

Transmitted by the expert from India

**India's position regarding Regulation N. 107**

(M2 or M3 vehicles )

UNECE R 107 applies to every single-deck, double-deck, rigid or articulated vehicle of category M<sub>2</sub> or M<sub>3</sub>. In India, there are some specific passenger vehicle types such as Van, Multi-purpose/Multi-utility vehicles with passenger seat capacities of nine or more in addition to the driver's seat. The popularity of these types of vehicles is also growing day by day all over the world because of following advantages,

- Slightly taller & increased interior volume than M1 category vehicles
- Improved aesthetics.
- specific styling and structure
- Increased passenger capacities (9 & above)
- Better agility and manoeuvrability
- Particularly suited for narrow streets and/or heavy traffic.
- High stability due to low centre of gravity
- Suitable for personal use also.
- Ease in air conditioning

The construction & shape of aforesaid passenger vehicle types are different than the regular bus shape & construction. Annexure –I gives pictures of various MPV/MUV & Van type vehicles available in Indian market. On the basis of seating capacity, they would be classified as M2 but not intended to be approved as buses/ minibuses. Our national standard for buses excludes such vehicles.

The body work of these vehicles has some constructional limitations and if tested for compliance to ECE R 107, would have following difficulties. India is not a signatory to 1958 and does not apply to R 107 but while studying R 107 and its applicability to M2 vehicles having seats less than 16, India experiences following difficulties:

A) Escape Hatch & other related requirements

Escape hatches in addition to the emergency doors & windows shall be fitted for the Class B vehicles. The vehicles shown in Annexure- I are generally not fitted with the escape hatches as these vehicles are already equipped with maximum number of doors for exit of passengers in normal circumstances and in an emergency.

B) Access to at least 2 doors

Requirements for a vehicle of class B with a technically permissible maximum mass not exceeding 3.5 tonne and up to 12 passenger seats in which each seat has unobstructed access to at least two doors.

- ▶ Service door and emergency door dimensions
- ▶ “Access to service door”
- ▶ “Access to emergency doors”
- ▶ “Gangways”
- ▶ “Space for seated passengers”

The vehicle configurations shown in Annexure-I may not require unobstructed access to at least two doors by each seat (Refer Image Nos. 5, 16, 17, 18).

C) Requirement of minimum number of doors

Rear door of the passenger vehicle type as shown in image nos. 15, 17, 18 can neither be called as emergency door nor service door due to presence of last row of seats which obstructs the rear door passageway. The intended operation of the vehicles do not require rear emergency door.

D) Minimum depth for first step from ground, its width and shape.

Minimum depth for the first step shall be 230 mm for vehicles having a capacity not exceeding 22 passengers and the width & shape of this step shall be such that a rectangle of dim. 400 x 200 mm can be placed on that step with not more than 5 percent of the area of the appropriate rectangle overhanging the step. The existing dimensions for the first step provided for the vehicle shown in Annexure – I (Refer Image no. 9) are less than these requirements. Increase in step width would result in external projection and would be un-safe.

E) Requirements related to Passenger seats & space for seated passengers

The Indian seat dimensional requirements are in line with the basic existing vehicular constructional requirements & comfort/ safety for the passengers. Under these circumstances, these specific vehicle types (as per Annexure –I) may face difficulties in complying with following requirements.

- ▶ Min. Seat width
  - ▶ Min. width of available space
  - ▶ Height of seat cushion
  - ▶ Seat Spacing
  - ▶ Space for seated passengers
- Free height over seating position

F) Other requirements

The vehicles would not meet the following requirements of R 107

- ▶ Space for Fire Extinguishers
- ▶ Min. Dimensions of exits
- ▶ Requirements for Handrails & handholds

Taking into account all the above said points, India feels that a clarification may be added in R 107 for exempting specific passenger vehicle types having seats up to 16.

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Annexure - I



Seats of rear passenger compartment has access to only one door at rear





13



14



15



16



Obstruction of last row of seat in the rear door way

