to be fitted:			
11.2.	Characteristics D, U, S and V of the coupling device(s) fitted or minimal characteristics D, U, S and of the coupling device(s) to be fitted:			
11.3.	Instructions for attachment of the coupling type to the vehicle and photographs or drawings of the fixing points at the vehicle as stated by the manufacturer; additional information, if the use of the coupling type is restricted to certain variants or versions of the vehicle type:			
11.4.	Information of the fitting of special towing brackets or mounting plates:			
11.5.	EC type-approval number(s):			
12.	MISCELLANEOUS			
12.1.	Audible warning device(s)			
12.1.1.	Location, method of affixing, placement and orientation of the device(s), with dimensions:			
12.1.2.	Number of device(s):			
12.1.3.	EC type-approval number(s):			
12.1.4.	Electrical/pneumatic (¹) circuit diagram:			
12.1.5.	Rated voltage or pressure:			
12.1.6.	Drawing of the mounting device:			
12.2.	Devices to prevent unauthorised use of the vehicle			
12.2.1.	Protective device			
12.2.1.1.	A detailed description of the vehicle type with regard to the arrangement and design of the control or of the unit on which the protective device acts:	ol 		
12.2.1.2.	Drawings of the protective device and of its mounting on the vehicle:			

12.2.1.3.	A technical description of the device:
12.2.1.4.	Details of the lock combinations used:
12.2.1.5.	Vehicle immobiliser
12.2.1.5.1.	EC type-approval number, if available:
12.2.1.5.2.	For immobilisers not yet approved
12.2.1.5.2.1.	A detailed technical description of the vehicle immobiliser and of the measures taken against inadvertent activation:
12.2.1.5.2.2.	The system(s) on which the vehicle immobiliser acts:
12.2.1.5.2.3.	Number of effective interchangeable codes, if applicable:
12.2.2.	Alarm system (if any)
12.2.2.1.	EC type-approval number, if available:
12.2.2.2.	For alarm systems not yet approved
12.2.2.1.	A detailed description of the alarm system and of the vehicle parts related to the alarm system installed:
12.2.2.2.	A list of the main components comprising the alarm system:
12.2.3.	A brief description of the electrical/electronic components (if any):
12.3.	Towing device(s)
12.3.1.	Front: Hook/eye/other (¹)
12.3.2.	Rear: Hook/eye/other/none (¹)
12.3.3.	Drawing or photograph of the chassis/area of the vehicle body showing the position, construction and mounting of the towing device(s):
12.4.	Details of any non-engine related devices designed to influence fuel consumption (if not covered by other items):
12.5.	Details of any non-engine related devices designed to reduce noise (if not covered by other items):
12.6.	Speed limiters (Council Directive 92/24/EEC (OJ L 129, 14.5.1992, p. 154))
12.6.1.	Manufacturer(s):
12.6.2.	Type(s):
12.6.3.	EC type-approval number(s), if available:
12.6.4.	Speed or range of speeds at which the speed limitation may be set: km/h
13.	SPECIAL PROVISIONS FOR VEHICLES USED FOR THE CARRIAGE OF PASSENGERS COMPRISING MORE THAN EIGHT SEATS IN ADDITION TO THE DRIVER'S SEAT
13.1.	Class of vehicle (Class I, Class II, Class III, Class A, Class B):
13.1.1	EC type-approval number of bodywork approved as a separate technical unit:

13.1.2.	Chassis types where the EC type-approved bodywork can be installed (manufacturer(s), and types of incomplete vehicle):
13.2.	Area for passengers (m <sup>2</sup> )
13.2.1.	Total (S <sub>0</sub> ):
13.2.2.	Upper deck $(S_{0a})$ $(^1)$ :
13.2.3.	Lower deck (S <sub>0b</sub> )
13.2.4.	For standing passengers (S <sub>1</sub> ):
13.3.	Number of passengers (seated and standing)
13.3.1.	Total (N):
13.3.2.	Upper deck (N <sub>a</sub> ) (¹):
13.3.3.	Lower deck (N <sub>b</sub> ) (¹):
13.4.	Number of passengers seated
13.4.1.	Total (A):
13.4.2.	Upper deck (A <sub>a</sub> ) (¹):
13.4.3.	Lower deck (A <sub>b</sub> ) (¹):
13.5.	Number of service doors:
13.6.	Number of emergency exits (doors, windows, escape hatches, intercommunication staircase and half staircase):
13.6.1.	Total:
13.6.2.	Upper deck (¹):
13.6.3.	Lower deck ( <sup>1</sup> ):
13.7.	Volume of luggage compartments (m³):
13.8.	Area of luggage transportation on the roof (m <sup>2</sup> ):
13.9.	Technical devices facilitating the access to vehicles (e.g. ramp, lifting platform, kneeling system), if fitted:
13.10.	Strength of superstructure
13.10.1.	EC type-approval number, if available:
13.10.2.	For superstructures not yet approved
13.10.2.1.	Detailed description of the superstructure of the vehicle type including its dimensions, configuration and constituent materials and its attachment to any chassis frame:
13.10.2.2.	Drawings of the vehicle and those parts of its interior arrangement which have an influence on the strength of the superstructure or on the residual space:
13.10.2.3.	Position of centre of gravity of the vehicle in running order in the longitudinal, transverse and vertical directions:
13.10.2.4.	Maximum distance between the centre lines of the outboard passenger seats:
13.11.	Points of Directive $2001//EC$ to be accomplished and demonstrated for this technical unit:
14.	SPECIAL PROVISIONS FOR VEHICLES INTENDED FOR THE TRANSPORT OF DANGEROUS GOODS (Directive 98/91/EC of the European Parliament and of the Council (OJ L 11, 16.1.1999, p. 25))
14.1.	Electrical equipment according to Council Directive 94/55/EC (OJ L 319, 12.12.1994, p. 7)

14.1.	1.	Protection against overheating of conductors:
14.1.2	2.	Type of circuit breaker:
14.1.3	3.	Type and operation of battery master switch:
14.1.4	4.	Description and location of safety barrier for tachograph:
14.1.5	5.	Description of permanently energised installations. Indicate the EN standard applied:
14.1.6	6.	Construction and protection of electrical installation situated to the rear of the driver's compartment:
14.2.		Prevention of fire risks
14.2.	1.	Type of not readily flammable material in the driver's compartment:
14.2.2	2.	Type of heat shield behind the driver's compartment (if applicable):
14.2.3	3.	Position and heat protection of engine:
14.2.4	4.	Position and heat protection of the exhaust system:
14.2.	5.	Type and design of the endurance braking systems heat protection:
14.2.6	6.	Type, design and position of combustion heaters:
14.3.		Special requirements for bodywork, if any, according to Directive 94/55/EC
14.3.	1.	Description of measures to comply with the requirements for Type EX/II and Type EX/III vehicles: $\dots$
14.3.2	2.	In the case of Type EX/III vehicles, resistance against heat from the outside:
Expla	natory not	es
(*)	Please fill in	here the upper and lower values for each variant.
(**)		and marks to be used, see Annex III, points 1.1.3 and 1.1.4 to Council Directive $77/541/EEC$ (OJ L 220, 29.8.1977, e case of 'S' type belts, specify the nature of the type(s).
(***)	t) The information in respect of components need not be given here so long as such information is included in the relevant installation approval certificate.	
(*)	Vehicles can be fuelled with both petrol and a gaseous fuel but, where the petrol system is fitted for emergency purposes or starting only and of which the petrol tank cannot contain more than 15 litres of petrol, will be regarded for the test as vehicles which can only run a gaseous fuel.	
(***)	Only for the	purpose of definition of off-road vehicles.
(#)	Set out in su	tch a way as to make the actual value clear for each technical configuration of the vehicle type.
(1)	Delete where not applicable (there are cases where nothing needs to be deleted when more than one entry is applicable).	
(2)	Specify the t	olerance.
(a)	not be desc	been type-approved, that part need not be described if reference is made to such approval. Similarly, a part need ribed if its construction is clearly apparent from the attached diagrams or drawings. For each item for which photographs must be attached, give numbers of the corresponding attached documents.
(b)		s of identification of type contains characters not relevant to describe the vehicle, component or separate technical overed by this information document, such characters shall be represented in the documentation by the symbol ?' 23??).
(°)	Classified acc	cording to the definitions listed in Annex II, Section A.

- (d) If possible, designation according to Euronorm, otherwise give:
  - description of the material,
  - yield point,
  - ultimate tensile stress,
  - elongation (in %),
  - Brinell hardness.
- (e) Where there is one version with a normal cab and another with a sleeper cab, both sets of masses and dimensions are to be stated
- (f) ISO Standard 612 1978, term No 6.4.
- (g) ISO Standard 612 1978, term No 6.19.2.
- (h) ISO Standard 612 1978, term No 6.20.
- i) ISO Standard 612 1978, term No 6.5.
- (b) ISO Standard 612 1978, term No 6.1 and for vehicles other than those of category M<sub>1</sub>: Directive 97/27/EC, Annex I, Section 2.4.1.
- (b) ISO Standard 612 1978, term No 6.2 and for vehicles other than those of category M<sub>1</sub>: Directive 97/27/EC, Annex I, Section 2.4.2.
- (SO Standard 612 1978, term No 6.3 and for vehicles other than those of category M<sub>1</sub>: Directive 97/27/EC, Annex I, Section 2.4.3
- (m) ISO Standard 612 1978, term No 6.6.
- (n) ISO Standard 612 1978, term No 6.7.
- (na) ISO Standard 612 1978, term No 6.10.
- (nb) ISO Standard 612 1978, term No 6.11.
- (nc) ISO Standard 612 1978, term No 6.9.
- (nd) ISO Standard 612 1978, term No 6.18.1.
- (°) The mass of the driver and, if applicable, of the crew member is assessed at 75 kg (subdivided into 68 kg occupant mass and 7 kg luggage mass according to ISO Standard 2416 1992), the fuel tank is filled to 90 % and the other liquid containing systems (except those for used water) to 100 % of the capacity specified by the manufacturer.
- (P) 'Coupling overhang' is the horizontal distance between the coupling for centre-axle trailers and the centreline of the rear axle(s).
- (9) In the case of non-conventional engines and systems, particulars equivalent to those referred to here shall be supplied by the manufacturer.
- (r) This figure must be rounded off to the nearest tenth of a millimetre.
- (5) This value must be calculated ( $\pi$  = 3,1416) and rounded off to the nearest cm<sup>3</sup>.
- (\*) Determined in accordance with the requirements of Directive 80/1269/EEC.
- (u) Determined in accordance with the requirements of Directive 80/1268/EEC.
- (\*) The specified particulars are to be given for any proposed variants.
- (w) A 5 % tolerance is permitted.
- (\*) "R-point' or 'seating reference point' means a design point defined by the vehicle manufacturer for each seating position and established with respect to the three-dimensional reference system as specified in Annex III to Directive 77/649/EEC.
- (?) For trailers or semi-trailers, and for vehicles coupled with a trailer or a semi-trailer, which exert a significant vertical load on the coupling device or the fifth wheel, this load, divided by standard acceleration of gravity, is included in the maximum technically permissible mass.
- (\*) 'Forward control' means a configuration in which more than half of the engine length is rearward of the foremost point of the windshield base and the steering wheel hub in the forward quarter of the vehicle length.

### ANNEX II

### DEFINITION OF VEHICLE CATEGORIES AND VEHICLE TYPES

### A. DEFINITION OF VEHICLE CATEGORY

Vehicle categories are defined according to the following classification:

(Where reference is made to 'maximum mass' in the following definitions, this means 'technically permissible maximum laden mass' as specified in point 2.8 of Annex I.)

1. Category M: Motor vehicles with at least four wheels designed and constructed for the carriage of passengers.

Category M<sub>1</sub>: Vehicles designed and constructed for the carriage of passengers and comprising no more than eight seats in addition to the driver's seat.

Category M<sub>2</sub>: Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass not exceeding 5 tonnes.

Category M<sub>3</sub>: Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass exceeding 5 tonnes.

The types of bodywork and codifications pertinent to the vehicles of category M are defined in Part C of this Annex paragraph 1 (vehicles of category  $M_1$ ) and paragraph 2 (vehicles of categories  $M_2$  and  $M_3$ ) to be used for the purpose specified in that Part.

2. Category N: Motor vehicles with at least four wheels designed and constructed for the carriage of goods.

Category N<sub>j</sub>: Vehicles designed and constructed for the carriage of goods and having a maximum mass not exceeding 3,5 tonnes.

Category  $N_2$ : Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 3,5 tonnes but not exceeding 12 tonnes.

Category  $N_3$ : Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 12 tonnes.

In the case of a towing vehicle designed to be coupled to a semi-trailer or centre-axle trailer, the mass to be considered for classifying the vehicle is the mass of the tractor vehicle in running order, increased by the mass corresponding to the maximum static vertical load transferred to the tractor vehicle by the semi-trailer or centre-axle trailer and, where applicable, by the maximum mass of the tractor vehicles own load.

The types of bodywork and codifications pertinent to the vehicles of category N are defined in Part C of this Annex paragraph 3 to be used for the purpose specified in that Part.

3. Category O: Trailers (including semi-trailers).

Category O<sub>i</sub>: Trailers with a maximum mass not exceeding 0,75 tonnes

Category  $O_2$ : Trailers with a maximum mass exceeding 0,75 tonnes but not exceeding 3,5 tonnes.

Category O<sub>3</sub>: Trailers with a maximum mass exceeding 3,5 tonnes but not exceeding 10 tonnes.

Category O.: Trailers with a maximum mass exceeding 10 tonnes.

In the case of a semi-trailer or centre-axle trailer, the maximum mass to be considered for classifying the trailer corresponds to the static vertical load transmitted to the ground by the axle or axles of the semi-trailer or centre-axle trailer when coupled to the towing vehicle and carrying its maximum load.

The types of bodywork and codifications pertinent to the vehicles of category O are defined in Part C of this Annex paragraph 4 to be used for the purpose specified in that Part.

- 4. OFF-ROAD VEHICLES (symbol G)
- 4.1. Vehicles in category N<sub>1</sub> with a maximum mass not exceeding two tonnes and vehicles in category M<sub>1</sub> are considered to be off-road vehicles if they have:
  - at least one front axle and at least one rear axle designed to be driven simultaneously including vehicles where the drive to one axle can be disengaged,
  - at least one differential locking mechanism or at least one mechanism having a similar effect and if they can climb a 30 % gradient calculated for a solo vehicle.

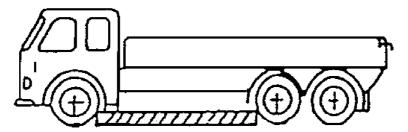
In addition, they must satisfy at least five of the following six requirements:

- the approach angle must be at least 25°,
- the departure angle must be at least 20°,
- the ramp angle must be at least 20°,
- the ground clearance under the front axle must be at least 180 mm,
- the ground clearance under the rear axle must be at least 180 mm,
- the ground clearance between the axles must be at least 200 mm.
- 4.2. Vehicles in category N<sub>1</sub> with a maximum mass exceeding two tonnes or in category N<sub>2</sub>, M<sub>2</sub> or M<sub>3</sub> with a maximum mass not exceeding 12 tonnes are considered to be off-road vehicles either if all their wheels are designed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged, or if the following three requirements are satisfied:
  - at least one front and at least one rear axle are designed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged,
  - there is at least one differential locking mechanism or at least one mechanism having a similar effect,
  - they can climb a 25 % gradient calculated for a solo vehicle.
- 4.3. Vehicles in category M<sub>3</sub> with a maximum mass exceeding 12 tonnes or in category N<sub>3</sub> are to be considered to be off-road vehicles either if the wheels are designed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged, or if the following requirements are satisfied:
  - at least half the wheels are driven.
  - there is at least one differential locking mechanism or at least one mechanism having a similar effect,
  - they can climb a 25 % gradient calculated for a solo vehicle,

at least four of the following six requirements are satisfied:

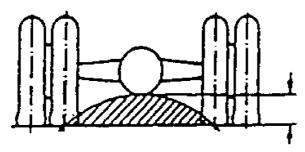
- the approach angle must be at least 25°,
- the departure angle must be at least 25°,
- the ramp angle must be at least 25°,
- the ground clearance under the front axle must be at least 250 mm,
- the ground clearance between the axles must be at least 300 mm,
- the ground clearance under the rear axle must be at least 250 mm.
- 4.4. Load and checking conditions.
- 4.4.1. Vehicles in category  $N_1$  with a maximum mass not exceeding two tonnes and vehicles in category  $M_1$  must be in running order, namely with coolant fluid, lubricants, fuel, tools, spare-wheel and driver ( see footnote (°) in Annex I).
- 4.4.2. Motor vehicles other than those referred to in 4.4.1 must be loaded to the technically permissible maximum mass stated by the manufacturer.
- 4.4.3. The ability to climb the required gradients (25 % and 30 %) is verified by simple calculation. In exceptional cases, however, the technical services may ask for a vehicle of the type concerned to be submitted to it for an actual test.
- 4.4.4. When measuring approach and departure angles and ramp angles, no account is taken of underrun protective devices.
- 4.5. Definitions and sketches of ground clearance. (For definitions of approach angle, departure angle, ramp angle, see Annex I, footnotes (na), (nb) and (nc)).
- 4.5.1. 'Ground clearance between the axles' means the shortest distance between the ground plane and the lowest fixed point of the vehicle.

Multi-axled bogies are considered to be a single axle.



4.5.2. 'Ground clearance beneath one axle' means the distance beneath the highest point of the arc of a circle passing through the centre of the tyre footprint of the wheels on one axle (the inner wheels in the case of twin tyres) and touching the lowest fixed point of the vehicle between the wheels.

No rigid part of the vehicle may project to the shaded area of the diagram. Where appropriate, the ground clearance of several axles is indicated in accordance with their arrangement, for example 280/250/250.



