# **COMMISSION DIRECTIVE 98/90/EC**

#### of 30 November 1998

adapting to technical progress Council Directive 70/387/EEC relating to the doors 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 type-approval of motor vehicles and their trailers (¹), as last amended by Commission Directive 98/14/EC (²), and in particular Article 13(2) thereof,

Having regard to Council Directive 70/387/EEC of 27 July 1970 on the approximation of the laws of the Member States relating to the doors of motor vehicles and their trailers (3), as amended by the Act of Accession of Denmark, Ireland and the United Kingdom, and in particular Article 3 thereof,

Whereas Directive 70/387/EEC is one of the separate Directives of the EC type-approval procedure established by Directive 70/156/EEC; whereas consequently the provisions laid down in Directive 70/156/EEC relating to vehicle systems, components and separate technical units apply to the present Directive;

Whereas it is possible further to adapt Directive 70/387/EEC to technical progress by improving safety of persons entering and leaving the driver's compartment of some heavy goods vehicles;

Whereas, in particular, Article 3(4) and Article 4(3) of Directive 70/156/EEC necessitate that each separate Directive has attached to it an information document incorporating the relevant items referred to in Annex I to that Directive and also a type-approval certificate based on Annex VI thereto in order that type-approval may be computerised;

Whereas with a view to the practical application of Directive 70/387/EEC, it is necessary to ensure that uniform provisions exist in all Member States;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee for the adaption to technical progress established by Directive 70/156/EEC,

HAS ADOPTED THIS DIRECTIVE:

## Article 1

Directive 70/387/EEC is amended as follows:

- 1. In Article 1, the words 'agricultural tractors' are replaced by 'agricultural and forestry tractors' and the words 'machinery and public works vehicles' are replaced by 'all mobile machinery'.
- 2. The Annexes are amended in accordance with the Annex to this Directive.

## Article 2

- 1. With effect from 1 January 1999 Member States may not on grounds relating to vehicle doors:
- refuse, in respect of a type of vehicle, to grant EC type-approval or national type-approval,
- prohibit the sale, registration, entry into service of vehicles,

if the vehicles comply with the requirements of Directive 70/387/EEC, as amended by this Directive.

- 2. With effect from 1 October 2000 Member States:
- shall no longer grant EC type-approval,
- may refuse to grant national type-approval

for a new type of vehicle on grounds relating to vehicle doors if the requirements of Directive 70/387/EEC, as amended by this Directive, are not fulfilled.

# Article 3

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1998 at the latest. They shall forthwith inform the Commission thereof.

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.

<sup>(1)</sup> OJ L 42, 23. 2. 1970, p. 1. (2) OJ L 91, 25. 3. 1998, p. 1.

<sup>(3)</sup> OJ L 176, 10. 8. 1970, p. 5.

# Article 4

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

# Article 5

This Directive is addressed to the Member States.

Done at Brussels, 30 November 1998.

For the Commission
Martin BANGEMANN
Member of the Commission

#### ANNEX

1. The following list of Annexes is inserted before the Annexes to Directive 70/387/EEC:

#### 'LIST OF ANNEXES

1. ANNEX I: Scope, definitions, general requirements, application for EC type-approval, granting of EC type-approval, modifications of the type and amendments to approvals, conformity of production

Appendix 1: Information document

Type-approval certificate

2. ANNEX II: Construction and fitting requirements and strength tests

3. ANNEX III: Requirements concerning access to and exit from doors of driver's compartment'.

2. Annex I is replaced by the following:

'ANNEX I

Appendix 2:

SCOPE, DEFINITIONS, GENERAL REQUIREMENTS, APPLICATION FOR EC TYPE-APPROVAL, GRANTING OF EC TYPE-APPROVAL, MODIFICATIONS OF THE TYPE AND AMENDMENTS TO APPROVALS, CONFORMITY OF PRODUCTION

- 1. SCOPE
- 1.1. This Directive applies to the doors of motor vehicles of categories M<sub>1</sub> and N (1).
- 2. DEFINITIONS

For the purpose of this Directive:

- 2.1. "approval of a vehicle", means the approval of a vehicle type with regard to its doors and to the characteristics applicable to such doors;
- 2.2. "vehicle type", means vehicles which do not differ essentially with respect to the following main characteristics:
  - design and strength characteristics of the latches and hinges as regards the vehicles mentioned in Annex II,
  - construction and fitting requirements of the running boards and steps as regards vehicles not covered by Annex III,
  - position and geometrical characteristics of the access steps and the handholds as regards vehicles mentioned in Annex III,

in so far as these characteristics have a bearing on the requirements of this Directive.

