

Statutory Document No. XX/20XX



Road Traffic Act 1985

BUSES (CARRIAGE OF PASSENGERS FOR HIRE OR REWARD) (CONSTRUCTION AND USE) (AMENDMENT) REGULATIONS 2016

Approved by Tynwald:

Coming into Operation:

1 July 2016

The Department of Infrastructure makes the following Regulations under section 74 of, and paragraphs 1 and 2 of Schedule 2 to, the Road Traffic Act 1985.

1 Title

These Regulations are the Buses (Carriage of Passengers for Hire or Reward) (Construction and Use) (Amendment) Regulations 2016.

2 Commencement

If approved by Tynwald¹, these Regulations come into operation on 1 July 2016.

3 Amendment of the Buses (Carriage of Passengers for Hire or Reward) (Construction and Use) Regulations 2001

The Buses (Carriage of Passengers for Hire or Reward) (Construction and Use) Regulations 2001 are further amended in accordance with the following provisions of these Regulations.


4 Amendment of regulation 3 (application and exemptions)

(1) Regulation 3 is amended as follows.

(2) For paragraphs (7) and (8) substitute —

- ☐(7) If a bus complies with Part IV and in consequence fails to meet certain requirements of Part II, the vehicle is to be taken as meeting those requirements.

¹ As required by section 74(3) of the Act

- (8) An accessibility certificate, declaration of conformity or conformity certificate issued in respect of a bus under the Public Service Vehicles Accessibility Regulations 2000² or the Public Service Vehicles Accessibility Regulations (Northern Ireland) 2003³ is to be taken as sufficient evidence that the vehicle complies with Part IV. .

5 New Part IV (accessibility requirements)

After Part III add —

PART IV ACCESSIBILITY REQUIREMENTS

DIVISION 1 — PRELIMINARY

49 Interpretation of this Part

In this Part —

- “the 1976 Directive” means EC Directive 76/115/EEC (as amended) on the approximation of the laws of the member states relating to anchorages for motor vehicle safety belts;
- “the 1977 Directive” means EC Directive 77/541/EEC (as amended) on the approximation of the laws of the member states relating to safety belts and restraint systems of motor vehicles;
- “boarding lift” means a lift fitted to a bus for the purpose of allowing wheelchair users to board and alight from the vehicle;
- “boarding ramp” means a ramp fitted to a bus for that purpose;
- “bus” means a bus to which this Part applies;
- “deep”, in relation to a step, means the distance from the outer edge of the nosing of the step tread to the riser of that tread;
- “doorway area” means the area that is within one metre of any entrance or exit as measured horizontally from any point along the external edge of the door aperture;
- “driver”, in relation to any bus or its equipment, means the driver of the vehicle;
- “exit”, in relation to a bus, does not include an exit which is provided for use only in the event of an emergency;
- “external step” means the last step or platform from an entrance or exit leading directly from a bus to the ground;

² SI 2000/1970 made under the Disability Discrimination Act 1995 (of Parliament)

³ SR & O 2003/37

“g” means 9.81 m/s²;

“kg” means kilograms;

“km/h” means kilometres per hour;

“kneeling system” means a system that enables the bodywork of a bus to be lowered relative to its normal height of travel;

“m” means metres and “mm” means millimetres;

“m/s” means metres per second and “m/s²” means metres per second per second;

“N” means newtons;

“normal height of travel” means the height specified by a bus’s manufacturer for normal travel;

“optical device” means any device (including a mirror, closed circuit television or optical cable) that provides the driver of a bus with a view of an area of the vehicle;

“portable ramp” means a ramp that is carried on a bus for the same purpose as a boarding lift;

“priority entrance” or “priority exit” means respectively an entrance or exit (not fitted in either case to the off side of a bus) providing access to or from, as the case may be, the priority floor area in accordance with regulation 60(2)(b);

“priority floor area” means a single continuous area of floor space comprising not less than 35 per cent of the total area of a bus;

“priority seat” means a seat designated as such in accordance with regulation 61;

“reference wheelchair” means an occupied wheelchair with the dimensions shown in diagram A in Division 3;

“seat” means a seat intended for use by passengers and does not include a driver’s seat or crew seat;

“total floor area” means —

(a) the total floor area of a bus, or

(b) in the case of a double-decked vehicle, the total floor area of the vehicle’s lower deck,

excluding the driver’s cab, wheelboxes, stepwells, internal staircases, and any space designated for the storage of luggage;

“wheelchair restraint system” means a system that is designed to keep a wheelchair restrained within the wheelchair space;

“wheelchair user” means a disabled person using a wheelchair; and

“wheelchair user restraint system” means a system that is designed to keep a wheelchair user restrained in a wheelchair.

50 Application of Part IV

- (2) This Part applies to buses which —
 - (a) are constructed or adapted to carry more than 22 passengers in addition to the driver and other crew; and
 - (b) are providing a regular service within the meaning of regulation 46(2).
- (3) However, this Part does not apply to such buses first used before 1 July 2016.
- (4) Whereas the Department of Infrastructure is satisfied —
 - (a) that it is requisite that the provisions of Part IV shall apply as from 1 July 2016 to vehicles registered under the Licensing and Registration of Vehicles Act 1985; and
 - (b) that, despite such application of those provisions to those vehicles, no undue hardship or inconvenience will be caused by it, paragraph 2(1) of Schedule 2 to the Road Traffic Act 1985 does not apply to those provisions.
- (5) For the purposes of this regulation the date on which a bus is first used is to be construed in accordance with regulation 2(3) and (4) of the Road Vehicles (Construction, Equipment and Weights) Regulations 2012.