### 4.6. Combined designation

Symbol 'G' shall be combined with either symbol 'M' or 'N'. For example, a vehicle of category  $N_{_{\rm I}}$  which is suited for off-road use shall be designated as  $N_{_{\rm I}}G$ .

- 'Special purpose vehicle' means a vehicle of category M, N or O for conveying passengers or goods and for performing a special function for which special body arrangements and/or equipment are necessary.
- 5.1. 'Motor caravan' means a special purpose M category vehicle constructed to include living accommodation which contains at least the following equipment:
  - seats and table,
  - sleeping accommodation which may be converted from the seats,
  - cooking facilities, and
  - storage facilities.

This equipment shall be rigidly fixed to the living compartment; however, the table may be designed to be easily removable.

- 5.2. 'Armoured vehicles' means vehicles intended for the protection of conveyed passengers and/or goods and complying with armour plating anti-bullet requirements.
- 5.3. 'Ambulances' means motor vehicles of category M intended for the transport of sick or injured people and having special equipment for such purpose.
- 5.4. 'Hearses' means motor vehicles of category M intended for the transport of deceased people and having special equipment for such purpose.
- 5.5. 'Trailer caravans' see ISO Standard 3833 1977, term No 3.2.1.3.
- 5.6. 'Mobile cranes' means a special purpose vehicle of category N<sub>3</sub>, not fitted for the carriage of goods, provided with a crane whose lifting moment is equal to or higher than 400 kNm.
- 5.7. 'Other special purpose vehicles' means vehicles as defined in point 5 with the exception of those mentioned in points 5.1 to 5.6.

The codifications pertinent to 'special purpose vehicles' are defined in Part C of this Annex paragraph 5 to be used for the purpose specified in that Part.

### B. DEFINITION OF VEHICLE TYPE

### 1. For the purposes of category M<sub>1</sub>:

A 'type' shall consist of vehicles which do not differ in at least the following essential respects:

- the manufacturer,
- the manufacturer's type designation,
- essential aspects of construction and design:
  - chassis/floor pan (obvious and fundamental differences),
  - power plant (internal combustion/electric/hybrid).

'Variant' of a type means vehicles within a type which do not differ in at least the following essential respects:

- body style (e.g. saloon, hatchback, coupé, convertible, station-wagon, multi-purpose vehicle),
- power plant:
  - working principle (as in point 3.2.1.1 of Annex III),
  - number and arrangement of cylinders,
  - power differences of more than 30 % (the highest is more than 1,3 times the lowest),
  - capacity differences of more than 20 % (the highest is more than 1,2 times the lowest),
- powered axles (number, position, interconnection),
- steered axles (number and position).

'Version' of a variant means vehicles, which consist of a combination of items shown in the information package subject to the requirements in Annex VIII.

Multiple entries of the following parameters may not be combined within one version:

- technically permissible maximum laden mass,
- engine capacity,
- maximum net power,
- type of gearbox and number of gears,
- maximum number of seating positions as defined in Annex II C.

### 2. For the purpose of categories M<sub>2</sub> and M<sub>3</sub>:

A 'type' shall consist of vehicles which do not differ in at least the following essential respects:

- the manufacturer,
- the manufacturer's type designation,
- category,
- essential aspects of construction and design:
  - chassis/self-supporting body, single-/double deck, rigid/articulated (obvious and fundamental differences),
  - number of axles,
  - power plant (internal combustion/electric/hybrid),

'Variant' of a type means vehicles within a type which do not differ in at least the following essential respects:

- class as defined in Directive 2001/.../EC 'Buses and coaches' (only for complete vehicles),
- extent of build (e.g. complete/incomplete),
- power plant:
  - working principle (as in point 3.2.1.1 of Annex III),
  - number and arrangement of cylinders,
  - power differences of more than 50 % (the highest is more than 1,5 times the lowest),
  - capacity differences of more than 50 % (the highest is more than 1,5 times the lowest),
  - location (front, mid, rear
- technically permissible maximum laden mass differences of more than 20 % (the highest is more than 1,2 times the lowest),
- powered axles (number, position, interconnection),
- steered axles (number and position).

'Version' of a variant means vehicles, which consist of a combination of items shown in the information package subject to the requirements in Annex VIII.

### 3. For the purpose of categories N<sub>1</sub>, N<sub>2</sub> and N<sub>3</sub>:

A 'type' shall consist of vehicles, which do not differ in at least the following essential respects:

- the manufacturer,
- the manufacturer's type designation,
- category,
- essential aspects of construction and design:
  - chassis/floor pan (obvious and fundamental differences),
  - number of axles,
- power plant (internal combustion/electric/hybrid),

'Variant' of a type means vehicles within a type which do not differ in at least the following essential respects:

- body structural concept (e.g. platform truck/tipper/tanker/semi-trailer towing vehicle) (only for complete vehicles),
- extent of build (e.g. complete/incomplete),
- power plant:
  - working principle (as in point 3.2.1.1 of Annex III),
  - number and arrangement of cylinders,
  - power differences of more than 50 % (the highest is more than 1,5 times the lowest),
  - capacity differences of more than 50 % (the highest is more than 1,5 times the lowest),
- technically permissible maximum laden mass differences of more than 20 % (the highest is more than 1,2 times the lowest),
- powered axles (number, position, interconnection),
- steered axles (number and position),

'Version' of a variant means vehicles, which consist of a combination of items shown in the information package subject to the requirements in Annex VIII

### 4. For the purpose of categories O<sub>1</sub>, O<sub>2</sub>, O<sub>3</sub> and O<sub>4</sub>:

A 'type' shall consist of vehicles which do not differ in at least the following essential respects:

- the manufacturer,
- the manufacturer's type designation,
- category,
- essential aspects of construction and design:
  - chassis/self supporting body (obvious and fundamental differences),
  - number of axles,
  - drawbar trailer/semi-trailer/centre axle trailer,
  - type of braking system (e.g. unbraked/inertia/power).

'Variant' of a type means vehicles within a type which do not differ in at least the following essential respects:

- extent of build (e.g. complete/incomplete),
- body style (e.g. caravans/platform/tanker) (only for complete/ completed vehicles),
- technically permissible maximum laden mass differences of more than 20 % (the highest is more than 1,2 times the lowest),
- steered axles (number and position),

'Version' of a variant means vehicles, which consist of a combination of items shown in the information package.

### For all categories:

Full identification of the vehicle just from the designations of type, variant and version must be consistent with a single accurate definition of all the technical characteristics required for the vehicle to be put into service.

### C. DEFINITION OF TYPE OF BODYWORK

### (only for complete/completed vehicles)

The type of bodywork in Annex II, Annex III, Part 1, point 9.1 and in Annex IX, point 37 shall be indicated by the following codification:

1. Passenger cars (M<sub>1</sub>)

AA Saloon ISO Standard 3833 — 1977, term No 3.1.1.1,

but including also vehicles with more than

four side windows.

AB Hatchback Saloon (AA) with a hatch at the rear end of

the vehicle.

AC Station wagon ISO Standard 3833 — 1977, term No 3.1.1.4

(estate car)

AD Coupé ISO Standard 3833 — 1977, term No 3.1.1.5

AE Convertible ISO Standard 3833 — 1977, term No 3.1.1.6

AF Multi-purpose vehicle Motor vehicle other tha

Motor vehicle other than those mentioned in AA to AE intended for carrying passengers and their luggage or goods, in a single compartment. However, if such a vehicle meets both of the following conditions:

(a) the number of seating positions, excluding the driver, is not more than six.

a 'seating position' shall be regarded as existing if the vehicle is provided with 'accessible' seat anchorages.

'accessible' shall mean those anchorages, which can be used. In order to prevent anchorages being 'accessible', the manufacturer shall physically obstruct their use, for example by welding over cover plates or by fitting similar permanent fixtures which cannot be removed by use of normally available tools; and

(b)  $P - (M + N \times 68) > N \times 68$ 

where:

P = technically permissible maximum laden mass in kg

M = mass in running order in kg

N = number of seating positions excluding the driver

This vehicle is not considered to be a vehicle of category  $\mathbf{M}_{\mbox{\tiny 1}}.$ 

2. Motor vehicles of category M<sub>2</sub> or M<sub>3</sub>

Vehicles of Class I (see Directive 2001/.../EC 'Buses and coaches')

- CA Single deck
- CB Double deck
- CC Articulated single deck
- CD Articulated double deck
- CE Low-floor single deck
- CF Low-floor double deck
- CG Articulated low-floor single deck
- CH Articulated low-floor double deck

Vehicles of Class II (see Directive 2001/.../EC 'Buses and coaches')

- CI Single deck
- CJ Double deck
- CK Articulated single deck
- CL Articulated double deck
- CM Low-floor single deck
- CN Low-floor double deck
- CO Articulated low-floor single deck

CP Articulated low-floor double deck

Vehicles of Class III (see Directive 2001/.../EC 'Buses and coaches')

CQ Single deck

CR Double deck

CS Articulated single deck

CT Articulated double deck

Vehicles of Class A (see Directive 2001/.../EC 'Buses and coaches')

CU Single deck

CV Low-floor single deck

Vehicles of Class B (see Directive 2001/.../EC 'Buses and coaches')

CW Single deck

### 3. Motor vehicles of category N

BA	Lorry	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.1.1
BB	Van	Lorry with the cab integrated into the body.
BC	Semi-trailer towing vehicle	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.1.1
BD	Trailer towing vehicle (road tractor)	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.1.1

- However, if a vehicle defined as BB with a technically permissible maximum mass not exceeding 3 500 kg:
  - has more than six seating positions excluding the driver or
  - meets both of the following conditions:
    - (a) the number of seating positions, excluding the driver, is not more than six, and

(b) 
$$P - (M + N \times 68) \le N \times 68$$

this vehicle is not considered to be a vehicle of category N.

- However, if a vehicle defined as BA, BB with a technically permissible maximum mass exceeding 3 500 kg, BC or BD meets at least one of the following conditions:
  - (a) the number of seating positions, excluding the driver, is more than eight, or

(b) 
$$P - (M + N \times 68) \le N \times 68$$

this vehicle is not considered to be a vehicle of category N.

See Part C, item of this Annex for the definitions of 'seating positions',  $P,\ M$  and N.

### 4. Vehicles of category O

DA	Semi-trailer	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.1.2
DB	Drawbar trailer	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.2.3
DC	Centre-axle trailer	See Directive 1997/27/EC 'Masses and dimensions of certain categories of motor vehicles and their trailers' Annex I, point 2.2.4

### 5. Special purpose vehicles

SA	Motor caravans	(See Annex IIA, point 5.1)
SB	Armoured vehicles	(See Annex IIA, point 5.2)
SC	Ambulances	(See Annex IIA, point 5.3)
SD	Hearses	(See Annex IIA, point 5.4)
SE	Trailer caravans	(See Annex IIA, point 5.5)
SF	Mobile cranes	(See Annex IIA, point 5.6)
SG	Other special purpose vehicles	(See Annex IIA, point 5.7)

### ANNEX III

### INFORMATION DOCUMENT FOR THE PURPOSE OF VEHICLE EC TYPE-APPROVAL

### (For explanatory notes, please refer to last page of Annex I)

### PART I

The following information, if applicable, must be supplied in triplicate and include a list of contents. Any drawings must be supplied in appropriate scale and in sufficient detail on size A4, or on a folder of A4 format. Photographs, it any, must show sufficient detail.

If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.

### A: For Categories M and N

0.	GENERAL
0.1.	Make trade name of manufacturer):
0.2.	Type
0.2.1.	Commercial name(s) (if available):
0.3.	Means of identification of type, if marked on the vehicle $\langle ^b \rangle$ :
0.3.1.	Location of that marking
0.4.	Category of vehicle ( <sup>6</sup> ):
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport:
0.5.	Name and address of manufacturer:
0.8.	Address(es) of assembly plant(s):
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle:
1.3.	Number of axles and wheels:
1.3.2.	Number and position of steered axles:
1.3.3.	Powered axles (number, position, interconnection):
1.4.	Chassis (if any) (overall drawing):
1.6.	Position and arrangement of the engine:
1.8.	Driving position left/right (¹)
1.8.1.	Vehicle is equipped to be driven in right/left (¹) hand traffic
2.	MASSES AND DIMENSIONS (*) (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheelbase(s) (fully loaded) (f):
2.3.1.	Track of each steered axle (*):
2.3.2.	Track of all other axles (*):

2.4.	Range of vehicle dimensions (overall)
2.4.2.	For chassis with bodywork
2.4.2.1.	Length (!):
2.4.2.1.1.	Length of the loading area:
2.4.2.2.	Width (k):
2.4.2.2.1.	Thickness of the walls (in the case of vehicles designed for controlled-temperature
2.4.2.3.	Height (in running order) ( $^{\mbox{\scriptsize $h$}}$ ) (for suspensions adjustable for height, indicate normal running position):
2.6.	Mass of the vehicle with bodywork and, in the case of a towing vehicle of a category other than $M_1$ , with coupling device, if fitted by the manufacturer, in running order, or mass of the chassis or chassis with cab, without bodywork and/or coupling device, if the manufacturer does not fit the bodywork and/or coupling device (including liquids, tools, spare wheel, if fitted, and driver and, for buses and coaches, a crew member if there is a crew seat in the vehicle) ( $^{\circ}$ ) (maximum and minimum for each variant):
2.6.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point (maximum and minimum for each variant):
2.7.	Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle:
2.8.	Technically permissible maximum laden mass stated by the manufacturer (*) (*):
2.8.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point (*):
2.9.	Technically permissible maximum mass on each axle:
2.10.	Technically permissible maximum mass on each axle group:
2.11.	Technically permissible maximum towable mass of the motor vehicle in case of
2.11.1.	Drawbar trailer:
2.11.2.	Semi-trailer:
2.11.3.	Centre-axle trailer:
2.11.4.	Technically permissible maximum mass of the combination:
2.11.5.	Vehicle is/is not $(^1)$ suitable for towing loads (point 1.2 of Annex II to Directive 1977/389/EEC)
2.11.6.	Maximum mass of unbraked trailer:
2.12.	Technically permissible maximum static vertical load/mass on the vehicle's coupling point
2.12.1.	Of the motor vehicle:
2.16.	Intended registration/in service maximum permissible masses (optional: where these values are given, they shall be verified in accordance with the requirements of Annex IV to Directive $1997/27/EC$ ):
2.16.1.	Intended registration/in service maximum permissible laden mass (Several entries possible for each technical configuration ( $^{\#}$ )):
2.16.2.	Intended registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point (Several entries possible for each technical configuration (#)):

2.16.3.	Intended registration/in service maximum permissible mass on each axle group (Several entries possible for each technical configuration (#)):
2.16.4.	Intended registration/in service maximum permissible towable mass (Several entries possible for each technical configuration $(\#)$ ):
2.16.5.	Intended registration/in service maximum permissible mass of the combination (Several entries possible for each technical configuration (#)):
3.	POWER PLANT (4) (In the case of a vehicle that can run either on petrol, diesel, . , or also, in combination with another fuel, items shall be repeated ( $^{+}$ ).
3.1.	Manufacturer:
3.1.1.	Manufacturer's engine code as marked on the engine:
3.2.	Internal combustion engine
3.2.1.1.	Working principle: positive ignition/compression ignition, four stroke/two stroke $(^1)$
3.2.1.2.	Number and arrangement of cylinders:
3.2.1.3.	Engine capacity (*): cm <sup>3</sup>
3.2.1.6.	Normal engine idling speed (²): min <sup>-1</sup>
3.2.1.8.	Maximum net power (*): kW bei min <sup>-1</sup> (manufacturer's declared value)
3.2.1.9.	Maximum permitted engine speed as prescribed by the manufacturer: min <sup>-1</sup>
3.2.2.	Fuel: Diesel oil/Petrol/LPG/NG/Ethanol: $(^1)$
3.2.2.1.	RON leaded:.
3.2.2.2.	RON, unleaded:
3.2.4.	Fuel feed
3.2.4.1.	By carburettor(s): yes/no (¹)
3.2.4.2.	By fuel injection (compression ignition only): yes/no (¹)
3.2.4.2.2.	Working principle: direct injection/pre-chamber/swirl chamber (1)
3.2.4.3.	By fuel injection (positive ignition only): yes/no (¹)
3.2.7.	Cooling system: liquid/air (¹)
3.2.8.	Intake system
3.2.8.1.	Pressure charger: yes/no (¹)
3.2.12.	Measures taken against air pollution
3.2.12.2.	Additional anti-pollution devices (if any, and if not covered by another heading)
3.2.12.2.1.	Catalytic converter: yes/no (¹)
3.2.12.2.2.	Oxygen sensor: yes/no (¹)
3.2.12.2.3.	Air injection: yes/no (¹)
3.2.12.2.4.	Exhaust gas recirculation: yes/no (¹)
3.2.12.2.5.	Evaporative emissions control system: yes/no (¹)

3.2.12.2.6.	Particulate trap: yes/no (1)			
3.2.12.2.7.	On-board-diagnostic (OBD) system: yes/no (¹)			
3.2.12.2.8.	Other systems (description	Other systems (description and operation):		
3.2.13.	Location of the absorption	coefficient symbol (compr	ession ignition engines onl	у):
3.2.15.	LPG fuelling system: yes/no	o (¹)		
3.2.16.	NG fuelling system: yes/no	(1)		
3.3.	Electric motor			
3.3.1.	Type (winding, excitation):			
3.3.1.1.	Maximum hourly output:	kW		
3.3.1.2.	Operating voltage: V			
3.3.2.	Battery			
3.3.2.4.	Position:			
3.6.5.	Lubricant temperature			
	minimum: K			
	maximum: K			
4.	TRANSMISSION (°)			
4.2.	Type (mechanical, hydraulic, electric, etc.):			
4.5.	Gearbox			
4.5.1.	Type (manual/automatic/CVT (continuously variable transmission)) (1)			
4.6.	Gear ratios			
	Gear	Internal gearbox ratios (ratios of engine to gearbox output shaft revolutions)	Final drive ratio(s) (ratio of gearbox output shaft to driven wheel revolutions)	Total gear ratios
	Maximum for CVT (1)			
	1			
	2			
	3			
	Minimum for CVT (1)			
	Reverse			
	(1) Continuously variable trans	smission		
4.7.	Maximum vehicle speed (in	n km/h) ( <sup>w</sup> ):		

