



Economic and Social Council

Distr.: General
23 January 2025

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on General Safety Provisions

129th session

Geneva, 7–11 April 2025

Item 2 of the Provisional Agenda

Amendments to Regulations on Buses and Coaches:

UN Regulation No. 107 (M₂ and M₃ Vehicles)

Proposal for the 11 Series of Amendments to Regulation No. 107 (M₂ and M₃ Vehicles)

Submitted by the expert from Germany on behalf of the Task Force Accessibility on UN Regulation No. 107*

The text reproduced below was prepared by the expert from Germany on behalf of the Task Force (TF) Accessibility of Buses and Coaches and aims to modify the requirements of UN Regulation No. 107 to improve accessibility of vehicles of categories M2 and M3, class I. The work of TF started after an initiative of the International Public Transport Operators Association. The modifications to the current text of UN Regulation No. 107 are marked in bold for new and in strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2025 as outlined in proposed programme budget for 2025 (A/79/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Paragraph 2.21., amend to read:

- "2.21. *"Passenger with reduced mobility"* means all passengers who have a difficulty when using public transport, **whether or not they are users of assistive products**, such as disabled people **with physical, sensory or cognitive impairments (permanent or temporary)**, **elderly people** ~~(including people with sensory and intellectual impairments, and wheelchair users, people with limb impairments,~~ people of small stature, **pregnant women, people with children (including children seated in pushchairs)**, people with heavy luggage, **and elderly people, pregnant women,** people with shopping trolleys; ~~and people with children (including children seated in pushchairs).~~"

Paragraph 5.2., amend to read:

- "5.2. Vehicles of Class I shall be accessible for people with reduced mobility, including at least one wheelchair user and one unfolded pram or pushchair according to the technical provisions laid down in Annex 8. In rigid vehicles of Class I the area for the accommodation of a wheelchair may be combined with the area for the accommodation of an unfolded pushchair or pram. In such a case, the area shall have signs fixed on or adjacent to the area with the following text; **in letters not less than 8 mm high equivalent text or pictogram:**

"Please give up this space for a wheelchair user",

or equivalent text or pictogram."

[Paragraphs 10.23. and 10.24., amend to read:

- "10.23. ~~Contracting Parties applying this Regulation shall not refuse to grant type approvals according to any preceding series of amendments to this Regulation or extensions thereof.~~
- reserved**
- 10.24. ~~Notwithstanding paragraphs 10.20. and 10.22., Contracting Parties applying this Regulation shall continue to accept type approvals granted to the 06 or 07 series of amendments to vehicles which are not affected by the 08 series of amendments.~~
- reserved"**

Insert new paragraphs 10.35. to [10.39. / 10.41.], to read:

- "10.35. As from the official date of entry into force of the 11 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this Regulation as amended by the 11 series of amendments.
- 10.36. As from 1 September 2027, Contracting Parties applying this Regulation shall not be obliged to accept type approvals to any of the preceding series of amendments, first issued after 1 September 2027.
- 10.37. Until 1 September 2030, Contracting Parties applying this Regulation shall accept type approvals to 10 series of amendments, first issued before 1 September 2027.
- 10.38. As from 1 September 2030, Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to any of the preceding series of amendments to this Regulation.
- 10.39. Notwithstanding paragraph 10.38., Contracting Parties applying this Regulation shall continue to accept type approvals issued according to the 06, 07, 08, 09 or 10 series of amendments to this Regulation, for the vehicles which are not affected by the changes introduced by the 11 series of amendments.

- [10.40. Contracting Parties applying this Regulation may grant type approvals according to any of the preceding series of amendments to this Regulation.
- 10.41. Contracting Parties applying this Regulation shall continue to grant extensions of existing approvals to any of the preceding series of amendments to this Regulation.]"

Annex 3, paragraph 7.6.12.2.5., shall be deleted

Annex 3, paragraph 7.6.12.2.6.(former), renumber as paragraph 7.6.12.2.5.

Annex 3, paragraph 7.7.7.4., amend to read:

- "7.7.7.4 Where there is more than one step, each step may extend into the area of the vertical projection of the next step by up to 100 mm and the projection over the tread below shall leave a free surface of at least 200 mm (see Annex 4, figure 8) with all step nosing's being designed such as to minimize the risk of tripping. ~~All step nosing's shall contrast visually with their immediate surroundings.~~"

Annex 3, insert new paragraph 7.7.7.8., to read:

- "7.7.7.8. All step nosing's shall have a band of contrasting colour on the front edge of the tread. This shall be 20–50 mm wide and provide either a visual contrast of $C \geq 0.7$ and a diffuse reflectance ρ_d of at least 0.5 according to Annex 5 of the step nosing (object to be seen) or be black on yellow or yellow on black or black on white or white on black."

