

In Annex 3

7.6 Exits

7.6.1. Number of exits

7.6.1.1. The minimum number of doors in a vehicle **compartment** shall be two, either two service doors or one service door and one emergency door. Every double-deck vehicle shall have two doors on the lower deck (see also paragraph 7.6.2.2.). **The intercommunication staircase shall be considered as a service door of the upper deck.** The minimum number of service doors required is as follows:

Number of passengers and crew to be accommodated in each compartment	Minimum number of service doors		
	CLASS I & A	CLASS II	CLASS III & B
9 - 45	1	1	1
46 - 70	2	1	1
71 - 100	3 (2 in the case of a double-deck vehicle)	2	1
[> 100]	[4]	[3]	[1]

7.6.1.2. The minimum number of service doors in each **separate compartment and** each rigid section of an articulated vehicle shall be one except that this minimum number shall be two in the case of front section of an articulated vehicle of Class I.

7.6.1.3. For the purpose of this requirement, service doors equipped with a power-operated control system shall not be deemed to be emergency doors unless they can be readily opened by hand, once the control prescribed in paragraph 7.6.5.1. has been actuated, if necessary.

7.6.1.4. ~~The minimum number of emergency exits shall be such that the total number of exits in a separate compartment is as follows:~~

Number of passengers and crew to be accommodated in each compartment	Minimum total number of exits
1-8	2
9-16	3
17-30	4
31-45	5
46-60	6
61-75	7
76-90	8
91-110	9
111-130	10
>130	11

The number of ~~exits~~ **doors** for each separate deck (in the case of a double-deck vehicle) and each separate compartment must be determined separately. Toilet compartments or galleys are not considered to be separate compartments ~~for the purposes of defining the number of emergency exits.~~ ~~Escape hatches can only count as one of the above mentioned number of emergency exits.~~

- 7.6.1.5. Each rigid section of an articulated vehicle shall be treated as a separate vehicle **compartment** for the purpose of determining the minimum number and the position of ~~exits.~~ **doors**. The connecting passage between them shall ~~not~~ be considered as an ~~exit.~~ **door**. ~~Toilet compartments or galleys are not considered to be separate compartments for the purposes of defining the number of emergency exits.~~ The number of passengers shall be determined for each rigid section. The plane, which contains the horizontal axis of the hinge between conjoined rigid sections of the vehicle, and perpendicular to the longitudinal axis of a vehicle, when it moves straight, shall be considered as the border between sections.
- 7.6.1.6. A double service door shall count as two **service** doors, ~~and a double or multiple window as two emergency windows.~~ **but only as one emergency door.**
- 7.6.1.7 All vehicles of Class II, Class III and B shall have emergency exit on the rear wall (either a door or emergency window).**
- 7.6.1.8. Side wall emergency windows may be provided in every vehicle categories and Classes, but they shall not be counted in the minimum required number.**
- 7.6.1.9. The windscreen of the upper deck of a double-deck vehicle may be considered as one escape hatch, if it meets the technical requirements of an emergency window.**
- 7.6.1.10. The windscreen of a vehicle may be considered as an emergency door or escape or escape hatch, if the vehicle is equipped with an electric glass cutting hand tool, located in the driver compartment.**

Renumber the paragraphs below

- 7.6.1.7. If the driver's compartment does not provide access to the passenger compartment by means of a passageway complying with one of the conditions described in paragraph 7.7.5.1.1., the following conditions shall be met:
- 7.6.1.7.1. The driver's compartment shall have two exits, which shall not both be in the same lateral wall; when one of the exits is a window, it shall comply with the requirements set out in paragraphs 7.6.3.1. and 7.6.8. for emergency windows.

7.6.1.7.2. One or two seats are permitted alongside the driver for additional people, in which case both of the exits referred to in paragraph 7.6.1.7.1. shall be doors.

The driver's door shall be accepted as the emergency door for the occupants of those seats, provided that it is possible to move a test gauge from the occupants' seats to the exterior of the vehicle through the driver's door (see Annex 4, figure 27).

Verification of the access to the driver's door shall be subject to the requirements of paragraph 7.7.3.2., by using the test gauge having a dimension of 600 x 400 mm, as described in paragraph 7.7.3.3.