5.	AXLES
5.1.	Description of each axle:
5.2.	Make:
5.3.	Type:
5.4.	Position of retractable axle(s):
5.5.	Position of loadable axle(s):
6.	SUSPENSION
6.2.	Type and design of the suspension of each axle or wheel:
6.2.1.	Level adjustment: yes/no/optional (¹)
6.2.3.	Air-suspension for driving axle(s): yes/no (¹)
6.2.3.1.	Suspension of driving axle equivalent to air-suspension: yes/no $(^1)$
6.2.3.2.	Frequency and damping of the oscillation of the sprung mass:
6.6.1.	Tyre/Wheel combination(s) (for tyres indicate size designation, minimum load-capacity index, minimum speed category symbol; for wheels indicate rim size(s) and off-set(s))
6.6.1.1.	Axles
6.6.1.1.1.	Axle 1:
6.6.1.1.2.	Axle 2:
	etc.
6.6.1.2.	Spare wheel, if any:
6.6.2.	Upper and lower limits of rolling radii
6.6.2.1.	Axle 1:
6.6.2.2.	Axle 2:
	etc.
7.	STEERING
7.2.	Transmission and control
7.2.1.	Type of steering transmission (specify for front and rear, if applicable):
7.2.2.	Linkage to wheels (including other than mechanical means; specify for front and rear, if applicable): $\dots$ .
7.2.3.	Method of assistance, if any:
8.	BRAKES
8.5.	Anti-lock braking system: yes/no/optional (¹)
8.9.	Brief description of the braking systems (according to item 1.6 of the Addendum to Appendix 1 of Annex IX to Directive 1971/320/EEC):
8.11.	Particulars of the type(s) of endurance braking system(s):

9.	BODYWORK			
9.1.	Type of bodywork:			
9.3.	Occupant doors, latches and hinges			
9.3.1.	Door configuration and r	number of doors:		
9.10.	Interior fittings			
9.10.3.	Seats			
9.10.3.1.	Number:			
9.10.3.2.	Position and arrangement	:		
9.10.3.2.1.	Number of seating position	ons:		
9.10.3.2.2.	Seat(s) designated for use	only when the vehicle is sta	itionary:	
9.10.4.1.	Type(s) of head restraints	: integrated/detachable/separ	ate (1)	
9.10.4.2.	Type-approval number(s)	if available:		
9.12.2.	Nature and position of su	pplementary restraint syster	ns (indicate yes/no/optiona	1):
		Front airbag	Side airbag	Belt pre-loading device
	(L			
	First row of seats C			
	R			
	Second row of			
	seats (1) C			
	(L = left-hand side, R = right-hand side, C = centre)  (¹) The table may be extended as necessary for vehicles with more than two rows of seats or if there are more than three seats across the width of the vehicle.			
9.17.	Statutory plates (Directive	e 76/114/EEC)		
9.17.1.	Photographs and/or drawings of the locations of the statutory plates and inscriptions and of the vehicle identification number:			
9.17.4.	Manufacturer's declaration of compliance with the requirement of point 1.1.1 of Annex II to Directive $76/114/\text{EEC}$			
9.17.4.1.	The meaning of characters in the second section and, if applicable, in the third section used to comply with the requirements of Section 5.3 of ISO Standard 3779 — 1983 shall be explained:			
9.17.4.2.	If characters in the second section are used to comply with the requirements of Section 5.4 of ISO Standard 3779 — 1983, these characters shall be indicated:			
11.	CONNECTIONS BETWEEN TOWING VEHICLES AND TRAILERS AND SEMI-TRAILERS			
11.1.	Class and type of the coupling device(s) fitted or to be fitted:			
11.3.	Instructions for attachment of the coupling type to the vehicle and photographs or drawings of the fixing points at the vehicle as stated by the manufacturer; additional information, if the use of the coupling type is restricted to certain variants or versions of the vehicle type:			

11.4.	Information on the fitting of special towing brackets or mounting plates:
11.5.	EC Type-approval number(s):
13.	SPECIAL PROVISIONS FOR VEHICLES USED FOR THE CARRIAGE OF PASSENGERS COMPRISING MORE THAN EIGHT SEATS IN ADDITION TO THE DRIVER'S SEAT
13.1.	Class of vehicle (Class I, Class II, Class III, Class A, Class B):
13.1.1.	Chassis types where the EC type-approved bodywork can be installed (manufacturer(s), and vehicle(s types):
13.3.	Number of passengers (seated and standing)
13.3.1.	Total (N):
13.3.2.	Upper deck $(N_a)$ $(^1)$ :
13.3.3.	Lower deck $(N_b)$ $(^1)$ :
13.4.	Number of passengers (seated)
13.4.1.	Total (A):
13.4.2.	Upper deck $(A_a)$ $(^1)$ :
13.4.3.	Lower deck $(A_b)$ $(^1)$ :
	B: For category O
0.	GENERAL
0.1.	Make (trade name of manufacturer):
0.2.	Type:
0.2.1.	Commercial name(s) (if available):
0.3.	Means of identification of type, if marked on the vehicle (b):
0.3.1.	Location of that marking:
0.4.	Category of vehicle (*):
0.4.1.	Classification(s) according to the dangerous goods which the vehicle is intended to transport:
0.5.	Name and address of manufacturer:
0.8.	Address(es) of assembly plant(s):
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle:
1.3.	Number of axles and wheels:
1.3.2.	Number and position of steered axles:
1.4.	Chassis (if any) (overall drawing):
2.	MASSES AND DIMENSIONS (e) (in kg and mm) (Refer to drawing where applicable)
2.1.	Wheelbase(s) (fully loaded) ( <sup>f</sup> ):

2.3.1.	Track of each steered axle (*):
2.3.2.	Track of all other axles (†):
2.4.	Range of vehicle dimensions (overall)
2.4.2.	For chassis with bodywork
2.4.2.1.	Length ():
2.4.2.1.1.	Length of the loading area:
2.4.2.2.	Width (k):
2.4.2.2.1.	Thickness of the walls (in the case of vehicles designed for controlled-temperature transport of goods): $\dots$
2.4.2.3.	Height (in running order) ( $^{\mbox{\scriptsize $($)$}}$ ) (for suspension adjustable for height, indicate normal running position):
2.6.	Mass of the vehicle with bodywork and, in the case of a towing vehicle of a category other than $M_1$ , with coupling device, if fitted by the manufacturer, in running order, or mass of the chassis or chassis with cab, without bodywork and/or coupling device if the manufacturer does not fit the bodywork and/or coupling device (including liquids, tools, spare wheel, if fitted, and driver and, for buses and coaches, a crew member if there is a crew seat in the vehicle) (°) (maximum and minimum for each variant):
2.6.1.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point (maximum and minimum for each variant):
2.7.	Minimum mass of the completed vehicle as stated by the manufacturer, in the case of an incomplete vehicle:
2.8.	Technically permissible maximum laden mass stated by the manufacturer (*) (*):
2.8.1.	Distribution of this mass among the axles, and in the case of a semi-trailer or centre-axle trailer, load on the coupling point (*):
2.9.	Technically permissible maximum mass on each axle:
2.10.	Technically permissible maximum mass on each axle group:
2.12.	Technically permissible maximum static vertical load/mass on the vehicle's coupling point
2.12.2.	Of the semi-trailer or centre-axle trailer:
2.16.	Intended registration/in service maximum permissible masses (optional: where these values are given, they shall be verified in accordance with the requirements of Annex IV to Directive $97/27/EC$ ):
2.16.1.	Intended registration/in service maximum permissible laden mass (Several entries possible for each technical configuration (#)):
2.16.2.	Intended registration/in service maximum permissible mass on each axle and, in the case of a semi-trailer or centre-axle trailer, intended load on the coupling point stated by the manufacturer if lower than the technically permissible maximum mass on the coupling point (Several entries possible for each technical configuration (**)):
2.16.3.	Intended registration/in service maximum permissible mass on each axle group (Several entries possible for each technical configuration (**)):
2.16.4.	Intended registration/in service maximum permissible towable mass (Several entries possible for each technical configuration (#)):
2.16.5.	Intended registration/in service maximum permissible mass of the combination (Several entries possible for each technical configuration $(^{\ddagger})$ ):

5.	AXLES
5.1.	Description of each axle:
5.2.	Make:
5.3.	Туре:
5.4.	Position of retractable axle(s):
5.5.	Position of loadable axle(s):
6.	SUSPENSION
6.2.	Type and design of the suspension of each axle or wheel:
6.2.1.	Level adjustment: yes/no/optional (¹)
6.6.1.	$Tyre/wheel\ combination (s)\ (for\ tyres\ indicate\ size\ designation,\ minimum\ load-capacity\ index,\ minimum\ speed\ category\ symbol;\ for\ wheels\ indicate\ rim\ size(s)\ and\ off-set(s))$
6.6.1.1.	Axles
6.6.1.1.1.	Axle 1:
6.6.1.1.2.	Axle 2:
	etc.
6.6.1.2.	Spare wheel, if any:
6.6.2.	Upper and lower limit of rolling radii
6.6.2.1.	Axle 1:
6.6.2.2.	Axle 2:
	etc.
7.	STEERING
7.2.	Transmission and control
7.2.1.	Type of steering transmission (specify for front and rear, if applicable):
7.2.2.	$Linkage \ to \ the \ wheels \ (including \ other \ than \ mechanical \ means; \ specify \ for \ front \ and \ rear, \ if \ applicable): \ .$
7.2.3.	Method of assistance, if any:
8.	BRAKES
8.5.	Antilock braking system: yes/no/optional (¹)
8.9.	Brief description of the braking devices (according to point 1.6 of the addendum to Appendix 1 of Annex IX to Directive $71/320/EEC$ ):
9.	BODYWORK
9.1.	Type of bodywork:
9.17.	Statutory plates (Directive 76/114/EEC)
9.17.1.	Statutory plates (Directive 76/114/EEC)

9.17.4.	Manufact 76/114/E		of com	pliance wit	h the requir	ement o	of point 1.1.1 o	f Anı	nex II to Directive
9.17.4.1.	The mea with the	ning of characters requirements of so	in the ection 5	second sect 3 of ISO St	tion and, if andard 3779	applicab — 198	le, in the third 33 shall be expla	sectio	on used to comply
9.17.4.2.		ters in the secon 3779 — 1983 th						of so	ection 5.4 of ISC
11.	CONNEC	TIONS BETWEEN	TOWI	I NG VEHICLI	es and tra	AILERS A	and semi-trai	LERS	
11.1.	Class and	l type of the coup	ling dev	ice(s) fitted	or to be fitte	d:			
11.5.	EC Type-	approval number(	s):						
				PAI	RT II				
entries. For	those mu		each er	itry is deno	ted by a pro	efix lette	er which will be		there are multiple l in this matrix to
A separate r	natrix mus	st be compiled for	each va	riant within	the type.				
Multiple en column hea		which there are n	o restri	ctions on t	heir combin	ation w	ithin a variant	shoul	d be listed in the
Item N	10	All	Ve	rsion 1	Version	1 2	Etc.		Version No
Each variant and number	and each	be presented in a version must be nust also be indica ant(s) pursuant to	identifie ited in t	d by a nume he certificate	erical code o	or numb nity (Anı	er consisting of nex IX) of the ve	a con hicle	nbination of letters concerned.
Separate Dir	ective EC	type-approval nur	nbers						
*		71 11		سن ملمامه مست	, manuact of	tla o o o o	مغممنطيين ماطممنا	/***\	for this vehicle in
		I. (All relevant app						(*****)	for this vehicle in
Sub	ject	EC type-approval	number		te issuing the pproval (†)	Ex	tension date	Va	riant(s)/Version(s)
(*) To be indi	cated if not	obtainable from the	EC type-	approval nun	nber.				
Signed:									
Position in o	company:								
Date:			<u></u>						

# ANNEX IV

# LIST OF REQUIREMENTS FOR THE PURPOSES OF VEHICLE EC TYPE-APPROVAL

## PART I

List of separate Directives

(735 appropriate, taxing account of the scope and takes anticidantes of the separate Discours instea octow)				parace	A II CCIII	2001	OCTOW)					
\$0.5kt.0	D. society	Official Learners					Applicability	ability				
Subject	Directive number	Omeial Journal reference	$\mathbf{M}_{_{\mathrm{I}}}$	$M_2$	$M_{_3}$	z	$N_2$	Z <sub>e</sub>	O	02	O <sub>3</sub>	O
1. Sound levels	70/157/EEC	L 42, 23.2.1970, p. 16	×	×	×	×	×	×				
2. Emissions	70/220/EEC	L 76, 6.4.1970, p. 1	×	×	X	×	×	×				
3. Fuel tanks/rear protective devices	70/221/EEC	L 76, 6.4.1970, p. 23	X ( <sup>5</sup> )	X (²)	X ( <sup>5</sup> )	X (²)	X (²)	X (²)	×	×	×	×
4. Rear registration plate space	70/222/EEC	L 76, 6.4.1970, p. 25	×	×	×	×	×	×	×	×	×	×
5. Steering effort	70/311/EEC	L 133, 18.6.1970, p. 10	×	×	×	×	×	×	×	×	×	×
6. Door latches and hinges	70/387/EEC	L 176, 10.8.1970, p. 5	×			×	×	×				
7. Audible warning	70/388/EEC	L 176, 10.8.1970, p. 12	×	×	×	×	×	×				
8. Rear visibility	71/127/EEC	L 68, 22.3.1971, p. 1	×	×	×	×	×	×				
9. Braking	71/320/EEC	L 202, 6.9.1971, p. 37	×	×	×	×	×	×	×	×	×	×
10. Suppression (radio)	72/245/EEC	L 152, 6.7.1972, p. 15	×	×	×	×	×	×	×	×	×	×
11. Diesel smoke	72/306/EEC	L 190, 20.8.1972, p. 1	X	X	×	X	X	X				
12. Interior fittings	74/60/EEC	L 38, 11.2.1974, p. 2	X									

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Subject	Directive number	Official Journal reference	$\mathbf{M}_{_{1}}$	$M_2$	$M_3$	N.	$\mathbf{N}_2$	$\mathbf{Z}_{s}$	0	O <sub>2</sub>	O <sub>3</sub>	O
13. Anti-theft and immobiliser	74/61/EEC	L 38, 11.2.1974, p. 22	×	×	×	×	×	×				
14. Protective steering	74/297/EEC	L 165, 20.6.1974, p. 16	×									
15. Seat strength	74/408/EEC	L 221, 12.8.1974, p. 1	×	×	×	×	×	×				
16. Exterior projections	74/483/EEC	L 256, 2.10.1974, p. 4	×									
17. Speedometer and reverse gear	75/443/EEC	L 196, 26.7.1975, p. 1	×	×	×	×	×	×				
18. Plates (statutory)	76/114/EEC	L 24, 30.1.1976, p. 1	×	X	X	×	X	X	×	X	×	×
19. Seat belt anchorages	76/115/EEC	L 24, 30.1.1976, p. 6	×	×	×	×	×	×				
20. Installation of lighting and light signalling devices	76/756/EEC	L 262, 27.9.1976, p. 1	Х	X	X	X	X	X	X	X	×	×
21. Retro reflectors	76/757/EEC	L 262, 27.9.1976, p. 32	×	×	X	×	×	×	×	X	×	×
22. End-outline, front-position (side), rearposition (side), stop, side marker, daytime running lamps	76/758/EEC	L 262, 27.9.1976, p. 54	X	×	×	×	×	×	X	×	×	×
23. Direction indicators	Direction indicators	L 262, 27.9.1976, p. 71	×	×	×	×	×	×	×	×	×	×
24. Rear registration plate lamps	76/760/EEC	L 262, 27.9.1976, p. 85	Х	Х	Х	Х	Х	Х	Х	Х	X	×
25. Headlamps (including bulbs)	76/761/EEC	L 262, 27.9.1976, p. 96	Х	X	×	X	X	X				

	:	- - - - -					Applicability	ability				
Subject	Directive number	Official Journal reference	$\mathbf{M}_{_{\mathrm{I}}}$	$M_2$	$M_3$	$\mathbf{N}_{_{\mathrm{I}}}$	$N_2$	$N_3$	0	$O_2$	O <sub>3</sub>	O
26. Front fog lamps	76/762/EEC	L 262, 27.9.1976, p. 122	X	X	X	X	X	X				
27. Towing hooks	77/389/EEC	L 145, 13.6.1977, p. 41	×	×	×	×	×	×				
28. Rear fog lamps	77/538/EEC	L 220, 29.8.1977, p. 60	×	×	×	×	×	×	×	×	×	×
29. Reversing lamps	77/539/EEC	L 220, 29.8.1977, p. 72	×	×	×	×	×	×	×	×	×	×
30. Parking lamps	77/540/EEC	L 220, 29.8.1977, p. 83	×	×	×	×	×	×				
31. Seat belts	77/541/EEC	L 220, 29.8.1977, p. 95	×	×	×	×	×	×				
32. Forward vision	77/649/EEC	L 267, 19.10.1977, p. 1	×									
33. Identification of controls	78/316/EEC	L 81, 28.3.1978, p. 3	×	×	×	×	×	×				
34. Defrost/demist	78/317/EEC	L 81, 28.3.1978, p. 27	X	(1)	(1)	(1)	(1)	(1)				
35. Wash/wipe	78/318/EEC	L 81, 28.3.1978, p. 49	X	(2)	(2)	(2)	(2)	(2)				
36. Heating systems	2001/56/EEC	L 292, 9.11.2001, p. 21	X	X	X	X	×	X	X	X	X	×
37. Wheel guards	78/549/EEC	L 168, 26.6.1978, p. 45	X									
38. Head restraints	78/932/EEC	L 325, 20.11.1978, p. 1	X									
39. CO <sub>2</sub> emissions/fuel consumption	80/1268/EEC	L 375, 31.12.1980, p. 36	X									
40. Engine power	80/1269/EEC	L 375, 31.12.1980, p. 46	X	X	X	X	Х	Х				
41. L 375, 31.12.1980, p. 46	88/77/EEC	L 36, 9.2.1988, p. 33	×	×	Х	×	×	×				

