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COUNCIL DIRECTIVE 92/21/EEC
of 31 March 1992
on the masses and dimensions of motor vehicles of category M₁

(OJ L 129, 14.5.1992, p. 1)

Corrected by:

► **C1** Corrigendum, OJ L 14, 22.1.1993, p. 29 (92/21)



**COUNCIL DIRECTIVE 92/21/EEC
of 31 March 1992**

on the masses and dimensions of motor vehicles of category M₁

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

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

Having regard to the proposal from the Commission ⁽¹⁾,

In cooperation with the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas it is important to adopt measures with the aim of progressively establishing the internal market over a period expiring on 31 December 1992; whereas the internal market comprises an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured;

Whereas the total-harmonization method will be essential in order fully to achieve the single market;

Whereas this method will to be used at the time of the revision of the entire EEC type-approval procedure, taking account of the spirit of the Council resolution of 7 May 1985 concerning a new approach to the question of technical harmonization and standardization;

Whereas the technical requirements which motor vehicles must satisfy pursuant to national laws relate, *inter alia*, to their masses and dimensions;

Whereas those requirements differ from one Member State to another; whereas it is therefore necessary that all Member States adopt the same requirements, either in addition to or in place of their existing rules in order to allow, in particular, the EEC type-approval procedure which was the subject of 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 ⁽⁴⁾, as last amended by Directive 87/403/EEC ⁽⁵⁾, to be applied in respect of each type of vehicle;

Whereas this Directive will be supplemented by Directives relating to the masses and dimensions of all categories of motor vehicles and their trailers;

Whereas it is not necessary to lay down requirements concerning the dynamic stability of combinations of motor vehicles and trailers since the manufacturers of motor vehicles take this aspect into account when stating the maximum technically permissible towable mass,

HAS ADOPTED THIS DIRECTIVE:

Article 1

For the purposes of this Directive, 'vehicle' means any motor vehicle in category M₁ as defined in Annex I to Directive 70/156/EEC, intended for use on the road, having at least four wheels and a maximum design speed exceeding 25 km/h.

⁽¹⁾ OJ No C 95, 12. 4. 1990, p. 92.

⁽²⁾ OJ No C 284, 12. 11. 1990, p. 80 and Decision of 12. 2. 1992 (not yet published in the Official Journal).

⁽³⁾ OJ No C 225, 10. 9. 1990, p. 9.

⁽⁴⁾ OJ No L 42, 23. 2. 1970, p. 1.

⁽⁵⁾ OJ No L 220, 8. 8. 1987, p. 44.

▼B*Article 2*

No Member State may refuse EEC type-approval or national type-approval of a type of vehicle, or refuse or prohibit the sale, registration, entry into service or use of a vehicle on grounds relating to its masses and dimensions if these satisfy the requirements set out in Annex I.

Article 3

Any amendments necessary to adapt the requirements of the Annexes to this Directive to technical progress shall be adopted by the Commission in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC.

Article 4

1. Member States shall adopt and publish the provisions necessary to comply with this Directive before 1 July 1992 and shall forthwith inform the Commission thereof.

When Member States adopt these provisions, they shall contain a reference to this Directive or be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

They shall apply these provisions from 1 October 1992.

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

Article 5

This Directive is addressed to the Member States.

▼B*ANNEX I*

1. SCOPE

This Directive applies to the masses and dimensions of motor vehicles in category M₁ as defined in Article 1.

1.1. **Definitions**

'Mass of the vehicle in running order' means the mass of the vehicle with bodywork in running order (including coolant, oils, fuel, spare wheels, tools and driver).

'Maximum authorized laden mass of a vehicle': see point 4.2.1.

'Maximum authorized laden mass of a vehicle suitable for drawing a trailer' means the mass as defined at point 4.2.1, which includes:

- the maximum mass of the towing device, and
- the maximum authorized drawbar load on the coupling point of the coupling device when the vehicle is stationary, as specified by the vehicle manufacturer.

2. APPLICATION FOR EEC TYPE-APPROVAL

2.1. Any application for the type-approval of a vehicle in respect of its masses and dimensions submitted by the manufacturer of the vehicle or by a duly authorized representative.

2.2. It is accompanied by the following documents, in triplicate, and the following information: a description of the type of vehicle, specifying the characteristics listed in Annex II, together with the documents requested in accordance with Article 3 of Directive 70/156/EEC.

