

SCHEDULE 3**PART 1**

**Technical Specification and Technical Requirements for
National Small Series Type-Approval for
Category M Vehicles**

(Small series numerical limits specified in Schedule 4)

To enable representative testing the vehicle will be delivered in a presentable state and capable of being laden to maximum authorised weight.

A representative of the manufacturer must be present to enable access to all parts of the vehicle, to assist in explanation of features of that vehicle, and to cooperate in any testing.

Subject / Requirements	Exemptions / Variations	Test Conditions / Resulting Documentation
<p>I. Sound Level</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 5 to Annex I to Directive 70/157/EEC as last amended by Directive 1999/101/EC or Directive 2007/34/EC <p>Or</p> <ul style="list-style-type: none"> • Paragraph 6 to UNECE Regulation 51.02 	<p>Directive 70/157/EEC, Annex I, paragraphs 5.3.1.1, 5.3.1.2. and 5.3.1.3 shall not apply.</p> <p>Vehicles for which an approval or test report has been issued prior to modification of the exhaust system downstream of the catalyst, a Stationary Noise Test</p> <p>“Stationary Noise Test” means:</p> <p>a) in the case of a modified exhaust system a stationary test as defined in paragraphs 5.2.3.4.2 and 5.2.3.4.3 of Annex I to Directive 70/157 and shall not exceed the equivalent stationary value recorded on the Certificate of Conformity, Approval Certificate or test report for that vehicle by more than 2dB(A) at 0.5m.</p> <p>b) in the case of vehicles having a maximum permissible mass exceeding 2800kg fitted with a modified air brake system, a test report is required to paragraph 5.4 of Annex I to Directive 70/157/EC except that this shall not apply if air brake silencers are fitted.</p> <p>Modification of the exhaust system length after last silencer not exceeding 2m is permissible without further test.</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p>	<p>Laden or unladen vehicle.</p> <p>Approval or Test Report</p> <p>And</p> <p>For modified systems a Stationary Noise Test</p>

<p>2. Emissions (Light Duty Vehicles)</p> <p>Vehicles manufactured up to 30th June 2016: the technical provisions of Regulation (EC) 715/2007 as amended by Regulation (EC) 692/2008, Annex I, Table 1.</p> <p>Vehicles manufactured on or after 1st July 2016: the technical provisions of Regulation (EC) 715/2007 as amended by Regulation (EC) 692/2008, Annex I, Table 2.</p>	<p>Applies to M₁ and M₂ vehicles and M₃ with positive ignition.</p> <p>Directive 70/220/EEC as amended shall cease to apply from 2 January 2013.</p> <p>Vehicles are exempt from the requirements of On Board Diagnostic systems.</p> <p>This item does not apply to vehicles approved to item 41.</p> <p>Modification of exhaust system length after the last silencer is permissible without any further test.</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg in the case of completed vehicle the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p> <p>An EC type-approval issued to the most representative base vehicle remains valid irrespective of change in the reference mass</p> <p>Only modifications specified above will be accepted without further test.</p> <p>Any other modifications may be assessed at the discretion of the Approval Authority</p>	<p>Laden or unladen vehicle.</p> <p>Approval or Test Report</p> <p>And</p> <p>Inspection of modifications (if applicable)</p>
<p>3. Fuel Tanks / Rear Protective Devices</p> <p>For fuel tanks: The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p> <ul style="list-style-type: none"> • For liquid fuel tanks: UNECE Regulation 34.02. <p>For vehicles using gaseous fuels: UNECE Regulations 67.01 and 115 for LPG. UNECE Regulations 110.00 and 115 for CNG.</p> <p>Or</p> <ul style="list-style-type: none"> • for hydrogen powered vehicles; The technical provisions of EU Regulation 79/2009 or ECE Regulation 134 <p>And</p> <p>For rear underrun: The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 5 of Annex II to Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p>	<p>Fuel tanks for liquid fuels at ambient temperature must :</p> <p>comply with the requirements given in column 1 except that the approval or test report, need not be for the same vehicle type: and</p> <p>subsequent modifications to the pipework or relocation of a tank excluding the tank, the cap/filler device or the venting device, may be accepted by the Approval authority.</p> <p>Note: The requirements for liquid fuel tanks apply only to fuel tanks used primarily for the propulsion of the vehicle.</p> <p>Rear Protection Device:</p> <p>An Installation check must be made to confirm that the rear protective device as a separate technical unit is of a type for which:</p> <ul style="list-style-type: none"> • a type approval or test report has been issued; <p>or</p> <ul style="list-style-type: none"> • has been tested and witnessed by the Approval Authority; <p>or</p> <ul style="list-style-type: none"> • calculations have been submitted to the satisfaction of the Approval Authority; 	<p>Installation Check that the fuel tank or rear underrun device has been correctly installed in accordance with the technical requirements.</p> <p>Fuel tanks for gaseous fuels:</p> <p>Approval or Test Report</p> <p>Fuel tanks for liquid fuels at ambient temperature:</p> <p>Approval or Test Report</p> <p>Rear Underrun:</p> <p>Approval or Test Report</p>

<ul style="list-style-type: none"> • UNECE Regulation 58.01 	<p>and a visual inspection that the device has been correctly installed in accordance with the technical requirements.</p> <p>If the vehicle is fitted with a fuel tank for petrol the fuel tank shall be so constructed that it cannot readily be filled from a petrol pump delivery nozzle which has an external diameter of not less than 23.6mm without the aid of a device (such as a funnel) not fitted to the vehicle.</p> <p>The fuel system, including the fuel tank, shall be so designed, constructed and fitted as to withstand the forces, vibration and corrosive environment to which it is likely to be subject. It shall also be so fitted as to avoid the risk of damage, such as abrasion, due to fouling of other parts, and to minimise the risk of fire in the event of any leakage of fuel.</p>	
<p>4. Rear Registration Plate Space</p> <p>The technical provisions of paragraphs 1 and 2 to Directive 70/222/EEC</p>	<p>A check that the positional, dimensional and the visibility requirements are met.</p>	<p>Approval or Test Report Or</p> <p>A dimensional and the visibility check</p>
<p>5. Steering Effort</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/311/EEC as last amended <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 79.01 	<p>Where a vehicle is constructed using a base vehicle of a different category the provisions applicable to the base vehicle category at its maximum mass may apply.</p> <p>For a modified system manoeuvrability test in accordance with paragraph 5 of 1992/62/EEC</p>	<p>Laden vehicle.</p> <p>Approval or Test Report</p>
<p>6. Door Latches and Hinges</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/387/EEC as last amended by Directive 2001/31/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 11.03. 	<p>Applies to M₁ vehicles</p> <p>Does not apply to any power operated door which meets the technical requirements of paragraph 7.6.5 of Annex I to Directive 2001/85/EC</p>	<p>Approval or Test Report Or</p> <p>Evidence that suitable proprietary parts from approved vehicles are used</p>
<p>7. Audible Warning</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 2 of Annex I to Directive 70/388/EEC as last amended by 87/354/EC <p>Or</p> <ul style="list-style-type: none"> • Paragraph 14 to UNECE Regulation 28.00 	<p>Inspection to confirm the presence of approval marks and operation of the device including a Sound Level Check which is a vehicle test as described in the technical provisions given in column 1 except that a voltage test is not required.</p>	<p>Component: Approval or Device must be “e” / “E” marked</p> <p>Vehicle: Approval or Test Report Or Inspection to confirm the presence and operation of the device including a Sound Level Check.</p>
<p>8. Indirect Vision Devices</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 2003/97/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 46.02 	<p>Field of view requirements do not apply to Optional mirrors.</p> <p>“Optional mirrors” are mirrors not intended to give a clear view to the rear, side or front of the vehicle within the fields of vision defined in 2003/97/EC; therefore they are in no way a substitute for rear view mirrors</p>	<p>Component Approval: Approval or Device must be “e” / “E” marked</p> <p>Vehicle Approval:</p>

		Approval or Test Report Specify the numbers and class(es) of mirror required for each vehicle category.
<p>9. Braking</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> Paragraph 2 of Annex I to Directive 71/320/EEC as last amended by Directive 1998/12/EC and tests as defined in associated Annexes as may be applicable. <p>Or</p> <ul style="list-style-type: none"> Paragraph 5 of UNECE Regulation 13.09 or 13H.00 and tests as defined in associated Annexes as may be applicable. 	For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.	Laden and Unladen vehicle Approval or Test Report
<p>10. Radio Interference / Electro-magnetic Compatibility</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> Directive 72/245/EEC as last amended by Directive 2006/28/EC, section 6 of Annex I taking into consideration the exemptions in section 8 and tests specified in Annexes IV to X <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 10.03 	<p>Items for which approval has been granted as part of the base of incomplete vehicle approval do not need re-approval.</p> <p>If adding additional electrical/electronic components to the vehicle then these additional components should be “e” / “E” marked. If they are not “e” / “E” marked then the additional components will require EMC testing as per 2004/104/EC and a test report will be required for evidence of this.</p>	<p>Components:</p> <p>Approval or Device must be “e” / “E” marked</p> <p>Installation:</p> <p>Approval or Test Report Or A Test / Inspection restricted to a check for “e” / “E” marked components and ESA approval for safety critical items.</p>
<p>11. Diesel Smoke</p> <ul style="list-style-type: none"> Directive 72/306/EEC as last amended by Directive 2005/21/EC section 5 of Annex I and tests as defined in Annexes IV and V <p>Or</p> <ul style="list-style-type: none"> EC Regulation 715/2007 <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 24.03 	<p>A free acceleration test such that the coefficient of absorption of the exhaust emissions from the engine immediately after leaving the exhaust shall not exceed -</p> <ol style="list-style-type: none"> for an M1 vehicle, 1.5 per metre <p>or</p> <ol style="list-style-type: none"> for an M2 or M3 vehicle: <ol style="list-style-type: none"> if the engine of the vehicle is turbo-charged, 3.0 per metre in any other case, 2.5 per metre is allowed as an alternative. <p>“co-efficient of absorption” is to be construed in accordance with paragraph 3.5 of Annex VII to Directive 72/306/EEC;</p> <p>“free acceleration” has the same meaning as in Annex II to Directive 77/143/EEC as last amended by Directive 92/55/EEC.</p> <p>A test report for a modified system need only refer to the</p>	Approval or Test Report

	<p>engine as long as the installation conditions are not violated.</p> <p>Vehicles fitted with proprietary engines which have already been satisfactorily tested for emissions to 72/306 may gain approval for the vehicle based on the engine results provided that similar conditions of installation to those on the test report are used. Where “similar” means installation tolerances in the directive. Data should be provided to show that Intake and Exhaust specifications are within the ranges specified in the 72/306/EEC type approval information document.</p> <p>Directive 72/306/EEC as amended shall cease to apply from 2 January 2013.</p>	
<p>12. Interior Fittings</p> <p>The essential Technical requirements of:</p> <ul style="list-style-type: none"> • Directive 74/60/EEC <p>or</p> <ul style="list-style-type: none"> • ECE Regulation 21.01 	<p>Applies to M₁ vehicles</p> <p>The following shall not apply: Directive 74/60/EEC, Annex I, Paragraphs 5.1.2, 5.2.4, 5.3.4.1, 5.4.2.2, 5.7.1.2 and the second sentence of 5.2.3.1. And ECE Regulation 21.01, paragraphs 5.1.2, 5.2.3.1, 5.2.4, 5.3.4.1, 5.4.2.2, 5.4.2.3, 5.7.1.2.</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p>	Approval or Test Report
<p>13. Anti-theft and Immobiliser</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/61/EEC as last amended by Directive 95/56/EC. <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulations 18.03, 97.01 and 116 as applicable. 	<p>Immobilisers must be approved as part of the base vehicle or as a Separate Technical Unit.</p> <p>Alarms must be approved as part of the base vehicle or as a Separate Technical Unit.</p> <p>The following shall not apply: Directive 74/61/EEC Annex IV, paragraphs 3.9, 4.1.3, 4.1.4, 4.2.4, 4.2.6, and 4.3.5; And UNECE Regulation 18, paragraphs 5.8, 6.1.3, 6.1.4, 6.2.4, 6.2.6, 6.3.5.</p> <p>In the case of devices to prevent unauthorised use the manufacturer may as an alternative to an approval or test report issue a declaration of the device(s) fitted and that they comply with column 1, and in such case an Installation Check will be conducted including any check the Approval Authority considers necessary and in the case of an immobiliser or alarm system a completed installation certificate.</p> <p>In the case of an immobiliser or alarm system an Installation Check</p> <p>An “Installation Check” means: An inspection of installed components as the approval authority deem necessary and in the case of an immobiliser or alarm system a completed installation certificate.</p>	<p>Device to prevent unauthorised use: Approval or Test Report</p> <p>Immobilisers and Alarm Systems Approval or Test report And Installation Check</p>

	For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.	
<p>14. Protective Steering</p> <p>The essential technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/297/EEC as last amended by Directive 91/662/EEC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 12.03 	<p>Applies to M₁ vehicles</p> <p>The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p>	Approval or Test Report
<p>15. Seat Strength</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/408/EEC as amended by Directive 2005/39/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 17.07 	<p>Side facing seats may be fitted in accordance with Directive 74/408/EEC as amended by Directive 2005/39/EC, Article 3a, paragraph 3, until 20 October 2010.</p> <p>The installation of side facing seats shall be prohibited in vehicles of categories M₁, M₂ (Class B or III) and M₃ (Class B or III).</p>	Approval or Test Report
<p>16. Exterior Projections</p> <p>The essential technical requirements of:</p> <ul style="list-style-type: none"> • Directive 74/483/EEC <p>Or</p> <ul style="list-style-type: none"> • ECE Regulation 26.03 	<p>Applies to M₁ vehicles</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply to the cab only.</p>	Approval or Test Report
<p>17. Speedometer and Reverse Gear</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 75/443/EEC as amended by Directive 97/39/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 39.00 	<p>This requirement does not apply to a vehicle fitted with a tachograph if the tachograph provides adequate visual indication of speed to the driver.</p>	<p>Speedometer Approval or Test Report Or</p> <p>Tachograph fitted and provides adequate visual indication of speed to the driver.</p> <p>Reverse Gear A test to confirm the presence and function of a reverse gear and operation from the driving position.</p>
<p>18. Plates (statutory)</p> <p>The technical provisions of: Directive 76/114/EEC as last amended by Directive 78/507/EEC.</p> <p>And</p> <p>Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate</p>	<p>Inspection to confirm:</p> <ul style="list-style-type: none"> • the presence of a plate bearing details of Make, Model, VIN (or equivalent unique vehicle identifier), and Masses (Maximum Design values for the Axles, Gross Vehicle and Gross Train, King Pin (for semi trailers only)); • the initial VIN or unique vehicle identifier is marked on the chassis or other structure on the right hand side of the vehicle. And that it is placed in a clearly visible and accessible position by a method such as hammering or stamping, in such a way that it cannot be obliterated or deteriorate. 	Inspection

	Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate.	
<p>19. Seat Belt Anchorages</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 76/115/EEC as last amended by Directive 2005/41/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 14.06 	Applies to M ₁ , M ₂ (Class B or III), M ₃ (Class B or III), And, if fitted, M ₂ (Class A, I or II), M ₃ (Class A, I or II)	Approval or Test Report
<p>20. Installation of Lighting and Light Signalling Devices</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Annex II to Directive 76/756/EEC as last amended by 2007/35/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 48.03, <p>And</p> <p>where applicable: Rear Marker Plates to Statutory Instrument 157 of 1985</p>	For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply to the cab.	<p>Approval or Test Report</p> <p>All lighting devices must be “e” / “E” marked and of the correct categories to be fitted in appropriate locations; Headlamps must be appropriate for left-hand rule of the road.</p> <p>The manufacturer should provide a list of components, their “e” / “E” numbers and any alternatives covered by test reports.</p>
<p>21. Retro Reflectors, Rear Marker</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/757/EEC as last amended by Directive 97/29/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 3.02 <p>And,</p> <p>2. Where applicable: Rear Marker Plates to Statutory Instrument 157 of 1985</p>		Approval or Devices must be “e” / “E” marked.
<p>22. End-outline, Front-position (side), Rear-position (side), Stop, Side Marker, Daytime Running Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/758/EEC as last amended by Directive 97/30/EC <p>Or</p> <ul style="list-style-type: none"> • For End-Outline, Front-Position (side), Rear-Position (side), and Stop lamps UNECE Regulation 7.02. For Daytime Running Lamps UNECE Regulation 87.00. For Side Marker lamps, UNECE Regulation 91.00 		Approval or Devices must be “e” / “E” marked

<p>23. Direction Indicators</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/759/EEC as last amended by Directive 99/15/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 6.01 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>24. Rear Registration Plate Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/760/EEC as last amended by Directive 97/31/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 4.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>25. Headlamps including bulbs</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/761/EEC as last amended by Directive 99/17/EC <p>Or</p> <ul style="list-style-type: none"> • Equivalent UNECE Regulations 1.02, 5.02, 8.05, 20.03, 31.02, 98.00 and 112 for headlamps, <p>And</p> <p>UNECE Regulations 2, 37.03 and 99.00 for all lamps (bulbs).</p>	<p>An Installation Check will be conducted including any check the Approval Authority considers necessary.</p> <p>A check for left hand rule of the road traffic dipped beam cut off is required.</p> <p>If of self levelling design then a self certification is required.</p>	<p>Headlamps:</p> <p>Approval Or Approval and supplementary test report for modifications</p> <p>Lamps (bulbs):</p> <p>Approval or Devices must be “e” / “E” marked</p> <p>Components be “e” marked</p> <p>Installation check</p>
<p>25A. Cornering Lamps</p> <p>Where fitted: the technical and marking requirements of UNECE Regulation 119</p>		<p>Approval or Devices must be “e” / “E” marked</p>
<p>26. Front Fog Lamps</p> <p>Where fitted: the technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/762/EEC as last amended by Directive 99/18/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 19.02 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>27. Towing Hooks</p> <p>The technical provisions of: Annex II to Directive 77/389/EEC as last amended by Directive 96/64/EC</p>	<p>Not Applicable for M₁</p>	<p>Approval or Test Report</p>
<p>28. Rear Fog Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 77/538/EEC as last amended by Directive 99/14/EC 		<p>Approval or Devices must be “e” / “E” marked</p>

Or • UNECE Regulation 38.00		
29. Reversing Lamps The technical and marking requirements of: • Directive 77/539/EEC as last amended by Directive 97/32/EC Or • UNECE Regulation 23.00		Approval or Devices must be “e” / “E” marked
30. Parking Lamps Where fitted: the technical and marking requirements of: • Directive 77/540/EEC as last amended by Directive 99/16/EC Or • UNECE Regulation 77.00		Approval or Devices must be “e” / “E” marked
31. Seat Belts and Restraint Systems The technical provisions of: • Directive 77/541/EEC as last amended by Directive 2005/40/EC Or • UNECE Regulation 16.05	Full Directive specification required in all seating positions Seat belts which have been specially designed or adapted for use by an adult or young person suffering from some physical defect or disability and intended for use solely by such person are exempt. Any vehicle not required to be fitted with seat belt anchorages is exempted from these requirements. A seat belt bearing an approval may be fitted, whether or not the seat belt has been type approved for the anchorages to which it is fitted, provided that the seat belt complies with the installation requirements.	List minimum numbers and classes of seat belt for each vehicle category Components: Approval or Test Report. Devices must be “e” / “E” marked Installation: Approval or Test Report or manufacturer’s test report
32. Forward Vision Technical requirements of: • Directive 77/649/EEC as amended by 90/630/EEC Or • UNECE Regulation 125	Applies to M ₁ vehicles For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.	Approval or Test Report
33. Identification of Controls, Tell-tales and Indicators The technical provisions of: • Directive 78/316/EEC as amended by Directive 94/53/EC Or • UNECE Regulation 121	Inspection to check that the prescribed controls are marked in accordance with the requirements of the directive. Other optional controls should be readily identifiable and must not be confusable with other symbols show in the Directive and Regulation. Electronic displays shall follow any appropriate priority protocol.	Approval or Test Report And Inspection
34. Defrost / Demist The essential technical requirements of Annex I paragraphs 5.1.1 and 5.2.1.of Directive 78/317/EEC	For M ₁ vehicles: For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply if an	Approval or Test Report Or Documented details of the system plus a functional check Or

	<p>adequate system is provided in the front.</p> <p>The defrost system must be capable of melting frost or ice on the surface of the windscreen thereby restoring visibility over the bulk of the area prescribed in the washer and wiper section.</p> <p>The demist system must be capable of removing a film of condensate on the inside surface of the windscreen thereby restoring visibility over the bulk of the area prescribed in the washer and wiper section [A test procedure to determine an adequate system is to be defined]</p> <p>For M₂ and M₃ vehicles:</p> <p>Vehicles shall be fitted with an adequate defrosting and demisting device.</p> <p>“Adequate” means sufficiently effective to ensure adequate visibility through the windscreen under all conditions.</p>	Where appropriate a check for adequate system.
<p>35. Wash / Wipe</p> <p>The technical requirements of Annex I paragraph 5 of Directive 78/318/EEC</p>	<p>For M₁ vehicles:</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply if an adequate system is provided in the front.</p> <p>For M₂ and M₃ vehicles:</p> <p>Vehicles shall be fitted with adequate washing and wiping devices.</p> <p>“Adequate” means sufficiently effective to ensure adequate visibility through the windscreen under all conditions.</p>	<p>Approval or Test Report Or Visual inspection</p> <p>Test to the specifications contained in paragraph 5 of 78/318/EEC.</p>
<p>36. Heating Systems</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 2006/119/EC, section 3 of Annex II, and Annexes III, VII and VIII. <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 122 	<p>Systems using waste heat from the engine cooling system need only be checked for presence and operation.</p> <p>Vehicle manufacturer needs to demonstrate the essential requirements are fulfilled. If air is the medium for heat transfer, conduct a test to ensure that CO levels of air coming from vents is not more than 20ppm above the ‘ambient’ air. Normal exhaust measuring equipment may be sufficiently sensitive.</p>	<p>Combustion heaters (if fitted) Approval or Test Report</p> <p>Waste Heat Systems Approval or Test Report Or Installation Check</p>
<p>37. Wheel Guards</p> <p>The technical provisions of Directive 78/549/EEC as amended by 94/78/EC</p>	<p>Applies to M₁ vehicles</p> <p>Vehicle to comply with dimensional requirements, which can be demonstrated by technical drawing</p>	Approval or Test Report or and visual inspection
<p>38. Head Restraints</p> <p>The technical provisions of Directive 78/932/EEC</p>	<p>Applies to M₁ vehicles</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p>	Approval or Test Report