	:						Applicability	ıbility				
Subject	Directive number	Official Journal reference	$\mathbf{M}_{_{1}}$	$M_2$	$M_3$	N.	$N_2$	$N_{\epsilon}$	0	$O_2$	O <sub>3</sub>	O
42. Lateral protection	89/297/EEC	L 124, 5.5.1989, p. 1					X	X			X	×
43. Spray-suppression systems	91/226/EEC	L 103, 23.4.1991, p. 5					×	×			×	×
44. Masses and dimensions (cars)	92/21/EEC	L 129, 14.5.1992, p. 1	×									
45. Safety glass	92/22/EEC	L 129, 14.5.1992, p. 11	×	×	×	×	×	×	×	×	×	×
46. Tyres	92/23/EEC	L 129, 14.5.1992, p. 95	×	×	×	×	×	×	×	×	×	×
47. Speed limiters	92/24/EEC	L 129, 14.5.1992, p. 154			×		×	×				
48. Masses and dimensions (other than vehicles referred to in item 44)	97/27/EC	L 233, 28.8.1997, p. 1		×	×	×	×	×	×	×	×	×
49. External projections of cabs	92/114/EEC	L 409, 31.12.1992, p. 17				×	Х	X				
50. Couplings	94/20/EC	L 195, 29.7.1994, p. 1	X (³)	X (³)	X (³)	X (³)	( <sub>3</sub> )	X (³)	X	X	X	×
51. Flammability	95/28/EC	L 281, 23.11.1995, p. 1			×							
52. Buses and coaches	//EC	L										
53. Frontal impact	96/79/EC	L 18, 21.1.1997, p. 7	X									
54. Side impact	96/27/EC	L 169, 8.7.1996, p. 1	X			×						
55.												
56. Vehicles intended for the transport of dangerous goods	98/91/EC	L 11, 16.1.1999, p. 25				X (4)	X (4)	X (4)	X (4)	X (4)	X (4)	X (4)

1							Applic	spplicability.				
	Directive number	Onicial Journal reference	$\mathbf{M}_{_{1}}$	$\mathbf{M}_{2}$	$M_3$	z	$\mathbf{N}_{_{2}}$	$\mathbf{N}_{\mathbf{s}}$	¹O	O2	O <sub>3</sub>	O
57. Front underrun protection	2000/40/EC	L 203, 10.8.2000, p. 9					×	X				

X Directive applicable.

(a) Vehicles of this category shall be fitted with an adequate windscreen defrosting and demisting device.
(b) Vehicles of this category shall be fitted with adequate windscreen washing and wiping devices.
(c) The requirements of Directive 94/20/EC are only applicable for vehicles equipped with couplings.
(c) The requirements of Directive 98/91/EC are only applicable when the manufacturer applies for the EC type-approval of a vehicle intended for the transport of dangerous goods
(c) In case of LPG or CNG vehicles, pending the adoption of the relevant amendments to Directive 70/221/EEC in order to include LPG and CNG tanks, a vehicle approval according to UN/ECE Regulation 67-01 or 110 is required.

### PART II

Where reference is made to a separate Directive, an approval issued under the following Regulations of the United Nations Economic Commission for Europe (taking account of the scope (¹), and the amendment to each of the UN/ECE Regulations listed below) shall be recognised as an alternative to an EC type-approval granted under the relevant separate Directive in the table of Part I.

These Regulations are the ones to which the Community has adhered as a Contracting Party to the United Nations Economic Commission for Europe 'Revised 1958 Geneva Agreement' by virtue of Council Decision 97/836/EC (OJ L 346, 17.12.1997, p. 78), or subsequent Council decisions as provided for under Article 3(3) of that Decision.

Any further amendment of the UN/ECE Regulations listed below has also to be deemed to be equivalent, subject to the Community decision provided for under Article 4(2) of Decision 97/836/EC++.

Subject	Basic UN/ECE Regulation No	Series of amend- ments
1. Sound levels	51	02
1. Replacement silencing systems	59	00
2. Emissions	83	03
2. Replacement catalytic converters	103	00
3. Rear protective device	58	01
3. Fuel tanks	34	01
3. Fuel tanks	67	01
3. Fuel tanks	110	00
5. Steering effort	79	01
6. Door latches and hinges	11	02
7. Audible warning	28	00
8. Rear view mirrors	46	01
9. Braking	13	09
9. Braking	13H	00
10. Radio suppression	10	02
11. Diesel smoke	24	03
12. Interior fittings	21	01
13. Anti-theft	18	02
13. Immobiliser	97	00
13. Alarm systems	97	00
14. Behaviour of steering device under impact	12	03
15. Seat strength	17	06
15. Seat strength (buses and coaches)	80	01
16. Exterior projections	26	02
17. Speedometer	39	00

Subject	Basic UN/ECE Regulation No	Series of amend- ments
19. Seat belt anchorages	14	04
20. Installation of lighting and light signalling devices	48	01
21. Retro reflectors	3	02
22. End-outline/front-position (side)/ rear-position (side)/stop lamps	7	02
22. Daytime running lamps	87	00
22. Side marker lamps	91	00
23. Direction indicators	6	01
24. Rear registration plate lamp	4	00
25. Headlamps (R <sub>2</sub> and HS <sub>1</sub> )	1	01
25. Headlamps (sealed beam)	5	02
25. Headlamps (H <sub>1</sub> , H <sub>2</sub> , H <sub>3</sub> , HB <sub>3</sub> , HB <sub>4</sub> , H <sub>7</sub> , and/or H <sub>8</sub> )	8	04
25. Headlamps (H <sub>4</sub> )	20	02
25. Headlamps (halogen sealed beam)	31	02
25. Filament lamps for use in approved lamp units	37	03
25. Headlamps with gas-discharge light sources	98	00
25. Gas-discharge light sources for use in approved gas-discharge lamp units	99	00
26. Front fog lamps	19	02
28. Rear fog lamps	38	00
29. Reversing lamps	23	00
30. Parking lamps	77	00
31. Seat belts	16	04
31. Child restraints	44	03
38. Head restraints (combined with seats)	17	06
38. Head restraints	25	04
39. Fuel consumption	101	00
40. Engine power	85	00
41. Diesel emission	49	02
42. Lateral protection	73	00
45. Safety glass	43	00

Subject	Basic UN/ECE Regulation No	Series of amend- ments
46. Tyres, motor vehicles and their trailers	30	02
46. Tyres, commercial vehicles and their trailers	54	00
46. Temporary-use spare wheels/tyres	64	00
47. Speed limiters	89	00
52. Strength of superstructure (buses)	66	00
57. Front underrun protection	93	00

 <sup>(</sup>¹) Where the separate Directives contain installation requirements, these apply also to components and separate technical units approved in accordance with the Regulations of the United Nations Economic Commission for Europe.
 ++ For subsequent amendments, see UN/ECE TRANS/WP.29/343 in its latest revision.

### ANNEX V

### PROCEDURES TO BE FOLLOWED DURING VEHICLE EC TYPE-APPROVAL

- In the case of an application for a whole vehicle type-approval, the EC typeapproval authority must:
  - (a) verify that all separate Directive EC type-approvals are applicable to the appropriate standard in the relevant separate Directive;
  - (b) by reference to the documentation make sure that the vehicle specification(s) and data contained in Part I of the vehicle information document are included in the data in the information packages and/or the approval certificates of the relevant separate Directive approvals; and when an item number in Part I of the information document is not included in the information package of any of the separate Directives, confirm that the relevant part or characteristic conforms to the particulars in the information folder;
  - (c) on a selected sample of vehicles from the type to be approved carry out or arrange to be carried out inspections of vehicle parts and systems to verify that the vehicle(s) is/are built in accordance with the relevant data contained in the authenticated information package in respect of all separate Directive EC type-approvals;
  - (d) carry out or arrange to be carried out relevant installation checks in respect of separate technical units where applicable;
  - (e) carry out or arrange to be carried out necessary checks in respect of the presence of the devices provided for in footnotes (¹) and (²) of Part I of Annex IV where applicable.
- 2. The number of vehicles to be inspected for the purposes of paragraph 1.c must be sufficient to permit the proper control of the various combinations to be type-approved according to the following criteria:

Vehicle category	M <sub>1</sub>	$M_2$	$M_3$	N <sub>1</sub>	$N_{_2}$	N <sub>3</sub>	$O_{_1}$	$O_2$	$O_3$	$O_4$
Criteria										
Engine	X	X	X	X	X	X	-	-	-	-
Gear box	X	X	X	X	X	X	-	-	-	-
Number of axles	-	X	X	X	X	X	X	X	X	X
Powered axles (number, position, interconnection)	X	X	X	X	X	X	-	-	-	-
Steered axles (number and position)	X	X	X	X	X	X	X	X	X	X
Body styles	X	X	X	X	X	X	X	X	X	X
Number of doors	X	X	X	X	X	X	X	X	X	X
Hand of drive	X	X	X	X	X	X	-	-	-	-
Number of seats	X	X	X	X	X	X	-	-	-	-
Level of equipment	X	X	X	X	X	X	-	-	-	-

- 3. In the case where no approval certificates for any of the relevant separate Directives are available, the EC type-approval authority must:
  - (a) arrange for the necessary tests and checks as required by each of the relevant separate Directives;
  - (b) verify that the vehicle conforms to the particulars in the vehicle information folder and that it meets the technical requirements of each of the relevant separate Directives;

### $\overline{\mathbf{B}}$

- (c) carry out or arrange to be carried out relevant installation checks in respect of separate technical units where applicable;
- (d) carry out or arrange to be carried out necessary checks in respect of the presence of the devices provided for in footnotes (¹) and (²) of Part I of Annex IV where applicable.

### ANNEX VI

MODEL Maximum format: A4 (210 × 297 mm)							
EC TYPE-APPROVAL CERTIFICATE							
	Stamp of EC type-approval authority						
Communication concerning:	of a type of:						
— EC type-approval (¹)	— complete vehicle (¹)						
— extension of EC type-approval (¹)	— completed vehicle (¹)						
— refusal of EC type-approval $(^1)$	— incomplete vehicle (¹)						
— withdrawal of EC type-approval (1)	— vehicle with complete and incomplete variants $(^1)$						
	— vehicle with completed and incomplete variants (1)						
with regard to Directive 1970/156/EEC as last amended by EC type-approval number:	Directive 2001/116/EC						
Reason for extension:							
0.1. Make (trade name of manufacturer):							
0.2. Type:							
0.2.1. Commercial name(s) (²):							
0.3. Means of identification of type, if marked on the vehicle:							
0.3.1. Location of that marking:							
0.4. Category of vehicle (3):							
0.5. Name and address of manufacturer of the complete vehicle (¹):							
Name and address of manufacturer of the base ve	hicle (1) (4):						
Name and address of manufacturer of the latest built stage of the incomplete vehicle (1) (4):							
Name and address of manufacturer of the complete	ted vehicle (¹) (⁴):						
(1) Delete where not applicable. (2) If not available at the time of granting the type-approval, this is the market. (3) As defined in Annex IIA. (4) See side 2.	em shall be completed at the latest when the vehicle is introduced on						

The undersigned hereby certifies the accuracy of the manufacturer's description in the attached information document of the vehicle(s) described above ((a) sample(s) having been selected by the EC type-approval authority and submitted by the manufacturer as prototype(s) of the vehicle type) and that the attached test results are applicable to the vehicle type.

1. For complete and completed vehicles/variants (1):

The vehicle type meets/does not meet ( $^1$ ) the technical requirements of all the relevant separate Directives as prescribed in Annex IV and Annex XI ( $^1$ ) ( $^4$ ) to Directive 1970/156/EEC.

2. For incomplete vehicles/variants (1):

The vehicle type meets/does not meet  $(^1)$  the technical requirements of the separate Directives listed in the table on side 2.

- 3. The approval is granted/refused/withdrawn (1).
- 4. The approval is granted in accordance with Article 8(2)(c) and the validity of the approval is thus limited to dd/mm/yy.

.....

(Place) (Signature) (Date)

Attachments: Information package.

Test results (see Annex VIII).

Name(s) and specimen(s) of the signature(s) of the person(s) authorised to sign certificates of conformity and a statement of their position in the company.

NB: If this model is used for type-approval pursuant to Article 8(2), it may not bear the heading 'EC vehicle type-approval certificate' except in the case referred to in paragraph 2(c) where the Commission has approved the report.

EC VEHICLE TYPE-APPROVAL CERTIFICATE									
Side 2									
This EC type-approval i for incomplete vehicles			l completed	vehicles or	variants are conce	rned, l	based on the approval(s)		
Stage 1: Manufacturer o	of the l	base vehicle:							
EC Type-approval numb	er:								
Dated:									
Applicable to variants: .									
Stage 2: Manufacturer: .									
EC Type-approval numb	er:								
Dated:									
Applicable to variants: .									
Stage 3: Manufacturer: .									
EC Type-approval numb	er:								
Dated:									
Applicable to variants: .									
In the case where the completed.	appro	val includes one c	or more inc	omplete var	iants, list those va	ariants	which are complete or		
Complete/completed var	riant(s)	):							
List of requirements ap the scope and latest am						approp	oriate, taking account of		
Item		Subject	Directive No		Last amended		Applicable to variants		
(List only subjects for w	hich a	separate Directive	e EC type-ap	proval exist	s)				
In the case of special peremptions granted pur			tions grante	ed or special	l provisions appli	ed pui	rsuant to Annex XI and		
Directive No		Item No	0		roval and nature of emption		Applicable to variants		

### ANNEX VII

### EC TYPE-APPROVAL CERTIFICATE NUMBERING SYSTEM(1)

- The EC type-approval number shall consist of four sections for whole vehicle type-approvals and five sections for system, component, and separate technical unit type-approvals as detailed below. In all cases, the sections shall be separated by the '\*' character.
  - Section 1: The lower case letter 'e' followed by the distinguishing number of the Member State issuing the EC type-approval:
    - 1 for Germany;
    - 2 for France;
    - 3 for Italy;
    - 4 for the Netherlands;
    - 5 for Sweden;
    - 6 for Belgium;
    - 9 for Spain;
    - 11 for the United Kingdom;
    - 12 for Austria;
    - 13 for Luxembourg;
    - 17 for Finland;
    - 18 for Denmark;
    - 21 for Portugal;
    - 23 for Greece;
    - 24 for Ireland.
  - Section 2: The number of the base Directive.
  - Section 3: The number of the latest amending Directive applicable to the EC type-approval.
    - In the case of whole vehicle EC type-approvals, this means the latest Directive amending an Article (or Articles) of Directive 70/156/EEC.
    - Means the latest Directive containing the actual provisions with which the system, component or technical unit conforms.
    - Should a Directive contain different implementation dates referring to different technical standards, an alphabetical character shall be added to specify to which standard the approval was granted.
  - Section 4: A four-digit sequential number (with leading zeros as applicable) for EC whole vehicle type-approvals, or four or five digits for EC type-approval pursuant to a separate Directive to denote the base type-approval number. The sequence shall start from 0001 for each base Directive.
  - Section 5: A two-digit sequential number (with leading zeros if applicable) to denote the extension. The sequence shall start from 00 for each base approval number.
- In the case of an EC type-approval for a whole vehicle, Section 2 shall be omitted.
- 3. On the vehicle's statutory plate(s) only, Section 5 shall be omitted.
- 4. Example of the third-system approval (with as yet no extension) issued by France to the braking Directive:

e2\*71/320\*98/12\*0003\*00

or

e2\*88/77\*91/542A\*0003\*00 in the case of a Directive with two implementation stages A and B.

<sup>(1)</sup> Components and separate technical units shall be marked in accordance with the provisions of the relevant separate Directive.

5. Example of the second extension to the fourth vehicle type-approval issued by the United Kingdom:

e11\*98/14\*0004\*02

Directive 98/14/EC being up to now the latest Directive amending the Articles of Directive 70/156/EEC.

6. Example of the EC type-approval number stamped on the vehicle's statutory plate(s):

e11\*98/14\*0004

 $\frac{\text{NO}_{x}}{\text{HC + NO}_{x}}$ Particulates

# ANNEX VIII

		TEST RESULTS		
(To be	completed by the type-approval authority and	d attached to the vehic	le EC type-approval ce	rtificate.)
more t	n case, the information must make clear to w than one result. However, a combination of so ter case, a note shall state that for items mark	everal results per version	on indicating the worst	
1.	Results of the sound level tests			
	Number of the base Directive and latest am with two or more implementation stages, inc	ending Directive appli dicate also the impleme	icable to the approval.	In case of a Directive
	Variant/Version:			
	Moving (dB(A)/E):			
	Stationary (dB(A)/E):			
	at (min <sup>-1</sup> ):			
2.1.	Base Directive (1):  — Directive 70/220/EEC concerning emissio  — Directive 88/77/EEC concerning emissio  — Directive 72/306/EEC concerning diesel  Directive 70/220/EEC concerning emissions:  Indicate the latest amending directive app implementation stages, indicate also the implementation stages.	ns from engines for us smoke.  from motor vehicles.  licable to the approv	e in vehicles.  al. In case the direct	ive has two or more
2.1.1.	Fuel(s) (²): (diesel, I		l: petrol/LPG, Bi-fuel: p	etrol/NG, ethanol, etc.)
	Variant/Version:			
	СО			
	HC			

2.1.2.	Test type II (3): emissions data required for ro	oadworthiness		
	Type II, low idle test:			
	Variant/Version:			
	CO %			
	Engine speed			
	Engine oil temperature			
	Type II, high idle test:			
	Variant/Version:			
	CO %			
	Lambda Value			
	Engine speed			
	Engine oil temperature			
2.1.3.	Result of type III test:			
2.1.4.	Result of type IV test (evaporative test):			g/test
2.1.5.	Result of type V test on durability:			
	— Durability type: 80 000 km/100 000 km	/not applicable (1)		
	Deterioration factor DF: calculated/fixed	(1)		
	— Value of specification:			
	CO:			
	HC:			
	NO <sub>x</sub> :			
2.1.6.	Result of type VI test on emissions by low ar	nbient temperature:		
	Variant/Version			
	CO: g/km			
	HC: g/km			
2.1.7.	OBD: yes/no (1)			
2.2.	Directive 88/77/EEC concerning emissions fro	om engines for use in	vehicles.	
	Indicate the latest amending directive applimplementation stages, indicate also the impl	licable to the approve ementation stage:	al. In case the direct	ive has two or more
	Fuel(s) ( <sup>2</sup> ):		(diesel. petrol.	LPG, NG, ethanol, etc.)