DIVISION 2 — WHEELCHAIR ACCESSIBILITY REQUIREMENTS**51 Wheelchair spaces**

- (1) A bus must be fitted with at least one wheelchair space.
- (2) Any wheelchair space must be provided in the lower deck of a double-decked vehicle.
- (3) Any wheelchair space must comply with the requirements prescribed in either regulation 52 or regulation 53.

52 Forward-facing wheelchairs

- (1) A wheelchair space must —
 - (a) not be less than —
 - (i) 1.3 m as measured in the longitudinal plane of the bus,
 - (ii) 750 mm as measured in the transverse plane of the bus, and
 - (iii) 1.5 m as measured vertically from any part of the floor of the wheelchair space;
 - (b) allow the carriage of a wheelchair and a wheelchair user facing the front of the bus; and
 - (c) be fitted with —

- (i) a wheelchair restraint system suitable for general wheelchair application, and
 - (ii) a wheelchair user restraint system that comprises a minimum of 2 anchorages and a pelvic restraint (lap belt) designed and constructed of components intended to perform in a similar manner to those of a seat belt conforming to the 1977 Directive.
- (2) Any such wheelchair restraint system or wheelchair user restraint system must be capable of being easily released in the event of an emergency.
- (3) Any wheelchair restraint system must –
 - (a) be securely attached to vehicle anchorages meeting the static test requirements in paragraph (8) and comply with the dynamic test requirements in paragraph (10); or
 - (b) be securely attached to vehicle anchorages so that the combination of restraint and anchorages meets the requirements in paragraph (10) when the anchorages comply with paragraph (11) (b).
- (4) Any wheelchair user restraint system must –
 - (a) be securely attached to vehicle anchorages meeting the static test requirements in paragraph (8) and comply with the test requirements in paragraph (12).; or
 - (b) be securely attached to vehicle anchorages so that the combination of restraint and anchorages meets the test requirements in paragraph (12) when fitted to a representative section of the vehicle structure as described in paragraph (8)(d).
- (5) One or more seats that are capable of being tipped, folded or otherwise moved may lie within the wheelchair space specified in paragraph (1)(a) or within the gangway specified in regulation 56, provided that the seat is capable of being easily moved out of that space or the gangway.
- (6) The clear space in front of any seat may lie within any such space or the gangway.
- (7) A sign must be displayed on or near a seat to which paragraphs (5) and (6) refer stating “Please give up this seat for a wheelchair user” or words to the same effect.
- (8) A static test must be carried out on the anchorage points for both the wheelchair restraint system and the wheelchair user restraint system in accordance with the following requirements –
 - (a) the forces specified in paragraph (9) are to be applied –
 - (i) by means of a device reproducing the geometry of the wheelchair restraint system, and

- (ii) by means of a device reproducing the geometry of the wheelchair user restraint system and by means of a traction device specified in paragraph 5.3.4 of Annex I to the 1976 Directive;
 - (b) those forces —
 - (i) in the case of sub-paragraph (a)(i), are to be applied in the rearward direction, and
 - (ii) in the case of sub-paragraph (a)(i) and (ii), are to be applied simultaneously in the forward direction, at an angle of $10^{\circ} \pm 5^{\circ}$ above the horizontal plane.
 - (c) those forces —
 - (i) are to be applied as rapidly as possible through the central vertical axis of the wheelchair space, and
 - (ii) are to be maintained for a period of not less than 0.2 seconds; and
 - (d) the test is to be carried out on a representative section of the vehicle structure together with any fitting that is provided in the bus and likely to contribute to the strength or rigidity of the structure.
- (9) The forces referred to in paragraph (8) are —
- (a) in the case of anchorages provided for a wheelchair restraint system fitted to a bus not exceeding a maximum gross weight of 5,000 kg —
 - (i) 11,100 N applied in the longitudinal plane and towards the front of the vehicle at a height not less than 200 mm and no more than 300 mm as measured vertically from the floor of the wheelchair space,
 - (ii) 5,500 N applied in the same plane and towards the rear of the vehicle at such a height;
 - (b) in the case of anchorages provided for such a system fitted to a bus exceeding that weight —
 - (i) 7,400 N applied in the same manner and at such a height as are specified in sub-paragraph (a)(i), and
 - (ii) 3,700 N applied in the same manner and at such a height as are specified in sub-paragraph (a)(ii);
 - (c) in the case of anchorages provided for a wheelchair user restraint system fitted to a bus, such forces as accord with the requirements of paragraph 5.4 of Annex I to the 1976 Directive.
- (10) A wheelchair restraint system must be the subject of a dynamic test carried out in accordance with the following requirements —