	This item does not apply to seats not intended for normal use while the vehicle is travelling on a road. Seats that are for use when travelling on a road must be clearly identified to users.	
39. CO₂ Emissions / Fuel Consumption The technical provisions of: <ul style="list-style-type: none"> • Directive 80/1268/EEC as amended by Directive 2004/3/EC. Or <ul style="list-style-type: none"> • UNECE Regulation 101 	Applies to M ₁ vehicles Does not apply to vehicles fitted with an engine approved to item 41. May be tested concurrent with Item 2. May accept validated test report from engine supplier or from another vehicle with proven equivalent characteristics.	Approval or Test Report
40. Engine Power The technical requirements of: <ul style="list-style-type: none"> • Directive 80/1269/EEC as amended by Directive 1999/99/EC Or <ul style="list-style-type: none"> • UNECE Regulation 85 where applicable 	If standard power unit is fitted the use of the manufacturer's data or a chassis dynamometer check is permitted.	Approval or Test Report
41. Emissions (Euro V and VI) Heavy-duty Vehicles Vehicles manufactured up to 30 th June 2016: Directive 2005/55/EC as amended by 2006/51/EC, Annex I, and Row B2 limit values (Euro V) Vehicles manufactured on or after 1 st July 2016: Regulation (EC) No 595/2009 Annex I limit value (Euro VI)	Does not apply to vehicles not fitted with a CI engine except for vehicles fuelled with natural gas or liquefied petroleum gas. Does not apply to vehicles approved under item 2. Modification of exhaust system length after the last silencer is permissible without any further test. In the case of completed vehicles the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply. Other modifications may be assessed by the Approval Authority. A check will be made that an approved/ tested engine is installed in the vehicle, and is marked in accordance with that approval or test report and the intake and exhaust systems are appropriate so as conform to the installation conditions. The approval label on the engine or control unit shall be checked	Approval or Test Report And Visual Check
42. Lateral Protection	Not Applicable	
43. Spray-suppression systems	Not Applicable	
44. Masses and Dimensions (cars) The essential technical requirements of Directive 92/21/EEC as amended by 95/48/EC	Applies to M ₁ vehicles Masses and dimension listed in the Road Traffic (Construction and Use of Vehicles) Regulations 2003 (Statutory Instrument No. 5 of 2003) as amended may apply.	Approval or Test Report
45. Safety Glazing	Exclusions defined in paragraph 1 of Annex II to Directive 92/22/EEC as amended.	Component:

<p>The technical and marking provisions of:</p> <ul style="list-style-type: none"> • Directive 92/22/EEC as amended by Directive 2001/92/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 43. 	<p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p> <p>Directive 92/22/EEC, Annex III, paragraph 2.1.1 and 2.1.2 do not apply provided that driver's forward vision is not distorted and that light transmission of at least 70% is maintained.</p>	<p>Approval And all glazing must be e/E marked</p> <p>Installation:</p> <p>Approval or Test Report or manufacturer's test report and installation check.</p>
<p>46. Tyres</p> <p>The technical provisions and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 92/23/EEC as last amended by Directive 2005/11/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulations 30.02 or 30.03, 54 for durability and 117.01 for noise. <p>And</p> <p>In the case of a temporary use spare wheel (if fitted), The technical provisions and marking requirements of: UNECE Regulation 64.01</p> <p>And</p> <p>The technical provisions and marking requirements of Regulation (EC) 661/2009 as it relates to tyre wet grip, rolling resistance and rolling noise from the dates shown in that Regulation</p>	<p>Installation Check required to ensure that all tyres (except those that are not accessible) are marked in accordance with the directive including the appropriate speed and load ratings for their particular axle locations and the intended use of the vehicle. Check that tyres don't foul bodywork</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p>	<p>Component:</p> <p>Approval or Devices must be "e" / "E" marked</p> <p>Installation:</p> <p>Approval or Test Report Or Installation Check</p> <p>Where markings cannot be checked a declaration will be required from the manufacturer</p>
<p>47. Speed Limitation Devices</p> <p>The technical provisions and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 92/24/EC as last amended by Directive 2004/11/EC, <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 89. 	<p>Applies to M₂ and M₃ vehicles</p> <p>Installation Check for presence, component approval markings and the set speed which must be indicated on a plate in a conspicuous position in the driver's compartment.</p>	<p>Component:</p> <p>Approval or Devices must be "e" / "E" marked</p> <p>Installation:</p> <p>Approval or Test Report Or Installation Check</p>
<p>48. Masses and Dimensions</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 97/27/EC as amended by Directive 2003/19/EC, section 7 of Annex I. <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 107.02, Annex 11. 	<p>Applies to M₂ and M₃ vehicles</p> <p>Masses and dimension listed in the Road Traffic (Construction and Use of Vehicles) Regulations 2003 (Statutory Instrument No. 5 of 2003) as amended may apply.</p> <p>Directive 97/27/EC, Annex I, Paragraph 7.6. does not apply to a motor vehicle having 4 or more axles where the distance between the foremost and rearmost axles exceeds</p>	<p>Approval or Test Report</p>

	6.4 m.	
49. External Projections of Cabs	Not Applicable	
50. Couplings Where fitted, the technical provisions of: • Annex VII to Directive 94/20/EC Or • UNECE Regulation 55.01		Component: Approval Installation: Approval / Test Report
51. Flammability The technical provisions of: • Directive 95/28/EC, section 7 of Annex I. Or • UNECE Regulation 118.	Applies to M ₃ Class III vehicles Inspection shall confirm by physical examination, all materials are either marked as having an approval to the directive or, if this is not possible, documentary evidence (e.g. approval certificate, report).	Approval / Test Report
52. Buses and Coaches	Applies to M ₂ and M ₃ vehicles Vehicles of Class 1 , as an alternative to the Accessibility Requirements in Annex VII of the Directive or Annex 8 or the UNECE Regulation, may comply with Chapters I, II, and III of this Schedule. Requirements that are not compatible with the intended use do not apply to the following: • Vehicles containing seating for use only while the vehicle is stationary • vehicles for the secure transport of persons • Vehicles designed for use by the Garda Síochána, security and armed forces, In the case of armoured vehicles, exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the approval authority that the special purpose of the vehicle makes it impossible to fully comply. In the case of any deck of a vehicle without a permanent top, the handrails are required to extend to the ceiling or to a height of not less than 1500mm. A handhold may be substituted for a handrail. A door, not being a service door, may be fitted to the offside of a vehicle. Vehicles of Class B fitted with more than one wheelchair space: In the case of the second and subsequent wheelchair spaces, the space must be not less than 700 mm wide and 1200 mm long. Vehicles of Class I, II or III As an alternative to Directive 2001/85/EC, Annex VIII, paragraph 7.6.1.14 the upper deck gangway shall be connected by one or more intercommunication staircases	Approval / Test Report
The technical provisions of: • Directive 2001/85/EC, section 7 of Annex I including references to Annex III, IV, V, VI and VIII.		

<p>Accessibility for vehicles of Class I: The technical provisions of Directive 2001/85/EC Annex VII and Routes and Destination Displays.</p> <p>Vehicles other than Class I: If equipped with devices for people with reduced mobility and/or wheelchairs, shall comply with the relevant requirements of Annex VII as may be applicable to the devices fitted.</p> <p>Optional accessibility approval for vehicles of Class II or III: The technical provisions of Directive 2001/85/EC Annex VII and Routes and Destination Displays.</p>	<p>to the access passageway of a service door or to the lower deck gangway within 3m of a service door.</p> <p>Vehicles of Class A or B As an alternative to Directive 2001/85/EC, Annex I, paragraph 7.11.3.1 a vehicle may be fitted with handrails or handholds on at least one side and in the case of double doors this requirement may be met by a central stanchion or handrail.</p> <p>Vehicles of Class A or B: As an alternative to Directive 2001/85/EC, Annex VII paragraphs 3.6 to 3.8, may comply with Chapter I of this Schedule. Requirements that are not compatible with the intended use do not apply to the following vehicles:</p> <p>In the case of a vehicle of Class III specially designed for the carriage of school children, Annex I to Directive 2001/85/EC shall be amended as follows:</p> <ul style="list-style-type: none"> (a) for 225mm in paragraphs 7.7.8.1.1 and 7.7.8.1.2 shall be substituted 200mm; (b) for 680mm in paragraph 7.7.8.4.1 shall be substituted 650mm; and (c) for 400mm in paragraph 7.7.8.2.2 shall be substituted 350mm. <p>Paragraph 7.4 of Annex I to Directive 2001/85/EC shall not apply to:</p> <ul style="list-style-type: none"> (a) a vehicle of Class B fitted with no more than 16 passenger seats; or (b) any other single deck vehicle fitted with a Vehicle Stability Function for which an approval has been issued in accordance with UN/ECE Regulation 13.11. <p>Vehicles of Class A & B: The frontal barrier collision test in paragraph 7.6.7.2. of Annex I to Directive 2001/85/EC shall not apply to a vehicle in which all passengers have access to at least two doors, being either a service door or an emergency door, one of which is not a sliding door.</p> <p>Vehicles of Class B: Directive 2001/85/EC, Annex VII, paragraph 3.3.1. shall not apply.</p> <p>Vehicles of Class B with a variable seating or wheelchair arrangement: Directive 2001/85/EC, Annex VII, paragraph 3.4.1. shall not apply to the extent that it requires a pictogram internally adjacent to a priority seat or a wheelchair space.</p> <p>Directive 2001/85/EC, Annex I, paragraph 7.6.7.6.: In the case of:</p> <ul style="list-style-type: none"> (i) a manually operated sliding door fitted with a slam lock of the two stage type the activation of the device may be by movement of the door itself; (ii) a nearside rear door forming part of a pair of doors fitted at the rear of the vehicle the requirements do 	
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<p>Or</p> <p>The technical provisions of UNECE Regulation 107.02 excluding Annex 8.</p> <p>Vehicles of Class I: The technical provisions of UNECE Regulation 107.02, Annex 8.</p> <p>Vehicles other than Class I:</p> <p>(a) If fitted with accommodation for a wheelchair the vehicle must comply with the technical provisions of Paragraphs 3.6 and 3.8 of Annex 8 to UNECE Regulation 107.02;</p> <p>(b) If fitted with a boarding aid the vehicle must comply with the technical provisions of Paragraph 3.11 of Annex 8 to UNECE Regulation 107.02.</p>	<p>not apply if that door is capable of being held securely closed by the other door of that pair.</p> <p>Vehicles of Class I May as an alternative to the table in Directive 2001/85/EC, Annex I, paragraph 7.6.1.1. meet the requirements of Table 1.</p> <p>Directive 2001/85/EC, Annex VIII, paragraph 7.6.1.4: for the words “emergency exits” shall be substituted the word “exits”.</p> <p>Vehicles of Class I, II or III: As an alternative to UNECE Regulation 107.02, Annex 3, Paragraph 7.6.1.14 the upper deck gangway shall be connected by one or more intercommunication staircases to the access passageway of a service door or to the lower deck gangway within 3 m of a service door.</p> <p>Vehicles of Class A or B: As an alternative to UNECE Regulation 107.02, Annex 3, Paragraph 7.11.3.1 a vehicle may be fitted with handrails or handholds on at least one side and in the case of double doors this requirement may be met by a central stanchion or handrail.</p> <p>In the case of a vehicle of Class III specially designed for the carriage of school children, Annex 3 to UNECE Regulation 107.02 is amended as follows:</p> <p>(a) for "225 mm" in Paragraphs 7.7.8.1.1.2 and 7.7.8.1.2.2 substitute "200 mm";</p> <p>(b) for "680 mm" in Paragraph 7.7.8.4.1 substitute "650 mm";</p> <p>and</p> <p>(c) for "400 mm" in Paragraph 7.7.8.2.2 substitute "350 mm".</p> <p>Paragraph 7.4 of Annex 3 to UNECE Regulation 107.02 does not apply to:</p> <p>(a) a vehicle of Class B fitted with no more than 16 passenger seats; or</p> <p>(b) any other single deck vehicle fitted with a vehicle stability function for which an approval has been issued in accordance with UNECE Regulation 13.11.</p> <p>Vehicles of Class A and B: The frontal barrier collision test in 7.6.7.2. of Annex 3 to UNECE Regulation 107.02 does not apply to a vehicle in which all passengers have access to at least two doors, being either a service door or an emergency door, one of which is not a sliding door.</p> <p>UNECE Regulation 107.02, Annex 3, Paragraph 7.6.7.6. In the case of:</p> <p>(i) a manually operated sliding door fitted with a slam lock of the two stage type, the activation of the device may be by movement of the door itself;</p> <p>(ii) a nearside rear door forming part of a pair of doors fitted at the rear of the vehicle, the requirements do not</p>	
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	<p>apply if that door is capable of being held securely closed by the other door of that pair.</p> <p>Vehicles of Class I, II or III may, as an alternative to the table in UNECE Regulation 107.02, Annex 3, Paragraph 7.6.1.1, meet the requirements of Table 1.</p> <p>The test requirements of Paragraph 3.8. of Annex 8 to UNECE Regulation 107.02 do not apply if the vehicle is designed to meet the strength characteristics equivalent to those needed to satisfy the requirements of those paragraphs.</p>	
<p>53. Frontal Impact</p> <p>If fitted with airbag, Technical requirements of 96/79/EC</p>	Applies to M ₁ vehicles	<p>Component:</p> <p>Approval</p> <p>Installation:</p> <p>Approval / Test Report</p>
54. Side Impact	Not Applicable	
55. Blank		
56. Vehicles Intended for the Transport of Dangerous Goods	Not Applicable	
57. Front Underrun Protection	Not Applicable	
<p>58. Pedestrian Protection</p> <p>Where Frontal Protection Systems fitted, the technical provisions of sections 5 and 6 of Annex I to Regulation (EC) 78/2009</p>	<p>Applies to M₁ vehicles</p> <p>Approvals given under superseded Directive 2006/96/EC and the test procedure in Commission Decision 2006/368/EC are acceptable</p>	<p>Component:</p> <p>Approval or Test Report</p> <p>Installation:</p> <p>Approval or Test Report</p>
59. Recyclability	Not Applicable	
60. Blank		
<p>61. Air-conditioning Systems</p> <p>Emission, gases, leakage, and marking requirements of 2006/40/EC</p>	Applies to M ₁ vehicles	<p>Component:</p> <p>Approval or Devices must be “e” / “E” marked</p>
<p>62. Hydrogen System</p> <p>The technical provisions and marking requirements of: Regulation (EC) 79/2009</p>		<p>Component:</p> <p>Approval or Test Report</p> <p>Installation:</p> <p>Approval or Test Report</p>
63. General Safety	Not Applicable (except as it relates to Subject 46 Tyres, 65 AEBS and 66 LDWS)	

<p>65. AEBS</p> <p>The essential technical provisions of Regulation (EU) 347/2012 or UNECE Regulation 131</p>	<p>Exemptions:</p> <ul style="list-style-type: none"> • A completed vehicle where the Complete or Incomplete vehicle it is based upon was manufactured before 1st November 2016. • A complete vehicle which was manufactured before 1st November 2016. The exemptions listed in EU 347/2012 • Does not apply to M1 	
<p>66. LDWS</p> <p>The essential technical provisions of Regulation (EU) 351/2012 or UNECE Regulation 130</p>	<p>Exemptions:</p> <ul style="list-style-type: none"> • A completed vehicle where the Complete or Incomplete vehicle it is based upon was manufactured before 1st November 2016. • A complete vehicle which was manufactured before 1st November 2016. The exemptions listed in EU 351/2012 • Does not apply to M1 	
<p>69. Electric Safety</p> <p>Vehicle: the essential technical provisions of UNECE Regulation 100.01</p>		

Table 1. Requirement for minimum number of exits in each separate compartment

This table may be used as an alternative to;

- Table 7.6.1.1 in Annex 1 of EC Directive 2001/85/EC
- and
- Table 7.6.1.1 in Annex 3 of UNECE Regulation 107.02

Number of Passengers	Number of Service Doors		
	Class I and A	Class II	Class III and B
9 - 45	1	1	1
46 - 70	2	1	1
71 - 100	2*	2	1
>100	4	3	1

Note * Indicates where the requirement differs from the regulatory acts mentioned above

CHAPTER I

WHEELCHAIR ACCESSIBILITY REQUIREMENTS

Definitions;

1. In this Schedule;

“the 1976 Directive” means Council Directive 76/115/EEC (as amended) of 18 December 1975 on the approximation of the laws of the member states relating to anchorages for motor vehicle safety belts;

“the 1977 Directive” means Council Directive 77/541/EEC (as amended) of 28 June 1977 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 regulated public service vehicle for the purpose of allowing wheelchair users to board and alight from the vehicle;

“boarding ramp” means a ramp fitted to a regulated public service vehicle for the purpose of allowing wheelchair users to board and alight from the vehicle;

“contrast” means a contrast in the amount of light which is reflected by the surfaces of the parts of a regulated public service vehicle or its equipment which is required by these Regulations to contrast;

“dynamic test” means a test which complies with the requirements of paragraph 3(7);

“exit” means an exit from a regulated public service vehicle but does not include an exit which is provided for use only in case of emergency;

“gangway” means the space provided for obtaining access from any entrance to the passengers’ seats or from any such seat to an exit other than an emergency exit, but does not include a staircase or any space in front of a seat or row of seats which is required only for the use of passengers occupying the seat or row of seats;

“g” means 9.81 m/s^2 ;

“kg” means kilogram(s);

“km/h” means kilometre(s) per hour;

“mm” means millimetre(s);

“m/s” means metre(s) per second and “m/s²” means metre(s) per second per second;

“N” means newton(s);

“optical device” means any system (including a mirror, closed circuit television and optical cable) which provides the driver of a regulated public service vehicle with a view of an area of the vehicle;

“portable ramp” means a ramp which is carried on a regulated public service vehicle for the purpose of allowing wheelchair users to board and alight from the vehicle;

“reference wheelchair” means an occupied wheelchair having the dimensions shown in diagram A of Part II to this Schedule;

“seat” means a seat intended for use by passengers and, accordingly, does not include the driver’s seat or any other seat intended to use solely by a crew member;

“static test” means a test which complies with the requirements of paragraph 3(5) and which applies the forces specified in paragraph 3(6);

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

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

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

Wheelchair spaces

2. (1) A regulated public service vehicle shall be fitted with not less than one wheelchair space.

(2) Any wheelchair space shall be fitted to the lower deck of a double-deck bus or double-deck coach.

(3) Any wheelchair space on a regulated public service vehicle -

(a) shall comply with the requirements of paragraph 3; or

(b) where the vehicle is adapted to carry standing passengers and is not fitted with any seat belts for passengers which are required to be fitted by regulation, may comply with the requirements of paragraph 4 as an alternative to the requirements of paragraph 3.

Forward-facing wheelchairs

3. (1) Any wheelchair space fitted to a regulated public service vehicle shall comply with the following requirements;

(a) a wheelchair space shall not be less than;

(i) 1300mm measured in the longitudinal plane of the vehicle;

(ii) 750mm measured in the transverse plane of the vehicle; and

(iii) 1500mm measured vertically from any part of the floor of the wheelchair space;

(b) a wheelchair space shall allow the carriage of a wheelchair and a wheelchair user facing the front of the vehicle;

(c) a wheelchair space shall be fitted with a wheelchair restraint system suitable for general wheelchair application;

(d) a wheelchair space shall be fitted with a wheelchair user restraint system which shall comprise a minimum of two anchorage points 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;

(e) any wheelchair user restraint or wheelchair restraint system fitted to a wheelchair space shall be capable of being easily released in the case of an emergency;

(f) any wheelchair restraint system shall either -

(i) meet the dynamic test requirements described in sub-paragraph (7) and be securely attached to vehicle anchorages meeting the static test requirements in sub-paragraph (5);

or

(ii) be securely attached to vehicle anchorages such that the combination of restraint and anchorages meets the requirements of sub-paragraph (7) when the anchorages comply with sub-paragraph (7)(d)(ii); and

(g) any wheelchair user restraint shall either -

(i) meet the test requirements described in sub-paragraph (8) and be securely attached to vehicle anchorages meeting the static test requirements in sub-paragraph (5); or

(ii) be securely attached to vehicle anchorages such that the combination of restraint and anchorages meets the test requirements described in sub-paragraph (8) when fitted to a representative section of the vehicle structure as described in sub-paragraph (5)(g).

(2) One or more seats which are capable of being tipped, folded or otherwise moved may lie within the volume specified in sub-paragraph (1)(a) or within the gangway specified in paragraph 7 provided that the seat is capable of being easily moved out of the volume or out of the gangway. In the case of a single-deck or double-deck coach, this may include a

seat which may be quickly dismantled or removed provided that the seat can be safely stowed.

(3) The clear space in front of any seat may lie within the volume specified in sub-paragraph (1) (a) or within the gangway specified in paragraph 7.

(4) There shall be a sign on or near a seat specified in sub-paragraphs (2) and (3) stating the following “Please give up this seat for a wheelchair user” or stating words of equivalent meaning.

(5) A static test shall be carried out on the anchorage points for both the wheelchair restraint system and the wheelchair user restraint in accordance with the following requirements -

(a) the forces specified in sub-paragraph (6) shall be applied by means of a device reproducing the geometry of the wheelchair restraint system;

(b) the forces specified in sub-paragraph (6) shall be applied by means of a device reproducing the geometry of the wheelchair user restraint and by means of a traction device specified in paragraph 5.3.4 of Annex 1 of the 1976 Directive;

(c) the forces in (a) and (b) above shall be applied simultaneously in the forward direction and at an angle of $10^{\circ} \pm 5^{\circ}$ above the horizontal plane;

(d) the forces in (a) above shall be applied in the rearward direction and at an angle of $10^{\circ} \pm 5^{\circ}$ above the horizontal plane;

(e) the forces shall be applied as rapidly as possible through the central vertical axis of the wheelchair space;

(f) the force shall be maintained for a period of not less than 0.2 seconds; and

(g) the test shall be carried out on a representative section of the vehicle structure together with any fitting provided in the vehicle which is likely to contribute to the strength or rigidity of the structure.