The door provided for ~~the passengers~~ **additional people** shall be in the side of the vehicle opposite to that containing the driver's door and shall be accepted as the emergency door for the driver.

7.6.1.7.3. Up to five additional seats may be fitted in a compartment incorporating the driver's compartment, provided that the additional seats and the space for these seats comply with all requirements of this Regulation and at least one door giving access to the passenger compartment complies with the requirements of paragraph 7.6.3. for emergency doors.

7.6.1.7.3.4 In the circumstances described in paragraphs 7.6.1.7.1. and 7.6.1.7.2., the exits provided for the driver's compartment shall not count as one of the doors required by paragraphs 7.6.1.1. to 7.6.1.2., nor as one of the exits required by paragraph 7.6.1.4., except in the case mentioned in paragraphs 7.6.1.7.1. and 7.6.1.7.2. Paragraphs from 7.6.3. to 7.6.7., 7.7.1., 7.7.2. and 7.7.7. shall not apply to such exits.

7.6.1.8. If the driver's compartment and any seats adjacent to it are accessible from the main passenger compartment by means of a passageway complying with one of the conditions described in paragraph 7.7.5.1.1., no external exit is required from the driver's compartment.

7.6.1.9. If a driver's door or other exit from the compartment is provided in the circumstances described in paragraph 7.6.1.8. it may only count as an exit for passengers provided:

7.6.1.9.1. it satisfies the requirements relating to the dimensions of emergency door indicated in paragraph 7.6.3.1.;

7.6.1.9.2. it fulfils the requirements indicated in paragraph 7.6.1.7.2.;

7.6.1.9.3. the space reserved for the driver's seat shall communicate with the main passengers' compartment through an appropriate passage; such requirement shall be deemed to be fulfilled if the test gauge described in paragraph 7.7.5.1. can move unobstructed from the gangway, until the front end of the gauge reaches the vertical plane tangential to the foremost point of the driver's seat back (this seat being situated in its rearmost longitudinal position) and, from this plane, the panel described in paragraph 7.6.1.7.2.

could be moved to the emergency door in the direction established by such paragraph (see Annex 4, figure 28) with seat and steering wheel adjustment in their mid position.

- 7.6.1.10. Paragraphs 7.6.1.8. and 7.6.1.9. do not preclude there being a door or other barrier between the driver's seat and the passenger compartment provided that this barrier can be released quickly by the driver in an emergency. A driver's door in a compartment protected by such a barrier shall not be counted as an exit for passengers.
- 7.6.1.11. Escape hatches, additional to the emergency doors ~~and windows~~, shall be fitted in the **compartments** of vehicles of Class II, III and B (in the upper deck roof **hatches, in the lower deck floor hatch** in the case of double-deck vehicles). . The minimum number of hatches shall be:

Number of passengers (in the upper deck in the case of double deck vehicles) and crew in a compartment	Minimum number of hatches in Class II, Class III and B
not exceeding 50	1
exceeding 50	2
- [23]	1
[24] - 45	2
46 - 70	2
71 - 100	3
[> 100]	[4]

They may also be fitted in the case of Class I and A vehicles

- ~~7.6.1.12. Each intercommunication staircase shall be considered to be an exit from the upper deck of a double-deck vehicle.~~

Renumber the paragraphs below

- 7.6.1.13. All persons accommodated in the lower deck of a double-deck vehicle must in ~~an~~ **all kind of** emergency situations, (**e.g. when the vehicle is lying on its side**) have access to the exterior of the vehicle without having to enter the upper deck.
- 7.6.1.14. The upper deck gangway of a double-deck vehicle shall be connected by one or more intercommunication staircases to the access passageway of a service door or to the lower deck gangway within 3 m of a service door:
- ~~7.6.1.14.1. two, or at least one and one half staircase, shall be provided in Class I and Class II vehicles if more than 50 passengers are carried on the upper deck;~~
- ~~7.6.1.14.2. Two, or at least one and-one-half, staircases are to be provided in Class III vehicles if more than [30] passengers are carried on the upper deck.~~
- 7.6.1.15. In the case of a vehicle without a roof, the exits on the deck without a roof shall be such as to fulfil those prescriptions that are not incompatible with the absence of the roof.