- (a) a representative wheelchair test trolley weighing 85 kg must, from a speed no less than 48 km/h and no greater than 50 km/h to rest, be subjected to a deceleration-time pulse in the forward direction which —
 - (i) exceeds 20 g for a cumulative period of at least 0.015 seconds,
 - (ii) exceeds 15 g for a cumulative period of at least 0.04 seconds,
 - (iii) is for an overall duration of not less than 0.075 seconds and no more than 0.12 seconds,
 - (iv) is not at 28 g for a duration of more than 0.08 seconds, and
 - (v) does not exceed 28 g;
 - (b) such a trolley must, from such a speed to rest, be subjected to a deceleration-time pulse in the rearward direction which —
 - (i) exceeds 5 g for a cumulative period of at least 0.015 seconds,
 - (ii) is not at 8 g for a duration of more than 0.02 seconds, and
 - (iii) does not exceed 8 g,but this sub-paragraph does not apply if the same restraints and direction of loading are used for the forward and rearward directions or if an equivalent test has been conducted.
- (11) In the case of a dynamic test under paragraph (10), the wheelchair restraint system must be attached to —
- (a) anchorages fixed to a test rig representing the geometry of the anchorages in the bus for which the system is intended; or
 - (b) anchorages forming part of a representative section of that bus, being a section set up as described in paragraph (8)(d).
- (12) A wheelchair occupant restraint must comply with —
- (a) the test requirements specified in paragraph 2.7.8.4 of Annex I to the 1977 Directive; or
 - (b) an equivalent test to the deceleration-time pulse prescribed in paragraph (10)(a),
- but a seat belt type approved and marked in accordance with the 1977 Directive shall be taken to comply.
- (13) A test prescribed in paragraph (8), (10) or (12) fails unless the following conditions are met —
- (a) during the test no part of the system has failed or has become detached from its anchorage or the bus;
 - (b) mechanisms to release the wheelchair and user are capable of releasing them after the completion of the test;

- (c) in the case of a test prescribed in paragraph (10), the wheelchair has not moved during the test more than 200 mm in the longitudinal plane of the test rig or bus; and
- (d) no part of the system has been deformed during the test to such an extent that sharp edges or other protrusions are capable of causing injury.

53 Rearward-facing wheelchairs

- (1) A wheelchair space must —
 - (a) meet the requirements specified in regulation 52(1)(a);
 - (b) allow the carriage of a wheelchair and a wheelchair user facing the rear of the bus;
 - (c) be equipped with a backrest —
 - (i) fitted to the front end of the wheelchair space,
 - (ii) positioned centrally with respect to that end, and
 - (iii) fitted with a padded surface facing the rear of the bus;
 - (d) be equipped with a horizontal handrail which —
 - (i) is fitted along at least one of the longitudinal sides of the wheelchair space,
 - (ii) is at a height of not less than 850 mm and no more than 1 m, as measured vertically from the floor of that space,
 - (iii) runs continuously from a point no more than 300 mm to the rear of the front end of that space to a point not less than 1 m to the rear of that end, as measured horizontally,
 - (iv) does not extend into that space by more than 90 mm as measured horizontally from the edge of that space,
 - (v) is capable of being easily and firmly grasped by a wheelchair user,
 - (vi) has a circular cross section with a diameter not less than 30 mm and no more than 35 mm,
 - (vii) has a clear space of not less than 45 mm between any part of the bus and all parts of the handrail other than its mounting, and
 - (viii) contrasts in reflected light with the parts of the bus adjacent to the handrail.
- (2) Any backrest mentioned in paragraph (1)(c) must comply with the following requirements —
 - (a) its bottom edge must be at a height of not less than 350 mm and no more than 480 mm, as measured vertically from the floor of the wheelchair space;

- (b) its top edge must be at a height of not less than 1.3 m as so measured;
 - (c) its width must be —
 - (i) not less than 270 mm and no more than 420 mm up to a height of 830 mm as so measured, and
 - (ii) not less than 270 mm and no more than 300 mm up to a height exceeding 830 mm as so measured;
 - (d) it must be fitted at an angle of not less than 4° and no more than 8° to the vertical with its bottom edge positioned closer to the rear end of the bus than its top edge;
 - (e) its padded surface must —
 - (i) form a single and continuous plane, and
 - (ii) pass through any point on an imaginary vertical plane situated —
 - (A) to the rear of the front end of the wheelchair space, and
 - (B) not less than 100 mm and no more than 120 mm from that end,as measured horizontally, and extending not less than 830 mm and no more than 870 mm from the floor of that space, as measured vertically;
 - (f) the backrest must —
 - (i) be capable of bearing for a minimum of 2 seconds a load of 2,000 N applied in the manner prescribed in paragraph (3), and
 - (ii) not consequentially deflect more than 100 mm or suffer permanent deformation or damage.
- (3) A load to which paragraph (2)(f)(i) refers is applied in the prescribed manner if it is applied by means of a block 200 mm by 200 mm square in the longitudinal plane of the bus to the padded surface of the backrest at a height not less than 600 mm and no more than 800 mm, as measured vertically from the floor of the wheelchair space.
- (4) A clear space of not less than 750 mm must be maintained in the lateral plane of the wheelchair space.
- (5) In order to restrict the lateral movement of a reference wheelchair, there must be a distance no greater than 900 mm (as measured in the aforementioned plane) between any 2 of the adjacent means of support fitted on each side of the wheelchair space and mentioned in paragraph (6).
- (6) The adjacent means of support so fitted are —
- (a) a vertical stanchion complying with the following requirements —

