

COMMISSION DIRECTIVE

of 30 October 1990

adapting to technical progress Council Directive 76/115/EEC on the approximation of the laws of the Member States relating to anchorages for motor vehicle safety belts

(90/629/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Article 2

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 76/115/EEC of 18 December 1975 on the approximation of the laws of the Member States relating to anchorages for motor-vehicle safety belts ⁽¹⁾, as last amended by Commission Directive 82/318/EEC ⁽²⁾, and in particular Article 6 thereof,

Whereas practical experience and technological development show that it is possible to improve road safety by applying similar requirements to those existing already to vehicle categories M₂ with a permissible maximum mass exceeding 3 500 kilograms and M₃ (buses) which were not covered hitherto and to generally extend the requirements to seating positions, not covered hitherto, of other vehicle categories;

Whereas that experience shows that some existing definitions and requirements have to be adjusted slightly;

Whereas the protection against "submarining" should be improved, which could be provided by modified positioning of the anchorages for safety belts and/or modifications to the seat construction; whereas a test procedure must be developed which enables the improvement in the level of protection to be shown;

Whereas the provisions of this Directive are in accordance with the opinion of the Committee on the Adaptation to Technical Progress of the Directives on the removal of technical barriers to trade in motor vehicles,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annex I to Directive 76/115/EEC, is hereby amended in accordance with the Annex to this Directive.

⁽¹⁾ OJ No L 24, 30. 1. 1976, p. 6.

⁽²⁾ OJ No L 139, 19. 5. 1982, p. 9.

1. With effect from 1 May 1991 no Member State may, on grounds relating to anchorages for safety belts:

— refuse, in respect of a type of vehicle, to grant EEC type-approval, or to issue the copy of the certificate provided for in the last indent of Article 10 (1) of Directive 70/156/EEC ⁽³⁾, or to grant national type-approval, or

— prohibit the entry into service of vehicles

if the anchorages in this type of vehicle or in these vehicles comply with the requirements of Directive 76/115/EEC, as amended by this Directive.

2. With effect from 1 July 1992 Member States:

— shall no longer issue the copy of the certificate provided for in the last indent of Article 10 (1) of Directive 70/156/EEC in respect of a type of vehicle,

— may refuse to grant national type-approval in respect of a type of vehicle

in which the anchorages do not comply with the requirements of Directive 76/115/EEC, as amended by this Directive.

3. With effect from 1 July 1997 Member States may prohibit the entry into service of vehicles in which the anchorages do not comply with the requirements of Directive 76/115/EEC, as amended by this Directive.

Article 3

The Commission shall, not later than 31 December 1992, proceed to a further review of the provisions of Directive 76/115/EEC and notably Annex I, item 4.4.3 thereof, in order to improve the protection against the risk of submarining, which amendment might include new measures and related dynamic test methods.

⁽³⁾ OJ No L 42, 23. 2. 1970, p. 1.

Article 4

Member States shall implement the provisions necessary in order to comply with this Directive before 1 May 1991. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.

Article 5

This Directive is addressed to the Member States.

Done at Brussels, 30 October 1990.

For the Commission
Martin BANGEMANN
Vice-President

ANNEX

Annex I is amended as follows:

After item 1.6, a new item 1.6.1 is added:

- 1.6.1. a "front passenger seat" means any seat where the "foremost H-point" of the seat in question is in or in front of the vertical transverse plane through the drivers R-point.'

Item 4.2.1.1, amend to read:

'incorporate retractors. *This provision shall not apply to vehicles for which, according to item 4.3, lap belts only for front outboard seating positions are allowed. If anchorages . . .*'

(Remainder unchanged)

Item 4.3 is replaced by the following:

- 4.3. Minimum number of belt anchorages to be provided (see Appendix 1).
- 4.3.1. Any vehicle in categories M and N (except those vehicles which include places specially designed for standing passengers in categories M₂ over 3,5 tonnes and M₃) must be equipped with safety belt anchorages which satisfy the requirements of this Directive.
- 4.3.2. The minimum number of safety belt anchorages for each forward directed seating position shall be as specified in Appendix 1.
- 4.3.3. However, for outboard seating positions — other than front — of vehicles of the category M₁, shown in Appendix 1 and marked with the symbol Ø, two lower anchorages are allowed, where there exists a passage between a seat and the nearest side wall of the vehicle intended to permit access of passengers to other parts of the vehicle. A space between a seat and the side wall is considered as a passage, if the distance between that side wall, with all doors closed, and a vertical longitudinal plane passing through the centreline of the seat concerned — measured at the R-point position and perpendicularly to the median longitudinal plane of the vehicle — is more than 500 mm.
- 4.3.4. For the front centre seating positions shown in Appendix 1 and marked with the symbol *, two lower anchorages shall be considered adequate where the windscreen is located outside the reference zone defined in Annex II to Directive 74/60/EEC; if located inside this reference zone, three anchorages are required.
- As regards belt anchorages, the windscreen is considered as part of the reference zone when it is capable of entering into static contact with the test apparatus according to the method described in Annex II to Directive 74/60/EEC.
- 4.3.5. For all seating positions shown in Appendix 1 and marked with the symbol *, each exposed seating position, as defined in item 4.3.6, must be equipped with two lower anchorages.
- 4.3.6. An "exposed seating position" is one where there is no "protective screen" in front of the seat within the following defined space:
- between two horizontal planes, one through the H-point and the other 400 mm above it,
 - between two vertical longitudinal planes which are symmetrical in relation to the H-point and are 400 mm apart,
 - behind a transverse vertical plane 1,30 m from the H-point.

