



Part 5

Technical Requirements (Supplementary) for National Individual Vehicle
Approval for Category M, N and O Vehicles including Special Purpose
Vehicles

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

The Approval Authority shall not carry out destructive tests to establish whether the vehicle complies with the Alternative Technical Requirements but shall instead use any relevant information provided by the applicant for that purpose.

To enable representative testing the vehicle shall be submitted in a presentable state and capable of being laden to maximum mass.

A manufacturer's representative shall 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.

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

Table 4: Technical Requirements (Supplementary) for National Individual Vehicle Approval for Category M, N and O Vehicles including Special Purpose Vehicles

'Alternative Technical Requirements' means technical requirements in Regulation 6.

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
A1	Interior fittings	Regulation (EU) 2019/2144	Scope: M1 Applicability: M1: A or C N1: N/A	<ol style="list-style-type: none"> 1. No surface (other than a surface of a window) of the vehicle interior which can be contacted by a sphere of 165 mm diameter, and which is within the specified zone, shall include any fittings (e.g. controls, including steering controls, and instruments) or design features which have any dangerous roughness or sharp edges. 2. Switches and other controls mounted on the instrument panel which project by more than 9.5 mm from the surface of the panel, can be contacted by a sphere of 165 mm 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 37.8 daN is applied to them. 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 19 mm, or if it is covered with non-rigid material, not less than 5 mm. 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 5 mm. 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 3.2 mm on surfaces which can be contacted by a sphere of 165 mm diameter. 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 25 mm high with edges rounded to a radius of curvature of not less than 3.2 mm.

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				<p>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 165 mm 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 5 mm. 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>8. In the case of ambulances, the manufacturer shall provide the Approval Authority with documentation demonstrating compliance with EN 1789:2014.</p> <p>For the purposes of this item-“airbag” means a device installed to supplement safety belts and restraint systems in power-driven vehicles, i.e. systems which in the event of a severe impact affecting the vehicle automatically deploy a flexible structure intended to limit, by compression of the gas contained within it, the severity of the contacts of one or more parts of an occupant of the vehicle with the interior of the passenger compartment.</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> <p>“non-rigid material” means a material which has a hardness of less than 50 shore A;</p> <p>“rigid material” means a material which has a hardness of no less than 50 shore A;</p> <p>“sharp edge” means an edge of rigid material having a radius of curvature of less than 2.5 mm, except in the case of</p>

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				<p>projections of less than 3.2 mm 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;</p> <p>“specified zone” means the zone which-</p> <p>(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;</p> <p>(b) is above the horizontal plane passing through the point 150 mm above the lowest part of the top of the front seat cushions; and</p> <p>(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.</p> <p>This item shall not apply to a goods vehicle.</p> <p>Paragraph 1 shall not apply to:</p> <p>(a) the edges of any interior fitting (if there is a gap of less than 20 mm wide between the edges);</p> <p>(b) any heating or ventilation grill element; or</p> <p>(c) any control mounted on the heating or ventilation grill element area; so long as they are blunted.</p> <p>Paragraph 1 shall not apply to foot pedal controls.</p> <p>Paragraphs 1 and 2 shall not apply to any switches, controls or associated equipment designed for the use by a person with a disability and fitted in a specially equipped vehicle so long as any edges are blunted.</p> <p>Paragraph 4 shall not apply to any seat designed for a person with a disability</p>

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				<p>and fitted in a specially equipped vehicle.</p> <p>Paragraph 5 shall not apply to-</p> <p>(a) any floor-mounted hand-brake control if, in the fully released position, no part of the control is in the specified zone; or</p> <p>(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.</p> <p>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> <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:</p> <p>(i) an amateur-built vehicle; and</p> <p>(ii) a vehicle manufactured in very low volume.</p>
A2	Seats and head restraints	Regulation (EU) 2019/2144	<p>Scope: M and N</p> <p>Applicability: B or C</p>	No Alterations or Variations except 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.