(6) The forces referred to in sub-paragraph (5) are -

(a) in the case of anchorages provided for a wheelchair restraint system fitted to a Category M2 vehicle -

(i) 11100N applied in the longitudinal plane of the vehicle and towards the front of the vehicle at a height of not less than 200mm and not more than 300mm measured vertically from the floor of the wheelchair space, and

(ii) 5500N applied in the longitudinal plane of the vehicle and towards the rear of the vehicle at a height of not less than 200mm and not more than 300mm measured vertically from the floor of the wheelchair space;

(b) in the case of anchorages provided for a wheelchair restraint system fitted to a Category M3 vehicle -

(i) 7400N applied in the longitudinal plane of the vehicle and towards the front of the vehicle at a height of not less than 200mm and not more than 300mm measured vertically from the floor of the wheelchair space, and

(ii) 3700N applied in the longitudinal plane of the vehicle and towards the rear of the vehicle at a height of not less than 200mm and not more than 300mm measured vertically from the floor of the wheelchair space;

(c) in the case of anchorages provided for a wheelchair user restraint system, the forces shall be in accordance with the requirements of paragraph 5.4 of Annex 1 of the 1976 Directive;

References to M₂ and M₃ vehicles are references to vehicles of those categories as defined in Annex II (A) to the 1970 Directive.

(7) A wheelchair restraint system shall be subject to a dynamic test carried out in accordance with the following requirements -

(a) a representative wheelchair test trolley of mass 85kg shall, from a speed of between 48km/h to 50km/h to rest, be subject to a deceleration-time pulse in the forward direction which -

(i) exceeds 20g for a cumulative period of at least 0.015 seconds,

- (ii) exceeds 15g for a cumulative period of at least 0.04 seconds,
- (iii) is for an overall duration of at least 0.075 seconds and not more than 0.12 seconds,
- (iv) shall not, for a duration of more than 0.08 seconds, be at 28g, and
- (v) shall not exceed 28g;

(b) except as provided in (c) below, a representative wheelchair test trolley of mass 85kg shall, from a speed of between 48km/h to 50km/h to rest, be subject to a deceleration-time pulse in the rearward direction which -

- (i) exceeds 5g for a cumulative period of at least 0.015 seconds,
- (ii) shall not, for a duration of more than 0.02 seconds, be at 8g, and
- (iii) shall not exceed 8g;

(c) the test in (b) above shall not apply if the same restraints and direction of loading are used for the forward and rearward direction or if an equivalent test has been conducted;

(d) for the above tests the wheelchair restraint system shall be attached to either -

- (i) anchorages fixed to the test rig which represents the geometry of the anchorages in a vehicle for which the restraint system is intended, or
- (ii) anchorages forming part of a representative section of the vehicle for which the restraint system is intended, set up as described in sub-paragraph (5)(g).

(8) A wheelchair occupant restraint shall comply with the test requirements specified in paragraph 2.7.8.4 of Annex 1 of the 1977 Directive or an equivalent test to the deceleration-time pulse in paragraph (7)(a). A seat belt which has been type approved in accordance with the 1977 Directive, and so marked, shall be deemed to comply.

(9) A test in sub-paragraphs (5), (7) or (8) shall fail unless the following requirements are met -

- (a) no part of the system shall have failed, or shall have become detached from its anchorage or from the vehicle during the test;
- (b) mechanisms to release the wheelchair and user shall be capable of release after completion of the test;
- (c) in the case of the test specified in sub-paragraph (7), the wheelchair shall not move more than 200mm in the longitudinal plane of the vehicle during the test; and
- (d) no part of the system shall be deformed to such an extent after completion of the test that, because of sharp edges or other protrusions, the part is capable of causing injury.

Rearward-facing wheelchairs

4. (1) Any wheelchair space fitted to a regulated public service vehicle shall comply with the following requirements -

(a) a wheelchair space shall not be less than -

- (i) 1300mm measured in the longitudinal plane of the vehicle,
- (ii) 750mm measured in the transverse plane of the vehicle, and
- (iii) 1500mm measured vertically from any part of the floor of the wheelchair space;

(b) a wheelchair space shall allow the carriage of a wheelchair and a wheelchair user seated in the wheelchair and facing the rear of the vehicle;

(c) a wheelchair space shall be fitted with a backrest which shall -

- (i) be fitted to the front end of the wheelchair space;
- (ii) be positioned centrally with respect to the front end of the wheelchair space, and
- (iii) be fitted with a padded surface facing the rear of the vehicle; and

(d) a wheelchair space shall be fitted with a horizontal handrail which shall -

- (i) be fitted along not less than one of the longitudinal sides of the wheelchair space,
- (ii) be at a height of not less than 850mm and not more than 1000mm measured vertically from the floor of the wheelchair space,
- (iii) run continuously from a point not more than 300mm to the rear of the front end of the wheelchair space measured horizontally to a point not less than 1000mm to the rear of the front end of the wheelchair space measured horizontally,
- (iv) not extend into the wheelchair space by more than 90mm measured horizontally from the edge of the wheelchair space,
- (v) be capable of being easily and firmly gripped by a wheelchair user,
- (vi) have a circular cross section with a diameter of not less than 30mm and not more than 35mm,
- (vii) have clear space of not less than 45mm between any part of the vehicle and all parts of a handrail other than its mountings,
- (viii) have a slip-resistant surface, and
- (ix) contrast with the parts of the vehicle adjacent to the handrail.

(2) Any backrest fitted to a wheelchair space in accordance with sub-paragraph (1)(c) shall comply with the following requirements -

- (a) the bottom edge of a backrest shall be at a height of not less than 350mm and not more than 480mm measured vertically from the floor of the wheelchair space;
- (b) the top edge of a backrest shall be at a height of not less than 1300mm measured vertically from the floor of the wheelchair space;
- (c) a backrest shall have a width of -
 - (i) not less than 270mm and not more than 420mm up to a height of 830mm measured vertically from the floor of the wheelchair space, and
 - (ii) not less than 270mm and not more than 300mm at heights exceeding 830mm measured vertically from the floor of the wheelchair space;
- (d) a backrest shall be fitted at an angle of not less than 4° and not more than 8° to the vertical with the bottom edge of the backrest positioned closer to the rear of the vehicle than the top edge;
- (e) the padded surface of a backrest shall form a single and continuous plane;
- (f) the padded surface of a backrest shall pass through any point on an imaginary vertical plane situated to the rear of the front end of the wheelchair space and situated not less than 100mm and not more than 120mm from the front end of the wheelchair

space measured horizontally and not less than 830mm and not more than 870mm from the floor of the wheelchair space measured vertically; and

(g) a backrest shall be capable of bearing a load of 2000N applied for a minimum of 2 seconds by means of a block 200mm x 200mm square in the longitudinal plane of the vehicle towards the front of the vehicle to the centre of the padded surface of the backrest at a height of not less than 600mm and not more than 800mm measured vertically from the floor of the wheelchair space. The backrest shall not deflect more than 100mm or suffer permanent deformation or damage.

(3) In the lateral plane of the wheelchair space, a clear space of not less than 750mm shall be maintained and, in order to restrict the lateral movement of a reference wheelchair, there shall be a distance not greater than 900mm (measured in the lateral plane of the wheelchair space) between any two of the following adjacent means of support fitted on each side of the wheelchair space -

(a) a vertical stanchion situated to the rear of the front end of the wheelchair space and running continuously from the floor of the wheelchair space to a height of not less than 1500mm, which shall comply with the following requirements -

(i) the base of the stanchion shall be not less than 400mm and not more than 560mm from the front end of the wheelchair space measured horizontally, and

(ii) at heights exceeding 775mm measured vertically from the floor of the wheelchair space, the stanchion shall be not less than 540mm and not more than 560mm from the front end of the wheelchair space measured horizontally; or

(b) a retractable rail extending continuously from a point not more than 200mm from the front end of the wheelchair space to a point not less than 540mm from the front end of the wheelchair space measured horizontally and at a height of not less than 600mm and not more than 800mm measured vertically from the floor of the wheelchair space; or

(c) a partition extending continuously from a point not more than 200mm from the front end of the wheelchair space to a point not less than 540mm from the front end of the wheelchair space measured horizontally and at a height of not less than 600mm and not more than 800mm measured vertically from the floor of the wheelchair space; or

(d) the side wall, or equipment fitted to the side wall, of the vehicle extending continuously from a point not more than 200mm from the front end of the wheelchair space to a point not less than 540mm from the front end of the wheelchair space measured horizontally and at a height of not less than 600mm and not more than 800mm measured vertically from the floor of the wheelchair space.

(4) Any stanchion, retractable rail, partition, or side wall (in this sub-paragraph referred to as “the device”) fitted to a regulated public service vehicle in accordance with sub-paragraph (3) shall be capable of bearing a load of 1000N applied for a minimum of 2 seconds by means of a block 200mm x 200mm in the transverse plane of the wheelchair space and applied to the centre of the device at a height of not less than 600mm and not more than 800mm measured vertically from the floor of the wheelchair space. The device should not deflect more than 50mm or suffer permanent deformation or damage.

(5) One or more seats which are capable of being tipped, folded or otherwise moved may lie within the volume specified in sub-paragraph (1)(a) or within the gangway specified in

paragraph 7 provided that the seat is capable of being easily moved out of the volume or out of the gangway.

(6) The clear space in front of any seat may lie within the volume specified in sub-paragraph (1)(a) or within the gangway specified in paragraph 7.

(7) There shall be a sign on or near a seat specified in sub-paragraphs (5) and (6) stating the following “Please give up this seat for a wheelchair user” or stating words of equivalent meaning.

(8) In this paragraph, the phrase “front end of a wheelchair space” means the end of a wheelchair space that is closer to the front of the regulated public service vehicle to which the wheelchair space is fitted.

Boarding lifts and ramps

5. (1) A regulated public service vehicle shall be fitted with not less than one boarding lift or one boarding ramp, or shall carry not less than one portable ramp.

(2) Any boarding lift or boarding ramp fitted in accordance with sub-paragraph (1) shall -

(a) have a safe working load of not less than 300kg;

(b) when subject to a uniformly distributed mass equal to 125 per cent of the safe working load for a period of not less than 10 seconds, not suffer any permanent deformation or damage when the load is removed;

(c) have its maximum safe working load marked in a position which is clearly visible to the operator of the lift or ramp; and

(d) not allow the vehicle in the normal course to be driven away unless the lift or ramp is at its normal position of vehicle travel.

(3) Any boarding ramp fitted to a regulated public service vehicle shall (subject to (d) below) comply with the following requirements -

(a) a boarding ramp shall have a surface of not less than 800mm in width;

(b) no part of the surface in sub-paragraph (3)(a), and no part of the vehicle, shall present an obstruction greater than 15mm in height measured along a plane parallel to, and above, the surface of the ramp, and in the direction of travel of a reference wheelchair when moved into or from the vehicle;

(c) with the vehicle on a flat surface, in the normal condition for a wheelchair user to board or alight, and with the boarding ramp extended and sitting on a kerb of 125mm in height measured vertically from and parallel to the ground, the surface of a boarding ramp shall have a slope measured over the surface referred to in sub-paragraph (3)(a) of not more than [8°] measured relative to the ground;

(d) notwithstanding (c) above, a boarding ramp may have -

(i) at the intersection of the surface of the kerb and the surface of the ramp described above, a slope not exceeding 15° relative to the ground over a distance of not more than 150mm (measured along the surface of the ramp and parallel to the direction of travel of a reference wheelchair when it is moved from the kerb and onto the ramp surface), and

(ii) at any other point a slope not exceeding 15° relative to the ground over a distance of not more than 150mm (measured along the surface of the ramp and parallel to the

direction of travel of a reference wheelchair when it is moved into the vehicle) and rising to a height of not more than 15mm (measured above and parallel to the surface of the ramp or its sections);

(e) with the vehicle on a flat surface and in the normal condition for a wheelchair user to board or alight, the boarding ramp shall be capable of being extended to and of sitting on that surface and in this position the surface of a boarding ramp shall have a slope of not more than 20° measured over the surface referred to in sub-paragraph (3)(a);

(f) a boarding ramp shall be free of sharp edges or other protrusions capable of causing injury; and

(g) around and abutting each of the edges of a boarding ramp there shall be a band of colour of not less than 50mm in width which shall contrast with the remainder of the ramp surface.

(4) Any boarding lift fitted to a regulated public service vehicle shall comply with the following requirements -

(a) a boarding lift platform shall be not less than 750mm in width and not less than 1200mm in length (excluding the device specified in (b) below);

(b) unless a boarding lift platform is in the lowered position and resting on a surface from which a wheelchair user will board, the following shall apply -

(i) along any side of the lift platform from which a wheelchair user will move on to, or move from, the lift platform, a device of a height not less than 100mm measured vertically above the surface of the lift platform shall operate automatically as the lift is raised above the lowered position, except that when in the raised position for a wheelchair user to move from the lift platform to the floor of the vehicle, the device shall permit unobstructed access to the floor of the vehicle;

(ii) along any other side, there shall be a device or structure of a height not less than 25mm measured vertically above the surface of the lift platform; and

(iii) part of the vehicle structure may fulfil the requirements in (i) or (ii) above 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 a boarding lift platform shall not exceed 0.15m/s;

(d) with the vehicle on a flat surface and in the normal condition for a wheelchair user to board or alight, the lift shall be capable of being lowered to and of sitting on that surface;

(e) where the vertical travel of the lift platform exceeds 500mm, at least one side of the lift platform shall be fitted with a handrail where -

(i) in the case of a handrail fitted to the lift platform, a secure horizontal handrail shall be provided at a height of not less than 650mm or more than 1100mm measured vertically from the surface of the lift platform; or

(ii) in the case of a handrail that does not move with the lift platform, a vertical handrail shall provide a grasping point at the same heights above the lift platform throughout the range of the vertical travel; and

(f) around and abutting each of the edges of a boarding lift there shall be a band of colour of not less than 50mm in width which shall contrast with the remainder of the lift surface.

(5) Any power-operated boarding lift or power-operated boarding ramp fitted to a regulated public service vehicle shall (subject to sub-paragraphs (6) to (9)) -

(a) be capable of operation -

(i) by means of a control situated in the driver's cab, or

(ii) by means of a control situated adjacent to the lift or ramp which shall only be capable of operation by means of a master control situated in the driver's cab;

(b) produce an audible signal when in operation;

(c) be capable of being manually operated, or where the vehicle is fitted with more than one lift or ramp, not less than one lift or ramp capable of being manually operated shall be accessible to each wheelchair user;

(d) not be capable of operation when the vehicle is in motion;

(e) be fitted with a safety device which stops the movement of the ramp if the ramp is subject to a reactive force not exceeding 150N in any direction and if that motion could cause injury to a passenger; and

(f) be fitted with sensors capable of stopping the movement of the lift platform if it comes into contact with any thing or person whilst it is in motion and, once stopped, the lift platform must be capable of being reversed.

(6) Sub-paragraph (5)(f) shall not apply to a power-operated boarding lift which can only be operated by a control fitted in accordance with sub-paragraph (5)(a)(ii).

(7) As an alternative to the requirement in sub-paragraph (5)(c), a regulated public service vehicle may carry a portable ramp.

(8) This sub-paragraph applies where -

(a) a power-operated boarding lift is fitted to a regulated public service vehicle, and

(b) there are areas of that lift which are not visible to a person operating the lift.

(9) Where sub-paragraph (8) applies -

(a) the lift shall be fitted with a stop control which is within easy reach of any user of the lift and which is operable with the palm of the hand, and

(b) where the stop control is activated, the lift, once stopped, shall be capable of being reversed.

(10) Where a portable ramp is carried in a regulated public service vehicle the ramp shall -

(a) not easily be moved when it is in the normal position for a wheelchair user to board or alight from the vehicle and it is being so used;

(b) be provided with a stowage position in a position where it is readily available for use;

(c) be capable of being securely stowed in the stowing position so as to minimise the risk of injury to the passengers, the driver and any other crew members; and

(d) comply with the requirements in sub-paragraph (2)(a), (b) and (c) and (3) as if references to “boarding ramp” were references to “portable ramp”.

(11) In this paragraph “master control” means a control which enables another control to activate the relevant system, but which is not itself alone capable of activating that system.

Entrances and exits

6. (1) Any entrance or exit which is intended to provide access for a wheelchair user shall have a clear unobstructed width of not less than 800mm.

(2) Subject to sub-paragraph (3), where an entrance or exit which is intended to provide access for a wheelchair user is fitted with a power-operated boarding lift or a power-operated boarding ramp which is not within the direct field of vision of the driver -

(a) the entrance or exit shall be fitted with an optical device; and

(b) the optical device shall 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) Sub-paragraph (2) shall not apply to a power-operated boarding lift or a power-operated ramp which can only be operated by a control fitted in accordance with paragraph 5(5)(a)(ii).

Gangways

7. Any gangway between a wheelchair space and an entrance or exit intended to provide access for a wheelchair user -

(a) shall allow a reference wheelchair to be moved from an entrance to the wheelchair space and from the wheelchair space to an exit, with the wheelchair user moving in a forward facing direction, and to be moved (in either direction) from the gangway into the wheelchair space in the appropriate direction for travel;

(b) shall not be less than 750mm wide at any point along the gangway; and

(c) where a vehicle is fitted with more than one wheelchair space, the requirement in (a) above shall be met with any other wheelchair space occupied with a reference wheelchair.

Signs and markings

8. (1) A regulated public service vehicle shall have a sign conforming with diagram B in Part II of this Schedule, or a sign of equivalent meaning conforming to the dimensions in that diagram, which is;

(a) coloured white on a blue background,

(b) of dimensions of not less than 150mm by 150mm when fitted externally or of not less than 60mm by 60mm when fitted internally, and

(c) situated -

(i) on the exterior of the vehicle and adjacent to any entrance for a wheelchair user,

(ii) on the interior of the vehicle and adjacent to any exit for a wheelchair user, and

(iii) adjacent to any wheelchair space,

and in a position clearly visible to a wheelchair user.

(2) There shall be situated adjacent to a wheelchair space and in a position clearly visible to a wheelchair user -

(a) a sign indicating the direction that the wheelchair and the wheelchair user shall face during travel, and

(b) appropriate safety instructions explaining the use of the wheelchair space.

(3) Where a regulated public service vehicle is fitted with a wheelchair space for a forward facing wheelchair in accordance with the requirements of paragraph 3, instructions on the use of the wheelchair restraint system and wheelchair user restraint shall be situated in a position readily visible to any person using the system.

Communication devices

9. (1) A communication device shall be fitted to a regulated public service vehicle in the following positions -

(a) adjacent to a wheelchair space and in a position readily useable by any person who is using the wheelchair space, and

(b) on the exterior of the vehicle adjacent to any entrance for wheelchair access which is outside the direct view of the driver, except where that entrance is in the rear of the vehicle in which case the device shall be fitted on the rearmost part of the side face of the vehicle from which passengers will board the vehicle and at a height of not less than 850mm and not more than 1000mm measured vertically from the ground (with the vehicle at its minimum height if it is fitted with a kneeling system) to the centre of the device.

(2) Unless sub-paragraph (3) applies, any communication device fitted in accordance with sub-paragraph (1) shall comply with the following requirements -

(a) a communication device shall be operable by the palm of the hand;

(b) the surround of the communication device shall contrast with the device and with the surface on which the surround is mounted; and

(c) when operated, a communication device shall activate an audible signal which enables the driver to identify that a device fitted in accordance with sub-paragraph (1) has been activated, and where fitted in accordance with sub-paragraph (1)(a), after activating an audible signal may (on being operated subsequently) provide a visual signal which is visible to the driver until the opening of at least one of the exits.

(3) Where a regulated public service vehicle is required to comply with Schedule 2, any communication device fitted in accordance with sub-paragraph (1)(a) shall comply with the following requirements -

(a) a communication device shall be operable by the palm of the hand;

(b) the surround of the communication device shall contrast with the device and with the surface on which the surround is mounted; and

(c) when operated, a communication device -

(i) after activating an audible signal to the driver which enables the driver to identify that a device fitted in accordance with sub-paragraph (1)(a) or (b) has been activated, may (on being operated subsequently) provide a visual signal to the driver until the opening of at least one of the exits;

(ii) shall activate an audible signal which is audible in the passenger area; and

(iii) shall activate at least one illuminated stopping sign on each deck of the vehicle or, in the case of an articulated vehicle, on each section of that vehicle, which is or would be within the field of vision of the passengers seated on a majority of the seats on that deck or in that section.

(4) An illuminated stopping sign -

(a) shall not use only capital letters; and

(b) shall display illuminated the word “stopping” or a word or words to that effect immediately a communication device is activated and until at least one of the exits is open.

Lighting

10.(1) Lighting shall be fitted to illuminate the interior and exterior of a regulated public service vehicle sufficient to allow a wheelchair user to board and alight from the vehicle in safety.

(2) Any lighting fitted to a regulated public service vehicle in accordance with sub-paragraph (1) shall have a means of preventing its operation when the vehicle is in motion if its use is likely to affect adversely the driver’s vision.