For the purposes of this requirement "protective screen" means a surface of suitable strength and showing no discontinuities such that, if a sphere of 165 mm diameter is geometrically projected in a longitudinal horizontal direction through any point of the space defined above and through the centre of the sphere, nowhere in the protective screen is there any aperture through which the geometrical projection of the sphere could be passed.

A seat is considered to be an "exposed seating position", if the protective screens within the space defined above have a combined surface area of less than 800 cm².

- 4.3.7. For all folding seats, as well as all the seats of any vehicle which are not covered in items 4.3.1 to 4.3.5, no belt anchorages are required. However, if the vehicle is fitted with anchorages for such seats, these anchorages must comply with the provisions of this Directive.

In this case, two lower anchorages shall be sufficient.'

Item 4.4.3 reads as follows:

- '4.4.3. *Location of the effective lower belt anchorages (see Appendix 2)*

- 4.4.3.1. Front seats, vehicle-category M_1

In motor vehicles of category M_1 , the angle α_1 (other than buckle side) shall be within the range of 30 to 80° and the angle α_2 (buckle side) shall be within the range of 45 to 80°. Both angle-requirements shall be valid for all normal travelling positions of the front seats. Where at least one of the angles α_1 and α_2 is constant in all normal positions of use, its value shall be $60 \pm 10^\circ$.

In case of adjustable seats with an adjusting device as described in item 1.12, with a seatback inclination angle of less than 20° (see Annex III, figure 1), the angle α_1 may be below the minimum value (30°) stipulated above; provided it is not less than 20° in any normal position of use.

- 4.4.3.2. Rear seats, vehicle category M_1

In motor vehicles of category M_1 , the angles α_1 and α_2 shall be within the range of 30 to 80° for all rear seats. If rear seats are adjustable the above angles shall be valid for all normal travelling positions.

- 4.4.3.3. Front seats, vehicle categories other than M_1

In motor vehicles of categories other than M_1 , the angles α_1 and α_2 must be between 30 to 80° for all normal travelling positions of the front seats. Where in the case of front seats of vehicles with a maximum vehicle mass not exceeding 3,5 tonnes at least one of the angles α_1 and α_2 is constant in all normal positions of use, its value shall be $60 \pm 10^\circ$.

- 4.4.3.4. Rear seats and special front or rear seats, vehicle categories other than M_1

In vehicles of categories other than M_1 , in the case of:

- bench seats,
- adjustable seats (front and rear) with an adjusting device as described in item 1.12 with a seatback angle of less than 20° (see Annex III, figure 1), and
- other rear seats,

angles α_1 and α_2 may be between 20 and 80° in any normal position of use. Where in the case of front seats of vehicles with a maximum vehicle mass not exceeding 3,5 tonnes at least one of the angles α_1 and α_2 is constant in all normal positions of use, its value shall be $60 \pm 10^\circ$.'

Old item 4.4.3.3 becomes 4.4.3.5.

Add at the end of 4.4.4.1:

'Where a two-door configuration is used to provide access to both the front and rear seats and the upper anchorage is fitted to the "B" post, the system must be designed so as not to impede access to or egress from the vehicle.'

After item 5.2.3, a new item 5.2.4 is added:

- '5.2.4. If a test method other than that prescribed in items 5.2.1 to 5.2.3 of this Directive is used, evidence must be furnished that it is equivalent.'

Item 5.3.5.3 reads as follows:

- '5.3.5.3. When a manufacturer supplies his vehicle with safety belts, the corresponding belt anchorages may, at the request of the manufacturer, be submitted only to a test in which the loads are transmitted to them by means of a device reproducing the geometry of the type of belts to be attached to these anchorages.'

Item 5.3.6 reads as follows:

- '5.3.6. If no upper belt anchorages are provided for the outboard seats and the centre seats, the lower belt anchorages shall be submitted to the test prescribed in 5.4.3, in which the loads are transmitted to these anchorages by means of a device reproducing the geometry of a lap belt.'

Item 5.4.1.2 reads as follows:

- '5.4.1.2. For vehicles in categories M₁ and N₁, a test load of $1\,350 \pm 20$ daN shall be applied by a traction device (see Annex IV, figure 2) attached to the belt anchorages of the same belt by means of a device reproducing the geometry of the upper torso strap of such a safety belt.