- 3. GENERAL REQUIREMENTS
- 3.1. Design
- 3.1.1. The design characteristics of the vehicle must permit entry to and exit from it in perfect safety.
- 3.1.2. Vehicles of category N<sub>2</sub> with a maximum mass exceeding 7,5 tonnes and N<sub>3</sub> are deemed to satisfy the abovementioned requirements if they comply with the prescriptions of Annex III.

<sup>(1)</sup> As defined in Annex IIA to Directive 70/156/EEC.

- 3.2. Doors, entries and exits
- 3.2.1. Doors, entries and exits must be such that they can be used easily and without danger.
- 3.3. Doors and latches
- 3.3.1. Doors and latches must be designed in such a way that any irritating noise on closing may be avoided.
- 3.3.2. Door latches must be designed in such a way as to prevent the doors from opening accidentally.
- 3.4. Latches and hinges (construction and fitting requirements)
- 3.4.1. The hinges of hinge-mounted doors (with the exception of folding doors), when fitted to the sides of the vehicles, must be fixed at the front edge of the doors in the direction of forward travel. In the case of double doors, these requirements apply to the door wing which opens first; it must be possible to bolt the other wing of the door.
- 3.4.2. The latches and hinges of the side doors of vehicles of category  $M_1$  must satisfy the requirements set out in Annex II to this Directive.
- 3.5. Running boards and steps (construction and fitting requirements)
- 3.5.1. The wheel hub, rims and other parts of the wheel shall not be deemed to be running boards or steps for the purpose of this Directive, except where reasons relating to construction or use preclude the fitting of running boards or steps elsewhere on the vehicle.
- 3.5.2. In vehicles of categories M<sub>1</sub>, N<sub>1</sub> and N<sub>2</sub> with a maximum mass not exceeding 7,5 tonnes if the floor entrance to the passenger compartment of such vehicles is more than 600 mm above the ground, the vehicle must have one or more running boards or steps.
- 3.5.2.1. However, for off-road vehicles, as defined in Annex IIA to Directive 70/156/EEC, such a distance from the ground may be increased up to 700 mm.
- 3.5.2.2. The running boards or steps must be constructed in such a way as to preclude the risk of slipping.
- 4. APPLICATION FOR EC TYPE-APPROVAL
- 4.1. The application for EC type-approval of a vehicle type with respect to the doors shall be submitted by the vehicle manufacturer.
- 4.2. A model for the information document is given in Appendix 1.
- 4.3. A vehicle representative of the type to be approved must be submitted to the technical service responsible for type-approval tests.
- 5. GRANTING OF EC TYPE-APPROVAL
- 5.1. If the relevant requirements are satisfied, EC type-approval pursuant to Article 4(3) of Directive 70/156/EEC shall be granted.
- 5.2. A model for the EC type-approval certificate is given in Appendix 2.
- 5.3. An approval number in accordance with Annex VII to Directive 70/156/EEC shall be assigned to each type of vehicle approved. The same Member State shall not assign the same number to another type of vehicle.
- 6. MODIFICATIONS OF THE TYPE AND AMENDMENTS TO APPROVALS
- 6.1. In the case of modifications of the type approved pursuant to this Directive, the provisions of Article 5 of Directive 70/156/EEC shall apply.
- 7. CONFORMITY OF PRODUCTION
- 7.1. Measures to ensure the conformity of production shall be taken in accordance with the provisions laid down in Article 10 of Directive 70/156/EEC.

# Appendix 1

# INFORMATION DOCUMENT No...

pursuant to Annex I to Council Directive 70/156/EEC (\*) relating to EEC type-approval of a vehicle with respect to the doors (Directive 70/387/EEC, as amended by Directive . . ./. . ./EC)

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 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.