2.2.1.	Results of the ESC test (1)			
	CO: g/kWh			
	THC: g/kWh			
	NO <sub>x</sub> : g/kWh			
	PT: g/kWh			
2.2.2.	Result of the ELR test (1)			
	Smoke value: $m^{-1}$			
2.2.3.	Result of the ETC test (1)			
	CO: g/kWh			
	THC: g/kWh(1)			
	NMHC: g/kWh(1)			
	$CH_4$ : $g/kWh(^1)$			
	NO <sub>x</sub> : g/kWh			
	PT: $g/kWh(^1)$			
2.3.	Directive 72/306/EEC concerning diesel smol			
	Indicate the latest amending directive applimplementation stages, indicate also the impl			ve has two or more
2.3.1.	Results of the test under free acceleration			
	Variant/Version			
	Corrected value of the absorption coefficient $(m^{-1})$			
	Normal engine idling speed			
	Maximum engine speed			
	Oil temperature (min./max.)			
3.	Results of the CO <sub>2</sub> emission/fuel consumptio	n tests (¹)(³)		
	Number of the base Directive and the latest a	mending Directive app	olicable to the approval	
	Variant/Version			
	CO <sub>2</sub> mass emission (urban conditions) (g/km)			
	$\mathrm{CO}_2$ mass emission (extra-urban conditions) (g/km)			
	CO <sub>2</sub> mass emission (combined) (g/km)			
	Fuel consumption (urban conditions) (l/100 km) (¹)			
	Fuel consumption (extra-urban conditions) ( $l/100 \text{ km}$ ) ( $l$ )			
	Fuel consumption (combined) (l/100 km) (¹)			
	(1) For vehicles fuelled with NG, the unit 1/100 km	' is replaced by 'm³/100 k	cm'.	
		• • • • • • • • • • • • • • • • • • • •		
(2) W1	nere applicable.  Item testrictions for the fuel are applicable, indicate the search of the fuel are applicable, indicate the search of a vehicle for petrol and gaseous fuel in the case of a vehicle for petrol and gaseous fuel in the case of a vehicle for petrol and gaseous fuel in the case of a vehicle for petrol and gaseous fuel in the case of a vehicle for petrol and gaseous fuel in the case of a vehicle for petrol and gaseous fuel in the case of a vehicle fuel fuel fuel fuel fuel fuel fuel fu	nese restrictions (e.g. for n	atural gas the L-range or t	he H-range). fuel. The vehicles can be

<sup>(9)</sup> Repeat for petrol and gaseous fuel in the case of a vehicle that can run either on patrol or on a gaseous fuel. The vehicles can be fuelled with both petrol and a gaseous fuel but, where the petrol system is fitted for emergency purposes or starting only and of which the petrol tank cannot contain more than 15 litres of petrol, will be regarded for the test, as vehicles which can only run a gaseous fuel.

## ANNEX IX

# EC CERTIFICATE OF CONFORMITY For complete/completed (1) vehicles PART I (Maximum format: A4 (210 × 297 mm), or a folder of A4 format) Side 1 The undersigned: . (Full name) hereby certifies that the vehicle: 0.1. Make (Trade name of manufacturer): 0.2. 0.2.1. Commercial name(s): 0.4. Category: Name and address of the manufacturer of the base vehicle: 0.5. 0.6. Vehicle identification number: ..... based upon the type(s) of vehicle described in EC type-approval (1) EC type-approval number: EC type-approval number: .....

Delete where not applicable.

Indicate also the numerical or combined number/letter identification code. This code shall contain not more than 25 or 35 positions for a variant or version respectively.

conforms in all respects to the complete/completed (1) type described in
EC type-approval number:
Dated:
The vehicle can be permanently registered without further EC type-approvals in Member States having right/left $(^1)$ hand traffic and using metric/imperial $(^2)$ units for the speedometer.
(Place) (Date):
(Signature) (Position)
Attachments (only applicable to multi-stage vehicle types): certificate of conformity for each stage.

<sup>(</sup>l) Indicate whether the vehicle as manufactured is suitable for use in either right or left-hand traffic or both right and left-hand traffic. (2) Indicate whether the speedometer fitted has metric or both metric and imperial units.

Side 2	
	For complete or completed vehicles of category $\mathbf{M}_1$
In case	dues and units indicated below are those given in the EC type-approval documentation of the relevant Directives. of conformity of production (COP) tests, the values must be verified according to the methods laid down in the t Directives taking into account the COP test tolerances allowed in those Directives.)
1.	Number of axles: and wheels:
2.	Powered axles:
3.	Wheel base: mm
5.	Axle(s) track: 1 mm 2 mm 3 mm
6.1.	Length: mm
7.1.	Width: mm
8.	Height: mm
11.	Rear overhang: mm
12.1.	Mass of the vehicle with bodywork in running order: kg
14.1.	Technically permissible maximum laden mass: kg
14.2.	Distribution of this mass among the axles: 1 kg 2 kg 3 kg etc.
14.3.	Technically permissible mass on each axle: 1 kg 2 kg 3 kg etc.
16.	Maximum permissible roof load: kg
17.	Maximum mass of trailer (braked): kg; (unbraked): kg
18.	Maximum mass of combination: kg
19.1.	Maximum vertical load at the coupling point for a trailer: kg
20.	Engine manufacturer:
21.	Engine code as marked on the engine:
22.	Working principle:
22.1.	Direct injection: yes/no (1)
23.	Number and arrangement of cylinders:
24.	Capacity: cm <sup>3</sup>
25.	Fuel:
26.	Maximum net power:
27.	Clutch (type):
28.	Gearbox (type):
29.	Gear ratios: 1 2 3 4 5 6
30.	Final drive ratio:

32.			de 3: (for tyres of category Z h essential tyre characteristics shall be
34.	Steering, method of assistance:		
35.	Brief description of the braking system	m:	
37.	Type of body:		
38.	Colour of vehicle (1):		
41.	Number and configuration of doors:		
42.1	Number and position of seats:		
43.1.	EC type-approval mark of coupling de	evice if fitted:	
44.	Maximum speed: km/h.		
45.	Sound level		
	Number of the base Directive and la Directive with two or more implemen		
	Stationary: dB(A) at engine speed	d:min <sup>-1</sup>	
	Drive-by: dB(A)		
46.1.	Exhaust emissions (²):		
	Number of the base Directive and la Directive with two or more implemen		
	1. test procedure:		
	CO: HC: NO <sub>x</sub> : HC + Smoke (corrected value of absorption	$NO_x$ : coefficient (m <sup>-1</sup> )) Particulates:	
	2. test procedure (if applicable)		
	CO: NO <sub>x</sub> : NMHC: Th	HC: CH <sub>4</sub> : Particulates:	
46.2.	CO <sub>2</sub> emissions/fuel consumption ( <sup>2</sup> ):		
	Number of the base Directive and late	est amending Directive applicable to t	the EC type-approval:
		CO <sub>2</sub> emissions	Fuel consumption
	Urban conditions:	g/km	1/100 km/m <sup>3</sup> /100 km ( <sup>2</sup> )
	Extra-urban conditions:	g/km	1/100 km/m³/100 km (²)
	Combined:	g/km	1/100 km/m³/100 km (²)

<sup>(1)</sup> Indicate only the basic colour(s) as follows: white, yellow, orange, red, purple/violet, blue, green, grey, brown or black.
(2) Repeat for petrol and gaseous fuel in the case of a vehicle that can run either on petrol or on a gaseous fuel. The vehicles can be fuelled with both petrol and a gaseous fuel but, where the petrol system is fitted for emergency purposes or starting only and of which the petrol tank cannot contain more than 15 litres of petrol will be regarded for the test as vehicles which can only run a gaseous fuel.

Denmark:	Germany:
Spain:	France:
Italy:	Luxembourg:
Austria:	Portugal:
Sweden:	United Kingdom:
	Spain:  Italy:  Austria:

Side 2	
	For complete or completed vehicles of categories $\rm M_{2}$ and $\rm M_{3}$
case of	alues and units indicated below are those given in the type-approval documentation of the relevant Directives. In conformity of production tests, the values must be verified according to the methods laid down in the relevant wes taking into account the conformity of production test tolerances allowed in those Directives.)
1.	Number of axles: and wheels:
2.	Powered axles:
3.	Wheelbase: mm
5.	Axle(s) track: 1 mm 2 mm 4 mm
6.1.	Length: mm
6.3.	Distance between the front end of the vehicle and the centre of the coupling device: mm
7.1.	Width: mm
8.	Height: mm
10.1.	Ground area covered by the vehicle: m <sup>2</sup>
11.	Rear overhang: mm
12.1.	Mass of the vehicle with bodywork in running order: kg
14.1.	Technically permissible maximum laden mass: kg
14.2.	Distribution of this mass among the axles: 1 kg 2 kg 3 kg 4 kg
14.4.	Technically permissible mass on each axle/axle group: 1 kg 2 kg 3 kg 4 kg
16.	Maximum permissible roof load: kg
17.	Maximum mass of trailer (braked): kg; (unbraked): kg
18.	Technically permissible maximum laden mass of combination kg
19.1.	Technically permissible maximum mass on the coupling point of a motor vehicle kg
20.	Engine manufacturer:
21.	Engine code as marked on the engine:
22.	Working principle:
22.1.	Direct injection: yes/no (¹)
23.	Number and arrangement of cylinders:
24.	Capacity: cm <sup>3</sup>
25.	Fuel:
26.	Maximum net power:: kW at min <sup>-1</sup>
27.	Clutch (type):
28.	Gearbox (type):
29.	Gear ratios: 1 2 3 4 5 6

30.	Final drive ratio:				
32.	Tyres and wheels: Axle 1:	Axle 2:	Axle 3: .		Achse 4:
33.1.	Drive axle(s) fitted with air suspensio	n or equivalent: yes/no (¹)			
34.	Steering, method of assistance:				
35.	Brief description of the braking system	n:			
36.	Pressure in feed line for trailer brakin	g system: bar			
37.	Type of body:				
41.	Number and configuration of doors:				
42.2.	Number of seating places (excluding	the driver):			
42.3.	Number of standing places:				
43.1.	EC type-approval mark of coupling d	evice, if fitted:			
44.	Maximum speed: km/h				
45.	Sound level				
	Number of the base Directive and la with two or more implementation sta	test amending Directive applicages, indicate also the impleme	cable to the	ne approva age:	al. In case of a Directive
	Stationary: dB(A) at engine spee	dmin <sup>-1</sup>			
	Drive-by: dB(A)				
46.1.	Exhaust emissions (1):				
	Number of the base Directive and la Directive with two or more impleme	atest amending Directive appli ntation stages, indicate also the	icable to t e impleme	the EC typentation sta	e-approval. In case of a
	1. test procedure:				
	CO: HC: NO <sub>x</sub> : HC + Smoke (corrected value of absorption	NO <sub>x</sub> : coefficient (m <sup>-1</sup> )): Partic	ulates:		
	2. test procedure (if applicable)				
	CO: NO <sub>x</sub> : NMHC: TE	HC: CH <sub>4</sub> : Particulate	es:		
47.	Fiscal power or national code number	r(s), if applicable:			
	Belgium:	Denmark:		Germany:	
	Greece:	Spain:	I	rance: .	
	Ireland:	Italy:	1	.uxemboui	g:
	Netherlands:	Austria:	1	Portugal:	
	Finland:	Sweden:		Jnited Kin	gdom:
50.	Remarks:				
51.	Exemptions:				

€ 2			

For complete or completed vehicles of categories  $N_1,\ N_2$  and  $N_3$ 

In case	dues and units indicated below are those given in the EC type-approval documentation of the relevant Directives of conformity of production tests, the values must be verified according to the methods laid down in the t Directives taking into account the conformity of production test tolerances allowed in those Directives.)
1.	Number of axles: and wheels:
2.	Powered axles:
3.	Wheelbase: mm
4.1.	Fifth wheel lead (maximum and minimum in case of an adjustable fifth wheel): mm
5.	Axle(s) track: 1 mm 2 mm 3 mm 4 mm
6.1.	Length: mm
6.3.	Distance between the front end of the vehicle and the centre of the coupling device: mm
6.5.	Length of the loading area: mm
7.1.	Width: mm
8.	Height: mm
10.2.	Ground area covered by the vehicle ( $N_2$ and $N_3$ only): $m^2$
11.	Rear overhang: mm
12.1.	Mass of the vehicle with bodywork in running order: kg
14.1.	Technically permissible maximum laden mass: kg
14.2.	Distribution of this mass among the axles: $1. \dots kg$ $2. \dots kg$ $3. \dots kg$ $4. \dots kg$
14.4.	Technically permissible mass on each axle/axle group: $1. \dots kg 2. \dots kg 3. \dots kg 4. \dots kg$
15.	Position of retractable or loadable axle(s):
17.	Technically permissible maximum towable mass of the motor vehicle in case of:
17.1.	Drawbar trailer:
17.2.	Semi-trailer:
17.3.	Centre-axle trailer:
17.4.	Technically permissible maximum mass of trailer (unbraked): kg
18.	Technically permissible maximum laden mass of combination kg
19.1.	Technically permissible maximum mass on the coupling point of a motor vehicle: kg
20.	Engine manufacturer:
21.	Engine code as marked on the engine:
22.	Working principle:
22.1.	Direct injection: yes/no (¹)
23.	Number and arrangement of cylinders:

24.	Capacity: cm <sup>3</sup>
25.	Fuel:
26.	Maximum net power: kW at min <sup>-1</sup>
27.	Clutch (type):
28.	Gearbox (type):
29.	Gearbox (type): 1 2 3 4 5 6
30.	Final drive ratio:
32.	Tyres and wheels: Axle 1: Axle 2: Axle 3: Axle 4:
33.1.	Drive axle(s) fitted with air suspension or equivalent: yes/no (1)
34.	Steering, method of assistance:
35.	Brief description of the braking system:
36.	Pressure in feed line for trailer braking system: bar
37.	Type of body:
38.	Colour of vehicle $(^2)$ (N <sub>1</sub> only):
39.	Tank capacity (Tanker vehicle only): m³
40.	Maximum crane moment capacity kNm.
41.	Number and configuration of doors:
42.1.	Number and position of seats:
43.1.	EC type-approval mark of coupling device, if fitted:
44.	Maximum speed: km/h
45.	Sound level
	Number of the base Directive and latest amending Directive applicable to the EC type-approval. In case of a Directive with two or more implementation stages, indicate also the implementation stage:
	Stationary: dB(A) at engine speedmin <sup>-1</sup>
	Drive-by: $dB(A)$
46.1.	Exhaust emissions (3):
	Number of the base Directive and latest amending Directive applicable to the approval. In case of a Directive with two or more implementation stages, indicate also the implementation stage:
	1. test procedure:
	CO: HC: $NO_{x^{1}}$ HC + $NO_{x^{2}}$ Particulates: Particulates:
	2. test procedure (if applicable)
	CO: $NO_{x^{i}}$ $NMHC$ : $CH_{4}$ : Particulates:

<b>4</b> 7.	Fiscal power or national code numbe	r(s), if applicable:	
	Belgium:	Denmark:	Germany:
	Greece:	Spain:	France:
	Ireland:	Italy:	Luxembourg:
	Netherlands:	Austria:	Portugal:
	Finland:	Sweden:	United Kingdom:
48.1.	EC type-approved according to the d yes/class(es):/no (¹)	esign requirements for transporting da	angerous goods:
48.2.	EC type-approved according to the d	esign requirements for transporting co	ertain animals:
	yes/class(es):/no (¹)		
0.	Remarks:		
51.	Exemptions:		

Side 2			
	For complete or compl	eted vehicles of categories C	1, O <sub>2</sub> , O <sub>3</sub> and O <sub>4</sub>
1.	Number of axles: and wheels:		
3.	Wheelbase: mm		
5.	Axle(s) track: 1 mm	2 mm 3 mm	
6.1.	Length: mm		
6.4.	Distance between the centre of the co	oupling device and the rear end of the	e vehicle: mm
6.5.	Length of the loading area: mm		
7.1.	Width: mm		
8.	Height: mm		
10.3.	Ground area covered by the vehicle (	O <sub>2</sub> , O <sub>3</sub> and O <sub>4</sub> ): m <sup>2</sup>	
11.	Rear overhang: mm		
12.1.	Mass of the vehicle with bodywork in	n running order: kg	
14.1.	Technically permissible maximum lac	len mass: kg	
14.5.	Distribution of this mass among the coupling point: 1 kg	axles and, in the case of a semi-trai 2 kg 3 kg.	ler or centre-axle trailer, mass on the Coupling point: kg
14.6.	Technically permissible mass on each axle/axle group: 1 kg 2 kg 3 kg and, in the case of a semi-trailer or centre-axle trailer, mass on the coupling point: kg		
15.	Position of retractable or loadable axle(s):		
19.2.	For coupling devices of classes B, D, E and H: maximum mass of the towing vehicle (T) or of the vehicle combination (if T $< 32\ 000\ kg$ ): kg		
32.	Tyres and wheels: Axle 1:	Axle 2: Axle 3	
33.2.	Axle(s) fitted with air suspension or e	equivalent: yes/no (¹)	
34.	Steering, method of assistance:		
35.	Brief description of the braking system	m:	
37.	Type of body:		
39.	Tank capacity (Tanker vehicle only):	m³	
43.2.	Approval mark of coupling device: .		
47.	Fiscal power or national code numbe	r(s), if applicable:	
	Belgium:	Denmark:	Germany:
	Greece:	Spain:	France:
	Ireland:	Italy:	Luxembourg:
	Netherlands:	Austria:	Portugal:
	Finland:	Sweden:	United Kingdom:

48.1.	EC type-approved according to the design requirements for transporting dangerous goods:
	yes/class(es):/no (¹)
48.2.	EC type-approved according to the design requirements for transporting certain animals:
	yes /class(es):/no (¹)
50.	Remarks:
51.	Exemptions:

# PART II

# EC CERTIFICATE OF CONFORMITY

	for incomplete vehicles
	(Maximum format: A4 (210 x 297 mm), or a folder of A4 format)
Side 1	
The un	dersigned:
hereby	certifies that the vehicle:
0.1.	Make (Trade name of manufacturer):
0.2.	Type:
	variant (¹):
	version (¹):
0.2.1.	Commercial name(s) (if available):
0.4.	Category:
0.5.	Name and address of the manufacturer of the base vehicle:
	Name and address of the manufacturer of the latest built stage of the vehicle (1):
0.6.	Location of the statutory plates:
	Vehicle identification number:
	Location of the vehicle identification number on the chassis:
	based upon the type(s) of vehicle described in EC type-approval (¹)
	Base Vehicle: Manufacturer:
	EC type-approval number:
	Dated:
	Stage 2: Manufacturer:
	EC type-approval number:
	Dated:
	conforms in all respects to the incomplete type described in:
	EC type-approval number:
	Dated:
	The vehicle cannot be permanently registered without further EC type-approvals.
	(Place) (Date) (Signature) (Position)
	Attachments: Certificate of conformity for each stage.