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A3	Bus seats	Regulation (EU) 2019/2144	Scope: M2 and M3 Applicability: B or C	No Alterations or Variations except 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.
A4	Safety-belt anchorages	Regulation (EU) 2019/2144	Scope: M and N Applicability: B or C	No Alterations or Variations For Schedule 1 Vehicles: 1. Compliance with Directive 76/115/EEC** is acceptable. 2. 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.
A5	Safety-belts and restraint systems	Regulation (EU) 2019/2144	Scope: M and N Applicability: Component: X Installation: B or C	No Alterations or Variations For Schedule 1 Vehicles: 1. Seat belts approved to an equivalent standard may be permitted.
A6	Safety-belt reminders	Regulation (EU) 2019/2144	Scope: M and N Applicability: B	No Alterations or Variations For Schedule 1 Vehicles: 1. Seat belts approved to an equivalent standard may be permitted. 2. A safety belt reminder is required for the driver and front row passengers for Schedule 1 Vehicles.
A8	Child restraint anchorages	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF X	No Alterations or Variations
A9	Child restraint systems	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF X	No Alterations or Variations

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A10	Enhanced child restraint systems	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF X	No Alterations or Variations
A11	Front underrun protection	Regulation (EU) 2019/2144	Scope: N2 and N3 Applicability: Component: A Installation: B or C	No Alterations or Variations
A12	Rear underrun protection	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: Component: A Installation: B or C	<p>No Alterations or Variations</p> <hr/> <p>For Schedule 1 Vehicles:</p> <p>1. The technical provisions of paragraph 5 of Annex II to Directive 70/221/EEC as last amended by Directive 2006/20/EC. 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:</p> <ul style="list-style-type: none"> (a) a type-approval has been granted 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; <p>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>

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A13	Lateral protection	Regulation (EU) 2019/2144	Scope: N2, N3, O3 and O4 Applicability: Component: D Installation: B or C	No Alternatives or Variations but tests are not required where the device is designed to meet the strength characteristics specified in the National Small Series Type-Approval requirements.
A14	Fuel tank safety	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: Liquid fuel tanks: B Installation: B or C	No Alternatives or Variations For Schedule 1 Vehicles: 1. The technical provisions of Section 5 of Annex I of Directive 70/221/EEC as last amended by Directive 2006/20/EC, with the exception of paragraphs 5.1, 5.2, and 5.12. No dripping test shall be performed. 2. Vehicles (except those not fitted for fuels liquid at normal ambient conditions) shall comply with the requirements of paragraphs 5.1.2 (run on unleaded petrol) of Directive 70/220/EEC as amended by Directive 2001/100/EC. 3. For vehicles using gaseous fuels: UN Regulation No. 34 for liquid fuels.
A15	Liquefied petroleum gas safety	Regulation (EU) 2019/2144	Scope: M and N Applicability: Component: X Installation: B or C	No Alternatives or Variations
A16	Compressed and liquefied natural gas safety	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF Component: X Installation: A or C	No Alternatives or Variations

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A17	Hydrogen safety	Regulation (EU) 2019/2144	Scope: M and N IF Component: X Installation: A	No Alternatives or Variations
A18	Hydrogen system material qualification	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF X	No Alternatives or Variations
A19	In-use electric safety	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alternatives or Variations For Schedule 1 Vehicles: 1. For a vehicle with batteries with maximum voltage 48V — only compliance with the essential technical requirements of UN Regulation No. 100 is required.
A20	Frontal off-set impact	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	Alternative for M1 and N1 vehicles: 1. Approval to the provisions listed in Directive 96/79/EC**, Annex II, paragraph 3 or UN Regulation No. 94.01 is required. 2. Category N1 vehicles and vehicles with a maximum mass exceeding 2,500 kg are exempt. 3. The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply. 4. For wheelchair accessible vehicles and specially equipped vehicles the vehicle is not required to comply with respect to adaptation for a person with a disability affecting the frontal impact. Evidence of compliance of the unadapted vehicle is required. Schedule 1 Vehicles: Not applicable for Schedule 1 vehicles.

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A21	Frontal full-width impact	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	Alternative for M1 and N1 vehicles: 1. Approval to the provisions listed in Directive 96/79/EC**, Annex II, paragraph 3 or UN Regulation No. 94.01 is required. 2. Category N1 vehicles and vehicles with a maximum mass exceeding 2,500 kg are exempt. 3. The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply. 4. For wheelchair accessible vehicles and specially equipped vehicles the vehicle is not required to comply with respect to adaptation for a person with a disability affecting the frontal impact. Evidence of compliance of the unadapted vehicle is required.
A22	Protective steering	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	No Alternatives or Variations For Schedule 1 Vehicles: 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. 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. 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- (a) the vehicle complies with the requirements of paragraph