0.	GENERAL
0.1.	Make (trade name of manufacturer):
0.2.	Type:
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:
0.8.	Address(es) of assembly plant(s):
1.	GENERAL CONSTRUCTION CHARACTERISTICS OF THE VEHICLE
1.1.	Photographs and/or drawings of a representative vehicle:
9.	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:

<sup>(\*)</sup> The item numbers and footnotes used in this information document correspond to those set out in Annex I to Directive 70/156/EEC. Items not relevant for the purpose of this Directive are omitted.

# Additional information in the case of off-road vehicles

1.3.	Number of axles and wheels:
1.3.3.	Powered axles (number, position, interconnection):
2.4.1.	For chassis without bodywork
2.4.1.4.1.	Approach angle (na):
2.4.1.5.1.	Departure angle (nb):
2.4.1.6.	Ground clearance (as defined in paragraph 4.5 of section A of Annex II to Directive 70/156/EEC):
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):
2.4.2.	For chassis with bodywork
2.4.2.4.1.	Approach angle (na):
2.4.2.5.1.	Departure angle (nb):
2.4.2.6.	Ground clearance (as defined in paragraph 4.5 of section A of Annex II to Directive 70/156/EEC):
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):
2.15.	Hill-starting ability (solo vehicle):
4.9.	Differential lock:

<sup>(1)</sup> Delete where not applicable.

# Appendix 2

## **MODEL**

(maximum format: A4 (210 × 297 mm))

#### EC TYPE-APPROVAL CERTIFICATE

Stamp of administration

— type-approval (¹)

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

Communication concerning the

— withdrawal of type-approval (1)

of a type of a vehicle/component/separate technical unit (¹) with regard to Directive 70/387/EEC, as amended by Directive  $\dots$  /  $\dots$  /EC.

Type-approval number:

Reason for extension:

## SECTION I

0.1. Make (trade name of manufacturer):

0.2. Type:

0.3. Means of identification of type if marked on the vehicle/component/separate technical unit (¹) (²): ....

0.3.1. Location of that marking:

0.4. Category of vehicle (¹) (³): ....

0.5. Name and address of manufacturer:

0.7. In the case of components and separate technical units, location and method of the affixing of the EEC approval mark:

Address(es) of assembly plant(s):

<sup>(1)</sup> Delete where not applicable.

<sup>(2)</sup> If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this type-approval certificate such characters shall be represented in the documentation by the symbol '?' (e.g. ABC??123??).

<sup>(3)</sup> As defined in Annex IIA to Directive 70/156/EEC.

# SECTION II

1.	Additional information (where applicable): See Addendum	
2.	Technical service responsible for carrying out the tests:	
3.	Date of test report:	
4.	Number of test report:	
5.	Remarks (if any): See Addendum	
6.	Place:	
7.	Date:	
8.	Signature:	
9.	The index to the information package lodged with the approval authority, which may be obtained on request, is attached.	
	Addendum to EC type-approval certificate No	
concerning the type approval of a vehicle with regard to Directive 70/387/EEC as amended by Directive $\dots/\dots/EC$		
1.	Additional information	
1.1.	Occupant door configuration(s):	
1.2.	Method of opening:	
1.3.	Latch-opening method:	
5.	Remarks:,	

- 3. Annex II is amended as follows:
  - (a) in the heading, the words 'PRIVATE CARS' are replaced by 'VEHICLES OF CATEGORY M,';
  - (b) in point 1.1, the word 'Directive' is replaced by 'Annex'.
- 4. The following Annex III is added:

'ANNEX III

# REQUIREMENTS CONCERNING THE ACCESS TO AND EXIT FROM THE DOORS OF THE DRIVER'S COMPARTMENT OF VEHICLES OF CATEGORY $N_2$ HAVING A MAXIMUM MASS EXCEEDING 7,5 TONNES AND OF CATEGORY $N_3$