# Side 2 For incomplete vehicles of category M1 (The values and units indicated below are those given in the EC type-approval documentation of the relevant Directives. In case of conformity of production (COP) tests, the values must be verified according to the methods laid down in the relevant Directives taking into account the COP test tolerances allowed in those Directives.) Number of axles: ..... and wheels: ..... Powered axles: Wheel base: ..... mm Axle(s) track: 1. ..... mm 2. ..... mm 3. ..... mm 6.2. Maximum permissible length of the completed vehicle: ..... mm 7.2. Maximum permissible width of the completed vehicle: ..... mm 9.1. Height of the centre of gravity (c.o.g.): ..... mm Maximum permissible height of the c.o.g. of the completed vehicle: ..... mm 9.2. 9.3. Minimum permissible height of the c.o.g. of the completed vehicle: ... mm 13.1. Minimum permissible mass of the completed vehicle: ..... kg 13.2. Distribution of this mass among the axles: 1. ... kg 2. ..... kg 3. ... kg 14.1. Technically permissible maximum laden mass: ...... kg 14.2. Distribution of this mass among the axles: 1. ... kg 2. ..... kg 3. ... kg 14.3. Technically permissible mass on each axle: 1. ... kg 2. ..... kg 3. ... kg 16. Maximum permissible roof load: ..... kg 17. Maximum mass of trailer (braked): ..... kg (unbraked): ..... kg 18. Maximum mass of combination: ..... kg 19.1. Maximum vertical load at the coupling point for a trailer: ..... kg 20. Engine manufacturer: Engine code as marked on the engine: ..... 22. Working principle: ..... 22.1. Direct injection: yes/no (1) 23. 24. Capacity: ..... cm<sup>3</sup> 25. Fuel: .... Maximum net power: ..... kW at ..... min<sup>-1</sup> 26 27. Clutch (type): 28. Gearbox (type): Gear ratios:

30.	Final drive ratio:				
32.	Tyres and wheels: Axle 1:	Axle	2:	Axle 3	·
34.	Steering, method of assistance:				
35.	Brief description of the braking system:				
41.	Number and configuration of doors:				
42.1	Number and position of seats:				
43.1.	EC type-approval mark of coupling d	levice, if fitted:			
43.3.	Types or classes of coupling devices	which can be	fitted:		
43.4.	Characteristic values (1): D / V .	/ S	/ U		
45.	Sound level:				
	Number of the base Directive and la with two or more implementation st	atest amending ages, indicate a	Directive app also the impler	olicable to nentation	the approval. In case of a Directive stage:
	Stationary: dB(A) at engine spec	ed min <sup>-1</sup>			
	Drive-by: dB(A)				
46.1.	Exhaust emissions (6):				
	Number of the base Directive and le Directive with two or more impleme				
	1. test procedure:				
	CO: HC: NO <sub>x</sub> : HC + Smoke (corrected value of absorption		n <sup>-1</sup> )): Particu	ılates:	
2. test procedure (if applicable)					
	CO: NO <sub>x</sub> : NMHC: Ti	HC: CH <sub>4</sub> :	Particula	ates:	
47.	Fiscal power or national code number	er(s) if applicab	ole:		
	Belgium:	Denmark:			Germany:
	Greece:	Spain:			France:
	Ireland:	Italy:			Luxembourg:
	Netherlands:	Austria:			Portugal:
	Finland:	Sweden: .			United Kingdom:
49.	Chassis designed for off-road vehicles	s only: yes/no	(1)		
50.	Remarks:				
51.	Exemptions:				

# Side 2

# For incomplete vehicles of categories $M_2$ und $M_3$

case of	dues and units indicated below are those given in the type-approval documentation of the relevant Directives. In conformity of production tests, the values must be verified according to the methods laid down in the relevant ves taking into account the conformity of production test tolerances allowed in those Directives).
1.	Number of axles: and wheels:
2.	Powered axles:
3.	Wheel base: mm
5.	Axle(s) track: 1, mm 2, mm 4, mm
6.2.	Maximum permissible length of the completed vehicle: mm
6.3.	Distance between the front end of the vehicle and the centre of the coupling device: mm
7.2.	Maximum permissible width of the completed vehicle: mm
9.1.	Height of the centre of gravity (c.o.g.): mm
9.2.	Maximum permissible height of the c.o.g. of the completed vehicle: mm
9.3.	Minimum permissible height of the c.o.g. of the completed vehicle: mm
12.3.	Mass of the bare chassis: kg
13.1.	Minimum permissible mass of the completed vehicle: kg
13.2.	Distribution of this mass among the axles: $1. \dots kg$ $2. \dots kg$ $3. \dots kg$ $4. \dots kg$
14.1.	Technically permissible maximum laden mass: kg
14.2.	Distribution of this mass among the axles: $1, \ldots, kg$ $2, \ldots, kg$ $3, \ldots, kg$
14.4.	Technically permissible mass on each axle/axle group: 1 kg 2 kg 3 kg 4 kg
16.	Maximum permissible roof load: kg
17.	Maximum mass of trailer (braked): kg; (unbraked): kg
18.	Technically permissible maximum laden mass of combinationkg
19.1.	Technically permissible maximum mass on the coupling point of a motor vehicle kg
20.	Engine manufacturer:
21.	Engine code as marked on the engine:
22.	Working principle:
22.1.	Direct injection: yes/no (¹)
23.	Number and arrangement of cylinders:
24.	Capacity: cm <sup>3</sup>
25.	Fuel:
26.	Maximum net power: kW at min <sup>-1</sup>
27.	Clutch (type):

28.	Gearbox (type):			
29.	Gear ratios: 1 2	3 5	6	
30.	Final drive ratio:			
32.	Tyres and wheels: Axle 1:	Axle 2: Axle 3	: Axle 4:	
33.1.	Drive axle(s) fitted with air suspension	n or equivalent: yes/no (¹)		
34.	Steering, method of assistance:			
35.	Brief description of the braking system	m:		
36.	Pressure in feed line for trailer brakin	g system: bar		
41.	Number and configuration of doors:			
43.1.	Approval mark of coupling device, if	fitted:		
43.3.	Types or classes of coupling devices v	which can be fitted:		
43.4.	Characteristic values (1): D/ V/	S/ U		
45.	Sound level:			
	Number of the base Directive and latest amending Directive applicable to the approval. In case of a Directive with two or more implementation stages, indicate also the implementation stage:			
	Stationary: dB(A) at engine spee	dmin <sup>-1</sup>		
	Drive-by: dB(A)			
46.1.	Exhaust emissions (2):			
	Number of the base Directive and latest amending Directive applicable to the EC type-approval. In case of a Directive with two or more implementation stages, indicate also the implementation stage:			
	1. test procedure:			
	CO: HC: $NO_x$ : HC + $NO_x$ : Smoke (corrected value of absorption coefficient (m <sup>-1</sup> )): Particulates:			
	2. test procedure (if applicable)			
	CO: NO <sub>x</sub> : NMHC: TF	HC: CH <sub>4</sub> : Particulates:		
47.	Fiscal power or national code number	r(s), if applicable:		
	Belgium:	Denmark:	Germany:	
	Greece:	Spain:	France:	
	Ireland:	Italy:	Luxembourg:	
	Netherlands:	Austria:	Portugal:	
	Finland:	Sweden:	United Kingdom:	
49.	Chassis designed for off-road vehicles			
50.	Remarks:			
51.	Exemptions:			

Side 2	
	For incomplete vehicles of categories $N_{1},N_{2}$ and $N_{3}$
case of	alues and units indicated below are those given in the type-approval documentation of the relevant Directives. In conformity of production tests, the values must be verified according to the methods laid down in the relevant ves taking into account the conformity of production test tolerances allowed in those Directives).
1.	Number of axles: and wheels:
2.	Powered axles:
3.	Wheel base: mm
4.2.	Fifth wheel lead for semi-trailer towing vehicle (maximum and minimum): mm
5.	Axle(s) track: 1 mm 2 mm 4 mm
6.2.	Maximum permissible length of the completed vehicle: mm
6.3.	Distance between the front end of the vehicle and the centre of the coupling device: mm
7.2.	Maximum permissible width of the completed vehicle: mm
9.1.	Maximum permissible width of the completed vehicle: mm
9.2.	Maximum permissible height of the c.o.g. of the completed vehicle: mm
9.3.	Minimum permissible height of the c.o.g. of the completed vehicle: mm
12.3.	Mass of the bare chassis: kg
13.1.	Minimum permissible mass of the completed vehicle: kg
13.2.	Distribution of this mass among the axles: 1 kg 2 kg 3 kg 4 kg
14.1.	Technically permissible maximum laden mass: kg
14.2.	Distribution of this mass among the axles: 1 kg 2 kg 3 kg 4 kg
14.4.	Technically permissible mass on each axle/axle group: 1 kg 2 kg 3 kg 4 kg
15.	Position of retractable or loadable axle(s):
17.	Technically permissible maximum towable mass of the motor vehicle in case of
17.1.	Drawbar trailer:
17.2.	Semi-trailer:
17.3.	Centre-axle trailer:
17.4.	Maximum mass of trailer (unbraked): kg
18.	Maximum mass of combination: kg
19.1.	Maximum vertical load at the coupling point for a trailer: kg
20.	Engine manufacturer:
21.	Engine code as marked on the engine:
22.	Working principle:
22.1.	Direct injection: yes/no (¹)

23.	Number and arrangement of cylinder	s:	
24.	Capacity: cm <sup>3</sup>		
25.	Fuel:		
26.	Maximum net power: kW at min <sup>-1</sup>		
27.	Clutch (type):		
28.	Gearbox (type):		
29.	Gear ratios: 1 2 3	4 5 6	
30.	Final drive ratio:		
32.	Tyres and wheels: Axle 1:	Axle 2: Axle 3	: Axle 4:
33.1.	Drive axle(s) fitted with air suspensio	n or equivalent: yes/no (¹)	
34.	Steering, method of assistance:		
35.	Brief description of the braking system	m:	
36.	Pressure in feed line for trailer brakin	g system: bar	
41.	Number and configuration of doors:		
42.1.	Number and position of seats:		
43.1.	EC type-approval mark of coupling d	evice, if fitted:	
43.3.	Types or classes of coupling devices which can be fitted:		
43.4.	Characteristic values ( $^{l}$ ): D/ V/ S/ U		
45.	Sound level:		
	Number of the base Directive and la with two or more implementation sta	test amending Directive applicable to ages, indicate also the implementation	the approval. In case of a Directive stage:
	Stationary: dB(A) at engine spee	edmin <sup>-1</sup>	
	Drive-by: dB(A)		
46.1.	Exhaust emissions (²):		
		atest amending Directive applicable t ntation stages, indicate also the imple	o the EC type-approval. In case of a mentation stage:
	1. test procedure:		
	CO: HC: NO <sub>x</sub> : HC + Smoke (corrected value of absorption	NO <sub>x</sub> : particulates:	
	2. test procedure (if applicable)		
	CO: NO <sub>x</sub> : NMHC: CI	H <sub>4</sub> : Particulates:	
47.	Fiscal power or national code number	r(s), if applicable:	
	Belgium:	Denmark:	Germany:
	Greece:	Spain:	France:
	Ireland:	Italy:	Luxembourg:
	Netherlands:	Austria:	Portugal:
	Finland:	Sweden:	United Kingdom:

48.1.	EC type-approved according to the design requirements for transporting dangerous goods:
	yes/class(es):/no (¹)
48.2.	EC type-approved according to the design requirements for transporting certain animals:
	yes/class(es):/no (¹)
49.	Chassis designed for off-road vehicles only: yes/no (¹)
50.	Remarks:
51.	Exemptions:

Side 2			
	For incomplete v	ehicles of categories O <sub>1</sub> , O <sub>2</sub> ,	$O_3$ and $O_4$
1.	Number of axles: and wheels:		
3.	Wheelbase: mm		
5.	Axle(s) track: 1 mm	2 mm 3 mm	
6.2.	Maximum permissible length of the c	ompleted vehicle: mm	
6.4.	Distance between the centre of the co	oupling device and the rear end of the	e vehicle: mm
7.2.	Maximum permissible width of the co	ompleted vehicle: mm	
9.1.	Height of the centre of gravity (c.o.g.)	: mm	
9.2.	Maximum permissible height of the c	.o.g. of the completed vehicle: r	nm
9.3.	Minimum permissible height of the c.	o.g. of the completed vehicle: n	nm
12.3.	Mass of the bare chassis: kg		
13.1.	Minimum permissible mass of the con	mpleted vehicle: kg	
13.2.	Distribution of this mass among the a	axles: 1 kg 2	kg 3 kg
14.1.	Technically permissible maximum lad	en mass: kg	
14.5.	Distribution of this mass among the axles and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point: 1 kg 2 kg 3 kg coupling point: kg		
14.6.	Technically permissible mass on each axle/axle group:  1 kg  2 kg  3 kg  and, in the case of a semi-trailer or centre-axle trailer, load on the coupling point: kg		
15.	Position of retractable or loadable axle	e(s):	
19.2.	For coupling devices of classes B, D, E and H: maximum mass of the towing vehicle (T) or of the vehicle combination (if T < $32\ 000\ kg$ ): kg		
32.	Tyres and wheels: Axle 1:	Axle 2: Axle 3	:
33.2.	Axle(s) fitted with air suspension or e	quivalent: yes/no (¹)	
34.	Steering, method of assistance:		
35.	Brief description of the braking system	n:	
43.2.	EC type-approval mark of coupling de	evice:	
43.3.	Types or classes of coupling devices v	which can be fitted:	
43.4.	Characteristic values (¹): D/ V/	S/ U	
47.	Fiscal power or national code number	r(s), if applicable:	
	Belgium:	Denmark:	Germany:
	Greece:	Spain:	France:
	Ireland:	Italy:	Luxembourg:
	Netherlands:	Austria:	Portugal:
	Finland:	Sweden:	United Kingdom:

51.	Exemptions:
50.	Remarks:
	yes/class(es):/no (¹)
48.2.	EC type-approved according to the design requirements for transporting certain animals:
	yes/class(es):/no (¹)
48.1.	EC type-approved according to the design requirements for transporting dangerous goods: yes/class(es):

### ANNEX X

### CONFORMITY OF PRODUCTION PROCEDURES

## 0. CONFORMITY OF PRODUCTION

Conformity of production to ensure conformity to the approved type including assessment of quality management systems referenced below as initial assessment (¹) and verification of the approval subject and product related controls referenced below as product conformity arrangements.

### 1. INITIAL ASSESSMENT

- 1.1. The EC type-approval authority of a Member State must verify, before granting EC type-approval, the existence of satisfactory arrangements and procedures for ensuring effective control so that components, systems, separate technical units or vehicles when in production conform to the approved type.
- 1.2. The requirement in point 1.1 must be verified to the satisfaction of the authority granting EC type-approval. That authority shall be satisfied with the initial assessment and the initial product conformity arrangements at Section 2, taking account, as necessary, of one of the arrangements described in points 1.2.1 to 1.2.3, or a combination of those arrangements in full or in part as appropriate.
- 1.2.1. The actual initial assessment and/or verification of product conformity arrangements may be carried out by the EC type-approval authority granting EC type-approval or a technical service on behalf of the EC type-approval authority.
- 1.2.1.1. When considering the extent of the initial assessment to be carried out, the EC type-approval authority may take account of available information relating to:

the manufacturer's certification described in point 1.2.3, which has not been qualified or recognised under that paragraph,

in the case of component or separate technical unit EC type-approval, quality system assessments performed in the component or separate technical unit manufacturer's premises by vehicle manufacturer(s), according to one or more of the industry sector specifications satisfying the requirements in harmonised standard EN ISO 9002 — 1994, or EN ISO 9001 — 2000 with the permissible exclusion of the requirements related to the concepts of design and development, point 7.3 'Customer satisfaction and continual improvement'.