2.3. A vehicle representative of the type to be type-approved must be presented to the technical department responsible for the type-approval tests.

3. EEC TYPE-APPROVAL

A certificate identical with the model set out in Annex III is attached to the EEC type-approval form.

4. REQUIREMENTS

4.1. **Dimensions**

4.1.1. The maximum authorized dimensions of a vehicle are as follows:

4.1.1.1. Length: 12 000 mm

4.1.1.2. Width: 2 500 mm

4.1.1.3. Height: 4 000 mm

4.1.1.4. The dimensions are measured according to the provisions of the notes of Annex I to Directive 70/156/EEC.

4.2. **Mass**

4.2.1. The maximum authorized mass of a vehicle must not exceed the maximum technically permissible laden mass as defined by the manufacturer.

4.2.2. The technically permissible maximum mass of the vehicle and of its axles must be determined by its manufacturer, bearing in mind, in particular, the strength of the materials used and provided that the technically permissible maximum mass thus determined is not lower than the mass of the vehicle in running order, plus 75 kg for every passenger seat. The number of seats must be stated by the manufacturer. The masses of the passengers and the luggage must be positioned in the correct place to determine the technically permissible maximum mass of the vehicle and the axles. The number of passenger seats must be indicated by the manufacturer. If the vehicle is intended to draw a trailer, the manufacturer may indicate a second permissible value on the rear axle(s) to apply only for this particular usage. In this case, both the maximum mass of the towing device as specified by the vehicle manufacturer and the maximum permitted drawbar load on the coupling point of the coupling device when the vehicle is stationary have to be taken

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into account for the determination of the maximum masses mentioned above. The method for verifying the masses is described in the Appendix. If the vehicle manufacturer equips his vehicle with a coupling device, he must indicate on the towing device in the vicinity of the coupling device the maximum permitted drawbar load on the coupling point of the coupling device.

4.2.2.1. The sum of the technically permissible maximum masses of the axles must not be less than the technically permissible maximum mass of the vehicle. Where the vehicle and, at the same time, its rear axle are laden to the technically permissible maximum mass, the mass bearing on the front axle must not be less than 30 % of the technically permissible maximum mass of the vehicle.

4.3. Towable mass and drawbar load on the coupling device

4.3.1. Towable mass of a vehicle intended to draw a trailer fitted with a service braking device.

4.3.1.1. The maximum authorized towable mass of vehicle is the lower value of either:

- (a) the technically permissible maximum towable mass based on the construction of the vehicle and/or the strength of the mechanical coupling device; or
- (b) the maximum authorized mass of the drawing vehicle (motor vehicle).

For the off-road vehicle as defined in Directive 70/156/EEC the maximum authorized towable mass may be increased to 1,5 times the maximum authorized mass of the drawing vehicle subject to it not exceeding the technically permissible maximum towable mass.

However, the maximum towable mass may ►C1 in no case exceed 3 500 kg. ◀

4.3.1.2. The technically permissible maximum towable mass is that stated by the manufacturer, the towable mass being the total actual mass of the trailer drawn including the actual drawbar load on the coupling device.

4.3.2. Towable mass of a vehicle intended to draw a trailer without a service braking device.

4.3.2.1. The authorized towable mass is the technically permissible maximum towable mass or half of the mass of the drawing vehicle in running order; the lower mass value applies.

The maximum towable mass must in no case exceed 750 kg.

4.3.3. The maximum authorized drawbar load at the coupling device of the vehicle is the technically permissible drawbar load, the drawbar load being the actual vertical load transmitted when the vehicle is stationary by the drawbar of the trailer to the vehicle coupling and acting via the centre of the coupling device.

4.3.3.1. The technically permissible drawbar load is that stated by the manufacturer; this load must be not less than 25 kg and must be increased for greater towable masses. The manufacturer must specify in the maintenance manual: the maximum permissible vertical load on the coupling device, the mounting point of the coupling device on the motor vehicle, and the rear overhang of the coupling device.

4.3.4. The motor vehicle towing a trailer must be able to start the vehicle combination — laden to its maximum mass — five times on an uphill gradient of at least 12 % within five minutes.