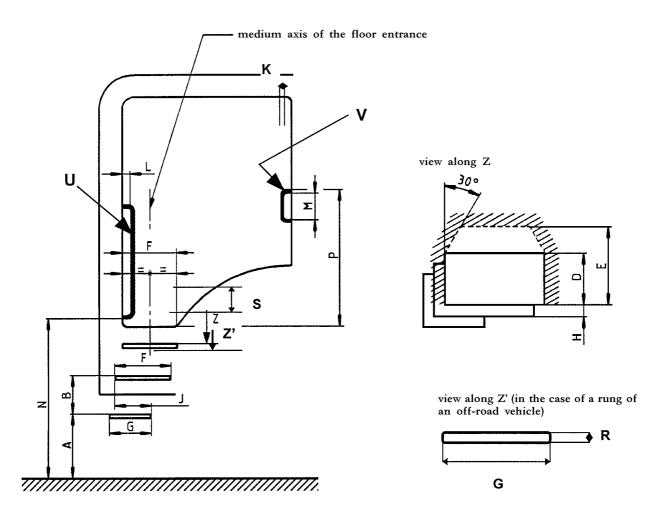
- 1. Access steps to the driver's compartment (see figure)
- 1.1. The distance (A) from the ground to the upper surface of the lowest step, measured with the vehicle in running order on a horizontal and flat surface, shall not be more than 600 mm.
- 1.1.1. However, for off-road vehicles, as defined in Annex IIA to Directive 70/156/EEC, that distance (A) may be increased up to 700 mm.
- 1.2. The distance (B) between the upper surfaces of the steps shall be not more than 400 mm. The vertical distance between two subsequent steps shall not vary by more than 50 mm.
- 1.2.1. However, for off-road vehicles (see 1.1.1), this latter figure may be increased up to 100 mm.
- 1.3. In addition, the following minimum geometrical specifications shall be fulfilled:
  - step depth (D):
    step clearance (E) (include step depth):
    step width (F):
    width of the lowest step (G):
    step height (S):
    tranversal offset between steps (H):
    longitudinal overlap (J):
    80 mm
    150 mm
    200 mm
    mm
    200 mm
- 1.3.1. However, for off-road vehicles (see 1.1.1), the value (F) may be reduced to 200 mm.
- 1.4. The lowest step may be designed as a rung, if this is necessary for reasons relating to construction or use, and in the case of off-road vehicles (see 1.1.1). In such case the rung depth (R) shall be at least 20 mm.
- 1.4.1. Rungs of round cross section are not permitted.
- 1.5. While getting down from the driver's compartment the position of the uppermost step shall be easily found out.
- 1.6. The upper surface of the steps shall be non-slip. In addition, steps exposed to the weather and the dirt during driving shall have adequate run-off (draining surface).
- 2. Access to handholds to the driver's compartment (see figure)
- 2.1. One or more suitable handrails and handholds or other equivalent holding devices shall be provided for the access to the driver's compartment.
- 2.1.1. The handrail(s) or handholds or equivalent holding devices must be positioned in such a way that they can be easily grasped and do not obstruct access.
- 2.1.2. A maximum discontinuity of 100 mm in the holding area of the handrails or handholds or equivalent holding devices may be allowed (for instance intermediate fixation).
- 2.1.3. In the case of access with more than two steps the handrails, handholds or equivalent holding devices shall be located so that a person may support himself at the same time at three points (with two hands and one foot or with two feet and one hand).

- 2.1.4. Except in the case of a stairway, the design and positioning of the handrails, handholds and equivalent holding devices must be such that operators are encouraged to descend facing the cab.
- 2.1.5. The steering wheel may be considered as a handhold.
- 2.2. The height (N) of the lower edge of at least one handrail or handhold or equivalent holding device, measured from the ground with the vehicle in running order on a horizontal and flat surface, shall not be more than 1850 mm.
- However, for off-road vehicles (see 1.1.1), such distance (N) may be increased up to 1 950 mm.
- If the floor of the driver's compartment has a height from the ground greater than "N", this height 2.2.2. shall be assumed as "N".
- 2.2.3. In addition, the minimum distance "P" of the upper edge of the handrail(s) or handholds or equivalent holding devices from the uppermost step (floor of the driver's compartment) shall be:
  - handrail(s) or handholds or equivalent holding devices (U) 650 mm,
  - handrail(s) or handholds or equivalent holding devices (V) 550 mm.
- The following geometrical specifications shall be fulfilled: 2.3.

- gripping dimension (K): 16 mm minimum 38 mm maximum,

- length (M): 150 mm minimum,

— clearance to vehicle components (L): 40 mm minimum with open door.



3. In the case of a sloped floor of the driver's compartment the required measurements shall be made from a horizontal plane passing through a point which is given by the intersection of the front edge of the floor with a vertical plane through the centre of the step immediately below and which is perpendicular to the longitudinal medium plane of the vehicle.'