For vehicles in categories M₂ and N₂, the test load shall be 675 ± 20 daN.

For vehicles in categories M₃ and N₃, the test load shall be 450 ± 20 daN.'

Item 5.4.1.3 reads as follows:

- '5.4.1.3. For vehicles in categories M₁ and N₁, at the same time a tractive force of $1\,350 \pm 20$ daN shall be applied to a traction device (see Annex IV, figure 1) attached to the two lower belt anchorages.

For vehicles in categories M₂ and N₂, this test load shall be 675 ± 20 daN.

For vehicles in categories M₃ and N₃, this test load shall be 450 ± 20 daN.'

Item 5.4.2.1 reads as follows:

- '5.4.2.1. For vehicles in categories M₁ and N₁, a test load of $1\,350 \pm 20$ daN shall be applied to a traction device (see Annex IV, figure 2) attached to the belt upper anchorage and to the opposite lower belt anchorage of the same belt, using, if supplied by the manufacturer, a retractor fixed at the upper belt anchorage.

For vehicles in categories M₂ and N₂, this test load shall be 675 ± 20 daN.

For vehicles in categories M₃ and N₃, this test load shall be 450 ± 20 daN.'

Item 5.4.2.2 reads as follows:

- '5.4.2.2. For vehicles in categories M₁ and N₁, at the same time a tractive force of $1\,350 \pm 20$ daN shall be applied to a traction device (see Annex IV, figure 1) attached to the lower belt anchorages.

For vehicles in categories M₂ and N₂, this test load shall be 675 ± 20 daN.

For vehicles in categories M₃ and N₃, this test load shall be 450 ± 20 daN.'

Item 5.4.3 reads as follows:

- '5.4.3. *Test in configuration of a lap belt.*

For vehicles in categories M₁ and N₁, a test load of $2\,225 \pm 20$ daN shall be applied to a traction device (see Annex IV, figure 1) attached to the two lower belt anchorages.

For vehicles in categories M₂ and N₂, this test load shall be $1\,110 \pm 20$ daN.

For vehicles in categories M₃ and N₃, this test load shall be 740 ± 20 daN.'

Item 5.4.4.2, amend the sentence which was added with Directive 82/318/EEC to read:

'In the case of vehicles in categories M₂ and N₂, this force must be equal to 10 times the weight of the complete seat; for categories M₃ and N₃ it must be equal to 6,6 times the weight of the complete seat.'

Replace old items 5.4.5.2 and 5.4.5.3 by the following new 5.4.5.2:

- '5.4.5.2. For vehicles in categories M₁ and N₁, at the same time, a tractive force of $1\,350 \pm 20$ daN shall be applied to a traction device (see Annex IV, figure 3) attached to the two lower belt anchorages.

For vehicles in categories M₂ and N₂, this test load shall be 675 ± 20 daN.

For vehicles in categories M₃ and N₃, this test load shall be 450 ± 20 daN.'

Add new Appendices 1 and 2 to Annex I as follows:

'Appendix 1

MINIMUM NUMBER OF ANCHORAGE POINTS

Vehicle categories	Outboard seating positions			Centre seating positions	
	Front		Other than front	Front	Other than front
	Driver	Passenger			
M ₁	3	3	∅ 3	*	2
M ₂ ≤ 3,5 tonnes	3	3	#	*	#
M ₂ > 3,5 tonnes	3	3	#	2	#
M ₃	3	3	#	2	#
N ₁	3	3	#	*	#
N ₂	3	3	#	*	#
N ₃	3	3	#	*	#

Notes:

2: two lower anchorages which allow the installation of a lap belt.

*: refers to items 4.3.4.

#: refers to items 4.3.5 and 4.3.6.

3: two lower anchorages and one upper anchorage which allow the installation of a three point safety belt, with the exception of front outboard seats on vehicles in categories M₁, N₁ and M₂ with a maximum vehicle mass not exceeding 3,5 tonnes, for which the anchorages shall allow the installation of a safety belt type Ar.

∅: refers to item 4.3.3.'

'Appendix 2

LOCATION OF LOWER ANCHORAGES, ANGLE REQUIREMENTS ONLY: α (°)

	Old requirements		New requirements	
	M ₁	Other than M ₁	M ₁	Other than M ₁
Front (outboard and centre)				
— buckle side	30-80	30-80	45-80	30-80
— other than buckle side	30-80	30-80	30-80	30-80
— angle constant	50-70	30-80	50-70	50-70
— bench:	30-80	20-80		
— buckle side			45-80	20-80
— other than buckle side			30-80	20-80
— adjustable seat with seat back angle < 20°	20-80	20-80	20-80 45-80 (*)	20-80
Rear (outboard and centre)	20-80	20-80	30-80	20-80
Folding seat	No belt anchorage required. If anchorage is fitted: see angle requirements Front and Rear.			

(*) "other than buckle side" (α1): 20-80°

"buckle side" (α2): 45-80°

(both: if angle is not constant: see item 4.4.3.1).'