Diagram A - Wheelchair Dimensions

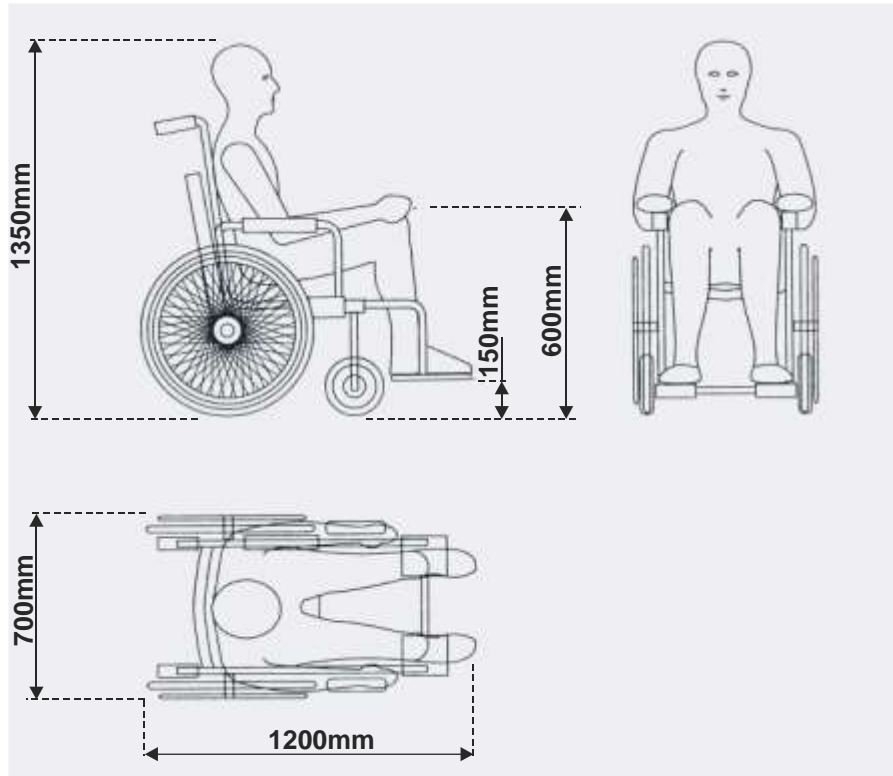


Diagram B - Wheelchair Sign



CHAPTER II

GENERAL ACCESSIBILITY REQUIREMENTS FOR SINGLE-DECK AND DOUBLE-DECK BUSES (Class I)

Definitions

1. In this Schedule;

“contrast” means a contrast in the amount of light which is reflected by the surfaces of the parts of a regulated public service vehicle or its equipment which is required by these Regulations to contrast;

“cushion” means that part of a seat on which a person using the seat sits, whether padded or not;

“deep” in relation to a step, means the distance from the outer edge of the nosing of the step tread to the riser of the step tread;

“doorway area” means that area which is within one metre of any entrance or exit measured horizontally from any point along the external edge of the door aperture;

“exit” means an exit from a regulated public service vehicle but does not include an exit which is provided for use only in case of emergency;

“external step” means the last step or platform from an entrance or an exit which leads directly from the vehicle to the ground;

“gangway” means the space provided for obtaining access from any entrance to the passengers’ seats or from any such seat to an exit other than an emergency exit, but does not include a staircase or any space in front of a seat or row of seats which is required only for the use of passengers occupying the seat or row of seats;

“km/h” means kilometre(s) per hour;

“kneeling system” means a system which enables the bodywork of a regulated public service vehicle to be lowered relative to its normal height of travel;

“mm” means millimetre(s);

“N” means newton(s);

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

“priority entrance” means an entrance (not being an entrance fitted to the off-side of the vehicle) providing access to the priority floor area in accordance with paragraph 2(2)(b);

“priority exit” means an exit (not being an exit fitted to the off-side of the vehicle) providing access from the priority floor area in accordance with paragraph 2(2)(b);

“priority floor area” means a single continuous area of floor space comprising not less than 35% of the total floor area of a regulated public service vehicle;

“priority seat” means a seat designated as such in accordance with paragraph 3;

“seat” means a seat intended for use by passengers and, accordingly, does not include the driver’s seat or any other seat intended for use solely by a crew member; and

“total floor area” means the total floor area of a regulated [public] service vehicle, or in the case of a double-deck bus 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.

Floor and gangways

2. (1) All floors within the total floor area of a regulated public service vehicle shall be slip-resistant.

(2) A regulated public service vehicle shall contain a priority floor area which shall -

(a) not contain steps;

(b) provide access to at least one priority entrance to, and one priority exit from, the vehicle or access to steps which lead to such entrances and exits;

(c) contain all priority seats specified in paragraph 3; and

(d) have a slope of not more than 3° in any direction, or not 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.

(3) Any gangway within the priority floor area of a regulated public service vehicle shall have a width of -

- (a) not less than 450mm up to a height of 1400mm measured vertically from the floor of the vehicle, and
- (b) not less than 550mm at heights exceeding 1400mm measured vertically from the floor of the vehicle.

Priority seats

3.(1) A regulated public service vehicle shall have not less than 4 seats designated by signs complying with sub-paragraph (3) as priority seats for use by disabled persons.

(2) Any priority seat fitted to a regulated public service vehicle and designated in accordance with sub-paragraph (1) shall comply with the following requirements -

- (a) a priority seat shall not be a seat which is capable of being tipped, folded or otherwise moved;
- (b) a priority seat shall face only the front or the rear of the vehicle;
- (c) a priority seat shall not be a seat to which the provisions of paragraphs 3(2) and (3) or 4(5) and (6) of Schedule 1 apply;
- (d) a priority seat shall be as close as practicable to a priority entrance;
- (e) there shall 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 shall be moveable to the extent required to permit unrestricted access by a disabled person to that seat or to any other priority seat to which access may be gained past the seat;
- (g) a cushion of a priority seat shall have a width of not less than 440mm measured at the widest point across the surface of the cushion, such distance being equally spaced either side of the centreline of the seating position;
- (h) the top surface of a cushion of a priority seat shall be at a height of not less than 400mm and not more than 500mm above the floor of the vehicle measured from the front edge of the seat and along an imaginary line passing vertically from the centreline of the seating position to the floor;
- (i) where a priority seat faces the same direction as a seat situated directly in front of the priority seat -
 - (i) the distance between the front surface of the back of the priority seat and the back surface of the back of the seat in front (measured along an imaginary horizontal line passing along the top surface of the cushion of the priority seat and through the centreline of the seating position of the priority seat) shall not be less than 650mm, and
 - (ii) where the back of either seat is adjustable, this measurement shall be made with the seat or seats in the manufacturer's nominal position for normal use;
- (j) where 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 (measured along an imaginary horizontal line passing along the top surface of the cushion of the priority seat and through the centreline of the seating position of the priority seat) shall not be less than 1300mm, and

(ii) where the back of either seat is adjustable, this measurement shall be made with the seat or seats in the manufacturer's nominal position for normal use;

(k) there shall be -

(i) not less than 1300mm of clear space above any point along the front edge of the top surface of a cushion of a priority seat measured vertically from the top surface of the cushion,

(ii) not less than 900mm of clear space above any point along the rear edge of the top surface of a cushion of a priority seat measured vertically from the top surface of the cushion, and

(iii) clear space between any point on the top surface of a cushion of a priority seat and an imaginary plane connecting the maximum height of clear space specified in (i) above to the maximum height of clear space specified in (ii) above; and

(l) where a priority seat faces the same direction as a seat situated directly in front of the priority seat or if the priority seat faces a bulkhead or a partition, there shall be -

(i) above an imaginary horizontal plane passing along the top surface of a cushion of a priority seat and situated in front of the front edge of the cushion, a volume of clear space of not less than 230mm measured in the longitudinal plane of the priority seat, of not less than 420mm measured in the transverse plane of the priority seat (such distance being equally spaced either side of the centreline of the seating position) and of a height not less than the height of the back of the priority seat;

(ii) below an imaginary horizontal plane passing along the top surface of a cushion of a priority seat and situated in front of the front edge of the cushion, a volume of clear space of not less than 230mm measured in the longitudinal plane of the priority seat, of not less than 300mm measured in the transverse plane of the priority seat (such distance being equally spaced either side of the centreline of the seating position) and of a height not less than the height of the priority seat cushion, and

(iii) where a priority seat is situated facing a bulkhead or a partition which is more than 1200mm in height measured vertically from the floor of the vehicle, the distances measured in the longitudinal plane of the priority seat referred to in (i) and (ii) above shall not be less than 300mm.

(3) There shall be a sign on or near a priority seat indicating that disabled persons have priority for the use of that seat.

(4) In sub-paragraph (2) the phrase "manufacturer's nominal position for normal use" means the position of an adjustable seat which the manufacturer of the seat recommends, or has nominated, as being the normal position for using that seat.

Steps

4. (1) Steps for use by passengers on a regulated public service vehicle shall (subject to sub-paragraph (6)) comply with the following requirements -

(a) the surface of each tread shall be covered in a slip-resistant material;

(b) step nosings shall be designed to minimise the risk of tripping;

(c) across the front edge of each tread there shall be a band of colour not less than 45mm and not more than 50mm in width, which shall contrast with the remainder of the tread;

(d) the rear of a step shall be closed by a vertical riser between the rear of the tread and either the front edge of the tread above or the floor of the vehicle above;

(e) any step, other than an external step or a step to a seat fitted to any part of a wheelarch or a step in (f) below, shall -

(i) not be less than 120mm and not more than 200mm in height, and

(ii) the surface of the tread shall not be less than 300mm deep and not less than 400mm wide;

(f) any steps between a gangway and a passenger seat or a row of passenger seats, other than a step to any seat fitted to any part of a wheelarch, shall not be more than 250mm in height; and

(g) in a flight of steps, the difference in height between any two steps shall not be more than 10mm.

(2) The height of a step in sub-paragraph (1) shall be measured vertically from the surface of the tread, and at the centre of the tread width, to an imaginary line extended horizontally from the surface of the next tread or floor of the vehicle.

(3) An external step, leading from not less than one priority entrance and to not less than one priority exit, shall -

(a) not be more than 250mm in height measured -

(i) from the surface of the tread of the external step to the ground,

(ii) if the vehicle is fitted with a kneeling system, with the regulated public service vehicle at its minimum height, and

(iii) at the centre of the tread width; and

(b) not be less than 300mm deep.

(4) A regulated public service vehicle shall not be fitted with a step which can project beyond the side of the vehicle adjacent to the step unless -

(a) the step is protected by parts of the vehicle or otherwise so that [it] is not liable to injure pedestrians; or

(b) the step can fold or retract so that it does not project beyond the side face of the vehicle and the vehicle is not capable in the normal course of being driven away unless the step is so folded or retracted.

(5) Where a regulated public service vehicle is fitted with a power-operated step, that step shall -

(a) not be capable of operation whilst the vehicle is in motion, and

(b) be fitted with a safety device which stops the motion of the step if the step is subject to a reactive force not exceeding 150N in any direction and if that motion could cause injury to a passenger.

(6) Sub-paragraphs (1)(d), (e) and (g) shall not apply to those steps in a double-deck bus which lead from the lower deck to the upper deck.

Handrails and handholds

5. (1) A handrail shall (subject to sub-paragraph (2)) be fitted in the following positions in a regulated public service vehicle -

(a) along one or both sides of a gangway -

(i) from a position level with the top of the back of a seat extending to the ceiling of the vehicle, or to a height of not less than 1500mm measured vertically from the floor of the vehicle, at intervals of not more than 1050mm measured in the longitudinal direction of the vehicle, or

(ii) in areas where there are no seats adjacent to a gangway, [from the floor or, where there is a wheel arch or similar structure, from the lowest height which is practicable to, in either case, the ceiling, or] a height of not less than 1500mm measured vertically from the floor of the vehicle, at intervals of not more than 1050mm measured in the longitudinal direction of the vehicle, and

(iii) where the gangway is adjacent to the internal walls of the vehicle, horizontally along the internal wall of the vehicle and parallel to those walls at a height of not less than 1200mm and not more than 1500mm measured vertically from the floor of the vehicle;

(b) in any area where passengers may stand other than a gangway -

(i) where the area is adjacent to the internal walls of the vehicle, horizontally along the internal walls of the vehicle and parallel to those walls at a height of not less than 1200mm and not more than 1500mm measured vertically from the floor of the vehicle, and

(ii) in any other area, from the floor to the ceiling, or to a height of not less than 1500mm measured vertically from the floor of the vehicle, at intervals of not more than 1050mm measured in the longitudinal direction of the vehicle;

(c) from the doorway area immediately adjacent to a priority entrance to not less than one of the priority seats at a height of not less than 800mm and not more than 900mm measured vertically from the floor of the vehicle or, where it is not practical to comply with those requirements, the handrail need not be continuous provided any gap does not exceed 1050mm and a vertical handrail is provided on at least one side of the gap extending from a height of at least 1200mm to a height of not less than 1500mm measured vertically from the floor of the vehicle; and

(d) on both sides of the interior of an entrance or exit -

(i) in the case of any external step in the vehicle entrance which is fixed, not more than 400mm measured from the outer edge of the step nosing and at a height of not less than 800mm and not more than 1100mm measured vertically from the ground, with the vehicle at its minimum height if the vehicle is fitted with a kneeling system,

(ii) in the case of an external step in the vehicle entrance which is not fixed, on both sides of the interior of an entrance or exit not more than 100mm from the outer edge of the step nosing of the lowest fixed step in the vehicle entrance and at a height of not less than 800mm and not more than 1100mm measured as mentioned in (i) above, and

(iii) in the case of any other steps leading into a vehicle, for the position appropriate to a particular step, at not more than 600mm measured horizontally and inwards from the outer edge of the step nosing of the tread of a step or the floor of the vehicle and at a height of not less than 800mm and not more than 1100mm measured vertically from the surface of the tread of the step.

(2) Where -

- (a) it is necessary to provide access to and into a wheelchair space, and
- (b) it is not possible to comply with the requirements of sub-paragraph (1)(b) or (1)(c),

a horizontal handrail or, at intervals of not more than 300mm, a series of handholds shall be provided across the gap.

(3) Any handrail in a regulated public service vehicle that is fitted in order to comply with this paragraph shall comply with the following requirements -

- (a) have a circular cross section with a diameter of not less than 30mm and not more than 35mm, or when fitted at either side of an entrance or exit, an oval cross section the maximum section of which is not more than 35mm and not less than 30mm, and the minimum section of which is not less than 20mm;
- (b) not be less than 800mm or more than 1900mm above the floor of the vehicle;
- (c) have a clear space of not less than 45mm between any part of the vehicle and all parts of a handrail other than its mountings;
- (d) have a slip-resistant surface;
- (e) be capable of being easily and firmly gripped by a passenger; and
- (f) contrast with the parts of the vehicle adjacent to the handrail.

(4) Any handhold in a regulated public service vehicle that is fitted in order to comply with this paragraph shall comply with the following requirements -

- (a) not be less than 800mm or more than 1900mm above the floor of the vehicle;
- (b) have a clear space of not less than 45mm between any part of the vehicle and all parts of a handhold other than its mountings;
- (c) have a loop shape, or some other form, designed to prevent a hand from slipping from the handhold;
- (d) have a slip-resistant surface;
- (e) be capable of being easily and firmly gripped by a passenger; and
- (f) contrast with the parts of the vehicle adjacent to the handhold.

(5) A handhold may be placed within the space of a gangway provided -

- (a) it is unlikely to cause injury; and
- (b) it is easily moveable to the extent required to permit unrestricted access by a disabled person to a priority seat or to the gangway.

Communication devices

6. (1) A communication device shall be fitted in the following positions in a regulated public service vehicle -

- (a) within reach of each person seated in a priority seat;

- (b) adjacent to not less than every third row of seats; and
- (c) at a height of -
 - (i) not more than 1200mm if the communication device is for the use of seated passengers, or
 - (ii) not more than 1500mm if the communication device is for the use of other passengers,
 measured vertically from the floor of the vehicle to the centre of the device.

(2) Any communication device shall comply with the following requirements -

- (a) a communication device shall be operable by the palm of the hand;
- (b) the surround of the communication device shall contrast with the device and with the surface on which the surround is mounted; and
- (c) when operated, a communication device shall -
 - (i) provide a signal to the driver of the vehicle to stop the vehicle,
 - (ii) activate an audible signal which is audible in the passenger areas, and
 - (iii) activate at least one illuminated stopping sign on each deck of the vehicle or, in the case of an articulated vehicle, on each section of that vehicle, which is, or would be, within the field of vision of the passengers seated on a majority of the seats on that deck or in that section, and

(3) An illuminated stopping sign -

- (a) shall not use only capital letters; and
- (b) shall display illuminated the word “stopping” or a word or words to that effect immediately a communication device is activated and until at least one of the exits is open.

Kneeling Systems

7. (1) Where a regulated public service vehicle is fitted with a kneeling system, the vehicle and system shall comply with the following requirements -

- (a) a switch shall be required to be used to enable operation of the system;
- (b) any control which initiates the lowering or raising of any part or the whole of the body relative to the road surface must be clearly identified and under the direct control of the driver of the vehicle;
- (c) the lowering process shall be capable of being stopped and immediately reversed by a control which is both -
 - (i) within reach of the driver whilst seated in the cab, and
 - (ii) adjacent to any controls provided for the operation of the kneeling system; and
- (d) the kneeling system shall not -
 - (i) allow the vehicle to be driven at a speed of more than 5km/h where the vehicle is lower than the normal height of travel, or

(ii) allow the vehicle to be lowered when the operation of an entrance or exit door (other than an emergency door) is prevented for any reason.

(2) In this paragraph “emergency door” means an external door which is generally intended for use only in an emergency.

CHAPTER III

ROUTE AND DESTINATION DISPLAYS

1. In this section -

“character” means capital letters or numbers of a specified height and lower case letters of a size relative to that of a capital letter for a given typeface;

“destination” means a word or words to describe the route or final destination; and

“route number” means any combination of numbers or letters which designate a coach route.

2. (1) A regulated public service vehicle shall be fitted with a route number display and a destination display in the following positions –

(a) on the front of the vehicle, as close as practicable to the part of the windscreen which is within the driver’s field of vision; and

(b) on the near-side of the vehicle adjacent to the entrance which is closest to the front of the vehicle at a height of not less than 1.2 metres to the lower edge of the display characters and not more than 2.5 metres to the upper edge of the display characters measured from the ground and, if fitted with a kneeling system, with the vehicle in the normal condition for vehicle travel.

(2) A regulated public service vehicle shall be fitted with a route number display on the rear of the vehicle.

(3) Any route number display shall be capable of displaying -

(a) characters of not less than 200mm in height on the front and rear of the vehicle and not less than 70mm in height on the side of the vehicle;

(b) characters that contrast with the display background;

(c) characters that are provided with a means of illumination; and

(d) not less than three characters.

(4) Any destination display shall be capable of displaying -

(a) characters of not less than 125mm in height when fitted to the front of a vehicle and not less than 70mm in height when fitted to the side of a vehicle;

(b) characters that contrast with the display background;

(c) characters that are provided with a means of illumination; and

(d) not less than fifteen characters.

(5) Destination information shall not be written in capital letters only.

PART 2

Technical Specification and Technical Requirements for

National Small Series Type-Approval for

Category N Vehicles

(Small series numerical limits specified in Schedule 4)

To enable representative testing the vehicle will be delivered in a presentable state and capable of being laden to maximum authorised weight.

A representative of the manufacturer must be present to enable access to all parts of the vehicle, to assist in explanation of features of that vehicle, and to cooperate in any testing.

Subject / Requirements	Exemptions / Variations	Test Conditions / Resulting Documentation
<p>1. Sound Level</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • paragraph 5 of Annex I to Directive 70/157 as last amended by Directive 1999/101/EC or 2007/34/EC <p>Or</p> <ul style="list-style-type: none"> • Paragraph 6 to UNECE Regulation 51.02 	<p>Directive 70/157/EEC, Annex I, paragraphs 5.3.1.1, 5.3.1.2. and 5.3.1.3 shall not apply.</p> <p>Vehicles for which an approval or test report has been issued prior to modification of the exhaust system down stream of the catalyst, a Stationary Noise Test where a Stationary Noise Test means:</p> <ol style="list-style-type: none"> a) in the case of a modified exhaust system a stationary test as defined in paragraphs 5.2.3.4.2 and 5.2.3.4.3 of Annex I to Directive 70/157 and shall not exceed the equivalent stationary value recorded on the Certificate of Conformity, Approval Certificate or test report for that vehicle by more than 2dB(A) at 0.5m. b) in the case of vehicles having a maximum permissible mass exceeding 2800kg fitted with a modified air brake system, a test report is required to paragraph 5.4 of Annex I to Directive 70/157/EC except that this shall not apply if air brake silencers are fitted. <p>Modification of the exhaust system length after last silencer not exceeding 2m is permissible without further test.</p>	<p>Laden or unladen vehicle.</p> <p>Approval or Test Report And for modified systems a Stationary Noise Test</p>
<p>2. Emissions (Light Duty Vehicles)</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • paragraph 5 of Annex I to Directive 70/220/EEC as last amended by Directive 2003/76/EC, Row B limit values <p>Or</p> <p>UNECE Regulations 83.05</p> <p>Vehicles manufactured up to 31st August 2016: the technical provisions of Regulation (EC) 715/2007 as amended by Regulation (EC) 692/2008, Annex I, Table 1.</p> <p>Vehicles manufactured on or after 1st September 2016: the technical provisions of Regulation (EC) 715/2007 as amended by Regulation (EC) 692/2008, Annex I, Table 2.</p>	<p>Applies to N₁ and N₂ vehicles</p> <p>Directive 70/220/EEC as amended shall cease to apply from 2 January 2013.</p> <p>As from 1st Jan 2012 in the case of N₂ vehicles, manufactured after that date seeking individual vehicle approval must comply with Regulation (EC) No. 715/2007.</p> <p>Vehicles are exempt from the requirements of On Board Diagnostic systems.</p> <p>This item does not apply to vehicles approved to item 41.</p> <p>Modification of exhaust system length after the last silencer is permissible without any further test.</p> <p>An EC type-approval issued to the most representative base vehicle remains valid irrespective of change in the reference mass.</p> <p>Only modifications specified above will be accepted without further test. Any other modifications may be assessed at the discretion of the Approval Authority.</p>	<p>Laden or unladen vehicle.</p> <p>Approval or Test Report And Inspection of modifications (if applicable)</p>