▼ **B***Appendix***METHOD FOR VERIFYING THE MASSES OF MOTOR VEHICLES OF CATEGORY M₁**

1. The mass of the vehicle will be verified as follows:
 - 1.1. empty, in running order and without driver;
 - 1.2. fully laden (under the conditions referred to in point 4.2.2), by means of calculation, taking the following into account:
 - the seat, if adjustable, must in particular be moved to the furthest back normal driving or seating position as indicated by the manufacturer taking into account only the longitudinal adjustment of the seat and excluding seats used otherwise than for normal driving or seating positions. Where there are other possibilities for adjusting the seat (vertical, angled, seat back, etc.) the adjusted positions must be as specified by the vehicle manufacturer. In the case of suspension seats, the seat must be locked in the normal driving position as specified by the manufacturer,
 - the mass for each occupant (driver included) is taken to be 75 kg (68 kg + kg of luggage);
 - the mass of each occupant is to be applied to the R point of each seat. Luggage is to be evenly distributed in the luggage compartment;
 - any load in excess of the conventional load must be distributed on the seats and in the luggage compartment in the proportions laid down in the second indent.
 - 1.3. The masses specified are determined according to the following table:

Conditions of vehicle				
Masses	(a) empty	(b) fully laden	(c) fully laden with load on coupling device	(d) maximum permissible mass on the axles
Front axle				
Rear axle				
Combined				

2. RESULTS OF VERIFICATION

The results are considered satisfactory if:

- the masses of the empty vehicle (column (a)) correspond to those declared by the manufacturer, with a tolerance of $\pm 5\%$; (in this case, the value of the mass stated by the manufacturer is adopted for calculating the masses in columns (b) and (c)),
- the masses verified under the conditions referred to in columns (b) and (c) do not exceed the maximum permissible masses stated by the manufacturer,
- the requirements set out in point 4.2.2.1 of Annex I are fulfilled,
- the masses stated by the manufacturer are compatible with the load characteristics of the tyres specified for the motor vehicle.

▼**B***ANNEX II***MODEL INFORMATION DOCUMENT (a)**

The information relating to the vehicle, technical unit or component to be type-approved must be supplied in triplicate and include a list of contents. Drawings, if any, shall be supplied in appropriate scale and in sufficient detail on size A4 or folded to that size. Photographs, if any, must also show sufficient detail. In the case of microprocessor-controlled functions, relevant performance-related information should be provided.

0. GENERAL
- 0.1. Make (trade name of manufacturer):
- 0.2. Type and commercial description (mention any variants):
- 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 (c):
- 0.5. Name and address of manufacturer:
- 0.6. Name and address of manufacturer's authorized representative (if any):
- 0.7. Location of statutory plates and inscriptions and method of affixing:
- 0.7.1. On the chassis:
- 0.7.2. On the bodywork:
- 0.8. The serial numbers of the chassis of this type commence at number:
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:
- 1.3.2. Number and position of steered axles:

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- 1.3.3. Powered axles (number, position, interconnection):
-
- 1.6. Position and arrangement of the engine:
-
2. MASSES AND DIMENSIONS (e) (refer to drawing where applicable)
- 2.1. Wheel base(s) (fully loaded) (f):
- 2.3. Axle track(s) and width(s):
- 2.3.1. Track of each steered axle (l):
- 2.3.2. Track of all the other axles:
- 2.3.3. Width of the widest rear axle:
- 2.3.4. Width of the rearmost axle:
- 2.4. Range of vehicle dimensions (overall):
- 2.4.1. For chassis with bodywork:
- 2.4.2.1. Length (j):
- 2.4.2.2. Width (k):
- 2.4.2.3. Height (unladen) (l) (for suspension adjustable for height, indicate normal running position):
.....
- 2.4.2.4. Front overhang (m):
- 2.4.2.4.1. Approach angle (off-road vehicles) (c): (degrees)
- 2.4.2.5. Rear overhang (n):
- 2.4.2.5.1. Departure angle (off-road vehicles) (c): (degrees)
- 2.4.2.6. Ground clearance (c):
- 2.4.2.6.1. Ramp angle (off-road vehicles) (c): (degrees)
- 2.6. Mass of the vehicle with bodywork in running order, or mass of the chassis with cab if the manufacturer does not fit the bodywork (including coolant, oils, fuel, tools, spare wheel and driver) (p):
-
- 2.6.1. Distribution of this mass among the axles:
- 2.8. Technically permissible maximum mass stated by the manufacturer:
- 2.8.1. Distribution of this mass among the axles:
- 2.9. Technically permissible maximum mass on each axle:
- 2.9.1. Maximum technically permissible mass on the rear axle(s) when a trailer is used:
- 2.10. Maximum mass of trailers which may be coupled:
- 2.10.4. Maximum mass of the combination:
- 2.10.5. The vehicle is/is not ⁽¹⁾ suitable for towing loads/trailers.
- 2.10.6. Maximum mass of unbraked trailer:

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- 2.11. Maximum vertical load at the coupling point of the trailer other than the fifth kingpin:
- 2.12. Swept path:
- 2.13. Engine power/maximum mass ratio (in kW/kg):
- 2.14. Hill starting ability (with trailer): (%)
- 2.15. Capacity to climb a gradient of (%) (off-road vehicles)

11. LINKS BETWEEN DRAWING VEHICLES AND TRAILERS AND SEMI-TRAILERS

- 11.1. Instructions for attaching the coupling device:
- 11.2. Class and type of coupling device:
- 11.4. Maximum vertical load at the coupling point ⁽¹⁾: kg
- 11.7. Instructions for mounting the coupling device on the vehicle together with photographs or drawings of the vehicle coupling points indicated by the manufacturer; further information in the event of use of the coupling device being limited to certain types of vehicles:
- 11.8. Information on the setting of towing brackets or mounting plates ⁽²⁾:

⁽¹⁾ Delete where inapplicable.

⁽²⁾ If necessary.

Note: For footnotes (a) to (p) see Annex I to Directive 70/156/EEC, as last amended by Directive 87/403/EEC.

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ANNEX III

MODEL

(maximum format: A4 (210 × 297 mm))

EEC TYPE-APPROVAL CERTIFICATE

(Vehicle)

Name of administration

Communication relating to:

- type-approval ⁽¹⁾
- extension of type-approval ⁽¹⁾
- refusal of type-approval ⁽¹⁾

of a type of vehicle in pursuance of the provisions of Directive 92/21/EEC on the masses and dimensions of motor vehicles of category M₁.

EEC type-approval No:

Extension No:

SECTION I

- 0.1. Make (name of undertaking):
- 0.2. Type and commercial description (mention any variants):
.....
- 03. Means of identifying the type attached to the vehicle (a):
- 0.3.1. Location of that information:
- 0.4. Category of vehicle (b):
- 0.5. Name and address of manufacturer:
.....
- 0.6. Name and address of manufacturer's authorized representative (if any):
.....

⁽¹⁾ Delete where inapplicable.

(a) Where used the means of identification can only appear on vehicles covered by the scope of the separate directive covering type-approval. Where the means of identifying the type consists of characters not relating to the description of the types of vehicles referred to in this information document these characters shall be replaced, in any such documents by the sign '?' (example: ABC?? 123??).

(b) As referred to in note (b) to Annex 1 to Directive 70/156/EEC, as last amended by Directive 87/403/EEC.

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SECTION II

1. **Additional information**
- 1.1. Length: (mm)
- 1.2. Width: (mm)
- 1.3. Height: (mm)
- 1.4. Mass of vehicle in running order: (kg)
- 1.5. Maximum authorized mass: (kg)
- 1.6. Technically permissible maximum axle masses:
 - 1.6.1. 1. Axle: (kg)
 2. Axle: (kg)
 3. Axle: (kg)
 - 1.6.2. Maximum technically permissible mass on the rear axle⁶₇ when a trailer is used: (kg)
- 1.7. Number of passenger seats (without driver):
.....
- 1.8. Towable mass:
 - 1.8.1. Trailer without service brake: (kg)
 - 1.8.2. Trailer with service brake: (kg)
 - 1.8.3. Technically permissible drawbar load:: (kg)
 - 1.8.4. Rear overhang of the coupling device: (cm)
 - 1.8.5. Photographs or drawings of the mounting point of the coupling device on the vehicle:
2. Technical department conducting tests:
.....
3. Date of test report: (kg)
4. Number of test reports:
5. Grounds justifying extension of type approval (if any):
.....
6. Comments (if any):
.....
7. Place:
8. Date:
9. Signature:
10. The list of the various components of the type-approval file maintained by the administrative department having carried out type-approval, and which may be obtained on request, are set out in the Annex.