- (i) it must be situated to the rear of the front end of the wheelchair space and run continuously from the floor of that space to a height of not less than 1.5 m,
 - (ii) its base must be not less than 400 mm and no more than 560 mm from that end, as measured horizontally, and
 - (iii) it must not be less than 540 mm and no more than 560 mm from that end (as so measured) at heights exceeding 775 mm (as measured vertically from the floor of that space); or
 - (b) a retractable rail extending continuously, and at the height prescribed in paragraph (7), from a point no more than 200 mm from the front end of the wheelchair space to a point not less than 540 mm from that end, as measured horizontally; or
 - (c) a partition, the side wall of the bus, or equipment fitted to the side wall, as so extending and at that height.
- (7) For the purposes of paragraph (6)(b) and (c) the prescribed height is not less than 600 mm and no more than 800 mm from the floor of the wheelchair space, as measured vertically.
- (8) Any stanchion, retractable rail, partition or side wall to which paragraph (6) refers (“a device”) must –
- (a) be capable of bearing for a minimum of 2 seconds a load of 1,000 N applied in the manner prescribed in paragraph (9); and
 - (b) not consequentially deflect more than 50 mm or suffer permanent deformation or damage.
- (9) A load to which paragraph (8)(a) refers is applied in the prescribed manner if it is applied by means of a block 200 mm by 200 mm square in the transverse plane of the wheelchair space to the centre of the device at a height mentioned in paragraph (3).
- (10) One or more seats that are capable of being tipped, folded or otherwise moved may lie within the wheelchair space specified in regulation 52(1)(a) or within the gangway specified in regulation 56, provided that the seat is capable of being easily moved out of that space or the gangway.
- (11) The clear space in front of any seat may lie within any such space or the gangway.
- (12) A sign must be displayed on or near a seat to which paragraphs (10) and (11) refer stating “Please give up this seat for a wheelchair user” or words to the same effect.
- (13) In this regulation “front end of a wheelchair space” means the end of the wheelchair space that is closer to the front end of the bus in which the space is provided.

54 Boarding lifts and ramps

- (1) A bus must —
 - (a) be equipped with at least one boarding lift or boarding ramp; or
 - (b) carry at least one portable ramp.
- (2) Any such boarding lift or boarding ramp must —
 - (a) have a safe working load of not less than 300 kg;
 - (b) not suffer any permanent deformation when —
 - (i) it is subjected for a period of not less than 10 seconds to a uniformly distributed weight equal to 125 per cent of the safe working load, and
 - (ii) the load is removed;
 - (c) have its maximum safe working load marked in a position that is clearly visible to the operator of the lift or ramp; and
 - (d) not allow the bus in the normal course to be driven away unless the lift or ramp is at its normal position for vehicle travel.
- (3) Any such boarding ramp must comply with the following requirements —
 - (a) it must have a surface not less than 800 mm wide;
 - (b) no part of that surface or of the bus may present an obstruction greater than 15 mm in height as measured —
 - (i) along a plane above and parallel to that surface, and
 - (ii) in the direction of travel of a reference wheelchair moving into or from the bus;
 - (c) when, save as provided in paragraph (4), —
 - (i) the bus is on a flat surface in the normal position for a wheelchair user to board or alight, and
 - (ii) the ramp is extended and sits on a kerb of 125 mm in height as measured vertically and parallel to the ground, the surface of the ramp must have a slope measured over its surface of no more than 7° as measured relative to the ground;
 - (d) when sub-paragraph (c)(i) applies —
 - (i) the ramp must be capable of being extended to, and of sitting on, the surface on which the bus rests, and
 - (ii) in this position the surface of the ramp must have a slope measured over its surface of no more than 20° as measured relative to the ground;
 - (e) the ramp must be free of sharp edges or other protrusions capable of causing injury; and

- (f) around and abutting each edge of the ramp there must be a band of colour that is not less than 50 mm wide and contrasts in reflected light with the rest of the ramp's surface.
- (4) Despite paragraph (3)(c), a boarding ramp may have —
- (a) at the intersection of the surface of the kerb and the surface of the ramp, a slope not exceeding 15° relative to the ground over a distance of no more than 150 mm as measured along the ramp's surface and parallel to the direction of a reference wheelchair moving from the kerb on to that surface; and
- (b) at any other point, a slope not exceeding 15° relative to the ground over a distance of no more than 150 mm (as measured along the ramp's surface and parallel to the direction of travel of a reference wheelchair moving into the bus) and rising to a height of no more than 15 mm (as measured above and parallel to the ramp's surface).
- (5) Any boarding lift with which a bus is equipped must comply with the following requirements —
- (a) a boarding lift platform must be not less than 750 mm wide and not less than 200 mm long (excluding a device mentioned in subparagraph (b));
- (b) unless such a platform is in the lowered position and resting on a surface from which a wheelchair user boards —
- (i) a device —
- (A) of a height not less than 100 mm as measured vertically above the platform's surface, and
- (B) along any side of the platform from which a wheelchair user moves on to or from it,
- must operate automatically as the lift is raised above the lowered position and permit the wheelchair user in the raised position to move without obstruction to the floor of the bus, and
- (ii) along any other side of the platform there must be a device or structure of a height not less than 25 mm as measured vertically above the platform's surface,
- but part of the vehicle structure may fulfil the requirements of head (i) or (ii) throughout the operating range of the lift, provided that any gaps in the structure are unlikely to cause injury while the lift is in motion;
- (c) the vertical operating speed of the platform must not exceed 0.15 m/s;
- (d) when paragraph (3)(c)(i) applies, the lift must be capable of being lowered to, and of sitting on, the surface on which the bus rests;