<p>3. Fuel Tanks / Rear Protective Devices</p> <p>For fuel tanks: The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p> <ul style="list-style-type: none"> • For liquid fuel tanks UNECE Regulation 34.01 <p>For vehicles using gaseous fuels:</p> <p>Regulations 67.01 and 115 for LPG. Regulation 110.00 and 115 for CNG.</p> <p>Or</p> <ul style="list-style-type: none"> • for hydrogen powered vehicles; The technical provisions of EU Regulation 79/2009 or ECE Regulation 134 <p>And</p> <p>For rear underrun: The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 5 of Annex II to Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 58.01 	<p>Fuel tanks for liquid fuels at ambient temperature must :</p> <p>(a) comply with the requirements given in column 1 except that the approval or test report, need not be for the same vehicle type: and (b) subsequent modifications to the pipework or relocation of a tank excluding the tank, the cap/filler device or the venting device, may be accepted by the Approval authority.</p> <p>Note: The requirements for liquid fuel tanks apply only to fuel tanks used primarily for the propulsion of the vehicle.</p> <p>Rear Protection Device</p> <p>An Installation check must be made to confirm that the rear protective device as a separate technical unit is of a type for which:</p> <p>(a) a type approval or test report has been issued; or (b) has been tested and witnessed by the Approval Authority; or (c) calculations have been submitted to the satisfaction of the Approval Authority; and a visual inspection that the device has been correctly installed in accordance with the technical requirements.</p> <p>If the vehicle is fitted with a fuel tank for petrol the fuel tank shall be so constructed that it cannot readily be filled from a petrol pump delivery nozzle which has an external diameter of not less than 23.6mm without the aid of a device (such as a funnel) not fitted to the vehicle.</p> <p>The fuel system, including the fuel tank, shall be so designed, constructed and fitted as to withstand the forces, vibration and corrosive environment to which it is likely to be subject. It shall also be so fitted as to avoid the risk of damage, such as abrasion, due to fouling of other parts, and to minimise the risk of fire in the event of any leakage of fuel.</p>	<p>Installation Check that the fuel tank or rear underrun device has been correctly installed in accordance with the technical requirements</p> <p>Fuel tanks for gaseous fuels</p> <p>Approval or Test Report</p> <p>Fuel tanks for liquid fuels at ambient temperature</p> <p>Approval or Test Report</p> <p>Rear Underrun</p> <p>Approval or Test Report</p>
<p>4. Rear Registration Plate Space</p> <p>The technical provisions of paragraphs 1 and 2 to Directive 70/222/EEC</p>	<p>A check that the positional, dimensional and the visibility requirements are met.</p>	<p>Approval or Test Report</p> <p>Or</p> <p>A dimensional and the visibility check</p>
<p>5. Steering Effort</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/311/EEC as last amended <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 79.01 	<p>For a modified system manoeuvrability test in accordance with paragraph 5 of 1992/62/EEC</p>	<p>Laden vehicle.</p> <p>Approval or Test Report</p>
<p>6. Door Latches and Hinges</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 3 of Annex 1 of Directive 70/387/EEC as last amended by Directive 2001/31/EC <p>Or</p> <ul style="list-style-type: none"> • Paragraph 5 of UNECE Regulation 11.03. 	<p>Evidence that suitable proprietary parts from approved vehicles are used may, at the discretion of the Approval Authority, remove the need for testing</p>	<p>Approval or Test Report</p> <p>Or</p> <p>Evidence that suitable proprietary parts from approved vehicles are used</p>
<p>7. Audible Warning</p>	<p>Inspection to confirm the presence of approval marks</p>	<p>Component:</p>

<p>The technical provisions of:</p> <ul style="list-style-type: none"> Paragraph 2 of Annex I to Directive 70/388/EEC as last amended by 87/354/EC <p>Or</p> <ul style="list-style-type: none"> Paragraph 14 to UNECE Regulation 28.00 	<p>and operation of the device including a Sound Level Check which is a vehicle test as described in the technical provisions given in column 1 except that a voltage test is not required.</p>	<p>Approval or Device must be “e” / “E” marked</p> <p>Vehicle: Approval or Test Report Or Inspection to confirm the presence and operation of the device including a Sound Level Check.</p>
<p>8. Indirect Vision Devices</p> <p>N1 vehicles: The technical provisions of:</p> <ul style="list-style-type: none"> Directive 2003/97/EC <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 46.02. <p>N2 and N3 vehicles manufactured after 1st July 2016: The technical provisions of paragraph 15 of UNECE R46.04</p>	<p>Field of view requirements do not apply to optional mirrors.</p> <p>“Optional mirrors”: are mirrors not intended to give a clear view to the rear, side or front of the vehicle within the fields of vision defined in 2003/97/EC; therefore they are in no way a substitute for rear view mirrors</p> <p>The vehicle requirements in col 1 paragraph 2 do not apply to vehicles where, any part of, the mirror is below 2.4m above the ground.</p> <p>The requirements in col 1 paragraph 2 do not apply to vehicles where the incomplete vehicle is of a type that is type approved to Directive 2003/97.</p>	<p>Component Approval: Approval or Device must be “e” / “E” marked</p> <p>Vehicle Approval: Approval or Test Report</p> <p>Specify the numbers and class(es) of mirror required for each vehicle category.</p>
<p>9. Braking</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> Paragraph 2 of Annex I to Directive 71/320/EEC as last amended by Directive 1998/12/EC and tests as defined in associated Annexes as may be applicable. <p>Or</p> <ul style="list-style-type: none"> Paragraph 5 of UNECE Regulation 13.09 and tests as defined in associated Annexes as may be applicable. 	<p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p>	<p>Laden and Unladen vehicle</p> <p>Approval or Test Report</p>
<p>10. Radio Interference / Electro-magnetic Compatibility</p> <p>The essential technical provisions of:</p> <ul style="list-style-type: none"> Directive 72/245/EEC as last amended by Directive 2006/28/EC, section 6 of Annex I taking into consideration the exemptions in section 8 and tests specified in Annexes IV to X <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 10.03 	<p>Items for which approval has been granted as part of the base of incomplete vehicle approval do not need re-approval.</p> <p>If adding additional electrical/electronic components to the vehicle then these additional components should be “e” / “E” marked. If they are not “e” / “E” marked then the additional components will require EMC testing as per 2004/104/EC and a test report will be required for evidence of this.</p>	<p>Components: Approval or Device must be “e” / “E” marked</p> <p>Installation: Approval or Test Report Or A Test / Inspection restricted to a check for “e” / “E” marked components and ESA approval for safety critical items.</p>
<p>11. Diesel Smoke</p> <ul style="list-style-type: none"> Directive 72/306/EEC as last amended by Directive 2005/21/EC section 5 of Annex I and tests as defined in Annexes IV and V <p>Or</p> <ul style="list-style-type: none"> EC Regulation 715/2007 	<p>A free acceleration test such that the coefficient of absorption of the exhaust emissions from the engine immediately after leaving the exhaust shall not exceed -</p>	<p>Approval or Test Report</p>

<ul style="list-style-type: none"> • UNECE Regulation 24.03 	<p>a) for an N1 vehicle, 1.5 per metre or b) for an N2 or N3 vehicle: iii) if the engine of the vehicle is turbo-charged, 3.0 per metre or iv) in any other case, 2.5 per metre is allowed as an alternative.</p> <p>“co-efficient of absorption” is to be construed in accordance with paragraph 3.5 of Annex VII to Directive 72/306/EEC;</p> <p>“free acceleration” has the same meaning as in Annex II to Directive 77/143/EEC as last amended by Directive 92/55/EEC.</p> <p>A test report for a modified system need only refer to the engine as long as the installation conditions are not violated.</p> <p>Vehicles fitted with proprietary engines which have already been satisfactorily tested for emissions to 72/306 may gain approval for the vehicle based on the engine results provided that similar conditions of installation to those on the test report are used. Where “similar” means installation tolerances in the directive. Data should be provided to show that Intake and Exhaust specifications are within the ranges specified in the 72/306/EEC type approval information document.</p>	
<p>12. Interior Fittings</p>	<p>Not Applicable</p>	
<p>13. Anti-theft and Immobiliser</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/61/EEC as last amended by Directive 95/56/EC. <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulations 18.03, 97.01 and 116 as applicable. 	<p>Immobilisers must be approved as part of the base vehicle or as a Separate Technical Unit.</p> <p>Alarms must be approved as part of the base vehicle or as a Separate Technical Unit.</p> <p>The following shall not apply: Directive 74/61/EEC Annex IV, paragraphs 3.9, 4.1.3, 4.1.4, 4.2.4, 4.2.6, and 4.3.5; UNECE Regulation 18, paragraphs 5.8, 6.1.3, 6.1.4, 6.2.4, 6.2.6, 6.3.5.</p> <p>In the case of devices to prevent unauthorised use the manufacturer may as an alternative to an approval or test report issue a declaration of the device(s) fitted and that they comply with column 1, and in such case an Installation Check will be conducted including any check the Approval Authority considers necessary and in the case of an immobiliser or alarm system a completed installation certificate.</p> <p>An “Installation Check” means: An inspection of installed components as the approval authority deem necessary and in the case of an immobiliser or alarm system a completed installation certificate.</p> <p>In the case of an immobiliser or alarm system an Installation Check</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p>	<p>Device to prevent unauthorised use:</p> <p>Approval or Test Report</p> <p>Immobilisers and Alarm Systems:</p> <p>Approval or Test report</p> <p>And</p> <p>Installation Check</p>
<p>14. Protective Steering</p>	<p>Applies to N₁ vehicles.</p>	<p>Approval or Test Report</p>

<p>The essential technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/297/EEC as last amended by Directive 91/662/EEC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 12.03 	<p>The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p>	
<p>15. Seat Strength</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 74/408/EEC as amended by Directive 2005/39/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 17.06 	<p>Except for N₁ category, side facing seats may be fitted in accordance with Directive 74/408/EEC as amended by Directive 2005/39/EC, Article 3a, paragraph 3, until 20 October 2010.</p>	<p>Approval or Test Report</p>
<p>16. Exterior Projections</p>	<p>Not Applicable</p>	
<p>17. Speedometer and Reverse Gear</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 75/443/EEC as amended by Directive 97/39/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 39.00 	<p>This requirement does not apply to a vehicle fitted with a tachograph if the tachograph provides adequate visual indication of speed to the driver.</p>	<p>Speedometer:</p> <p>Approval or Test Report Or Tachograph fitted and provides adequate visual indication of speed to the driver.</p> <p>Reverse Gear:</p> <p>A test to confirm the presence and function of a reverse gear and operation from the driving position.</p>
<p>18. Plates (statutory)</p> <p>The technical provisions of: Directive 76/114/EEC as last amended by Directive 78/507/EEC.</p> <p>And</p> <p>Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate</p>	<p>Inspection to confirm:</p> <ul style="list-style-type: none"> • the presence of a plate bearing details of Make, Model, VIN (or equivalent unique vehicle identifier), and Masses (Maximum Design values for the Axles, Gross Vehicle and Gross Train, King Pin (for semi trailers only)); • the initial VIN or unique vehicle identifier is marked on the chassis or other structure on the right hand side of the vehicle. And that it is placed in a clearly visible and accessible position by a method such as hammering or stamping, in such a way that it cannot be obliterated or deteriorate. <p>Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate.</p>	<p>Inspection</p>
<p>19. Seat Belt Anchorages</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 76/115/EEC as last amended by Directive 2005/41/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 14.06 		<p>Approval or Test Report</p>
<p>20. Installation of Lighting and Light Signalling Devices</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Annex II to Directive 76/756/EEC as last amended by 2007/35/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 48.03 	<p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p>	<p>Approval or Test Report</p> <p>All lighting devices must be “e” / “E” marked and of the correct categories to be fitted in appropriate locations; Headlamps must be appropriate for left-hand rule of the road.</p>

<p>And</p> <p>where applicable: Rear Marker Plates to Statutory Instrument 157 of 1985</p>		<p>The manufacturer should provide a list of components, their “e” / “E” marks and any alternatives covered by test reports.</p>
<p>21. Retro Reflectors, Rear Marker Plates and Conspicuity Markings</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/757/EEC as last amended by Directive 97/29/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 3.02 <p>And</p> <p>Where applicable Rear Marker Plates to Statutory Instrument 157 of 1985 and UNECE 104 (conspicuity markings)</p>	<p>Conspicuity Markings to be red to the rear and white or yellow to the side.</p>	<p>Approval or Devices must be “e” / “E” marked</p>
<p>22.End-outline, Front-position (side), Rear-position (side), Stop, Side Marker, Daytime Running Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/758/EEC as last amended by Directive 97/30/EC <p>Or</p> <ul style="list-style-type: none"> • For End-Outline, Front-Position (side), Rear-Position (side), and Stop lamps UNECE Regulation 7.02. For Daytime Running Lamps UNECE Regulation 87.00. For Side Marker lamps, UNECE Regulation 91.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>23. Direction Indicators</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/759/EEC as last amended by Directive 99/15/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 6.01 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>24. Rear Registration Plate Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/760/EEC as last amended by Directive 97/31/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 4.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>25. Headlamps including bulbs</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/761/EEC as last amended by Directive 99/17/EC <p>Or</p> <ul style="list-style-type: none"> • Equivalent UNECE 	<p>An Installation Check will be conducted including any check the Approval Authority considers necessary.</p> <p>A check for left-hand rule of the road dipped beam cut off is required.</p> <p>If of self levelling design then a self certification is required.</p>	<p>Headlamps: Approval Or Approval and supplementary test report for modifications</p> <p>Lamps (bulbs):</p>

<p>Regulations 1.02, 5.02, 8.05, 20.03, 31.02, 98.00 and 112 for headlamps,</p> <p>And</p> <p>UNECE Regulations 2, 37.03 and 99.00 for all lamps (bulbs).</p>		<p>Approval or Devices must be “e” / “E” marked</p> <p>Components be e-marked</p> <p>Installation check</p>
<p>25A. Cornering Lamps</p> <p>Where fitted: the technical and marking requirements of UNECE Regulation 119</p>		<p>Approval or Devices must be “e” / “E” marked</p>
<p>26. Front Fog Lamps</p> <p>Where fitted: the technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/762/EEC as last amended by Directive 99/18/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 19.02 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>27. Towing Hooks</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Annex II to Directive 77/389/EEC as last amended by Directive 96/64/EC 	<p>Not Applicable for N₁</p>	<p>Approval or Test Report or manufacturer’s test report</p>
<p>28. Rear Fog Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 77/538/EEC as last amended by Directive 99/14/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 38.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>29. Reversing Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 77/539/EEC as last amended by Directive 97/32/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 23.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>30. Parking Lamps</p> <p>Where fitted: the technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 77/540/EEC as last amended by Directive 99/16/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 77.00 		<p>Approval or Devices must be “e” / “E” marked</p>
<p>31. Seat Belts and Restraint Systems</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 77/541/EEC EEC as last amended by Directive 2005/40/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 16.05 	<p>Full Directive specification required in all seating positions</p> <p>Seat belts which have been specially designed or adapted for use by an adult or young person suffering from some physical defect or disability and intended for use solely by such person are exempt.</p> <p>Any vehicle not required to be fitted with seat belt anchorages is exempted from these requirements.</p> <p>A seat belt bearing an approval may be fitted, whether or not the seat belt has been type approved for the anchorages to which it is fitted, provided that the seat belt complies with the installation</p>	<p>List minimum numbers and classes of seat belt for each vehicle category</p> <p>Components: Approval or Test Report . Devices must be “e” / “E” marked</p> <p>Installation: Approval or Test Report or manufacturer’s test report</p>

	requirements.	
32. Forward Vision	Not Applicable	
33. Identification of Controls, Tell-tales and Indicators The technical provisions of: <ul style="list-style-type: none"> • Directive 78/316/EEC as amended by Directive 94/53/EC Or <ul style="list-style-type: none"> • UNECE Regulation 121 	Inspection to check that the prescribed controls are marked in accordance with the requirements of the directive. Other optional controls should be readily identifiable and must not be confusable with other symbols show in the Directive and Regulation. Electronic displays shall follow any appropriate priority protocol.	Approval or Test Report And Inspection
34. Defrost / Demist	The defrost system must be capable of melting frost or ice on the surface of the windscreen thereby restoring visibility over the bulk of the area prescribed in the washer and wiper section. The demist system must be capable of removing a film of condensate on the inside surface of the windscreen thereby restoring visibility over the bulk of the area prescribed in the washer and wiper section. “Adequate” means sufficiently effective to ensure adequate visibility through the windscreen under all conditions.	Test Report Or Documented details of the system plus a functional check Or Where appropriate a check for adequate system.
35. Wash / Wipe	Vehicles shall be fitted with adequate washing and wiping devices. For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete based on maximum mass may apply if an adequate system is provided in the front. “Adequate” means sufficiently effective to ensure adequate visibility through the windscreen under all conditions.	Test Report Or Visual inspection Test to the specifications contained in paragraph 5 of 78/318/EEC.
36. Heating Systems The technical provisions of: <ul style="list-style-type: none"> • Directive 2006/119/EC, section 3 of Annex II, and Annexes III, VII and VIII. Or <ul style="list-style-type: none"> • UNECE Regulation 122 	Systems using waste heat from the engine cooling system need only be checked for presence and operation. Vehicle manufacturer needs to demonstrate the essential requirements are fulfilled. If air is the medium for heat transfer, conduct a test to ensure that CO levels of air coming from vents is not more than 20ppm above the ‘ambient’ air. Normal exhaust measuring equipment may be sufficiently sensitive.	Combustion heaters (if fitted): Approval or Test Report Waste Heat Systems: Approval or Test Report Or Installation Check
37. Wheel Guards	Not Applicable	
38. Head Restraints	Not Applicable	
39. CO₂ Emissions / Fuel Consumption The technical provisions of: <ul style="list-style-type: none"> • Directive 80/1268/EEC as amended by Directive 2004/3/EC. Or <ul style="list-style-type: none"> • UNECE Regulation 101 	Applies to N ₁ vehicles Does not apply to vehicles fitted with an engine approved to item 41 May be tested concurrent with item 2. May accept validated test report from engine supplier or from another vehicle with proven equivalent characteristics.	Approval or Test Report
40. Engine Power The technical requirements of: <ul style="list-style-type: none"> • Directive 80/1269/EEC as amended by Directive 1999/99/EC Or	If standard power unit is fitted the use of the manufacturer’s data or a chassis dynamometer check is permitted.	Approval or Test Report

<ul style="list-style-type: none"> • UNECE Regulation 85 where applicable 		
<p>41. Emissions(V and VI) Heavy-duty Vehicles</p> <p>Vehicles manufactured up to 30th June 2016: Directive 2005/55/EC as amended by 2006/51/EC, Annex I, and Row B2 limit values (Euro V)</p> <p>Vehicles manufactured on or after 1st July 2016: Regulation (EC) No 595/2009 Annex I limit value (Euro VI)</p>	<p>Does not apply to vehicles not fitted with a CI engine except for vehicles fuelled with natural gas or liquefied petroleum gas.</p> <p>Does not apply to vehicles approved under item 2.</p> <p>Modification of exhaust system length after the last silencer is permissible without any further test.</p> <p>Other modifications may be assessed by the Approval Authority.</p> <p>A check will be made that an approved/ tested engine is installed in the vehicle, and is marked in accordance with that approval or test report and the intake and exhaust systems are appropriate so as conform to the installation conditions.</p> <p>The approval label on the engine or control unit shall be checked.</p>	<p>Approval or Test Report</p> <p>And</p> <p>Visual Check</p>
<p>42. Lateral Protection</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • paragraphs 1 to 4 of Directive 89/297/EEC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 73. 	<p>Applies to N₂ and N₃ vehicles.</p>	<p>Approval or Test Report</p>
<p>43. Spray-suppression systems</p> <p>Component: Directive 91/226/EEC.</p> <p>Vehicle: The technical provisions of: Directive 91/226/EEC.</p>	<p>Applies to N₂ of maximum mass exceeding 7.5 tonnes and N₃ vehicles.</p> <p>Installation Check confirms that approved devices are fitted and installed in accordance with the directive.</p> <p>Except where fitted the requirements do not apply to ‘off-road’ vehicles as defined in Directive 70/156/EEC, or vehicles in which the presence of spray-suppression devices is incompatible with their use.</p>	<p>Components: Approval or Test Report . Devices must be “e” / “E” marked</p> <p>Installation: Approval or Test Report</p> <p>And</p> <p>Installation Check</p>
<p>44. Masses and Dimensions (cars)</p>	<p>Not Applicable</p>	
<p>45. Safety Glazing</p> <p>The technical and marking provisions of:</p> <ul style="list-style-type: none"> • Directive 92/22/EEC as amended by Directive 2001/92/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 43. 	<p>Exclusions defined in paragraph 1 of Annex II to Directive 92/22/EEC as amended.</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p> <p>Directive 92/22/EEC, Annex III, paragraph 2.1.1 and 2.1.2 do not apply provided that driver’s forward vision is not distorted and that light transmission of at least 70% is maintained.</p>	<p>Component:</p> <p>Approval And all glazing must be “e” / “E” marked.</p> <p>Installation:</p> <p>Approval or Test Report or manufacturer’s test report and installation check.</p>
<p>46. Tyres</p> <p>The technical provisions and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 92/23/EEC as last amended by Directive 2005/11/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulations 30.02 or 30.03, 54 for durability and 117 for noise. 	<p>Installation Check required to ensure that all tyres (except those that are not accessible) are marked in accordance with the directive including the appropriate speed and load ratings for their particular axle locations and the intended use of the vehicle. Check that tyres don’t foul bodywork.</p> <p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle based on</p>	<p>Component:</p> <p>Approval or Devices must be “e” / “E” marked</p> <p>Installation:</p> <p>Approval or Test Report</p>

<p>And</p> <p>In the case of a temporary use spare wheel (if fitted) UNECE Regulation 64.01</p> <p>And</p> <p>The technical provisions and marking requirements of Regulation (EC) 661/2009 as it relates to tyre wet grip, rolling resistance and rolling noise from the dates shown in that Regulation</p>	<p>maximum mass may apply.</p>	<p>Or</p> <p>Installation Check</p> <p>Where markings cannot be checked a declaration will be required from the manufacturer.</p>
<p>47. Speed Limitation Devices</p> <p>The technical and marking provisions of:</p> <ul style="list-style-type: none"> • Directive 92/24/EC as last amended by Directive 2004/11/EC, <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 89. 	<p>Applies to N₂ and N₃ vehicles.</p> <p>Installation Check for presence, component approval markings. and the set speed which must be indicated on a plate in a conspicuous position in the driver's compartment.</p>	<p>Component:</p> <p>Approval or Devices must be "e" / "E" marked</p> <p>Installation:</p> <p>Approval or Test Report Or Installation Check</p>
<p>48. Masses and Dimensions</p> <p>The technical provisions of: Directive 97/27/EC as amended by Directive 2003/19/EC, section 7 of Annex I.</p>	<p>Masses and dimension listed in the Road Traffic (Construction and Use of Vehicles) Regulations 2003 (Statutory Instrument No. 5 of 2003) as amended may apply.</p> <p>For the purpose of Directive 97/27/EC, Annex I, Paragraph 2.4.1., the items specified must also include:</p> <p>(i) any plate, whether rigid or movable, fitted to a trailer constructed for the purpose of carrying other vehicles and designed to bridge the gap between the trailer and a motor vehicle constructed for that purpose and to which the trailer is designed to be attached such that vehicles carried on it may be moved from the trailer to the motor vehicle or from the motor vehicle to the trailer;</p> <p>(ii) any part of a trailer designed primarily for use as a means of attaching it to another vehicle and any fitting designed for use in connection with any such part.</p> <p>Directive 97/27/EC, Annex I, Paragraph 7.6. does not apply to a motor vehicle having 4 or more axles where the distance between the foremost and rearmost axles exceeds 6.4 m.</p>	<p>Approval or Test Report</p>
<p>49. External Projections of Cabs</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • sections 3 & 4 of Annex I to Directive 92/114/EEC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 61 		<p>Approval or Test Report</p>
<p>50. Couplings</p> <p>Where fitted, the technical provisions of:</p> <ul style="list-style-type: none"> • Annex VII to Directive 94/20/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 55.01 or 102 for close coupling devices 		<p>Component:</p> <p>Approval</p> <p>Installation:</p> <p>Approval / Test Report</p>
<p>51. Flammability</p>	<p>Not Applicable</p>	
<p>52. Buses and Coaches</p>	<p>Not Applicable</p>	
<p>53. Frontal Impact</p>	<p>Not Applicable</p>	