7.6.2. Siting of exits

~~Vehicles having a capacity exceeding 22 passenger seats shall meet the requirements shown below. Vehicles having a capacity not exceeding 22 passengers may meet either the requirements shown below or those contained in Annex 7, paragraph 1.2.~~

7.6.2.1. The service door(s) shall be situated on the side of the vehicle that is nearer to the side of the road corresponding to the direction of traffic in the country in which the vehicle is to be licensed for operation and at least one of them shall be in the forward half of the vehicle. This does not preclude:

7.6.2.1.1. the provision of a specially designed door in the rear or side faces of a vehicle for use in place of a service door by wheelchair passengers, or

7.6.2.1.2. the provision of an additional service door in the rear face of a vehicle (**especially in Class B**) principally for loading/unloading of goods or luggage, but which could be used by passengers where circumstances so require, or

~~7.6.2.1.3. the provision of one or more additional service doors on the opposite side of the vehicles in the case of vehicles designed for use in circumstances which require loading/unloading on both sides. Examples of such circumstances include vehicles for airside use at airports, vehicles for use on multimodal transport systems using island platforms, or vehicles which cross borders to countries which do not drive on the same side of the road as the country in which the vehicle is to be licensed for operation. Vehicles so equipped shall be provided with control(s) which allow the driver to inhibit normal operation of the doors which are not currently in use, or~~

~~7.6.2.1.4. the provision of a service door in the rear face of a Class A or B vehicle.~~

7.6.2.2. Two of the doors referred to in paragraph 7.6.1.1. shall be separated such that the distance between transverse vertical planes through their centres of area is not less than:

7.6.2.2.1. In the case of a single deck vehicle, 40 per cent of the overall length of the passenger compartment measured parallel to the longitudinal axis of the vehicle.

In the case of an articulated vehicle, this requirement shall be fulfilled if two doors of the different sections are separated such that the distance between the doors is not less than 40 per cent of the overall length of the combined passenger compartment (all sections).

If one of these two doors forms part of a double door this distance shall be measured between the two doors which are furthest apart.

7.6.2.2.2. In the case of a double-deck vehicle, two of the doors referred to in paragraph 7.6.1.1. shall be separated such that the distance between

transverse vertical planes through their centres of area is not less than either 25 per cent of the overall length of the vehicle or 40 per cent of the overall length of the passenger compartment on the lower deck; this shall not apply if the two doors are on different sides of the vehicle. If one of these two doors forms part of a double door, this distance shall be measured between the two doors which are furthest apart.

- 7.6.2.3. ~~The exits (on each deck in the case of a double deck vehicle) shall be placed in such a way that their number on each of the two sides of the vehicle is substantially the same. (This shall not imply the need to provide additional exits over and above the number specified in paragraph 7.6.1.).~~ **The emergency door shall be placed on the other lateral wall as the service door(s)**
- ~~7.6.2.4. At least one exit shall be situated either in the rear face or in the front face of the vehicle respectively. For Class I vehicles and for vehicles with a rear part permanently closed off from the passenger compartment, this provision is fulfilled if an escape hatch is fitted. For double deck vehicles, this requirement shall apply only to the upper deck.~~
- ~~7.6.2.5. The exits on the same side of the vehicle shall be suitably spaced out along the length of the vehicle.~~
- ~~7.6.2.6. A door shall, provided that it is not a service door, be permitted in the rear face of the vehicle.~~
- 7.6.2.7.4. If Escape hatches are fitted, they shall be positioned as follows: if there is only one hatch, it shall be situated in the middle third of the passenger compartment, if there are two **or more** hatches, they shall be separated by a distance of at least 2 m measured between the nearest edges of the apertures in a line parallel to the longitudinal axis of the vehicle.
- 7.6.3. Minimum dimensions of exits
- 7.6.3.1. Vehicles of Class I, II or III shall meet the following requirements:
- 7.6.3.1.1. A service door shall have an aperture creating an access in accordance with the requirements shown in paragraph 7.7.1. of this annex.
- 7.6.3.1.2. An emergency door shall have a door aperture with a minimum height of 1,250 mm and a minimum width of 550 mm.
- 7.6.3.1.3. An emergency window shall have a minimum area of 400,000 mm². It shall be possible to inscribe in this area a rectangle measuring 500 mm x 700 mm.
- 7.6.3.1.4. In the case of an emergency window situated in the rear face of the vehicle, either it shall meet the requirements shown in paragraph 7.6.3.1.3., or it shall be possible to inscribe in the aperture of this emergency window a rectangle 350 mm high and 1,550 mm wide, the corners of which may be rounded to a radius of curvature not exceeding 250 mm.

