Draft Recommendations on the Functionality of Door Release Devices

Scope

These recommendations are applicable to internal and external door release devices used on vehicles of categories M2 and M3.

Purpose

To ensure the successful deployment of door release devices by crew, passengers and persons attending emergency situations.

Device location

Ensure that the release device and instructions for its operation are at a height at which they can be easily seen, read and the device operated.

Handle hardware

The release device shall be easy to operate; forces shall be appropriate for the device.

Push button release devices shall have a minimum diameter of 10 mm if for fingertip operation and of 20 mm if for thumb or palm operation. The force required to operate the push button shall not exceed 11 N in the case of fingertip operation and 23 N if the release device is thumb or palm operated.

Rotary knob release devices shall have a diameter not exceeding 75 mm; the operating torque of which shall not exceed 0.6 Nm. The angular displacement of the device shall not exceed 90° .

The form of the device and the size of any apertures or housings shall be capable of allowing easy access and operation of the device by a gloved hand having a closed-fist width of 140 mm.

Devices used in close proximity of one another shall be of different form in order to avoid confusion if located in the same area. The use of different colours is not sufficient as in poor light or smoky conditions differentiation by colour may be difficult.

Door systems shall be capable of being opened within a few seconds of the device being activated. In cases where a delay exists, then this shall be made clear in the operating instructions by symbol and text.

In cases where doors have to be slid open manually, the addition of hand holds aids both as a visual clue as to where to place hands and makes opening the doors easier.

Signage

The instructions for the operation of door release devices shall be displayed as a safe condition sign, i.e. white on a green background, and be graphically integrated with the device. The sign shall surround or border the device and shall the two shall be of an identical colour. No part of the sign shall cover any misuse protection or tamper proofing, e.g. a cover, that may be present. The device shall be clearly visible and identifiable at all times.

Other signs in the proximity of the door aperture shall not have the same form or colouring as the sign for the door release device.

Where a door release device is placed in a position that may make it difficult to see from the normal line of sight of passengers in the doorway there shall be additional signs pointing to the location of the device.