54. Side Impact	Not Applicable	
55. Blank		
56. Vehicles Intended for the Transport of Dangerous Goods The technical provisions of: <ul style="list-style-type: none"> • Directive 98/91/EC, section 4 of Annex I. Or <ul style="list-style-type: none"> • UNECE Regulation 105 	Only applicable to vehicles intended for the transport of dangerous goods.	Approval / Test Report
57. Front Underrun Protection The technical provisions of: <ul style="list-style-type: none"> • section 3 of Annex II to Directive 2000/40/EC Or <ul style="list-style-type: none"> • UNECE Regulation 93.00 	Applies to N ₂ and N ₃ vehicles. Does not apply to off-road vehicles and vehicles where the provision of a front underrun device is incompatible with its use.	Approval / Test Report
58. Pedestrian Protection Where Frontal Protection Systems fitted, the technical provisions of sections 5 and 6 of Annex I to Regulation (EC) 78/2009	Applies to N ₁ vehicles	Component: Approval or Test Report Installation: Approval or Test Report
59. Recyclability	Not Applicable	
60. Blank		
61. Air-conditioning Systems Emission, gases, leakage, and marking requirements of 2006/40/EC	Applies to N ₁ vehicles	Component: Approval or Devices must be “e” / “E” marked
62. Hydrogen System The technical provisions and marking requirements of: Regulation (EC) 79/2009		Component: Approval or Test Report Installation: Approval or Test Report
63. General Safety	Not Applicable (except as it relates to Subject 46 Tyres, 65 AEBS and 66 LDWS)	
65. AEBS The essential technical provisions of Regulation (EU) 347/2012 or UNECE Regulation 131	Exemptions: <ul style="list-style-type: none"> • A completed vehicle where the Complete or Incomplete vehicle it is based upon was manufactured before 1st November 2016. • A complete vehicle which was manufactured before 1st November 2016. The exemptions listed in EU 347/2012 • Does not apply to N1 	
66. LDWS The essential technical provisions of Regulation (EU) 351/2012 or UNECE Regulation 130	Exemptions: <ul style="list-style-type: none"> • A completed vehicle where the Complete or Incomplete vehicle it is based upon was manufactured before 1st November 2016. • A complete vehicle which was manufactured before 1st November 2016. The exemptions listed in EU 351/2012 • Does not apply to N1 	
69. Electric Safety Vehicle: the essential technical provisions of UNECE Regulation 100.01		

PART 3

Technical Specification and Technical Requirements for

National Small Series Type-Approval for

Category O Vehicles

(Small series numerical limits specified in Schedule 4)

To enable representative testing the vehicle will be delivered in a presentable state and capable of being laden to maximum authorised weight.

A compatible towing vehicle also capable of being laden to maximum authorised must also be supplied.

A representative of the manufacturer must be present to enable access to all parts of the vehicle, to assist in explanation of features of that vehicle, and to cooperate in any testing.

Subject / Requirements	Exemptions / Variations	Test Conditions / Resulting Documentation
1. Sound Level	Not Applicable	
2. Emissions	Not Applicable	
<p>3. Fuel Tanks / Rear Protective Devices</p> <p>For fuel tanks:</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p> <ul style="list-style-type: none"> • For liquid fuel tanks UNECE Regulation 34.01 <p>For vehicles using gaseous fuels:</p> <ul style="list-style-type: none"> ➤ Regulations 67.01 and 115 for LPG. ➤ Regulation 110.00 and 115 for CNG. <p>And</p> <p>For rear underrun:</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Paragraph 5 of Annex II to Directive 70/221/EEC as last amended by directive 2006/20/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 58.01 	<p>Fuel tanks for liquid fuels at ambient temperature must :</p> <p>comply with the requirements given in column 1 except that the approval or test report, need not be for the same vehicle type: and</p> <p>subsequent modifications to the pipework or relocation of a tank excluding the tank, the cap/filler device or the venting device, may be accepted by the Approval authority.</p> <p>The requirements for liquid fuel tanks apply to all fuel tanks not just those used primarily for the propulsion of the vehicle.</p> <p>Rear Protection Device Applies to O₃ and O₄ vehicles</p> <p>An Installation check must be made to confirm that the rear protective device as a separate technical unit is of a type for which:</p> <p>a type approval or test report has been issued; or</p> <p>has been tested and witnessed by the Approval Authority; or</p> <p>calculations have been submitted to the satisfaction of the Approval Authority; and a visual inspection that the device has been correctly installed in accordance with the technical requirements.</p> <p>If the vehicle is fitted with a fuel tank for petrol the fuel tank shall be so constructed that it cannot readily be filled from a petrol pump delivery nozzle which has an external diameter of not less than 23.6mm without the aid of a device (such as a funnel) not fitted to the vehicle.</p> <p>The fuel system, including the fuel tank, shall be so designed, constructed and fitted as to withstand the</p>	<p>Installation Check that the fuel tank or rear underrun device has been correctly installed in accordance with the technical requirements</p> <p>Fuel tanks for gaseous fuels Approval or Test Report</p> <p>Fuel tanks for liquid fuels at ambient temperature Approval or Test Report</p> <p>Rear Underrun Approval or Test Report</p>

	forces, vibration and corrosive environment to which it is likely to be subject. It shall also be so fitted as to avoid the risk of damage, such as abrasion, due to fouling of other parts, and to minimise the risk of fire in the event of any leakage of fuel.	
4. Rear Registration Plate Space The technical provisions of paragraphs 1 and 2 to Directive 70/222/EEC	A check that the positional, dimensional and the visibility requirements are met.	Approval or Test Report Or A dimensional and the visibility check
5. Steering Effort The technical provisions of: <ul style="list-style-type: none"> • Directive 70/311/EEC as last amended Or <ul style="list-style-type: none"> • UNECE Regulation 79.01 	For a modified system manoeuvrability test in accordance with paragraph 5 of 1992/62/EEC	Laden vehicle. Approval or Test Report
6. Door Latches and Hinges	Not Applicable	
7. Audible Warning	Not Applicable	
8. Indirect Vision Devices	Not Applicable	
9. Braking The technical provisions of: <ul style="list-style-type: none"> • Paragraph 2 of Annex I to Directive 71/320/EEC as last amended by Directive 1998/12/EC and tests as defined in associated Annexes as may be applicable. Or <ul style="list-style-type: none"> • Paragraph 5 of UNECE Regulation 13.09 and tests as defined in associated Annexes as may be applicable. 	O ₂ , O ₃ , O ₄ , and O ₁ if fitted Category O ₂ trailers and O ₁ trailers fitted with an inertia type braking system may, as an alternative, comply with the following requirements: (a) technical reports to Directive 71/320/EEC, Annex VIII, Appendix 2 and 3; (b) a compatibility check to Annex VIII, Appendix 4; and (c) compliance with the requirements of Annex I, paragraphs 2.2.2.9 and 2.2.2.10; (d) the technical requirements of Annex VIII, paragraphs 3.1, 3.2, 3.4 excluding drag force check; (e) a visual assessment to Annex VIII, paragraphs 4.1, and of the first sentence of paragraph 4.2; (f) instead of the provisions in (a) to (e) the equivalent provisions of UNECE Regulation 13.09 may apply: and a Park Brake Test A “Park Brake Test” means: A test for O ₂ and if fitted O ₁ category trailers that the park brake meets the performance requirement of Directive 71/320/EEC, Annex II, paragraph 2.2.2 or UNECE Regulation 13.09.	Laden and Unladen vehicle Approval or Test Report
10. Radio Interference / Electro-magnetic Compatibility The essential technical provisions of: <ul style="list-style-type: none"> • Directive 72/245/EEC as last amended by Directive 2006/28/EC, section 6 of Annex I taking into consideration the exemptions in section 8 and tests specified in Annexes IV to X Or <ul style="list-style-type: none"> • UNECE Regulation 10.03 	Items for which approval has been granted as part of the base of incomplete vehicle approval do not need re-approval. If adding additional electrical/electronic components to the vehicle then these additional components should be “e” / “E” marked. If they are not “e” / “E” marked then the additional components will require EMC testing as per 2004/104/EC and a test report will be required for evidence of this.	Components: Approval or Device must be “e” / “E” marked Installation: Approval or Test Report Or A Test / Inspection restricted to a check for “e” / “E” marked components and ESA approval for safety critical

		items.
11. Diesel Smoke	Not Applicable	
12. Interior Fittings	Not Applicable	
13. Anti-theft and Immobiliser	Not Applicable	
14. Protective Steering	Not Applicable	
15. Seat Strength	Not Applicable	
16. Exterior Projections	Not Applicable	
17. Speedometer and Reverse Gear	Not Applicable	
<p>18. Plates (statutory)</p> <p>The technical provisions of: Directive 76/114/EEC as last amended by Directive 78/507/EEC.</p> <p>And</p> <p>Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate</p>	<p>Inspection to confirm:</p> <p>the presence of a plate bearing details of Make, Model, VIN (or equivalent unique vehicle identifier), and Masses (Maximum Design values for the Axles, Gross Vehicle and Gross Train, King Pin (for semi trailers only));</p> <p>the initial VIN or unique vehicle identifier is marked on the chassis or other structure on the right hand side of the vehicle. And that it is placed in a clearly visible and accessible position by a method such as hammering or stamping, in such a way that it cannot be obliterated or deteriorate.</p> <p>Where the vehicle is the subject of a multi stage build a plate is required on completion of each stage as appropriate.</p>	Inspection
19. Seat Belt Anchorages	Not Applicable	
<p>20. Installation of Lighting and Light Signalling Devices</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> • Annex II to Directive 76/756/EEC as last amended by 2007/35/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 48.03 <p>And</p> <p>Where applicable: UNECE 104 and Rear Marker Plates to Statutory Instrument 157 of 1985</p>		<p>Approval or Test Report</p> <p>All lighting devices must be “e” / “E” marked and of the correct categories to be fitted in appropriate locations.</p> <p>The manufacturer should provide a list of components, their “e” / “E” numbers and any alternatives covered by test reports.</p>
<p>21. Retro Reflectors, Rear Marker Plates and Conspicuity Markings</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/757/EEC as last amended by Directive 97/29/EC <p>Or</p> <ul style="list-style-type: none"> • UNECE Regulation 3.02 <p>And</p> <p>Where applicable Rear Marker Plates to Statutory Instrument 157 of 1985 and UNECE Regulation (conspicuity markings)</p>	Conspicuity Markings to be red to the rear and white or yellow to the side.	Approval or Devices must be “e” / “E” marked
<p>22. End-outline, Front-position (side), Rear-position (side), Stop, Side Marker, Daytime Running Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> • Directive 76/758/EEC as last amended by Directive 97/30/EC <p>Or</p>		Approval or Devices must be “e” / “E” marked

<ul style="list-style-type: none"> For End-Outline, Front-Position (side), Rear-Position (side), and Stop lamps UNECE Regulation 7.02. For Side Marker lamps, UNECE Regulation 91.00 		
<p>23. Direction Indicators</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> Directive 76/759/EEC as last amended by Directive 99/15/EC <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 6.01 		Approval or Devices must be “e” / “E” marked
<p>24. Rear Registration Plate Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> Directive 76/760/EEC as last amended by Directive 97/31/EC <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 4.00 		Approval or Devices must be “e” / “E” marked
25. Headlamps including bulbs	Not Applicable	
25A. Cornering Lamps	Not Applicable	
26. Front Fog Lamps	Not Applicable	
27. Towing Hooks	Not Applicable	
<p>28. Rear Fog Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> Directive 77/538/EEC as last amended by Directive 99/14/EC <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 38.00 		Approval or Devices must be “e” / “E” marked
<p>29. Reversing Lamps</p> <p>The technical and marking requirements of:</p> <ul style="list-style-type: none"> Directive 77/539/EEC as last amended by Directive 97/32/EC <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 23.00 	O ₂ , O ₃ , O ₄ , and O ₁ if fitted	Approval or Devices must be “e” / “E” marked
30. Parking Lamps	Not Applicable	
31. Seat Belts and Restraint Systems	Not Applicable	
32. Forward Vision	Not Applicable	
33. Identification of Controls, Tell-tales and Indicators	Not Applicable	
34. Defrost / Demist	Not Applicable	
35. Wash / Wipe	Not Applicable	
<p>36. Heating Systems</p> <p>The technical provisions of:</p> <ul style="list-style-type: none"> Directive 2006/119/EC, section 3 of Annex II, and Annexes III, VII and VIII. <p>Or</p> <ul style="list-style-type: none"> UNECE Regulation 122 	<p>Systems using waste heat from the engine cooling system need only be checked for presence and operation.</p> <p>Vehicle manufacturer needs to demonstrate the essential requirements are fulfilled. If air is the medium for heat transfer, conduct a test to ensure that CO levels of air coming from vents is not more than 20ppm above the ‘ambient’ air. Normal exhaust measuring equipment may be sufficiently sensitive.</p>	<p>Combustion heaters (if fitted):</p> <p>Approval or Test Report</p> <p>Waste Heat Systems:</p> <p>Approval or Test Report Or Installation Check</p>
37. Wheel Guards	Not Applicable	
38. Head Restraints	Not Applicable	
39. CO₂ Emissions / Fuel Consumption	Not Applicable	
40. Engine Power	Not Applicable	
41. Emissions(Euro IV and V) Heavy-	Not Applicable	

duty Vehicles		
42. Lateral Protection The technical provisions of: <ul style="list-style-type: none"> paragraphs 1 to 4 of Directive 89/297/EEC Or <ul style="list-style-type: none"> UNECE Regulation 73. 	Applies to O ₃ and O ₄ vehicles.	Approval or Test Report
43. Spray-suppression systems Component: Directive 91/226/EEC. Vehicle: The technical provisions of: Directive 91/226/EEC.	Applies to O ₃ and O ₄ vehicles. Installation Check confirms that approved devices are fitted and installed in accordance with the directive. Except where fitted the requirements do not apply to ‘off-road’ vehicles as defined in Directive 70/156/EEC, or vehicles in which the presence of spray-suppression devices is incompatible with their use.	Components: Approval or Test Report . Devices must be “e” / “E” marked Installation: Approval or Test Report And Installation Check
44. Masses and Dimensions (cars)	Not Applicable	
45. Safety Glazing The technical and marking provisions of: <ul style="list-style-type: none"> Directive 92/22/EEC as amended by Directive 2001/92/EC Or <ul style="list-style-type: none"> UNECE Regulation 43. 	Exclusions defined in paragraph 1 of Annex II to Directive 92/22/EEC as amended. Directive 92/22/EEC, Annex III, paragraph 2.1.1 and 2.1.2 do not apply.	Component: Approval And all glazing must be “e” / “E” marked. Installation: Approval or Test Report or manufacturer’s test report and installation check.
46. Tyres The technical provisions and marking requirements of: <ul style="list-style-type: none"> Directive 92/23/EEC as last amended by Directive 2005/11/EC Or <ul style="list-style-type: none"> UNECE Regulations 30.02 or 30.03, 54 for durability and 117 for noise. And The technical provisions and marking requirements of Regulation (EC) 661/2009 as it relates to tyre wet grip, rolling resistance and rolling noise from the dates shown in that Regulation	Installation Check required to ensure that all tyres (except those that are not accessible) are marked in accordance with the directive including the appropriate speed and load ratings for their particular axle locations and the intended use of the vehicle. Check that tyres don’t foul bodywork.	Component: Approval or Devices must be “e” / “E” marked Installation: Approval or Test Report Or Installation Check Where markings cannot be checked a declaration will be required from the manufacturer
47. Speed Limitation Devices	Not Applicable	
48. Masses and Dimensions The technical provisions of: <ul style="list-style-type: none"> Directive 97/27/EC as amended by Directive 2003/19/EC, section 7 of Annex I. Or <ul style="list-style-type: none"> UNECE Regulation 107.02, Annex 11. 	Masses and dimension listed in the Road Traffic (Construction and Use of Vehicles) Regulations 2003 (Statutory Instrument No. 5 of 2003) as amended may apply. For the purpose of Directive 97/27/EC. Annex I, Paragraph 2.4.1., the items specified must also include: (i) any plate, whether rigid or movable, fitted to a trailer constructed for the purpose of carrying other vehicles and designed to bridge the gap between the trailer and a motor vehicle constructed for that purpose and to which the trailer is designed to be attached such that vehicles carried on it may be moved from the trailer to the motor vehicle or from the motor vehicle to the trailer;	Approval or Test Report

	(ii) any part of a trailer designed primarily for use as a means of attaching it to another vehicle and any fitting designed for use in connection with any such part.	
49. External Projections of Cabs	Not Applicable	
50. Couplings Where fitted, the technical provisions of: <ul style="list-style-type: none"> • Annex VII to Directive 94/20/EC Or <ul style="list-style-type: none"> • UNECE Regulation 55.01 or 102 for close coupling devices 	Component: Approval Installation: Approval / Test Report	
51. Flammability	Not Applicable	
52. Buses and Coaches	Not Applicable	
53. Frontal Impact	Not Applicable	
54. Side Impact	Not Applicable	
55. Blank		
56. Vehicles Intended for the Transport of Dangerous Goods The technical provisions of: <ul style="list-style-type: none"> • Directive 98/91/EC, section 4 of Annex I. Or <ul style="list-style-type: none"> • UNECE Regulation 105 	Only applicable to vehicles intended for the transport of dangerous goods. Approval / Test Report	
57. Front Underrun Protection	Not Applicable	
58. Pedestrian Protection	Not Applicable	
59. Recyclability	Not Applicable	
60. Blank		
61. Air-conditioning Systems	Not Applicable	
62. Hydrogen System	Not Applicable	
63. General Safety	Not Applicable (except as it relates to Subject 46 Tyres)	

PART 4

Technical Specification and Technical Requirements (Supplementary) for National Small Series Type-Approval for Special Purpose Vehicles

(small series limit for Special Purpose vehicles are the same as for their parent category)

This supplement should be read in conjunction with Technical Specification and Technical Requirements for the category of vehicle on which it is based.

All requirements related to the parent category apply unless specific exemptions or variations are listed here.

To enable representative testing the vehicle will be delivered in a presentable state and capable of being laden to maximum authorised weight.

For Special Purpose vehicles based on O category vehicles, a compatible towing vehicle also capable of being laden to maximum authorised must also be supplied.

A representative of the manufacturer must be present to enable access to all parts of the vehicle, to assist in explanation of features of that vehicle, and to cooperate in any testing.