- (e) if the vertical travel of the platform exceeds 500 mm —
 - (i) a secure horizontal handrail must be fitted to at least one side of the platform at a height not less than 650 mm or more than 1.1 m as measured vertically from the platform's surface, or
 - (ii) a vertical handrail that does not move with the platform must be fitted on at least one side of it to provide a grasping point at the same height above the platform's surface throughout the range of its vertical travel; and
 - (f) around and abutting each edge of the lift there must be a band of colour that is not less than 50 mm wide and contrasts in reflected light with the rest of the lift's surface.
- (6) Subject to paragraphs (7) to (9), any power-operated boarding lift or power-operated boarding ramp with which a bus is equipped must —
- (a) be capable of operation by means of a control located —
 - (i) in the driver's cab, or
 - (ii) adjacent to the lift or ramp, but the control must be capable of being activated only by means of a master control in the driver's cab;
 - (b) produce an audible signal when in operation;
 - (c) be capable of being manually operated, but if the bus is equipped with more than one lift or ramp, at least one of them that is capable of being so operated must be accessible to each wheelchair user;
 - (d) be incapable of operation when the bus is in motion;
 - (e) in the case of a ramp, be fitted with a safety device that stops the movement of the ramp in the event that —
 - (i) the ramp is subjected to a reactive force exceeding 150 N in any direction, and
 - (ii) its movement could cause injury to a passenger; and
 - (f) in the case of a lift —
 - (i) be fitted with sensors capable of stopping the movement of the lift platform in the event that it comes into contact with any person or thing while it is in motion, and
 - (ii) be capable of reversing such movement when the platform is so stopped.
- (7) However —
- (a) a bus may carry a portable ramp as an alternative to complying with paragraph (6)(c); and

- (b) paragraph (6)(f) does not apply to a power-operated lift that can be operated only by a control fitted in accordance with paragraph (6)(a)(ii).
- (8) If there are areas of a power-operated boarding lift that are not visible to a person operating it —
- (a) the lift must be fitted with a stop control which —
 - (i) is within easy reach of any user of the lift, and
 - (ii) is operable with the palm of a hand; and
 - (b) when the stop control is activated, the movement of the lift, once stopped, must be capable of being reversed.
- (9) If a portable ramp is carried on a bus, the ramp must —
- (a) not easily be moved when —
 - (i) it is in the normal position for a wheelchair user to board or alight from the bus, and
 - (ii) it is being used for that purpose;
 - (b) be securely stowed in a position where —
 - (i) it is readily available for use, and
 - (ii) the risk of injury to the passengers, driver and other crew is minimised; and
 - (c) comply with paragraph (2)(a), (b) and (c) as if a reference to a boarding ramp were a reference to a portable ramp.
- (10) In this regulation “master control” means a control which —
- (a) enables another control to activate the relevant system; but
 - (b) is not itself capable alone of activating that system.

55 Entrances and exits

- (1) Any entrance or exit intended to provide access for a wheelchair user must have a clear unobstructed width of not less than 800 mm.
- (2) If such an entrance or exit is to a power-operated boarding lift or power-operated boarding ramp that is not within the direct field of vision of the driver —
 - (a) the entrance or exit must be fitted with an optical device; and
 - (b) the device must enable the driver to have a clear unobstructed view of the inside and outside of the door area and of the operation of the lift or ramp.
- (3) However, paragraph (2) does not apply to such a lift or ramp that can be operated only by means of a control fitted in accordance with regulation 54(6)(a)(ii).

56 Gangways

Any gangway between a wheelchair space and an entrance or exit intended to provide access for a wheelchair user must —

- (a) allow —
 - (i) a reference wheelchair to be moved from an entrance to that space and from that space to an exit,
 - (ii) the wheelchair user to move in a forward-facing direction for that purpose, and
 - (iii) the wheelchair to be moved in either direction from the gangway into that space in the appropriate direction for travel; and
- (b) be not less than 750 mm wide at any point along the gangway.

57 Signs and markings

- (1) A bus must display a sign conforming with diagram B in Division 3 or a sign of equivalent meaning, being a sign which in either case —
 - (a) is coloured white on a blue background,
 - (b) is of dimensions —
 - (i) not less than 150 mm by 150 mm when fitted externally, and
 - (ii) not less than 60 mm by 60 mm when fitted internally; and
 - (c) is situated in a position clearly visible to a wheelchair user —
 - (i) on the exterior of the bus adjacent to any entrance for his or her use,
 - (ii) in the interior of the bus adjacent to any exit for such use, and
 - (iii) adjacent to any wheelchair space.
- (2) There must be displayed adjacent to a wheelchair space and in a position clearly visible to a wheelchair user —
 - (a) a sign indicating the direction that the wheelchair user will face during travel; and
 - (b) appropriate safety instructions on the use of the space.
- (3) If a bus is fitted with a wheelchair space for a forward-facing wheelchair in accordance with regulation 52, instructions on the use of the wheelchair restraint system and wheelchair user restraint system must be displayed in a position readily available to any person using them.

58 Communication devices

- (1) A communication device must be fitted to a bus in a position which is —

- (a) adjacent to a wheelchair space and readily operable by a person using it;
 - (b) save as provided in sub-paragraph (c), on the exterior of the bus adjacent to any entrance for wheelchair access that is outside the direct view of the driver; and
 - (c) in a case where the entrance is in the rear of the bus, on the rearmost part of the vehicle's external side face from which such access is gained.
- (2) A device fitted in accordance with paragraph (1)(a) must comply with the following requirements —
- (a) it must be operable by the palm of a hand;
 - (b) its surround must contrast in reflected light with it and with the surface on which the surround is mounted; and
 - (c) when operated, the device must —
 - (i) activate an audible signal to the driver and may, on being operated subsequently, provide a visual signal to the driver until the opening of at least one of the exits,
 - (ii) activate an audible signal in the passenger area, and
 - (iii) activate at least one illuminated stopping sign —
 - (A) on each deck of the bus, or
 - (B) in the case of an articulated bus, in each section of the vehicle,

being a sign that is or would be within the field of vision of passengers seated in a majority of the seats on that deck or in that section.
- (3) A device fitted in accordance with paragraph (1)(b) or (c) must be at a height not less than 850 mm and no more than 1 m, as measured vertically from the ground to the centre of the device, subject to the bus being at its minimum height if it is fitted with a kneeling system.
- (4) An illuminated stopping sign must —
- (a) not use only capital letters; and
 - (b) display the illuminated word “stopping”, or a word or words to the same effect, immediately a communication device is activated until at least one of the exits is open.