Annex 3, paragraph 7.11.1.5., amend to read:

- "7.11.1.5. The surface of every handrail, handhold or stanchion shall contrast visually with their immediate surroundings **and have a diffuse reflectance ρ_d of at least 0.5 according to Annex 5 or be yellow or white** ~~and be slip-resistant.~~"

Annex 3, insert new paragraph 7.11.1.6., to read:

- "7.11.1.6. **The surface of every handrail, handhold or stanchion shall be slip-resistant.**"

Annex 3, paragraph 7.7.9.1., amend to read:

- "7.7.9.1. On vehicles of Classes I, II and A, a means shall be provided to enable passengers to signal that the driver should stop the vehicle. The controls for all such communication devices shall be capable of being operated with the palm of the hand. There shall be appropriate communication devices distributed adequately and evenly throughout the vehicle and no more than 1 500 mm from the floor; this does not exclude the possibility of installing higher additional communication devices. Controls shall contrast visually with their immediate surroundings. Activation of the control shall also be indicated to the passengers by means of one or more illuminated signs. The sign shall display the words 'bus stopping' or equivalent, **in letters of not less than 50 mm high**, and/or a suitable pictogram, and shall remain illuminated until the service door(s) open. Articulated vehicles shall have such signs in each rigid section of the vehicle. Double-deck vehicles shall have them on each deck. The provisions of paragraph 7.6.11.8 of this annex apply to any textual markings used."

Annex 8, paragraph 3.2.2., amend to read:

- "3.2.2. There shall be adequate space for ~~a guide~~ **an assistance** dog under, or adjacent to, at least one of the priority seats. This space shall **be free of sharp edges** and not form a part of the gangway. **In case of vehicles of Class I, the floor area for an assistance dog shall have a minimum size of 700 mm x 400 mm. This space may overlay the required foot space of a non-priority seat by a maximum of 10 per cent.**"

Annex 8, paragraph 3.2.3., amend to read:

- "3.2.3. Armrests shall be fitted on seats between the seating position and the gangway and shall be capable of being moved easily out of the way to permit clear access to the seat.

In vehicles of Class I, these armrests shall have a minimum length of 250 mm when deployed, measured from the backrest of the seat and protrude no further than the front edge of the seat. Armrests shall be positioned so they facilitate entry and exit of the seat by a person with reduced mobility, and shall be designed in such a way as to allow the passenger to grasp them easily. The upper surface of the armrest shall be slip resistant.

In the case of seats facing each other one of the gangway seats may alternatively be fitted with a vertical stanchion. This stanchion shall be positioned so that the seat occupant is kept securely on the seat and easy access to the seat is possible."

Annex 8, paragraph 3.2.6., amend to read:

- "3.2.6. The foot space at priority seating positions shall extend forward of the seat from a vertical plane through the forward edge of the seat cushion. The foot space shall not have a slope in any direction of more than 8 per cent. ~~For vehicles of Classes I and A, the vertical distance between the floor of the seating area and the adjacent gangway shall be not more than 250 mm.~~

3.2.6.1. For vehicles of Classes I and A, this foot space shall be at the level of the adjacent gangway.

3.2.6.2. For vehicles of Class I not exceeding a width of 2.35 m, the requirements of paragraph 3.2.6.1. shall be applicable only to two of the required priority seating positions. For the other priority seating positions, the vertical distance between the floor of the seating area and the adjacent gangway shall be not more than 250 mm."

Annex 8, paragraph 3.2.8., amend to read:

- "3.2.8. Vehicles fitted with a priority seat shall have pictogram(s) in accordance with Annex 4, Figure 23B visible from the outside, both on the front nearside of the vehicle and adjacent to the relevant service door(s). A pictogram, **complying the Figure 23B**, shall be placed internally adjacent to the priority seat."

Annex 8, insert new paragraph 3.2.9., to read:

- "3.2.9. The priority seats shall be visually distinguishable from standard seats in the vehicle (e.g. by their colour or pictogram on the seat)."**

Annex 8, paragraph 3.3.1., amend to read:

- "3.3.1. Communication devices shall be placed adjacent to any priority seat, ~~and~~ within any wheelchair area **and any pram or pushchair area**, and shall be at a height between 700 mm and 1 200 mm above the floor."

Annex 8, paragraph 3.3.3.1., amend to read:

- "3.3.3.1. Provide either a visual contrast of $C \geq 0.4$ **0.7** and a diffuse reflectance ρ_d of at least 0.5 according to Annex 5 **for the button of the communication device (object to be seen)** or be ~~white or yellow~~ **black on yellow or yellow on black or black on white or white on black,**"

Annex 8., insert new paragraphs 3.3.3.4. and 3.3.3.5., to read:

"3.3.3.4. Have specific unique driver indicators different from other communication devices in the vehicle to warn the driver that a person with reduced mobility wishes to alight from the vehicle.

