## Proposal for amendments to Regulation No. 107 (M2 and M3 vehicles)

The text reproduced below has been prepared by the expert from the United Kingdom to ensure all occupants of exposed seats are provided with a means of protection, and not just those at risk of being thrown forward into a step well. Modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

## I. Proposal

Annex 3, paragraphs 7.12.1. to 7.12.4., amend to read:

- "7.12.1. Where any seated passenger is likely to be thrown forward into a step well, **designated** wheelchair space, buggy space or open area for standing passengers as a result of heavy braking, either a guard or, in the case of a vehicle of Class A or B, a safety-belt shall be fitted. Where fitted, the guard shall have a minimum height from the floor on which the passenger's feet rest of 800 mm and shall extend inwards from the wall of the vehicle at least as far as 100 mm beyond the longitudinal centre line of any seating position where the passenger is at risk or, in the case of a step well, to the riser of the innermost step; whichever is the lesser dimension.
- 7.12.2. Paragraph 7.12.1. shall not apply to any sideways facing seat, a seat which has its centreline within the longitudinal projection of a gangway, a seat in front of which is existing vehicle structure (e.g. fixed table or luggage pen) [offering comparable levels of protection as a guard meeting the requirements of paragraph 7.12.1.] or transverse facing seats where the maximum distance between the front faces of the seat squabs of facing seats does not exceed [1,800 mm] when measured in accordance with paragraph 7.7.8.4.3.
- 7.12.23. On the upper deck of a double-deck vehicle, the intercommunication staircase well shall be protected by an enclosed guard having a minimum height of 800 mm measured from the floor. The lower edge of the guard shall not be more than 100 m from the floor.
- 7.12.34. The front windscreen ahead of passengers occupying the upper deck front seats of a double-deck vehicle must be provided with a padded guard. The higher edge of that protection shall be situated vertically between 800 mm and 900 mm above the floor where the passenger's feet rest.
- 7.12.45. The riser of each step in an intercommunication staircase of a double-deck vehicle shall be closed."

## II. Justification

- 1. While bus and coach travel across Europe is statistically one of the safest forms of road transport, the EU CARE database recorded 148 fatalities and 1709 seriously injured occupants across 23 European countries in 2013. During the same year, 7 passengers died in Great Britain from injuries received whilst travelling on a bus or coach and a further 250 receive serious injuries over half of all casualties are seated passengers<sup>1</sup>.
- 2. Incident reports confirm that some of these relate to occupants of exposed seats who are thrown forward during heavy braking or vehicle impact conditions, often sustaining head injuries from contact with the vehicle floor or other hard structure. Seats particularly affected are those located immediately to the rear of an open wheelchair or buggy space these seats are often preferred by passengers of reduced mobility, irrespective of whether they are designated priority seats.
- 3. This proposal aims to reduce this risk by extending existing requirements for exposed seats adjacent to step wells, to apply to other exposed seats where there is a risk of the occupant being thrown forwards.

Great Britain road casualty data - average of bus and coach casualties (excluding minibuses) 2009-2013 inclusive.