59 Lighting

- (1) The interior must be sufficiently illuminated by lighting to allow a wheelchair user to board and alight from the bus in safety.
- (2) Any such lighting must have a means of terminating its operation when —
 - (a) the bus is in motion; and

- (b) the use of the lighting is likely to affect adversely the driver's vision.

DIVISION 3 — WHEELCHAIR DIMENSIONS AND SIGN

DIVISION 4 – GENERAL ACCESSIBILITY REQUIREMENTS

60 Floors and gangways

- (1) All floors within the total floor area of a bus must be slip-resistant.
- (2) A bus must contain a priority floor area which —
 - (a) is free of steps;
 - (b) provides access to —
 - (i) at least one priority entrance to, and one priority exit from, the vehicle, or
 - (ii) steps leading to them;
 - (c) includes all priority seats specified in regulation 61; and
 - (d) has a slope of no more than 3° in any direction, or no more than 5° in any direction within the doorway area, when the vehicle is unladen, standing on a level surface, and in its normal condition of travel.
- (2) Any gangway within the priority floor area of a bus must have a width of —
 - (c) not less than 450 mm up to a height of 1.4 m; and
 - (d) not less than 550 mm at heights exceeding 1.4 m.

61 Priority seats

- (1) A bus must have no fewer than 4 seats designated by signs complying with paragraph (3) as priority seats for use by disabled persons.
- (2) Any such seat must comply with the following requirements —
 - (a) it must not be a seat that is capable of being tipped, folded or otherwise moved;
 - (b) it must face only the front or the rear of the bus;
 - (c) it must not be a seat to which regulation 52(5) or (8) or 53(10) applies;
 - (d) it must be as close as practicable to a priority entrance;
 - (e) there must be adequate space under or adjacent to at least one priority seat for the comfortable accommodation of a dog trained to assist a disabled person;
 - (f) any armrest fitted to a priority seat must be movable to the extent required to enable unrestricted access by a disabled person to —
 - (i) that seat, or
 - (ii) any other priority seat to which access may be gained past that seat;
 - (g) a cushion of a priority seat must —

- (i) have a width of not less than 440 mm as measured at the widest point across its surface, and
 - (ii) be so located that such a distance is equally spaced on either side of the centre line of the seating position;
- (h) the top surface of such a cushion must be at a height not less than 400 mm and no more than 500 mm above the floor of the bus as measured —
 - (i) from the front edge of the seat, and
 - (ii) along an imaginary line passing vertically from the centre line of the seating position to the floor;
- (i) if a priority seat faces in the same direction as a seat directly in front of it —
 - (i) the distance between the front surface of the back of the priority seat and the back of the seat in front (as measured along an imaginary horizontal line passing along the top surface of the priority seat's cushion and through the centre line of its seating position) must not be less than 650 mm, and
 - (ii) in a case where the back of either seat is adjustable, that measurement must be made when the seat or seats is or are in the manufacturer's nominal position for normal use;
- (j) if a priority seat faces any other seat —
 - (i) the distance between the front surface of the back of the priority seat and the front surface of the back of the facing seat (as so measured in sub-paragraph (i)(i)) must not be less than 1.3 m, and
 - (ii) sub-paragraph (i)(ii) applies here as it applies there.
- (k) the top surface of a priority seat's cushion must be such that there is —
 - (i) not less than 1.3 m of clear space above any point along the front edge of that surface,
 - (ii) not less than 900 mm of clear space above any point along the rear edge of that surface, and
 - (iii) clear space between any point on that surface and an imaginary plane connecting the maximum height of clear space specified in head (i) to the maximum height of clear space specified in head (ii),as measured vertically from that surface;
- (l) if a priority seat faces in the same direction as a seat directly in front of it or if the priority seat faces a bulkhead or partition, there must be —

- (i) above an imaginary horizontal plane passing along the top surface of a priority seat's cushion and extending in front of the front edge of that cushion, a clear space of the following dimensions —
 - (A) not less than 230 mm as measured in the longitudinal plane of that seat,
 - (B) not less than 420 mm as measured in the transverse plane of that seat and as spaced equally on either side of the centre line of the seating position, and
 - (C) a height not less than the height of the back of that seat,
 - (ii) below such a plane, a clear space of —
 - (A) such dimensions of not less than 230 mm and 300 mm as correspond respectively to those mentioned in head (i)(A) and (B), and
 - (B) a height not less than the height of the priority seat's cushion,
- but if a priority seat faces a bulkhead or partition that is more than 1.2 m high as measured vertically from the floor of the bus, those dimensions as measured in the longitudinal plane of that seat must not be less than 300 mm.
- (3) On or near a priority seat there must be displayed a sign indicating that disabled persons have priority for the use of that seat.
 - (4) In paragraph (2) “manufacturer's nominal position for normal use” means, in relation to an adjustable seat, the position that the manufacturer recommends, or has nominated, as the normal position for using that seat.