Subject	Exemptions / Variations related to Special Purpose Vehicles
1. Sound Level	<p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>If a motor-caravan, ambulance, hearse, or other special purpose vehicle is type approved and the exhaust system is subsequently modified after the last silencer by not more than 2m in length, no further test is required.</p> <p>In the case of a mobile crane point 5.2.2.1 of Annex I to Directive 70/157/EEC the following limit values are applicable: 81 dB(A) for vehicles with an engine power of less than 75 kW 83 dB(A) for vehicles with an engine power of not less than 75 kW but less than 150 kW 84 dB(A) for vehicles with an engine power of not less than 150 kW.</p>
2. Emissions (Light Duty Vehicles)	<p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of a motor-caravan, ambulance, hearse or other special purpose vehicle, an EC type-approval issued to the most representative base vehicle remains valid irrespective of change in reference weight.</p> <p>In the case of an armoured vehicle exemption from one or more of the provisions in column 2 is permissible where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.</p> <p>In the case of a wheelchair accessible vehicle the modification of the exhaust system is permitted without any further test provided: (a) the emission control devices including particulate filters (if any) are not affected; and No new evaporative test shall be required on the modified vehicle on condition that the evaporative control devices are kept as fitted by the manufacturer of the base vehicle.</p>
3. Fuel Tanks / Rear Protective Devices	No Exemptions or Variations
4. Rear Registration Plate Space	In the case of all special purpose vehicles exemption from one or more of the provisions in column 2 is permissible where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply provided that a Irish registration plate can be mounted and remain visible.
5. Steering Effort	<p>In the case of a mobile crane with a crab steering system may be fitted.</p> <p>In the case of a disable person's vehicle Directive 70/311/EEC, Annex I, paragraphs 4.1.1.2</p>

	and 4.2.1.1.2. shall not apply to a steering control system designed to meet the needs of a driver with a physical disability.
6. Door Latches and Hinges	<p>In the case of a mobile crane exemption from one or more of the provisions in column 2 is permissible where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.</p> <p>For the purpose of this provision the seat cushion of a wheelchair is considered to be a seat. A door for wheelchair access must comply with paragraph 3.3 of Annex I to the directive.</p>
7. Audible Warning	<p>In the case of an armoured vehicle:</p> <p>(a) exemption from one or more of the provisions in column 2 is permissible where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply; and</p> <p>(b) additional panic alarm devices are permitted.</p> <p>Optional panic alarm not forming part of an alarm system shall comply with the following:</p> <p>(a) The alarm signal shall be audible and in addition may include optical alarm devices, or be a radio alarm, or any combination of the above.</p> <p>(b) The technical requirements of Directive 74/61/EEC as last amended by Directive 95/56/EC, Annex VI, Part II, paragraphs 8.2 to 8.8, 9.1.2 to 9.2.1, 9.2.3 to 9.4, 9.6, 9.9 to 9.10, and 9.11.2 to 11. inclusive.</p> <p>(c) unsetting the panic alarm shall immediately cut the alarm signal.</p> <p>(d) any reference to “alarm” or “AS” shall be taken to mean “panic alarm”</p>
8. Indirect Vision Devices	<p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of an armoured vehicle, exemption from one or more of the provisions in column 2 is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.</p>
9. Braking	<p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of a mobile crane with more than 4 axles derogations are permitted provided that:</p> <p>(a) they are justified by the particular construction; and</p> <p>(b) all the braking performances relating to parking, service and secondary braking are fulfilled.</p> <p>In the case of a disabled person’s vehicle The requirements for the driver to be able to operate the service braking system while keeping both hands on the steering control, and the secondary braking system while keeping at least one hand on the steering control, shall not apply to, so long as the vehicle is adapted for a disabled driver to enable him to control the steering at all times while operating either braking system.</p> <p>Where supplementary controls are fitted for a disabled driver both the standard and supplementary shall comply with the technical requirements.</p>
10. Radio Interference / Electro-magnetic Compatibility	No Exemptions or Variations
11. Diesel Smoke	No Exemptions or Variations
12. Interior Fittings	<p>For the purpose of this requirement a wheelchair shall be considered to be a seat.</p> <p>In the case of an armoured vehicle exemption from any requirement of this item is permitted if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.</p>
13. Anti-theft and Immobiliser	In the case of a wheelchair accessible vehicle, motor-caravan, ambulance or hearse , the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.
14. Protective Steering	<p>This item shall not apply to an armoured vehicle.</p> <p>If a disabled person’s vehicle had been adapted, then the requirements of this item shall not apply to the vehicle insofar as the adaptation prevents the vehicle from complying with any of the requirements of this item.</p>
15. Seat Strength	In the case of a motor-caravan, ambulance, hearse, armoured vehicle, mobile crane or other special purpose vehicle , any seats which are not designated for use when travelling on

	<p>a road must be clearly identified to users by means of a pictogram or a sign with appropriate text.</p> <p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of a disabled person's vehicle this item does not apply to the anchorages of any seat designed for a disabled person, so long as such a seat is securely attached to the vehicle but shall comply with all other technical requirements.</p> <p>In the case of a wheelchair accessible vehicle:</p> <ul style="list-style-type: none"> (a) a wheelchair location shall be considered as a seating position but the requirements do not apply to the wheelchair. (b) For each wheelchair sufficient space shall be provided. The longitudinal plane of the special area shall be parallel to the longitudinal plane of the vehicle. <p>Appropriate adaptations may be made to the seats of the vehicle provided that their anchorages, mechanisms and head restraints guarantee the same level of performance provided for in Directive 2005/39/EC.</p>
16. Exterior Projections	<p>In the case of all special purpose vehicles those parts of a special purpose vehicle other than the driver's cabin shall be exempted from any requirement of this item if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.</p> <p>In the case of an armoured vehicle exemption from any requirement of this item is permitted if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.</p> <p>In the case of a wheelchair accessible vehicle the requirements shall apply to boarding aids when in the position for vehicle travel.</p>
17. Speedometer and Reverse Gear	No Exemptions or Variations
18. Plates (statutory)	No Exemptions or Variations
19. Seat Belt Anchorages	<p>In the case of a motor-caravan, ambulance, hearse, mobile crane or other special purpose vehicle, Any seats which are not designated for use when travelling on a road must be clearly identified to users by means of a pictogram or a sign with appropriate text.</p> <p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of an armoured vehicle exemption from any requirement of this item is permitted if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.</p> <p>In the case of a wheelchair accessible vehicle:</p> <ul style="list-style-type: none"> (a) Each wheelchair location shall be fitted with an integrated restraint system which consists of a restraint system for the wheelchair and a restraint system for the wheelchair user. (b) Anchorages for restraint systems shall resist forces as prescribed in Directive 76/115/EEC and in Standard ISO 10542-1: 2001. (c) Webbing and hardware intended to secure the wheelchair (tie-down mechanisms) shall meet the requirements of Directive 77/541/EEC and of the relevant part of Standard ISO 10542. <p>Tests shall be performed by the technical service which has been appointed for testing and checking in accordance with the Directives referred to above. The criteria are those included in these Directives. Tests shall be performed with the surrogate wheelchair described in Standard ISO 10542.</p>
20. Installation of Lighting and Light Signalling Devices	<p>In the case of a motor-caravan, ambulance, hearse, armoured vehicle, mobile crane, or other special purpose vehicle, exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply provided that all mandatory lighting devices are fitted and, except in the case of a mobile crane, that the geometric visibility is not affected.</p> <p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the</p>

	base/incomplete vehicle may apply to the cab. In the case of an incomplete/completed vehicle, it is acceptable that the requirement relating to the cab for vehicles of the corresponding category N (based on maximum mass) are satisfied.
21. Retro Reflectors	No Exemptions or Variations
22. End-outline, Front-position (side), Rear-position (side), Stop, Side Marker, Daytime Running Lamps	No Exemptions or Variations
23. Direction Indicators	No Exemptions or Variations
24. Rear Registration Plate Lamps	No Exemptions or Variations
25. Headlamps including bulbs	No Exemptions or Variations
25A. Cornering Lamps	No Exemptions or Variations
26. Front Fog Lamps	No Exemptions or Variations
27. Towing Hooks	<p>In the case of an armoured vehicle, mobile crane, or other special purpose vehicle, exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.</p> <p>In the case of a motor-caravan, ambulance or hearse, the requirements apply only to the front of the vehicle.</p>
28. Rear Fog Lamps	No Exemptions or Variations
29. Reversing Lamps	No Exemptions or Variations
30. Parking Lamps	No Exemptions or Variations
31. Seat Belts and Restraint Systems	<p>In the case of a motor-caravan, ambulance, hearse, mobile crane or other special purpose vehicle, Any seats which are not designated for use when travelling on a road must be clearly identified to users by means of a pictogram or a sign with appropriate text.</p> <p>In the case of a motor-caravan, ambulance, or hearse, at least lap belts are required for rear seating positions.</p> <p>In the case of a motor-caravan, ambulance or hearse, the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.</p> <p>In the case of an armoured vehicle, exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.</p> <p>In the case of a prison vehicles seat belts are required to be fitted for the driver's and any front passenger's seat. Any other optional seat belts fitted must also comply.</p> <p>In the case of a wheelchair accessible vehicle when, due to the conversion, anchorage points for the safety belts need to be moved outside the tolerance provided for in point 2.7.8.1. of Annex I to Directive 77/541/EEC, the technical service shall check whether the alteration constitutes a worst case or not. If that is the case, the test provided for in Annex VII to Directive 77/541/EEC shall be performed. Extension to the EC type-approval does not need to be issued. This does not apply to a seat that is a wheelchair.</p>
32. Forward Vision	<p>In the case of an armoured vehicle the light transmission factor shall be at least 60% and the 'A' pillar obstruction angle shall not exceed 10°.</p> <p>In the case of a wheelchair accessible vehicle adapted for a wheelchair to be used as the driver's seat, it shall be sufficient to demonstrate to the satisfaction of the Approval Authority that the driver's forward vision is comparable to that of the original driver's seat when the vehicle was first approved to the directive when the seat height adjustment of the original seat shall be set in the mid position.</p>
33. Identification of Controls, Tell-tales and Indicators	No Exemptions or Variations
34. Defrost / Demist	In the case of an armoured vehicle exemption from any requirement of this item is permitted if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.
35. Wash / Wipe	In the case of an armoured vehicle exemption from any requirement of this item is permitted if it can be demonstrated to the satisfaction of the Approval Authority that it is impossible for the vehicle to comply due to its special purpose.

36. Heating Systems	No Exemptions or Variations
37. Wheel Guards	No Exemptions or Variations
38. Head Restraints	Does not apply to a seat which is a wheelchair.
39. CO₂ Emissions / Fuel Consumption	Does not apply to special purpose vehicles other than a wheelchair accessible vehicle . In the case of a wheelchair accessible vehicle a new measurement relating to CO ₂ emissions does not need to be performed when no fresh tests have to be performed with regard to tail pipe emissions.
40. Engine Power	No Exemptions or Variations
41. Emissions(Euro, V and VI) Heavy-duty Vehicles	In the case of a motor-caravan, ambulance or hearse , the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied. In the case of a mobile crane compliance with Directive 97/68/EC can be accepted.
42. Lateral Protection	No Exemptions or Variations
43. Spray-suppression systems	No Exemptions or Variations
44. Masses and Dimensions (cars)	In the case of wheelchair accessible vehicles : <ul style="list-style-type: none"> (a) For the purposes of calculations, the mass of the wheelchair including the user shall be assumed to be 100 kg. The mass shall be concentrated at the H point of the three dimensional machine. (b) The technical service shall also consider the possibility to use electric wheelchair(s), the mass of which, including the user, is assumed to be 250 kg. Whether the vehicle is suitable for an electric wheelchair and any limitation in the passenger capacity resulting from the use of electric wheelchair(s) shall be recorded in the type-approval certificate and in an appropriate language thereto shall be included in the certificate of conformity.
45. Safety Glazing	In the case of a motor-caravan, ambulance or hearse , the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied. In the case of a motor-caravan, ambulance or hearse, mobile crane, or other special purpose vehicle , the requirements for all window glazing, other than the driver's cab glazing (windshield and side glazing), the material may be either safety glass or rigid plastic glazing. This item does not apply to an armoured vehicle .
46. Tyres	In the case of a motor-caravan, ambulance or hearse , the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied. In the case of an armoured vehicle, or mobile crane , save as required by paragraph 3, exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply. In the case of a mobile crane the provision in paragraph 2 above applies on condition that the requirements in ISO 10571 – 1995 (E) or ETRTO Standards Manual 1998 are fulfilled.
47. Speed Limitation Devices	No Exemptions or Variations
48. Masses and Dimensions	Exemption from Annex I, paragraph 7.3.1: a trailer for abnormal indivisible loads of exceptional length; a trailer being a drying or mixing plant designed for the production of asphalt or of bituminous or tar macadam and used mainly for the construction, repair or maintenance of roads; a road planing machine; Exemption from Annex I, paragraph 7.6: “Abnormal Indivisible Load” vehicle; a semi-trailer low loader; a semi-trailer step-frame low loader. In the case of a semi-trailer which is designed to carry at least two other wheeled vehicles for the distance mentioned in Annex I, paragraph 7.3.1.4.1 shall be substituted 12.5 m and for paragraph 7.3.1.4.2 shall be substituted 4.19 m.

	<p>For the purpose of Directive 97/27/EC. Annex I, Paragraph 2.4.2, the items specified shall also include safety railings mounted on a vehicle designed to carry at least two other wheeled vehicles, provided that the safety railings are more than 2 m above the ground and the overall width including safety railings does not exceed 2.70 m.</p> <p>In the case of a semi-trailer which is designed to carry at least two other wheeled vehicles Annex I, paragraph 7.6 shall apply save that any part of the semi-trailer forward of the transverse plane passing through the king pin may be ignored.</p> <p>In the case of wheelchair accessible vehicles:</p> <p>(a) For the purposes of calculations, the mass of the wheelchair including the user shall be assumed to be 100 kg. The mass shall be concentrated at the H point of the three dimensional machine.</p> <p>(b) The technical service shall also consider the possibility to use electric wheelchair(s), the mass of which, including the user, is assumed to be 250 kg.</p> <p>Whether the vehicle is suitable for an electric wheelchair and any limitation in the passenger capacity resulting from the use of electric wheelchair(s) shall be recorded in the type-approval certificate and in an appropriate language thereto shall be included in the certificate of conformity.</p>
49. External Projections of Cabs	In the case of an armoured vehicle , exemption from one or more of the provisions in column 2 is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply.
50. Couplings	In the case of a motor-caravan, ambulance or hearse , the requirements according to the base/incomplete vehicle may apply. In the case of an incomplete/completed vehicle, it is acceptable that the requirement for vehicles of the corresponding category N (based on maximum mass) are satisfied.
51. Flammability	<i>Flammability only applies to M₃</i>
52. Buses and Coaches	In the case of an armoured vehicle , exemption from one or more of the provisions is permitted where it can be demonstrated to the satisfaction of the Approval Authority that the special purpose of the vehicle makes it impossible to fully comply
53. Frontal Impact	Not Applicable
54. Side Impact	Not Applicable
55. Blank	
56. Vehicles Intended for the Transport of Dangerous Goods	No Exemptions or Variations
57. Front Underrun Protection	No Exemptions or Variations
58. Pedestrian Protection	No Exemptions or Variations
59. Recyclability	No Exemptions or Variations
60. Blank	
61. Air-conditioning Systems	No Exemptions or Variations
62. Hydrogen System	No Exemptions or Variations
63. General Safety	No Exemptions or Variations
65. AEBS	No Exemptions or Variations
66. LDWS	No Exemptions or Variations
69. Electric Safety	For a vehicle with batteries with maximum voltage 48V – only compliance with the essential technical requirements of UNECE Regulation 100 is required.

PART 5

Technical Specification and Technical Requirements (Supplementary)

for Individual Approvals

This supplement should be read in conjunction with National Small Series Type Approval Technical Specification and Technical Requirements for the category of vehicle.

All requirements related to the equivalent NSSTA apply unless specific alternatives or variations are listed here.

Vehicle requirements will relate to age of vehicle (except full current seat belt requirements will be required)

To enable representative testing the vehicle will be delivered in a presentable state and capable of being laden to maximum authorised weight.

For O category vehicles, a compatible towing vehicle also capable of being laden to maximum authorised must also be supplied.

A representative of the manufacturer must be present to enable access to all parts of the vehicle, to assist in explanation of features of that vehicle, and to cooperate in any testing.

Subject	Alternatives / Variations related to vehicles offered for IVA	Test Conditions / Resulting Documentation
1. Sound Level	<p>No Alterations or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required. Vehicles for which an approval or test report has been issued prior to modification of the exhaust system down stream of the catalyst, a stationary test as defined in paragraphs 5.2.3.4.2 and 5.2.3.4.3 of Annex I to Directive 70/157 and shall not exceed the equivalent stationary value recorded on the Certificate of Conformity, Approval Certificate or test report for that vehicle by more than 2dB(A) at 0.5m.</p> <p>for Schedule 7 Vehicles:</p> <p>1. The vehicle shall be fitted with an exhaust system including a silencer such that the exhaust gases shall not escape into the atmosphere without first passing through the silencer.</p> <p>2. When -</p> <p>(a) the vehicle is held stationary on a level surface such that there is an unobstructed area not less than 3 metres wide all around the vehicle; and</p> <p>(b) the engine by which the vehicle is propelled is run at a constant rotational speed of 3/4 S (“S” means the rotational speed at which maximum power is produced).</p> <p>The noise measured at 0.5 metres from the exhaust outlet at 45 degrees to the axis of the outlet pipe in a horizontal plane, shall not exceed 99db(A).</p>	
2. Emissions (Light Duty Vehicles)	<p>Vehicles are exempt from the requirements of On Board Diagnostics.</p> <p>Modification of exhaust system length after the last silencer not exceeding 2m is permissible without any further test.</p>	Test(s) for modifications not covered in column 2

	<p>For vehicles with a maximum mass equal to or exceeding 2500kg the requirements according to the category of the base or incomplete vehicle or of the corresponding N category vehicle based on maximum mass may apply.</p> <p>Only modifications specified above will be accepted without further test. Any other modifications may be assessed at the discretion of the Approval Authority.</p> <p>Otherwise:</p> <p>No Alterations or Variations for M₁ and N₁ vehicles other than Schedule 7 vehicles.</p> <p>For Schedule 7 Vehicles:</p> <p>The vehicle shall not emit any avoidable smoke or avoidable visible vapour.</p> <p>When the engine by which the vehicle is propelled is running without load at a normal idling speed, the carbon monoxide content of the exhaust emissions from the engine shall not exceed - 0.3% of the total exhaust emissions from the engine by volume.</p> <p>If the engine by which the vehicle is propelled is run without a load at a rotational speed of 2,000 revolutions per minute, the hydrocarbon content of the exhaust emission from the engine shall not exceed 0.12% if the vehicle is one to which paragraph 2(b) or (c) applies and the engine by which it is propelled is run without a load at a fast idling speed -</p> <p>(a) the carbon monoxide content of the exhaust emissions from the engine shall not exceed 0.3% of the total exhaust emissions from the engine by volume;</p> <p>(b) the hydrocarbon content of the exhaust emissions from the engine shall not exceed 0.02% of the total exhaust emissions from the engine by volume; and</p> <p>(c) the lambda value shall be between the relevant limits.</p> <p>For other vehicles</p> <p>The technical provisions of paragraph 5 of Annex I to Directive 70/220/EEC as amended by Directive 2003/76/EC, Row B limit values.</p>	
<p>3. Fuel Tanks / Rear Protective Devices</p>	<p>No Alternatives or Variations except</p> <p>For Schedule 7 Vehicles:</p> <p>1. The technical provisions of Section 5 of Annex I of Directive 70/221/EC as last amended by 2006/20/EC, with the exception of paragraphs 5.1. 5.2. and 5.12. No dripping test shall be performed.</p> <p>2. Vehicles (except those not fitted for fuels liquid at normal ambient conditions) must comply with the requirements of paragraphs 5.1.2 (run on unleaded petrol) of Directive 70/220/EEC as amended by 2001/100/EC.</p> <p>3. For vehicles using gaseous fuels: Or</p>	

	<p>ECE Regulation 34.02 for liquid fuels Or ECE Regulation 67.01 for LPG Or ECE Regulation 110 for CNG Or ECE Regulation 115 for LPG or CNG retro-fit.</p> <p>Rear Protective Devices:</p> <p>The technical provisions of paragraph 5 of Annex II to Directive 70/221/EEC as last amended by directive 2006/20/EC</p> <p>As an alternative to the installation requirements above for a rear protective device fitted to a vehicle, an Installation Check where an Installation Check means: A check to confirm that the rear protective device as a separate technical unit is of a type for which: (a) a type approval or test report has been issued; or (b) has been tested and witnessed by the Approval Authority; or (c) calculations have been submitted to the satisfaction of the Approval Authority; and a visual inspection that the device has been correctly installed in accordance with The technical provisions of paragraph 5 of Annex II to Directive 70/221/EEC as last amended by directive 2006/20/EC</p>	
4. Rear Registration Plate Space	<p>No Alternatives or Variations or</p> <p>For Schedule 7 Vehicles: The technical provisions of Directive 70/222/EEC Or Sufficient space (width 520mm, height 120mm. OR width 340mm, height 240mm) shall be provided for a registration plate.</p>	
5. Steering Effort	<p>In the case of a Manual or Power Assisted System, and where an approval or test report has been issued for that system prior to its modification, a test will be conducted to ensure no obvious defect or undue stiffness is evident.</p>	<p>Laden vehicle:</p> <p>Manoeuvrability test for modified systems.</p> <p>Test for establishing undue stiffness in steering system.</p>
6. Door Latches and Hinges	<p>No Alternatives or Variations</p>	
7. Audible Warning	<p>The vehicle shall be fitted with an audible warning device which when operated emits a continuous uniform sound capable of giving audible warning of the approach or position of the vehicle to which it is fitted.</p>	
8. Indirect Vision Devices	<p>No exemptions or variations except:</p> <p>An Installation Check</p> <p>For Schedule 7 Vehicles:</p> <p>1. Directive 2003/97/EC, Annex II, paragraph 1.4 shall not apply.</p> <p>2. In the case where the longitudinal plane of the exterior bodywork on either side of the vehicle adjacent to the driver's position on which an exterior rear view mirror</p>	

	<p>may be mounted is more than 150mm inwards from a longitudinal plane passing through the outer edge of the rear tyre(s) on that side of the vehicle the following may apply: Directive 2003/97/EC, Annex III, paragraphs 5.3.1 and 5.3.2, in the second paragraph in each case, for 1m shall be substituted 2.125m and for 4m Shall be substituted 10m.</p> <p>3. Field of view requirements do not apply to optional mirrors.</p> <p>4. Vehicles manufactured before 26 January 2010 may, as an alternative to the provisions comply with Directive 71/127/EEC as amended by Directive 88/321/EEC.</p> <p>“Installation Check” means a check that the devices required are fitted, are securely attached to the vehicle so as to minimize the effects of vibration, and that the field of view requirements are met.</p>	
<p>9. Braking</p>	<p>No Alterations or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required</p> <p>For category O2 trailers and O1 trailers fitted with an inertia type braking system may, as an alternative, comply with the following requirements:</p> <p>(a) technical reports to Directive 71/320/EEC, Annex VIII, Appendix 2 and 3;</p> <p>(b) a compatibility check to Annex VIII, Appendix 4; and</p> <p>(c) compliance with the requirements of Annex I, paragraphs 2.2.2.9 and 2.2.2.10;</p> <p>(d) the technical requirements of Annex VIII, paragraphs 3.1, 3.2, 3.4 excluding drag force check;</p> <p>(e) a visual assessment to Annex VIII, paragraphs 4.1, and of the first sentence of paragraph 4.2; and</p> <p>(f) a Park Brake Test.</p> <p>For Schedule 7 Vehicles</p> <p>1. The vehicle shall comply with the requirements of paragraph 2.1 and 2.2 of Annex 1 of Directive 71/320/EEC as last amended by Directive 98/12/EC; but in the application of that Annex (as so amended) for these purposes -</p> <p>(a) the second sentence of paragraph 2.2.1.2.4 shall not apply;</p> <p>(b) paragraph 2.2.1.4.2 shall not apply in relation to a vehicle which is fitted with a braking device having a split-circuit transmission which enables braking of not less than one wheel on each side of the vehicle, in the event of failure in a part of the transmission of the service braking; and</p> <p>(c) paragraph 2.2.1.5.1 shall apply as if for the last sentence there were substituted the words “This condition must be met by automatic means”.</p> <p>2. If the vehicle is equipped with an anti-lock device</p>	<p>Laden and [part] laden.</p> <p>Inertia brakes for up to 3.5 tonne trailers.</p> <p>Bodied rigid vehicles, so long as the base vehicle has an EC type approval for its brakes this is acceptable with simple brake test on brake roller.</p> <p>When an additional axle is fitted to a tractor unit, will need to pull down tractor unit for brake test. Similarly for addition of extra axle to a semi-trailer.</p> <p>Compatibility test (correct air pressure, signal etc., between vehicle and trailer to ensure balanced braking) for rigid vehicle equipped to tow drawbar trailer. Appointed Test Centre will require calibrated air supply for trailer test</p> <p>Axles supplied by axle manufacturer come with a test report and sufficient information from axle manufacturer to allow manufacturer install axle in such away as to ensure compliance with braking directive. Documentation check plus basic brake test will suffice.</p> <p>Inertia brakes are only for small trailers, up to 3.5 tonnes.</p> <p>NB. Do not approve trailers fitted with inertia brakes that are over 3.5 tonnes.</p>