3.3.3.5. Be fitted with the pictograms described in Figure 23 of Annex 4. The dimensions of the pictogram may be reduced as needed."

Annex 8, paragraph 3.3.4., amend to read:

- "3.3.4. If a vehicle is fitted with a ramp or lift, a means of communication with the driver shall be fitted outside, **on or** adjacent to the door, **accessible even when**

the door is open, and at a height between 850 mm and 1,300 mm from the ground. This requirement shall not apply to a door situated in the direct field of vision of the driver."

Annex 8, paragraph 3.6.6., amend to read:

"3.6.6. Vehicles fitted with a wheelchair space shall have pictogram(s) in accordance with Annex 4, Figure 23A visible from the outside, both on the front nearside of the vehicle and adjacent to the relevant service door(s).

One of these pictograms shall be placed internally adjacent to each wheelchair space indicating whether the wheelchair is to be positioned facing the front or the rear of the vehicle. **In the case of vehicles of Class I the floor of the wheelchair space shall include a pictogram in accordance with Annex 4, Figure 23A, with a minimum diameter of 500 mm, indicating whether the wheelchair is to be positioned facing the front or the rear of the vehicle.**"

Annex 8, paragraph 3.7.3., amend to read:

"3.7.3. For vehicles of Classes I, II and A, where the foot space of any seat, or part of a folding seat when in use, intrudes into a wheelchair space, those seats shall have signs fixed on or adjacent to them, with the following text, **in letters not less than 8 mm high equivalent text or pictogram:**

"Please give up this space for a wheelchair user",

or equivalent text or pictogram.

The provisions of paragraph 7.6.11.8. of Annex 3 apply to any textual markings used."

Annex 8, paragraph 3.8.4.1.4., amend to read:

"3.8.4.1.4. A handrail or handhold shall be fitted to the side or wall of the vehicle or a partition in such a way to allow the wheelchair user to grasp it easily. This handrail shall not extend over the vertical projection of the wheelchair space, except by not more than 90 mm and ~~only~~ at a height ~~not less than~~ **between 850 mm and 1,100 mm** above the floor of the wheelchair space."

Annex 8, paragraph 3.8.4.1.6., amend to read:

"3.8.4.1.6. A sign shall be fixed adjacent to the wheelchair ~~area~~ **space in letters not less than 8 mm high**, with the following text **or any equivalent text:**

"This space is reserved for a wheelchair. The wheelchair shall be placed facing rearwards resting against the support or backrest with the brakes on".

The provisions of paragraph 7.6.11.8. of Annex 3 apply to any textual markings used."

Annex 8, paragraph 3.9.1.2., amend to read:

"3.9.1.2. In the case of interior controls in vehicles of Classes I, II and III, be on or adjacent to that door at a height of between 850 mm and ~~1,300~~ **1,200** mm from the upper surface of the floor nearest the control and be not more than 900 mm in any direction from the door aperture."

Annex 8, paragraphs 3.10.6. and 3.10.7., shall be deleted

Annex 8, paragraph 3.10.8. (former), renumber as paragraph 3.10.6.

Annex 8, paragraph 3.10.9., amend to read:

"3.10.9. Additional wheelchair areas may be combined with the area for the accommodation of an unfolded pram or pushchair provided the relevant requirements are met. In such a case, the area shall have signs fixed on or adjacent to it with the following text, **in letters not less than 8 mm high equivalent text or pictogram:**

"Please give up this space for a wheelchair user",

or equivalent text or pictogram"

Annex 8, paragraph 3.11.4.1.6., amend to read:

- "3.11.4.1.6. The outer edge of ramp surfaces available for use by a wheelchair shall be clearly marked with a band of colour 45 mm to 55 mm in width with a visual contrast with the remainder of the ramp surface of $C \geq 0.4$ **0.7 and a diffuse reflectance ρ_d of at least 0.5 according to Annex 5 of the band of colour (object to be seen) or be white or yellow black on yellow or yellow on black or black on white or white on black** of which contrasts visually. The band of colour shall extend along the outermost edge and along both edges parallel to the direction of travel of the wheelchair."

Annex 8, insert new paragraph 3.11.4.1.8., to read:

- "3.11.4.1.8. For Class I vehicles fitted with a power-operated ramp, the gap between the innermost parts of the access passage and the deployed ramp shall not exceed 75 mm on each side. This shall be measured using two vertical planes having a height of 1,090 mm from the floor, perpendicular to the longitudinal plane through the centre of the vehicle tangential to the innermost parts fitted 300 mm to the inside and 100 mm to the outside of the vehicle measured from the outer edge of the first step. When the ramp is deployed, the service-doors may be repositioned to achieve this requirement."

II. Justification

1. *Paragraph 2.21.:*

Definition of "Passenger with reduced mobility" has been rewritten to cover and include a more diverse range of passengers with reduced mobility needs.