62 Steps

- (1) Steps for use by passengers in a bus must comply with the following requirements —
 - (a) the surface of each tread must be covered in a slip-resistant material;
 - (b) step nosings must be designed to minimise the risk of tripping;
 - (c) across the front edge of each tread there must be a band of colour which —
 - (i) is not less than 45 mm and no more than 50 mm in width, and

- (ii) contrasts in reflected light with the rest of the tread;
- (d) the rear of a step must be closed by a vertical riser between the rear of the tread and either the front edge of the tread above or the floor above of the bus;
- (e) any step, not being —
 - (i) an external step,
 - (ii) a step to a seat fitted to any part of a wheelarch, or
 - (iii) a step mentioned in sub-paragraph (f),must be not less than 120 mm and no more than 200 mm in height and the surface of the tread must not be less than 300 mm deep and not less than 400 mm wide;
- (f) any steps between a gangway and a passenger seat or a row of passenger seats, not being to a seat fitted to any part of a wheelarch, must not be more than 200 mm in height; and
- (g) in a flight of steps the difference in height between any 2 steps must not be more than 10 mm,

and the height of a step is to be measured vertically at the centre of the tread width from the surface of the tread to an imaginary line extending horizontally from the surface of the next tread or from the floor of the bus.

- (2) However, sub-paragraphs (d), (e) and (g) of paragraph (1) do not apply to such steps in a double-decked vehicle as lead from the lower deck to the upper deck.
- (3) An external step leading from at least one priority entrance to at least one priority seat must not —
 - (a) be more than 250 mm high as measured vertically at the centre of the tread width from the surface of the step's tread to the ground, and, if the bus is fitted with a kneeling system, when the bus is at its minimum height and
 - (b) be less than 300 mm deep.
- (4) A bus must not be fitted with a step capable of projecting beyond the side of the vehicle adjacent to the step unless —
 - (a) the step is protected by parts of the bus or otherwise so that it is not liable to injure pedestrians; or
 - (b) the bus is so constructed or adapted that —
 - (i) the step can fold or retract so as not to project beyond the side face of the vehicle, and
 - (ii) the bus is incapable in the normal course of being driven away unless the step is so folded or retracted.
- (5) If a bus is fitted with a power-operated step, the step must —

- (a) be incapable of operation while the bus is in motion; and
- (b) be fitted with a safety device that stops the step's motion if —
 - (i) the step is subject to a reactive force exceeding 150 N in any direction, and
 - (ii) that motion could cause injury to a passenger.

63 Handrails and handholds

- (1) Handrails must be fitted to a bus in the following positions —
 - (a) along one or both sides of a gangway —
 - (i) extending from a position level with the top of the back of a seat to the ceiling, or otherwise to a height not less than 1.5 m as measured vertically from the floor, and spaced at intervals of no more than 1.05 m as measured in the longitudinal plane of the bus,
 - (ii) extending, in the case of areas where there are no seats adjacent to the gangway, from the floor or, if there is a wheelarch or similar structure, from the lowest practicable height to, in either case, the ceiling, or otherwise a height prescribed in head (i), and spaced at the intervals specified there, and
 - (iii) extending horizontally, in the case of any part of the gangway adjacent to the internal walls of the bus, along those walls, and parallel to them, at a height not less than 1.2 m and no more than 1.5 m as measured vertically from the floor;
 - (b) in any area (not being a gangway) in which passengers may stand —
 - (i) extending horizontally, in a case where the area is adjacent to the internal walls of the bus, in the manner and at the height prescribed in sub-paragraph (a)(iii), and
 - (ii) extending vertically, in any other case, from the floor to the ceiling, or otherwise to a height prescribed in sub-paragraph (a)(i), and spaced at the intervals specified there;
 - (c) from the doorway area immediately adjacent to a priority entrance to at least one of the priority seats at a height not less than 800 mm and no more than 900 mm as measured vertically from the floor, but if it is not practical to comply with that requirement, the handrail need not be continuous provided that —
 - (i) any gap does not exceed 1.05 m, and
 - (ii) a vertical handrail is provided on at least one side of the gap at a height prescribed in sub-paragraph (a)(iii); and

- (d) on both sides of the interior of an entrance or exit —
 - (i) in a case where any external step in the entrance or exit is fixed, at no more than 400 mm (as measured horizontally and inwards) from the outer edge of the step nosing and at a height of not less than 800 mm and no more than 1.1 m as measured vertically from the ground, the bus being at its minimum height if fitted with a kneeling system,
 - (ii) in a case where any such step is not fixed, at no more than 100 mm (as measured horizontally and inwards) from the outer edge of the step nosing of the lowest fixed step in the entrance or exit and at such a height, and
 - (iii) in a case where any other steps lead into or from a bus, at no more than 600 mm (as measured horizontally and inwards) from the outer edge of the step nosing and at such a height, but as measured vertically from the surface of the tread of a step.
- (2) However, if —
 - (a) it is necessary to provide access to and into a wheelchair space; and
 - (b) it is not possible to comply with paragraph (1)(b) or (c),
a horizontal handrail, or a series of handholds at intervals of no more than 300 mm, must be provided across the gap.
- (3) Any handrail fitted to a bus in accordance with this regulation must —
 - (a) save as provided in sub-paragraph (b), have a circular cross section with a diameter of not less than 30 mm and no more than 35 mm;
 - (b) if fitted at either side of an entrance or exit, have an oval cross section of which —
 - (i) the maximum section is not less than 30 mm and no more than 35 mm, and
 - (ii) the minimum section is not less than 20 mm;
 - (c) be not less than 800 mm or more than 1.9 m above the floor;
 - (d) have a clear space of not less than 45 mm between any part of the bus and all parts of the handrail other than its mountings;
 - (e) have a slip-resistant surface;
 - (f) be capable of being easily and firmly gripped by a passenger; and
 - (g) contrast in reflected light with the parts of the bus adjacent to the handrail.
- (4) A handhold fitted to a bus in accordance with this regulation must —
 - (a) have a loop shape, or some other form, designed to prevent a hand from slipping from the handhold; and

- (b) comply with the requirements of paragraph (3)(c) to (g) as if for any reference there to a handrail there were substituted a reference to a handhold.
- (5) A handhold may be placed within the space of a gangway provided that —
 - (a) it is unlikely to cause injury; and
 - (b) it is easily movable to the extent required to permit unrestricted access by a disabled person to a priority seat or the gangway.