Annex 7

ALTERNATIVE REQUIREMENTS FOR VEHICLES OF CLASSES A AND B

1. Vehicles of Classes A and B shall comply with the requirements of Annex 3 with the exception that:

- (a) in place of paragraph 7.6.3.1. of Annex 3, a vehicle may comply with paragraph 1.1. of this annex;
- ~~(b) in place of paragraph 7.6.2. of Annex 3, a vehicle may comply with paragraph 1.2. of this annex.~~

1.1. Minimum dimensions for exits

The several kinds of exits shall have the following minimum dimensions:

Aperture	Dimensions	Remarks
Service Door	<u>Entry height:</u> Class A 1,650 mm B 1,500 mm	The service door entry height shall be measured as the vertical distance measured on a vertical plane of the horizontal projections of the mid point of the door aperture and the top surface of the lowest step.
	Aperture Height	The vertical height of the service door aperture shall be such as to permit the free passage of the dual panel referred to in paragraph 7.7.1.1. of Annex 3. The upper corners may be reduced with round-offs, with a radius of not more than 150 mm.
	<u>Width:</u> Single door: 650 mm Double door: 1,200 mm	For Class B vehicles where the service door aperture height lies between 1,400 mm and 1,500 mm a minimum single door aperture width of 750 mm shall apply. For all the vehicles the width of any service door may be reduced by 100 mm when the measurement is made at the level of the handholds and by 250 mm in cases where intruding wheel arches or the actuating mechanism for automatic or remote-control doors or the rake of the windscreen so require.
Emergency door	Height: 1,250 mm Width: 550 mm	The width may be reduced to 300 mm in cases where intruding wheel arches so require, providing that the width of 550 mm is respected at the minimum height of 400 mm above the lowest part of the door aperture. The upper corners may be reduced with round-offs, with a radius of not more than 150 mm.
Emergency Window	Aperture area: 4,000 cm ²	A 5 per cent tolerance shall, however, be permitted in respect of this area for type-approvals issued for one year following the entry into force of this Regulation. It shall be possible to inscribe in this area a rectangle of 500 mm x 700 mm.

1.1.1. A vehicle to which paragraph 7.7.1.10. of Annex 3 applies shall meet the requirements of paragraph 7.6.3.1. of Annex 3 or paragraph 1.1. of this annex as

regards emergency windows and escape hatches, and the following minimum requirements as regards service doors and emergency doors:

Aperture	Dimensions	Remarks
Service Door	Aperture Height: 1,100 mm	This dimension may be reduced by a radius at the corners of the aperture not exceeding 150 mm.
	Width: Single door: 650 mm Double door: 1,200 mm	This dimension may be reduced by a radius at the corners of the aperture not exceeding 150 mm. The width may be reduced by 100 mm when the measurement is made at the level of the handholds and by 250 mm in cases where intruding wheel arches or the actuating mechanism for automatic or remote-control doors or the rake of the windscreen so require.
Emergency door	Height: 1,100 mm Width: 550 mm	The width may be reduced to 300 mm in cases where intruding wheel arches so require, providing that the width of 550 mm is respected at the minimum height of 400 mm above the lowest part of the door aperture. The upper corners may be reduced with round-offs with a radius of not more than 150 mm.

1.2. ~~Siting of exits~~

- 1.2.1. ~~The service door(s) shall be situated on the side of the vehicle that is nearer to the side of the road corresponding to the direction of the traffic in the country in which the vehicle is to be registered, or in the rear face of the vehicle.~~
- 1.2.2. ~~The exits shall be placed in such a way that there is at least one exit on each side of the vehicle.~~
- 1.2.3. ~~The forward half and the rearward half of the passenger space shall each contain at least one exit.~~
- 1.2.4. ~~At least one exit shall be situated either in the rear face or in the front face of the vehicle unless an escape hatch is fitted.~~