2. *Paragraph 5.2.:*

Minimum height of letters of written text has been added to align with other paragraphs of UN Regulation No. 107.

3. *Annex 3, paragraph 7.6.12.2.5.:*

Service door lighting should be operable by manual or automatic activation. By deleting 7.6.12.2.5. both options become possible.

4. *Annex 3, paragraph 7.7.7.4. and 7.7.7.8.:*

Requirement for visual contrast improved from $C \geq 0.4$ to $C \geq 0.7$ based on ISO 21542-2021 from the building sector. Paragraph amended to clarify that the object to be seen has to provide the required reflectance. Combinations of black/yellow/white added to avoid unnecessary burden with testing and approval.

5. *Annex 3, paragraph 7.7.9.1.:*

Minimum height of letters shown on the sign that displays "Bus stopping" has been added to improve the readability based on ISO 9241-300 on ergonomics of human-system interaction.

6. *Annex 3, paragraph 7.11.1.5. and 7.11.1.6.:*

Paragraph amended to clarify that handrails, handholds or stanchions shall provide the required reflectance or be yellow or white. A minimum reflectance is required to ensure that only suitable colours are used.

7. *Annex 8, paragraph 3.2.2.:*

Modified wording "assistance dog" instead of "guide dog" added to recognize the wide range of dogs used to assist disabled people. Dimensions and design of the floor area for an assistance dog are defined recognizing the constraints on available floor space within the vehicle.

8. *Annex 8, paragraph 3.2.3.:*

Definition of the armrest length is added and general characteristics of armrests are specified.

9. *Annex 8, paragraph 3.2.6., 3.2.6.1. and 3.2.6.2.:*

Text is modified to ensure that in class I and A vehicles the foot space of the priority seats is at the level of the adjacent gangway to allow improved access to the priority seats.

10. *Annex 8, paragraph 3.2.8.:*

Reference to figure 23B added. Alignment within the Regulation.

11. *Annex 8, new paragraph 3.2.9.:*

A new requirement is added to improve the identification of priority seats from other passenger seats (e.g. by their colour or pictogram on the seat).

12. *Annex 8, paragraph 3.3.1.:*

A requirement is added that any pram or pushchair area shall be fitted with communication devices.

13. *Annex 8, paragraph 3.3.3.1.:*

Requirement for visual contrast improved from $C \geq 0,4$ to $C \geq 0,7$ based on ISO 21542-2021 from the building sector. Combinations of black/yellow/white are added to avoid unnecessary burden with testing and approval.

14. *Annex 8., new paragraphs 3.3.3.4. and 3.3.3.5.:*

New paragraphs are added to require specific driver indicators that ensure a clear information to the driver that a person with reduced mobility wants to alight from the vehicle.

15. *Annex 8, paragraph 3.3.4.:*

Paragraph is modified to ensure that the communication device at a door fitted with a ramp or lift is not permitted to be covered by, e.g. a door (e.g. door sliding to the exterior of the vehicle).

16. *Annex 8, paragraph 3.6.6.:*

A new requirement is added for a pictogram to be fitted to the floor area of the wheelchair space. Dimensions and positioning are defined to ensure a good visibility in the vehicle and to guide the wheelchair user to position the wheelchair properly.

17. *Annex 8, paragraph 3.7.3.:*

Minimum height of letters of written text is added to align with other paragraphs of UN Regulation No. 107.

18. *Annex 8, paragraph 3.8.4.1.4.:*

The position of handrails or handholds at the wheelchair space is redefined on basis of ISO 21542-2021 from the building sector.

19. *Annex 8, paragraph 3.8.4.1.6.:*

A minimum height of letters of written text is added to align with other paragraphs of UN Regulation No. 107.

20. *Annex 8, paragraph 3.9.1.2.:*

The position of interior controls is redefined on basis of ISO 21542-2021 from the building sector.

21. *Annex 8, paragraphs 3.10.6. and 3.10.7. deleted:*

Paragraphs are deleted and new detailed prescriptions for specific unique driver-indicators are included in new paragraphs 3.3.3.4. and 3.3.3.5.

22. *Annex 8, paragraph 3.10.9.:*

A minimum height of letters of written text is added to align with other paragraphs of UN Regulation No. 107. Paragraph renumbered.

23. *Annex 8, paragraph 3.11.4.1.6.:*

Requirement for visual contrast improved from $C \geq 0,4$ to $C \geq 0,7$ based on ISO 21542-2021 from the building sector. Combinations of black/yellow/white added to avoid unnecessary burden with testing and approval.

24. *Annex 8, paragraph 3.11.4.1.8.:*

New paragraph 3.11.4.1.8 is added to avoid the risk for a wheelchair user to get into a possible gap between a deployed ramp and the service-door opening.