64 Communication devices

- (1) A communication device must be fitted in a bus —
 - (a) in the following positions —
 - (i) within reach of each person seated in a priority seat, and
 - (ii) adjacent to not less than every third row of seats; and
 - (b) at a height of —
 - (i) no more than 1.2 m if the device is for the use of seated passengers, and
 - (ii) no more than 1.5 m if the device is for the use of other passengers,as measured vertically from the floor to the centre of the device.
- (2) Any such device must —
 - (a) be operable by the palm of a hand;
 - (b) have a surround that contrasts in reflected light with the device and with the surface on which the surround is mounted; and
 - (c) when operated —
 - (i) provide a signal to the driver,
 - (ii) activate an audible signal in the passenger areas, and
 - (iii) activate at least one illuminated stopping sign —
 - (A) on each deck of the bus, or
 - (B) in the case of an articulated bus, in each section of the vehicle,
being a sign that is or would be within the field of vision of passengers seated in a majority of the seats on that deck or in that section.
- (3) An illuminated stopping sign must —
 - (a) not use only capital letters; and
 - (b) display the illuminated word “stopping”, or a word or words to the same effect, immediately a communication device is activated until at least one of the exits is open.

65 Kneeling systems

- (1) If a bus is fitted with a kneeling system, they must comply with the following requirements —
 - (a) a switch must be used to enable the operation of the system;
 - (b) any control that initiates the lowering or raising of any part or the whole of the body relative to the road surface must —
 - (i) be clearly identified, and
 - (ii) be under the direct control of the driver;
 - (c) the lowering process must be capable of being stopped and immediately reversed by a control that is both —
 - (i) within reach of the driver while seated in the cab, and
 - (ii) adjacent to any controls provided for the operation of the system; and
 - (d) the system must not allow the bus —
 - (i) to be driven at a speed exceeding 5 km/h when the bus is lower than the normal height of travel, or
 - (ii) to be lowered when the operation of an entrance or exit door (other than an emergency door) is prevented for any reason.

66 Route and destination displays

- (1) A bus must be fitted with a route number display and a destination display in the following positions —
 - (a) on the front of the bus as close as practicable to that part of the windscreen which is within the driver's field of vision; and
 - (b) on the nearside of the bus adjacent to the entrance closest to the front of the vehicle at a height not less than 1.2 m to the lower edge of the display characters and no more than 2.5 m to the upper edge of those characters as measured vertically from the ground, the bus being in the normal condition for travel if fitted with a kneeling system.
- (2) A bus must be fitted with a route number display on the rear of the vehicle.
- (3) Any route number display must be capable of displaying at least 3 characters which —
 - (a) are not less than 200 mm high on the front and rear of the bus and not less than 70 mm high on the side of the bus;
 - (b) are provided with a means of illumination; and
 - (c) contrast in reflected light with the display background.

- (4) Any destination display must be capable of displaying at least 15 characters which —
- (a) are not less than 125 mm high when on the front of the bus and not less than 70 mm high on the side of the bus; and
 - (b) comply with paragraph (3)(b) and (c) as if those provisions applied to a destination display.
- (5) Characters in a destination display must not consist only of capitals.
- (6) In this regulation —
- “characters” means —
- (a) upper-case letters or numbers of a height specified in the foregoing provisions of this regulation, and
 - (b) lower-case letters of a size relative to upper-case letters for a given typeface;
- “destination display” means a display of a word or words describing the route or final destination of the bus; and
- “route number display” means a display of any combination of numbers or letters designating the bus’s route.

MADE

PHIL GAWNE
Minister for Infrastructure

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations further amend the Buses (Carriage of Passengers for Hire or Reward) (Construction and Use) Regulations 2001 in pursuance of enabling powers contained in the Equality Act 2015.

There is added to the above Regulations a new *Part IV*, the principal features of which are as follows.

Division 1 contains interpretive provisions and applies Part IV to buses providing a regular service and constructed or adapted to carry more than 22 passengers. As provided by Bus Vannin, a regular service is a service (not an excursion) provided on more than one occasion for the carriage of passengers at separate fares on either a predetermined route or a variable route which falls within predetermined limits, whether passengers are taken up or set down at predetermined stopping places or on demand. Only such buses first registered on or after 1 July 2016 are affected.

Divisions 2 to 4 prescribe detailed technical requirements to be met by affected buses, the predominant purpose of which is to ensure that disabled persons —

- can board and alight from affected buses in safety and without unreasonable difficulty, and
- in the case of wheelchair users, can do so while remaining in their wheelchairs.

Under the Licensing and Registration of Vehicles Regulations 2014 affected buses are required to possess a certificate of initial fitness, in connection with which the Department of Infrastructure's Vehicle and Driving Test Centre will check their compliance with Part IV. If, however, an accessibility certificate, declaration of conformity or conformity certificate has been issued in respect of an affected bus under the GB Public Service Vehicles Accessibility Regulations 2000 or the Northern Ireland corresponding Regulations, it is to be taken as sufficient evidence that the bus complies with Part IV.