1.2.2. The actual initial assessment and/or verification of product conformity arrangements may also be carried out by the EC type-approval authority of another Member State or the technical service designated for this purpose by the EC type-approval authority. In that case, the EC type-approval authority of the other Member State shall prepare a statement of compliance outlining the areas and production facilities it has covered as relevant to the product(s) to be EC type-approved and to the Directive according to which these products are to be approved (²). On receiving an application for a compliance statement from the EC type-approval authority of a Member State granting EC type-approval, the EC type-approval authority of another Member State shall send forthwith the statement of compliance or advise that it is not in a position to provide such a statement. The statement of compliance should at least include:

Group or company: (e.g. XYZ Automotive)
Particular organisation: (e.g. European Division)

Plants/sites: (e.g. Engine Plant 1 (United Kingdom)

Vehicle Plant 2 (Germany))

Vehicle/component range: (e.g. All Category M, models)

Guidance on the planning and conduct of assessment is to be found in harmonised standard ISO 10011, Parts 1, 2 and 3, 1991.

<sup>(2)</sup> For example, the relevant separate Directive, if the product to be approved is a system, component or technical unit, and Directive 70/156/EEC if it is a whole vehicle.

Areas assessed: (e.g. Engine assembly, body pressing

and assembly, vehicle assembly)

Documents examined: (e.g. Company and site quality manual

and procedures)

Assessment: (e.g. Conducted: 18-30.9.2001)

(e.g. Planned monitor visit: March

2002)

1.2.3. The EC type-approval authority must also accept the manufacturer's suitable certification to harmonised standard EN ISO 9002 — 1994 (whose scope covers the locations of production and product(s) to be approved), or EN ISO 9001 — 2000 with the permissible exclusion of the requirements related to the concepts of design and development, point 7.3 'Customer satisfaction and continual improvement', or an equivalent harmonised standard as satisfying the initial assessment requirements of point 1.2. The manufacturer must provide details of the certification and undertake to inform the EC type-approval authority of any revisions to its validity or scope.

'Suitable' means granted by a certification body complying with harmonised standard EN 45012, and either qualified as such by the EC type-approval authority of a Member State itself, or accredited as such by a national accreditation organisation of a Member State and recognised by that Member State's EC type-approval authority.

The EC type-approval authorities of the Member State shall inform each other of the certification bodies they have qualified or recognised as abovementioned, and of any revision to the validity or scope of these bodies.

1.3. For the purpose of the whole vehicle EC type-approval, the initial assessments carried out for granting of approvals for systems, components and technical units of the vehicle need not be repeated, but shall be completed by an assessment covering the locations and activities relating to the assembly of the whole vehicle not covered by the former assessments.

## 2. PRODUCT CONFORMITY ARRANGEMENTS

- 2.1. Every vehicle, system, component or separate technical unit approved pursuant to this Directive or a separate Directive must be so manufactured as to conform to the type approved by meeting the requirements of this Directive or a separate Directive contained in the complete list set out in Annex IV or XI.
- 2.2. The EC type-approval authority of a Member State, at the time of granting an EC type-approval, must verify the existence of adequate arrangements and documented control plans, to be agreed with the manufacturer for each approval, to carry out at specified intervals those tests or associated checks necessary to verify continued conformity with the approved type including specifically, where applicable, tests specified in the separate Directives.
- 2.3. The holder of the EC type-approval must, in particular:
- 2.3.1. ensure the existence and application of procedures for effective control of the conformity of products (vehicles, systems, components or separate technical units) to the approved type;
- 2.3.2. have access to the testing or other appropriate equipment necessary for checking the conformity to each approved type;
- 2.3.3. ensure that test or check results data are recorded and that annexed documents remain available for a period to be determined in agreement with the type-approval authority. This period is not required to exceed 10 years;
- 2.3.4. analyse the results of each type of test or check, in order to verify and ensure the stability of the product characteristics, making allowance for variation of an industrial production;
- 2.3.5. ensure that for each type of product, at least the checks prescribed in this Directive and the tests prescribed in the applicable separate Directives contained in the complete list set out in Annex IV or XI, are carried out;
- 2.3.6. ensure that any set of samples or test pieces, giving evidence of non-conformity in the type of test or check in question gives rise to a further

- sampling and test or check. All the necessary steps shall be taken to restore conformity of the corresponding production;
- 2.3.7. in the case of whole-vehicle EC type-approval, the checks referred to in point 2.3.5 are restricted to those verifying the correct build specification in relation to the approval and especially to the information document laid down in Annex III and the information required for certificates of conformity given in Annex IX to this Directive.

### 3. CONTINUED VERIFICATION ARRANGEMENTS

- 3.1. The authority which has granted EC type-approval may at any time verify the conformity control methods applied in each production facility.
- 3.1.1. The normal arrangements shall be to monitor the continued effectiveness of the procedures established at 1.2 (initial assessment and product conformity) of this Annex.
- 3.1.1.1. Surveillance activities carried out by a certification body (qualified or recognised as required by point 1.2.3 of this Annex) must be accepted as satisfying the requirements of point 3.1.1 with regard to the procedures established at initial assessment (point 1.2.3).
- 3.1.1.2. The normal frequency of verifications by the EC type-approval authority (other than those at point 3.1.1.1) shall be such as to ensure that the relevant controls applied in accordance with Sections 1 and 2 of this Annex are reviewed over a period consistent with the climate of trust established by the type-approval authority.
- 3.2. At every review, records of tests or checks and records of production shall be made available to the inspector; in particular, records of those tests or checks documented as required by point 2.2 of this Annex.
- 3.3. Where the nature of the test is appropriate, the inspector may select samples at random to be tested in the manufacturer's laboratory (or by the technical service where the separate Directive so provides). The minimum number of samples may be determined according to the results of the manufacturer's own verification.
- 3.4. Where the level of control appears unsatisfactory, or when it seems necessary to verify the validity of the tests carried out in application of point 3.2, the inspector must select samples to be sent to the technical service which conducted the EC type-approval tests.
- 3.5. The EC type-approval authority may carry out any check or test prescribed in this Directive or in the applicable separate Directives contained in the complete list set out in Annex IV or XI.
- 3.6. In cases where unsatisfactory results are found during an inspection or a monitoring review, the EC type-approval authority must ensure that all necessary steps are taken to restore conformity of production as rapidly as possible.

# ANNEX XI

# NATURE OF AND PROVISIONS FOR SPECIAL PURPOSE VEHICLES

Appendix 1

Motor-caravans, ambulances and hearses

Item Subject  Sound levels  Emissions  Fuel tanks/rear protective devices  Rear registration plate space  Door latches and hinges  Audible warning  Rear visibility  Braking  Diesel smoke  In Diesel smoke  Interior fittings  Anti-theft and immobiliser  Anti-theft and immobiliser  Protective steering						
Sound levels  Emissions  Fuel tanks/rear J  Rear registration  Steering effort  Door latches and Audible warning  Rear visibility  Braking  Suppression of 1  Diesel smoke  Interior fittings  Anti-theft and in  Protective steeri	Subject	Directive No	$M_1 \le 2500  (^1)$ kg	$M_1 > 2.500 (^1)$ kg	$M_2$	$M_3$
Emissions Fuel tanks/rear J Rear registration Steering effort Door latches an Audible warning Rear visibility Braking Suppression of 1 Diesel smoke Interior fittings Anti-theft and in Protective steeri		70/157/EEC	Н	G + H	H + 9	H + 9
Fuel tanks/rear J Rear registratior Steering effort Door latches an Audible warning Rear visibility Braking Suppression of 1 Diesel smoke Interior fittings Anti-theft and in Protective steeri		70/220/EEC	ò	Q + Q	Ò + Đ	Ò + Đ
	protective devices	70/221/EEC	H	Ħ	Ŀц	Ħ
	plate space	70/222/EEC	×	X	×	×
		70/311/EEC	×	Ð	Ð	ŋ
	hinges	70/387/EEC	В	G + B		
		70/388/EEC	×	X	×	×
		71/127/EEC	×	Ð	Ð	Ð
		71/320/EEC	×	Ð	Ð	Ð
<del>                                     </del>	dio interference	72/245/EEC	×	×	×	×
		72/306/EEC	Н	Н	Н	Н
		74/60/EEC	C	G + C		
	nobiliser	74/61/EEC	×	Ð	Ð	ŋ
	50	74/297/EEC	X	Ð		
15 Seat strength		74/408/EEC	D	G + D	G + D	G + D

Item	Subject	Directive No	$M_1 \le 2500  (^1)$ kg	$M_1 > 2500 (^1)$ kg	$M_2$	M <sub>3</sub>
16	Exterior projections	74/483/EEC	X for the cab; A for the remaining part	G for the cab; A for the remaining part		
17	Speedometer and reverse gear	75/443/EEC	×	X	×	×
18	Plates (statutory)	76/114/EEC	×	×	×	×
19	Seat belt anchorages	76/115/EEC	D	G+L	G+L	G+L
20	Installation of lighting and light signalling devices	76/756/EEC	A+N	A+G+N for the cab; A+N for the remaining part	A+G+N for the cab; A+N for the remaining part	A+G+N for the cab; A+N for the remaining part
21	Retro reflectors	76/757/EEC	×	X	×	×
22	End-outline, front-side, rear-side, stop, day time running, side-marker lamps	76/758/EEC	×	×	×	×
23	Direction indicators	76/759/EEC	X	X	X	X
24	Rear registration plate lamps	76/760/EEC	×	X	×	×
25	Head lamps (including bulbs)	76/761/EEC	×	X	×	×
26	Front fog lamps	76/762/EEC	X	X	X	X
27	Towing hooks	77/389/EEC	E	Е	Е	Ε
28	Rear fog lamps	77/538/EEC	X	X	X	X
29	Reversing lamps	77/539/EEC	X	X	X	X
30	Parking lamps	77/540/EEC	X	X	X	X
31	Seat belts	77/541/EEC	D	G + M	G + M	G + M
32	Forward vision	77/649/EEC	X	G		

Item	Subject	Directive No	$M_1 \le 2500 (1)$ kg	$M_1 > 2500 (^1)$ kg	$M_2$	M <sub>3</sub>
33	Identification of controls	78/316/EEC	X	X	X	×
34	Defrost/demist	78/317/EEC	×	O + 9	0	0
35	Wash/wipe	78/318/EEC	X	O + 9	0	0
36	Heating systems	Council Directive 78/548/EEC (OJ L 168, 26.6.1978, p. 4)	I	G + P		
37	Wheel guards	78/549/EEC	×	Ð		
38	Head restraints	78/932/EEC	D	G + D		
39	CO <sub>2</sub> emissions/fuel consumption	80/1268/EEC	N/A	N/A		
40	Engine power	80/1269/EEC	X	X	X	X
41	Diesel emissions	88/77/EEC	Н	H + 9	H + 9	G + H
4	Masses and dimensions (cars)	92/21/EEC	×	×		
45	Safety glass	92/22/EEC	J	G + J	G + J	G + J
46	Tyres	92/23/EEC	×	Ð	G	Ð
47	Speed limiters	92/24/EEC				×
84	Masses and dimensions (other than vehicles referred to in item 44)	97/27/EC			X	×
50	Couplings	94/20/EC	X	G	G	Ð
51	Flammability	95/28/EC				G for the cab; X for the remaining part
52	Buses and coaches	//EC			А	А

M³			
$M_1 > 2500 (1)$ $M_2$	N/A	N/A	
$M_1 \le 2500  (^1)$ N	N/A	N/A	
Directive No	36/79/EC	96/27/EC	
Subject	Front impact	54 Side impact	(1) Technically permissible maximum laden mass.
Item	53	54	(¹) Tech

Appendix 2

Armoured Vehicles

Item	Subject	Directive No	$M_1$	$M_2$	$M_3$	Z Z	$N_2$	N <sub>s</sub>	O	$O_2$	O <sub>3</sub>	O <sub>4</sub>
1	Sound levels	70/157/EEC	X	X	X	X	X	X				
2	Emissions	70/220/EEC	Y	A	Ą	A	A	Ą				
3	Fuel tanks/rear protective devices	70/221/EEC	X	×	×	×	X	×	×	X	×	×
4	Rear registration plate space	70/222/EEC	X	X	X	X	X	X	X	X	X	×
5	Steering effort	70/311/EEC	X	×	×	×	X	×	×	×	×	×
9	Door latches and hinges	70/387/EEC	X			X	X	X				
7	Audible warning	J9388/EEC	A + K	A + K	A + K	A + K	A + K	A + K				
∞	Rear visibility	71/127/EEC	A	A	Ą	A	A	Ą				
6	Braking	71/320/EEC	X	X	X	X	X	X	X	X	X	×
10	Suppression of radio interference	72/245/EEC	X	Х	X	X	X	X	Х	Х	Х	X
11	Diesel smoke	72/306/EEC	X	X	X	X	X	X				
12	Interior fittings	74/60/EEC	Y									
13	Anti-theft and immobiliser	74/61/EEC	X	X	X	X	X	X				
14	Protective steering	74/297/EEC	V/N			N/A						
15	Seat strength	74/408/EEC	X	D	D	D	D	D				
16	Exterior projections	74/483/EEC	Y									
17	Speedometer and reverse gear	75/443/EEC	X	X	X	X	X	X				

Item	Subject	Directive No	$\mathbf{M}_{_{\mathrm{I}}}$	$M_2$	M <sub>3</sub>	z	$\mathbf{N}_{_{2}}$	Z <sub>e</sub>	0	$O_2$	O <sub>3</sub>	O
18	Plates (statutory)	76/114/EEC	X	X	X	X	X	X	X	X	X	×
19	Seat belt anchorages	76/115/EEC	Y	A	A	A	A	A				
20	Installation of lighting and light signalling devices	76/756/EEC	A + N	A + A	A + N	A + N	A + N	A + N	A + N	A + A	A + X	A + N
21	Retro reflectors	76/757/EEC	X	×	×	×	×	×	X	×	×	×
22	End-outline, front-side, rear-side, stop, day time running, side-marker lamps	76/758/EEC	X	×	×	×	×	×	X	×	×	×
23	Direction indicators	76/759/EEC	X	X	X	X	×	X	X	X	X	×
24	Rear registration plate lamps	76/760/EEC	X	×	×	×	×	X	X	×	×	×
25	Head lamps (including bulbs)	76/761/EEC	X	X	X	X	×	X				
26	Front fog lamps	76/762/EEC	X	X	X	X	X	X				
27	Towing hooks	77/389/EEC	A	A	А	А	А	A				
28	Rear fog lamps	77/538/EEC	X	X	X	X	X	X	X	X	X	×
29	Reversing lamps	77/539/EEC	X	X	X	X	×	X	X	X	X	×
30	Parking lamps	77/540/EEC	X	X	X	X	X	X				
31	Seat belts	77/541/EEC	Y	A	A	А	Α	Α				
32	Forward vision	77/649/EEC	S									
33	Identification of controls	78/316/EEC	X	X	X	X	X	X				
34	Defrost/demist	78/317/EEC	Y	0	0	0	0	0				
35	Wash/wipe	78/318/EEC	A	0	0	0	0	0				

Item	Subject	Directive No	$^{^{1}}M$	$M_2$	$M_3$	Z I	$N_2$	$N_3$	10	$O_2$	O³	O
36	Heating systems	78/548/EEC	X									
37	Wheel guards	78/549/EEC	X									
38	Head restraints	78/932/EEC	×									
39	CO <sub>2</sub> emissions/fuel consumption	80/1268/EEC	N/A									
40	Engine power	80/1269/EEC	X	X	X	×	X	X				
41	Diesel emissions	88/77/EEC	A	X	X	×	X	X				
42	Lateral protection	89/297/EEC					×	X			×	×
43	Spray suppression systems	91/226/EEC					X	X			X	×
4	Masses and dimensions (cars)	92/21/EEC	X									
45	Safety glass	92/22/EEC	N/A	N/A	V/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46	Tyres	92/23/EEC	Y	A	A	Α	A	A	A	A	A	A
47	Speed limiters	92/24/EEC			X		X	X				
48	Masses and dimensions (other than vehicles referred to in item 44)	97/27/EC		X	X	X	X	X	X	X	X	×
49	External projections of cabs	92/114/EEC				A	A	A				
50	Couplings	94/20/EC	X	X	X	Х	X	X	X	Х	X	X
51	Flammability	95/28/EC			X							
52	Buses and coaches	)/EC										
53	Front impact	96/79/EC	N/A									
54	Side impact	96/27/EC	N/A			N/A						

dangerous	A()	A()	A()	X I of a vehi	X  The-approvi	A()	applies fo	nufacturer	hen the ma	2000/40/EC	57 Front underrun protection 2000/40/EC are only applicable when the manufacturer applies for the EC type-approval of a vehicle intended for the transport of dangerous (*)	57 (¹) The
X (¹)	(·) X	X (¹)	X (¹)	X(') X(') X(') X(') X(') X(')	(') X	X (¹)				98/91/EC	56 Vehicles intended for the transport 98/91/EC of dangerous goods	56
O	O³	$O_2$	$\mathbf{O}_1 \qquad \mathbf{O}_2$	$N_3$	$N_2$	N_	$M_3$	$M_2$ $M_3$	$\mathbf{M}_{_{1}}$	Directive No M <sub>1</sub>	Subject	Item

Appendix 3

Other special purpose vehicles (including trailer caravans)

Application of the exemptions is only permitted if the manufacturer demonstrates to the satisfaction of the approval authority that the vehicle, due to the special function, cannot meet all the requirements.