	<p>it shall comply with paragraph 2.2.1.23 of 71/320/EEC as last amended by Directive 98/12/EC.</p> <p>3. The vehicle shall comply with the requirements of paragraphs 2.2.1.11.1 and 2.2.1.11.2 of Directive 71/320/EEC as last amended by Directive 98/12/EC.</p> <p>4. The secondary braking and service braking shall have the same control.</p> <p>5. The brake efficiency shall be not less than -</p> <p>(a) for the service braking</p> <p>(i) in the case of a passenger vehicle, 60%; or</p> <p>(ii) in the case of a goods vehicle, 50%</p> <p>(b) for the secondary braking in the case when the servo-assistance provided for the service braking (if any) fails and a force is applied to the control</p> <p>(i) in the case of a passenger vehicle, 30% when the force applied is 50kg; or</p> <p>(ii) in the case of a goods vehicle, 25% when the force applied is 70kg.</p> <p>(c) 18% for the parking braking.</p> <p>6. The vehicle shall comply with the braking distribution requirements of paragraph 1.1.4.2 of Annex II of 71/320/EEC as amended</p> <p>A Park Brake Test means: A test for O2 and if fitted O1 category trailers that the park brake meets the performance requirement of Directive 71/320/EEC, Annex II, paragraph 2.2.2.</p>	
<p>10. Radio Interference / Electro-magnetic Compatibility</p>	<p>No Alterations or Variations except</p> <p>The manufacturer may submit a declaration of the relevant components installed, that they, or the vehicle as a whole, comply with the requirements, and in such case an Installation Check will be conducted.</p> <p>“Installation Check” means a manufacturer’s declaration that installed components are compliant with the requirements and inspection of a sample of installed components as the approving authority deem necessary.</p>	
<p>11. Diesel Smoke</p>	<p>No Alternatives or Variations except</p> <p>For Schedule 7 Vehicles:</p> <p>1. A free acceleration test such that the coefficient of absorption of the exhaust emissions from the engine immediately after leaving the exhaust shall not exceed -</p> <p>a) for an M1 or N1 vehicle, 1.5 per metre</p> <p>or</p> <p>b) for an N2, M2, N3 or M3 vehicle:</p> <p>v) if the engine of the vehicle is turbo-charged, 3.0 per metre</p> <p>or</p> <p>vi) in any other case, 2.5 per metre is allowed as an alternative.</p> <p>“co-efficient of absorption” is to be construed in accordance with paragraph 3.5 of Annex VII to Directive 72/306/EEC;</p>	

	<p>“free acceleration” has the same meaning as in Annex II to Directive 77/143/EEC as last amended by Directive 92/55/EEC.</p>	
<p>12. Interior Fittings</p>	<p>1. No surface (other than a surface of a window) of the vehicle interior which can be contacted by a sphere of 165mm diameter and which is within the specified zone, shall include any fittings (eg controls, including steering controls, and instruments) or design features which have any dangerous roughness or sharp edges.</p> <p>2. Switches and other controls mounted on the instrument panel which project by more than 9.5mm from the surface of the panel, can be contacted by a sphere of 165mm diameter and which are within the specified zone, shall be so constructed and mounted that they would either retract into the surface of the panel or become detached from the panel when a horizontal force of 40kg is applied to them.</p> <p>3. The lower edge of the instrument panel which is within the specified zone shall be rounded to a radius of curvature of not less than 19mm, or if it is covered with non-rigid material, not less than 5mm.</p> <p>4. The rearward and upward-facing parts of seat frames behind which there is a designated seating position, and which are within the head impact zone shall be both covered with non-rigid material and have a radius of curvature of not less than 5mm.</p> <p>5. The handbrake control in the fully released position and the gear-lever control in any forward gear position shall not have any radius of curvature of less than 3.2mm on surfaces which can be contacted by a sphere of 165mm diameter.</p> <p>6. Shelves and other similar items fitted below the level of the highest part of the instrument panel shall be so constructed that their supports have no protruding edges and that all parts facing into the vehicle present a surface not less than 25mm high with edges rounded to a radius of curvature of not less than 3.2mm. This surface shall also be covered with non-rigid material.</p> <p>7. On that part of the inner surface of the roof which is situated above or forward of the occupants and can be contacted by a sphere of 165mm diameter, the width of projecting parts made of rigid material, shall not be less than the length of their projection from the surface and their edges shall have a radius of curvature of not less than 5mm. Roof sticks or ribs made of rigid material with the exception of the header rail of the glazed surfaces and door frames, shall not project downwards by more than 19mm.</p> <p>For the purposes of this item -</p> <p>“air bag” means a flexible bag fitted to a vehicle and designed to be filled with gas under pressure in order to protect the driver or a front seat passenger in the event of a collision involving the front of the vehicle;</p> <p>“designated seating position” means a position where there is a seat designed for normal use while the vehicle is travelling on the road;</p> <p>“head impact zone” has the same meaning as in Directive 74/60/EEC;</p>	

“**non-rigid material**” means a material which has a hardness of less than 50 shore A;

“**rigid material**” means a material which has a hardness of no less than 50 shore A;

“**sharp edge**” means an edge of **rigid material** having a radius of curvature of less than 2.5mm, except in the case of projections of less than 3.2mm from the panel. In this case, the minimum radius of curvature shall not apply provided that the height of the projection is not more than half its width and its edges are blunted;

“**specified zone**” means the zone which -

(a) is forward of the transverse plane of the torso reference line of the manikin as defined in paragraph 2.5 and appendix 1 of Annex 3 to Directive 77/649/EEC as last amended by Directive 90/630/EEC with the manikin positioned in the rearmost **designated seating position**;

(b) is above the horizontal plane passing through the point 150mm above the lowest part of the top of the front seat cushions; and

(c) is outside the areas defined by paragraphs 2.3.1, 2.3.2 and 2.3.3 of Annex I to Directive 74/60/EEC as last amended by Directive 78/632/EEC.

This item shall not apply to a goods vehicle.

Paragraph 1 shall not apply to:

(a) the edges of any interior fitting (if there is a gap of less than 20 mm wide between the edges);

(b) any heating or ventilation grill element; or

(c) any control mounted on the heating or ventilation grill element area; so long as they are blunted.

Paragraph 1 shall not apply to foot pedal controls.

Paragraphs 1 and 2 shall not apply to any switches, controls or associated equipment designed for the use by a disabled person and fitted in a disabled person's vehicle so long as any edges are blunted.

Paragraph 4 shall not apply to any seat designed for a disabled person and fitted in a disabled person's vehicle.

Paragraph 5 shall not apply to -

(a) any floor-mounted hand-brake control if, in the fully released position, no part of the control is in the **specified zone**; or

(b) any hand-brake control mounted on or under the instrument panel, if in the fully released position, there is no possibility of the occupants of the vehicle contacting it in the event of a frontal impact.

Paragraph 7 shall not apply to parts covered with a **non-rigid material** and the hood-frames of convertible vehicles. For opening roofs, the requirements shall apply to parts, including devices for opening, closing and adjusting the roof, with the roof in the closed position.

	<p>Paragraph 1 (in so far as it relates to the surface of an instrument panel) and paragraph 2 shall not apply to any vehicle if:</p> <p>(a) it is fitted with air bags for the protection of the driver and the front seat passenger; and</p> <p>(b) those air bags were fitted at the time the vehicle was manufactured, except that this exemption shall not apply to: (i) an amateur-built vehicle, (ii) a vehicle manufactured in very low volume, (iii) a vehicle manufactured using parts of a registered vehicle, and (iv) a rebuilt vehicle.</p>	
<p>13. Anti-theft and Immobiliser</p>	<p>No Alterations or Variations except for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required</p> <p>for Schedule 7 Vehicles:</p> <p>In the case of devices to prevent unauthorised use the manufacturer may as an alternative to an approval or test report issue a declaration of the device(s) fitted and that they comply with column of parent document, and in such case an Installation Check will be conducted. The vehicle shall be fitted with some form of anti-theft device, that is to say, a mechanical, electrical or electronic immobiliser or a combination of these (in addition to any key operated switch normally used to start the engine) that prevents the vehicle being driven or moved under its own power. Such device(s) shall comply with the following:</p> <p>(a) No anti-theft device shall operate on the braking system.</p> <p>(b) If any anti-theft device is, or incorporates, any mechanical device that acts upon a system that affects the control of the vehicle (eg the steering control) -</p> <p>(i) it shall not be possible to start the engine in the normal way until every such mechanical device has been deactivated,</p> <p>(ii) it shall not be possible to activate any such mechanical device while the engine is running, and</p> <p>(iii) the action of activating any such mechanical device shall be distinct and separate from that of stopping the engine.</p> <p>Any alarm system or immobiliser fitted to a vehicle shall comply with paragraph 1 or 2 as applicable.</p> <p>Optional panic alarm not forming part of an alarm system under paragraphs 1 or 2 shall comply with the following:</p> <p>(a) The alarm signal shall be audible and in addition may include optical alarm devices, or be a radio alarm, or any combination of the above.</p> <p>(b) The technical requirements of Directive 74/61/EEC as last amended by Directive 95/56/EC, Annex VI, Part II, paragraphs 8.2 to 8.8, 9.1.2 to 9.2.1, 9.2.3 to 9.4, 9.6, 9.9 to 9.10, and 9.11.2 to 11. inclusive.</p> <p>(c) unsetting the panic alarm shall immediately cut the alarm signal.</p> <p>(d) any reference to “alarm” or “AS” shall be taken to</p>	

	<p>mean “panic alarm”.</p> <p>An “Installation Check” means an inspection of installed components as the approving authority deem necessary and in the case of an Immobiliser or Alarm system a completed installation certificate except that a panic alarm a test report is required.</p>	
14. Protective Steering	<p>No Alterations or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required</p> <p>for Schedule 7 Vehicles:</p> <p>1. No part of the steering control surface directed towards the driver which can be contacted by a sphere of 165mm in diameter shall present any roughness or sharp edges with a radius of curvature of less than 2.5mm.</p> <p>2. The steering control shall be designed, constructed and fitted so as not to embody components or accessories, including the horn control and other assemblies, capable of catching in the driver’s clothing or jewellery in normal driving movements.</p> <p>3. The steering control and column assembly as fitted to the vehicle or the steering control itself shall offer a degree of protection to the driver in the event of a frontal impact by absorbing energy. This requirement shall be treated as met if either -</p> <p>(a) the vehicle complies with the requirements of paragraph 5.2 of Annex 1 of Directive 74/297/EEC; or</p> <p>(b) the steering control complies with the requirements of paragraphs 5.2, 5.4.3, 5.4.4 and 5.4.5 of Directive 74/297/EEC as last amended by Directive 91/662/EEC.</p> <p>4. The vehicle shall comply with the requirements of paragraph 5.1 of Annex 1 of Directive 74/297/EEC.</p>	
15. Seat Strength	<p>No Alterations or Variations except</p> <p>For vehicles other than category M₂ (Class B or III) and M₃ (Class B or III) and not fitted with seat belts a Visual Inspection.</p>	
16. Exterior Projections	<p>No Alterations or Variations plus</p> <p>Handles, hinges, push buttons and fuel tank filler caps shall not project more than 40 mm from the external surface unless they cannot under any circumstance project beyond the extreme outer edge of the vehicle, in which case they may project by up to 50 mm from the external surface. All handles shall be enclosed in a protective surround or be recessed, unless they cannot in any circumstances project beyond the extreme outer edge of the vehicle.</p> <p>The open ends of door handles which rotate parallel to the plane of the door shall be turned back towards the plane of the door. Such open ends shall be directed rearwards unless the handles cannot under any circumstances project beyond the extreme outer edge of the vehicle and at least one of the following</p>	

	<p>requirements is met -</p> <p>(a) the open end of the handle is shielded to the front by a protective surround, or</p> <p>(b) the open end of the handle is recessed into the vehicle bodywork, or</p> <p>(c) the gap measured laterally between the open end of the handle and the vehicle body is no more than 2 mm when the handle is in its normal position with the door latched.</p> <p>The open ends of handles, which pivot outwards in any direction, shall face either rearwards or downwards, unless they have an independent return mechanism and cannot project more than 15 mm from the external surface should the return mechanism fail.</p>	
17. Speedometer and Reverse Gear	<p>No Alternatives or Variations</p> <p>Speedometers require metric only units (but it shall be sufficient that the speedometer uses units of measurement other than metric in combination with metric units of measurement).</p>	
18. Plates (statutory)	No Alternatives or Variations	
19. Seat Belt Anchorages	<p>No Alterations or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required</p> <p>for Schedule 7 Vehicles tests need not be performed provided that the vehicle is designed to meet the strength characteristics equivalent to those needed to satisfy the requirements of this item.</p>	
20. Installation of Lighting and Light Signalling Devices	<p>The requirements shall be limited to the installation of approved components as appropriate to the location, of the requisite number, installed in the specified positions, with the required geometric visibility and that operate in accordance with the technical requirements of UNECE Regulation 48.03</p> <p>Dipped beam headlamps shall be suitable for left hand rule of the road traffic.</p> <p>For category M₁ and N₁:</p> <ol style="list-style-type: none"> Paragraphs 6.2.6.2 and 6.2.6.3 (Headlamp levelling) shall not apply except where dipped beam headlamps with light sources having an objective luminous flux which exceeds 2000 lumens is fitted; the requirements relating to S3 devices in paragraph 6.7 of UNECE Regulation 48.01 shall not apply; In the case of a rear direction indicator which is one of a number of lamps having a common housing and fitted to a left-hand drive vehicle, paragraph 6.5.4.1 of UNECE regulation 48 shall apply as if for “400 mm” there were substituted “480 mm”. 	
21. Retro Reflectors Rear Marker Plates and Conspicuity Markings	<p>No Alternatives or Variations except for M₁ and N₁ category vehicles:</p> <p>This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity, of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.</p>	
22. End-outline, Front-position (side), Rear-	No Alternatives or Variations except for M ₁ and N ₁ category vehicles:	

position (side), Stop, Side Marker, Daytime Running Lamps	This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
23. Direction Indicators	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
24. Rear Registration Plate Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
25. Headlamps including bulbs	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
25A. Cornering Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
26. Front Fog Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
27. Towing Hooks	An Installation Check “ Installation Check ” means a check to confirm the presence and that towing hooks are securely attached to major structural aspects of the vehicle.	
28. Rear Fog Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles : This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	

29. Reversing Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
30. Parking Lamps	No Alternatives or Variations except for M ₁ and N ₁ category vehicles: This item, in so far as it requires any reflector or device to bear a particular standard mark (or one of two or more standard marks), shall not apply if it meets the standards as to coefficient of luminous intensity , of the instrument to which the standard mark (or as the case may be one of those standard marks) relates.	
31. Seat Belts and Restraint Systems	No Alterations or Variations except for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required Seat belts approved to an equivalent standard may be permitted	
32. Forward Vision	The driver shall have a clear and un-obscured view of the road ahead and to the side (180° forward). “Clear” means no tinting.	
33. Identification of Controls, Tell-tales and Indicators	Instead of complying with NSSTA requirements it is sufficient for controls to be clearly identified so as to avoid confusion.	
34. Defrost / Demist	No Alternatives or Variations	
35. Wash / Wipe	No Alternatives or Variations	
36. Heating Systems	No Alternatives or Variations For Schedule 7 Vehicles: The technical provisions of: Directive 2001/56/EC, paragraph 3 of Annex II excluding paragraph 3.1.	
37. Wheel Guards	No Alternatives or Variations	
38. Head Restraints	No Alternatives or Variations	
39. CO₂ Emissions / Fuel Consumption	No Alternatives or Variations Not applicable for Schedule 7 Vehicles .	
40. Engine Power	An engine power and maximum power speed shall be determined for each vehicle.	
41. Emissions(Euro IV and V and VI) Heavy-duty Vehicles	Vehicles manufactured up to 30th June 2016: Directive 88/77/EEC as amended by Directive 99/96/EC Row B2 limit values (Euro V) Vehicles manufactured on or after 1st July 2016 Regulation (EC) No 595/2009 Annex I limit values (Euro VI)	
42. Lateral Protection	No Alternatives or Variations but Tests are not required where the device is designed to meet the strength characteristics specified in the NSSTA requirements.	
43. Spray-suppression	No Alternatives or Variations	

systems		
44. Masses and Dimensions (cars)	No Alternatives or Variations	
45. Safety Glazing	<p>Installation check</p> <p>and</p> <p>Windscreen and windows to side of driver must be safety glass (“e” / “E” marked or BS marked) all other glass must be safety glazing (ie will not shatter - may be plastic).</p> <p>An opacity of 70% is required for all windows (60% if armoured).</p> <p>Directive 92/22/EEC, Annex III, paragraph 2.1.1 and 2.1.2 and UNECE Regulation 43, Annex 21, paragraph 4.1.2 and 4.1.3. do not apply provided that driver’s forward vision is not distorted and that light transmission of at least 70% is maintained.</p>	
46. Tyres	No Alternatives or Variations plus installation check including wheel arch clearance check.	
47. Speed Limitation Devices	No Alternative or Variations	
48. Masses and Dimensions	No Alternative or Variations	
49. External Projections of Cabs	<p>No Alternative or Variations</p> <p>Does not apply to category M vehicles.</p>	
50. Couplings	<p>No Alterations or Variations plus</p> <p>An Installation Check and Securely attached to structural parts of the vehicle.</p> <p>Couplings fitted as original equipment to mass produced vehicles which are compatible with trailer coupling devices complying with the requirements of Annex V to Directive 94/20/EC are permitted.</p> <p>“Installation Check” means confirmation that the components are “e” / “E” marked and securely installed in accordance with supporting information provided by the vehicle manufacturer.</p>	
51. Flammability	No Alterations or Variations	
52. Buses and Coaches	No Alternative or Variations	
53. Frontal Impact	<p>No Alterations or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in Directive 96/79/EC, Annex II, paragraph 3 or UNECE 94.01 is required</p> <p>Category N₁ vehicles and vehicles with a maximum mass exceeding 2500 kg are exempt</p> <p>The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply</p> <p>For wheelchair accessible vehicles and disabled person’s vehicles the vehicle is not required to comply with respect to adaptation for a disabled person affecting the frontal impact. Evidence of compliance of the unadapted vehicle is required</p>	

	Not applicable for Schedule 7 Vehicles	
54. Side Impact	<p>No Alteration or Variations except</p> <p>for M₁ and N₁ vehicles other than Schedule 7 vehicles Approval to the provisions listed in Directive 96/27/EC Annex II paragraph 3 or UNECE 95.02 is required</p> <p>Not applicable for Schedule 7 Vehicles</p> <p>Does not apply to vehicles where the R point of the lowest seat is more than 700 mm above the ground</p> <p>The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply</p> <p>For wheelchair accessible vehicles and disabled person's vehicles the vehicle is not required to comply with respect to adaptation for a disabled person affecting the side impact. Evidence of compliance of the unadapted vehicle is required</p>	
55. Blank		
56. Vehicles Intended for the Transport of Dangerous Goods	No Alternatives or Variations	
57. Front Underrun Protection	<p>No Alterations or Variations plus an Installation Check</p> <p>Not applicable for category M and N1 vehicles.</p> <p>"Installation Check" means a check to confirm that the device is approved or of the type tested and has been correctly installed.</p>	
58. Pedestrian Protection	No Alternatives or Variations	
59. Recyclability	No Alteration or Variations	
60. Blank		
61. Air-conditioning Systems	<p>Not Applicable except</p> <p>for M₁ vehicles compliance with the essential provisions listed in the National Small Series Type Approval Series and Technical Requirements for the category of vehicle is required.</p>	
62. Hydrogen System	No Alterations or Variations	
63. General Safety	No Alterations or Variations	
65. AEBS	No Alterations or Variations	
66. LDWS	No Alterations or Variations	
69. Electric Safety	No Alterations or Variations	

1. All aspects of the design and construction of the vehicle and its equipment which are not covered by other subject matters in this Schedule, shall be such that no danger is caused or likely to be caused to any person in the vehicle or on a road.

2. In particular, under all normal conditions likely to be encountered while the vehicle is being driven on a road, including when the vehicle is loaded to its maximum gross weight and the axle weight of any one axle equals its maximum permitted axle weight -

(a) it shall be possible to control the vehicle safely, taking account of the vehicle's speed and acceleration capabilities;

(b) it shall at all times be possible for the driver, while controlling the vehicle, to have a full view of the road and traffic ahead of the vehicle;

(c) the clearance between any of the following parts of the vehicle, namely the tyres, wheels, other rotating components associated with the transmission of engine power or braking, moveable parts of the steering mechanism and fixed parts shall be sufficient to ensure no risk of fouling and the wheels and wheel fixings shall be compatible;

(d) the vehicle structure (chassis or integral chassis-body), shall be so designed and constructed as to withstand the forces and vibration to which it is likely to be subject;

(e) all entries and exits provided for the vehicle occupants (other than doors) shall be so designed as to allow easy and safe use;

(f) all aperture covers (other than doors) including tail gates, boot and bonnet lids, shall be capable of being securely latched in the fully closed position;

(g) the steering, suspension, axles and wheels shall be so designed, constructed and fitted as to withstand the forces and vibration to which they are likely to be subject;

(h) the electrical system, including the battery, electrical components and wires, shall be securely attached to the vehicle. In particular, the maximum distance between attachments of wires, except those contained within hollow components, shall be 300 mm and wires shall be so fitted and protected as to avoid the risk of damage to insulation, such as abrasion. All components shall be so constructed and fitted as to minimise the risk of corrosion and fire.

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“Regulations 20(12) and 23(7)