Item	Subject	Directive No	$M_2$	$\mathbf{M}_{_{3}}$	Z	N	N <sub>s</sub>	0	$O_2$	03	O
-	Sound levels	70/157/EEC	Н	Н	Н	Н	Н				
7	Emissions	70/220/EEC	Ò	Ò	Ò	ò	Ò				
3	Fuel tanks/rear protective devices	70/221/EEC	Ħ	Ħ	Ħ	দ	Ħ	×	X	×	×
4	Rear registration plate space	70/222/EEC	A + R	A + R	A + R	A + R	A + R	A + R	A + R	A + R	A + R
S	Steering effort	70/311/EEC	×	×	×	×	×	×	X	×	×
9	Door latches and hinges	70/387/EEC			В	В	В				
7	Audible warning	70/388/EEC	×	×	×	×	×				
∞	Rear visibility	71/127/EEC	×	×	X	×	×				
6	Braking	71/320/EEC	X	X	X	X	X	X	X	X	×
10	Suppression of radio interference	72/245/EEC	×	×	×	×	×	×	X	×	×
11	Diesel smoke	72/306/EEC	Н	Н	Н	Н	Н				
13	Anti-theft and immobiliser	74/61/EEC	X	X	X	X	X				
14	Protective steering	74/297/EEC			X						
15	Seat strength	74/408/EEC	Q	D	Q	D	Q				
17	Speedometer and reverse gear	75/443/EEC	X	X	X	Х	X				
18	Plates (statutory)	76/114/EEC	Х	Х	Х	Х	X	Х	X	X	X

Item	Subject	Directive No	$M_2$	M <sub>3</sub>	$\mathbf{Z}_{\mathbf{I}}$	$N_{_2}$	$N_3$	0	$O_2$	O <sub>3</sub>	O <sub>4</sub>
19	Seat belt anchorages	76/115/EEC	Q	Q	D	D	D				
20	Installation of lighting and light signalling devices	76/756/EEC	A + N	A + N	A + N	A + N	A + N	A + N	A + N	A + N	A + N
21	Retro reflectors	76/757/EEC	X	×	×	X	×	X	×	×	×
22	End-outline, front-side, rear-side, stop, day time running, side-marker lamps	76/758/EEC	X	X	×	×	×	X	×	×	×
23	Direction indicators	76/759/EEC	X	×	×	X	×	X	×	×	×
24	Rear registration plate lamps	76/760/EEC	X	×	×	×	×	X	×	×	×
25	Head lamps (including bulbs)	76/761/EEC	X	X	X	X	X				
26	Front fog lamps	76/762/EEC	X	×	×	X	×				
27	Towing hooks	77/389/EEC	Y	Y	A	A	A				
28	Rear fog lamps	77/538/EEC	X	X	X	X	X	X	X	X	×
29	Reversing lamps	77/539/EEC	X	X	X	X	X	X	X	X	×
30	Parking lamps	77/540/EEC	X	×	×	×	×				
31	Seat belts	77/541/EEC	Q	Q	D	D	D				
33	Identification of controls	78/316/EEC	X	×	×	×	×				
34	Defrost/demist	78/317/EEC	0	0	0	0	0				
35	Wash/wipe	78/318/EEC	0	0	0	0	0				
40	Engine power	80/1269/EEC	X	X	X	X	X				
41	Diesel emissions	88/77/EEC	Н	Н	Н	Н	Н				

Item	Subject	Directive No	$\mathbf{M}_2$	$M_3$	$\mathbf{Z}_{_{_{\mathrm{I}}}}$	$N_2$	N <sub>3</sub>	0	$\mathbf{O}_2$	03	O
42	Lateral protection	89/297/EEC				X	X			X	X
43	Spray suppression systems	91/226/EEC				X	X			×	×
45	Safety glass	92/22/EEC	J	ſ	J	ſ	ſ	ſ	J	J	J
46	Tyres	92/23/EEC	X	X	×	X	X	X	X	×	×
47	Speed limiters	92/24/EEC		X		X	X				
48	Masses and dimensions	97/27/EC	X	X	×	X	X	X	X	×	×
49	External projections of cabs	92/114/EEC			×	X	X				
50	Couplings	94/20/EC	X	X	X	X	X	X	X	X	×
51	Flammability	95/28/EC		X							
52	Buses and coaches	//EC	X	X							
54	Side impact	96/27/EC			V						
99	Vehicles intended for the transport of dangerous goods	98/91/EC				X	X	X	X	×	×
57	Front underrun protection	2000/40/EC				X	X				

## Appendix 4

## Mobile cranes

Item	Subject	Directive No	Mobile crane of category N
1	Sound levels	70/157/EEC	Т
2	Emissions	70/220/EEC	Х
3	Fuel tanks/rear protective devices	70/221/EEC	Х
4	Rear registration plate space	70/222/EEC	Х
5	Steering effort	70/311/EEC	X crab steering allowed
6	Door latches and hinges	70/387/EEC	A
7	Audible warning	70/388/EEC	X
8	Rear visibility	71/127/EEC	X
9	Braking	71/320/EEC	U
10	Suppression of radio interference	72/245/EEC	X
11	Diesel smoke	72/306/EEC	X
12	Interior fittings	74/60/EEC	X
13	Anti-theft and immobiliser	74/61/EEC	X
15	Seat strength	74/408/EEC	D
17	Speedometer and reverse gear	75/443/EEC	X
18	Plates (statutory)	76/114/EEC	X
19	Seat belt anchorages	76/115/EEC	D
20	Installation of lighting and light signalling devices	76/756/EEC	A + Y
21	Reflex reflectors	76/757/EEC	X
22	End-outline, front position (side), rear-position (side), stop, side marker, daytime running lamps	76/758/EEC	X
23	Direction indicators	76/759/EEC	X
24	Rear registration plate lamps	76/760/EEC	X
25	Head lamps (including bulbs)	76/761/EEC	X
26	Front fog lamps	76/762/EEC	X
27	Towing hooks	77/389/EEC	A
28	Rear fog lamps	77/538/EEC	X
29	Reversing lamps	77/539/EEC	X
30	Parking lamps	77/540/EEC	Х
31	Seat belts	77/541/EEC	D

## **▼**B

Item	Subject	Directive No	Mobile crane of category N
33	Identification of controls	78/316/EEC	X
34	Defrost/demist	78/317/EEC	О
35	Wash/wipe	78/318/EEC	0
40	Engine power	80/1269/EEC	X
41	Diesel emissions	88/77/EEC	V
42	Lateral protection	89/297/EEC	X
43	Spray-suppression systems	91/226/EEC	X
45	Safety glass	92/22/EEC	J
46	Tyres	92/23/EEC	A, provided that the requirements in ISO 10571 — 1995 (E) or ETRTO Standards Manual 1998 are fulfilled.
47	Speed limiters	92/24/EEC	X
48	Masses and dimensions	97/27/EC	X
49	External projections of cabs	92/114/EEC	X
50	Couplings	94/20/EC	X
57	Front underrun protection	2000/40/EC	X

#### Meaning of letters

- X No exemptions except those specified in the separate Directive.
- N/A This Directive is not applicable to this vehicle (no requirements).
- A Exemption permitted where special purposes make it impossible to fully comply. The manufacturer shall demonstrate this to the satisfaction of the type-approval authority that the vehicle cannot meet the requirements due to its special purpose.
- B Application limited to doors giving access to the seats designated for normal use when the vehicle is travelling on the road and where the distance between the R point of the seat and the average plane of the door surface, measured perpendicular to the longitudinal medium plane of the vehicle, does not exceed 500 mm.
- C Application limited to that part of the vehicle in front of the rearmost seat designated for normal use when the vehicle is travelling on the road and also limited to the head impact zone as defined in Directive 74/60/EEC.
- D Application limited to seats designated for normal use when the vehicle is travelling on the road.
- E Front only.
- F Modification to the routing and length of the refuelling duct and re-positioning of the tank inboard is permissible.
- G Requirements according to the category of the base/incomplete vehicle (the chassis of which was used to built the special purpose vehicle). In the case of incomplete/completed vehicles, it is acceptable that the requirements for vehicles of the corresponding category N (based on maximum mass) are satisfied.
- H Modification of exhaust system length after the last silencer not exceeding 2 m is permissible without any further test.
- I Application limited to those heating systems not specially designed for habitation purposes.
- J For all window glazing other than driver's cab glazing (windshield and side glasses), the material may be either of safety glass or rigid plastic glazing.

## **▼**B

- K Additional panic alarm devices permitted.
- L Application limited to seats designated for normal use when the vehicle is travelling on the road. At least anchorages for lap belts are required in the rear seating positions.
- M Application limited to seats designated for normal use when the vehicle is travelling on the road. At least lap belts are required in all rear seating positions.
- N Provided that all mandatory lighting devices are installed and that the geometric visibility is not affected.
- O The vehicle shall be fitted with an adequate system in the front.
- P Application limited to those heating systems not specially designed for habitation purposes. The vehicle shall be fitted with an adequate system in the front.
- Q Modification of exhaust system length after the last silencer not exceeding 2 m is permissible without any further test. An EC type-approval issued to the most representative base vehicle remains valid irrespective of change in the reference weight.
- R Provided that the registration plates of all member states can be mounted and remain visible.
- S The light transmission factor is at least 60 %, also the 'A' pillar obstruction angle is not more than 10 degrees.
- T Test to be performed only with the complete/completed vehicle. The vehicle can be tested according to Directive 70/157/EEC as last amended by 99/101/EC. Concerning point 5.2.2.1 of Annex I to Directive 70/157/EEC the following limit values are applicable:
  - 81 dB(A) for vehicles with an engine power of less than 75 kW
  - 83 dB(A) for vehicles with an engine power of not less than 75 kW but less than 150 kW
  - 84 dB(A) for vehicles with an engine power of not less than 150 kW
- U Test to be performed only with the complete/completed vehicle. Vehicles up to four axles shall comply with all the requirements laid down by Directive 1971/320/EEC. Derogations are admitted for vehicles having more than four axles, provided that:
  - they are justified by the particular construction
  - all the braking performances, related to parking, service and secondary braking laid down by Directive 1971/320/EEC are fulfilled.
- V The compliance with Directive 1997/68/EC can be accepted.
- Y Provided that all mandatory lighting devices are installed.

#### ANNEX XII

#### SMALL SERIES AND END-OF-SERIES LIMITS

## A. SMALL SERIES LIMITS

The number of units of one family of types as defined below to be registered sold or entered into service per year in one Member State shall not exceed the figure shown below for the vehicle category in question.

Category	Units
$M_{_1}$	500
M <sub>2</sub> , M <sub>3</sub>	250
$N_{_1}$	500
N <sub>2</sub> , N <sub>3</sub> (*)	250
O <sub>1</sub> , O <sub>2</sub>	500
O <sub>3</sub> , O <sub>4</sub>	250
	<u> </u>

<sup>(\*)</sup> For mobile cranes, 20 units.

A 'family of types' shall consist of vehicles do not differ in the following essential respects:

- 1. For the purpose of category M<sub>1</sub>:
  - the manufacturer,
  - essential aspects of construction and design:
    - chassis/floor pan (obvious and fundamental differences),
    - power plant (internal combustion/electric/hybrid).
- 2. For the purpose of category M, and M,:
  - the manufacturer,
  - category,
  - essential aspects of construction and design:
    - chassis/self-supporting body (obvious and fundamental differences).
    - power plant (internal combustion/electric/hybrid),
    - number of axles.
- 3. For the purpose of category  $N_1$ ,  $N_2$  and  $N_3$ :
  - the manufacturer,
  - category,
  - essential aspects of construction and design:
    - chassis/floor pan (obvious and fundamental differences),
    - power plant (internal combustion/electric/hybrid),
    - number of axles.
- 4. For the purpose of category  $O_1$ ,  $O_2$ ,  $O_3$  and  $O_4$ :
  - the manufacturer,
  - category,
  - essential aspects of construction and design:
    - chassis/self-supporting body (obvious and fundamental differences),
    - number of axles,
    - drawbar trailer/semi-trailer/centre axle trailer,
    - type of braking system (e.g. unbraked/inertia/power).

## B. END-OF-SERIES LIMITS

The maximum number of complete and completed vehicles put into service in each Member State under the procedure 'end-of-series' shall be restricted in one of the following ways to be chosen by the Member State:

eithei

- the maximum number of vehicles of one or more types may, in the case
  of category M<sub>1</sub>, not exceed 10 % and in the case of all other categories
  not exceed 30 % of the vehicles of all types concerned put into service in
  that Member State during the previous year.
  - Should 10 %, respectively 30 %, be less than 100 vehicles, then the Member State may allow the putting into service of a maximum of 100 vehicles, or
- vehicles of any one type shall be restricted to those for which a valid certificate of conformity was issued on or after the date of manufacture and which remained valid for at least three months after its date of issue but subsequently lost its validity because of coming into force of a separate Directive.

A special entry shall be made on the certificate of conformity of the vehicles put into service under this procedure.

## ANNEX XIII

LIST OF EC TYPE-APPROVALS ISSUED PURSUANT TO SEPARATE DIRECTIVES					
Type-approval authority stamp					
List number:					
Covering the period:					
The following information in respect of each EC type-approval granted, refused or withdrawn in the above mentioned period must be given:					
Manufacturer:					
EC type-approval number:					
Reason for extension (where applicable):					
Make:					
Туре:					
Date of issue:					
First date of issue (in the case of extensions):					

#### ANNEX XIV

# PROCEDURES TO BE FOLLOWED DURING MULTI-STAGE EC TYPE-APPROVAL

#### 1. GENERAL

- 1.1. The satisfactory operation of the process of multi-stage EC type-approval requires joint action by all the manufacturers concerned. To this end approval authorities must ensure, before granting first and subsequent stage approval, that suitable arrangements exist between the relevant manufacturers for the supply and interchange of documents and information such that the completed vehicle type meets the technical requirements of all the relevant separate Directives as prescribed in Annex IV or Annex XI. Such information must include details of relevant system, component and separate technical unit approvals and of vehicle parts which form part of the incomplete vehicle but are not yet approved.
- 1.2. EC type-approvals in accordance with this Annex are granted on the basis of the current state of completion of the vehicle type and must incorporate all approvals granted at earlier stages.
- 1.3. Each manufacturer in a multi-stage EC type-approval process is responsible for the approval and conformity of production of all systems, components or separate technical units manufactured by him or added by him to the previously built stage. He is not responsible for subjects which have been approved in an earlier stage except in those cases where he modifies relevant parts to an extent that the previously granted approval becomes invalid.

## 2. PROCEDURES

The type-approval authority must:

- (a) verify that all relevant separate Directive EC type-approvals are applicable to the appropriate standard in the separate Directive;
- (b) ensure that all the relevant data, taking account of the state of completion of the vehicle, is included in the information folder;
- (c) by reference to the documentation make sure that the vehicle specification(s) and data contained in Part I of the vehicle information folder are included in the data in the information packages and/or the approval certificates of the relevant separate Directive EC type-approvals; and in the case of a completed vehicle, where an item number in Part I of the information folder is not included in the information package of any of the separate Directives, confirm that the relevant part of characteristic conforms to the particulars in the information folder;
- (d) on a selected sample of vehicles from the type to be approved carry out or arrange to be carried out inspections of vehicle parts and systems to verify that the vehicle(s) is/are built in accordance with the relevant data contained in the authenticated information package in respect of all relevant separate Directive EC type-approvals;
- (e) carry out or arrange to be carried out relevant installation checks in respect of separate technical units where applicable.
- 3. The number of vehicles to be inspected for the purposes of paragraph 2(d) must be sufficient to permit the proper control of the various combinations to be EC type-approved according to the state of completion of the vehicle and the following criteria:
  - engine,
  - gearbox,
  - powered axles (number, position, interconnection),
  - steered axles (number and position),
  - body styles,
  - number of doors,
  - driving position,
  - number of seats,
  - level of equipment.

## 4. IDENTIFICATION OF THE VEHICLE

At the second and subsequent stages, in addition to the statutory plate prescribed by Directive 76/114/EEC, each manufacturer must affix to the vehicle an additional plate the model of which is shown in the appendix

to this Annex. This plate must be firmly attached, in a conspicuous and readily accessible position on a part not subject to replacement in use. It must show clearly and indelibly the following information in the order listed:

- name of the manufacturer,
- Sections 1, 3 and 4 of the EC type-approval number,
- the stage of approval,
- vehicle identification number,
- maximum permissible laden mass of the vehicle (a)
- maximum permissible laden mass of the combination (where the vehicle is permitted to tow a trailer) (1),
- maximum permissible mass on each axle, listed in order from front to rear (¹),
- in the case of a semi-trailer or centre axle trailer, the maximum permitted mass on the coupling device (1).
- Unless otherwise provided for above, the plate must comply with the requirements of Directive 1976/114/EEC.

## Appendix

## Model of the manufacturer's additional plate

The example below is given as a guide only.

MANUFACTURER'S NAME (stage 3)
e2*98/14*2609
Stage 3
WD9VD58D98D234560
1 500 kg
2 500 kg
1 — 700 kg
2 — 800 kg

## ANNEX XV

	CERTIFICATE OF OR	LIGIN OF THE VEHICLE				
Manufacture	er's declaration of base/inco	mplete vehicle of category	other than M <sub>1</sub>			
Declaration number:						
I, the undersigned, hereby de that it is a newly manufacture	clare that the vehicle as spec d vehicle.	cified below, has been manufa	actured in our own factory and			
0.1. Make (trade name of	manufacturer):					
0.2. Type of vehicle:						
0.2.1. Commercial name(s):						
0.3. Means of identification	on of type:					
0.6. Vehicle identification number:						
0.8. Address(es) of assembly plant(s):						
Moreover, the undersigned declares that the vehicle when delivered complied with the following Directives:						
Subject	Directive No	EC type-approval No	Member State granting (1)			
1. Sound level						
2. Emissions						
3						
usw.						
(1) To be indicated if not obtainal	ole from the EC type-approval nu	mbers.				
The present declaration is issu		ns established in Annex XI to				
(Place)		nature)	(Date)			