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				<p>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>
A24	Cab impact	Regulation (EU) 2019/2144	Scope: N Applicability: B	No Alterations or Variations
A25	Side impact	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	<p>Alternative for M1 and N1 vehicles:</p> <p>1. Approval to the provisions listed in Directive 96/27/EC** Annex II paragraph 3 or UN Regulation No. 95 is required.</p> <p>2. Does not apply to vehicles where the R point of the lowest seat is more than 700 mm above the ground.</p> <p>3. The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p> <p>4. For wheelchair accessible vehicles and specially equipped vehicles the vehicle is not required to comply with respect to adaptation for a person with a disability affecting the side impact. Evidence of compliance of the unadapted vehicle is required.</p> <hr/> <p>For Schedule 1 Vehicles: Not applicable for Schedule 1 Vehicles.</p>
A26	Pole side impact	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	<p>Alternative for M1 and N1 vehicles:</p> <p>1. Approval to the provisions listed in UN Regulation No. 135 is required.</p>

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				<p>2. Does not apply to vehicles where the R point of the lowest seat is more than 700 mm above the ground.</p> <p>3. The requirements according to the category of the base or incomplete vehicle based on maximum mass may apply.</p> <p>4. For wheelchair accessible vehicles and specially equipped vehicles the vehicle is not required to comply with respect to adaptation for a person with a disability affecting the side impact. Evidence of compliance of the unadapted vehicle is required.</p>
A27	Rear impact	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: Component: B Installation: B or C	No Alterations or Variations
A28	112-based eCall in vehicles systems	Regulation (EU) 2015/758	Scope: M1 and N1 Applicability: N/A	No Alterations or Variations
B1	Pedestrian leg and head protection	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	No Alterations or Variations
B2	Enlarged head impact zone	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	No Alterations or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
B3	Frontal protection system	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	No Alternatives or Variations
B4	Advanced emergency braking for pedestrian and cyclist	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: IF B	No Alternatives or Variations
B5	Pedestrian and cyclist collision warning	Regulation (EU) 2019/2144	Scope: M and N Applicability: M3 Class I and M3 Class II: B M2, M3 Class III, N2 and N3 IF B	No Alternatives or Variations
B6	Blind spot information system	Regulation (EU) 2019/2144	Scope: M2, M3, N2 and N3 Applicability: M3 Class I and M3 Class II: B M2, M3 Class III, N2 and N3 IF B	No Alternatives or Variations
B7	Reversing detection	Regulation (EU) 2019/2144	Scope: M and N Applicability: B	No Alternatives or Variations

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B8	Forward vision	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B	1. Until 31 December 2025, compliance with Directive 77/649/EEC** is acceptable. 2. The regular light transmission shall not be less than 70% in the case of a windscreen and other glazing that is located in a position requisite for driving visibility.
B10	Safety glazing	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: Component: X Installation: B or C	1. Windscreen and windows to side of driver shall comply with the technical and marking provisions of UN Regulation No. 43. 2. All other glass shall be safety glazing certified for land transport, and have the appropriate marking: “e” / “E” marked, or BS marked. 3. For rigid plastic panes fitted inside the vehicle which are requisite for the driver forward vision, the abrasion requirements for Class M shall be accepted as an alternative to the Class L abrasion requirements specified in Annex 24, paragraph 4.2.1.2. 4. In the case of a motor caravan, ambulance, 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 that meets the requirements of UN Regulation No. 43. 5. The regular light transmittance shall not be less than 70% in the case of a windscreen and other glazing that is located in a position requisite for driving visibility. 6. Vehicles having a maximum design speed greater than 40km/h may not be fitted with a toughened windscreen. . Until 31 December 2025, for extensions, compliance with Directive 92/22/EEC** is acceptable.

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B11	Defrost/demist	Regulation (EU) 2019/2144	Scope: M and N Applicability: B	1. Until 31 December 2025, compliance with Directive 78/317/EEC** is acceptable.
B12	Wash/wipe	Regulation (EU) 2019/2144	Scope: M and N Applicability: B	1. Until 31 December 2025, compliance with Directive 78/318/EEC** is acceptable.
B13	Indirect vision devices	Regulation (EU) 2019/2144	Scope: M and N Applicability: Component: X Installation: B or C	No Alternatives or Variations For Schedule 1 Vehicles: 1. Paragraph 6.1.1.6. of UN Regulation No. 46 shall not apply. 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 may be mounted is more than 150 mm 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: Paragraphs 15.2.4.2.1. and 15.2.4.2.2. of UN Regulation No. 46, in the second paragraph in each case, for 1 m shall be substituted 2.125 m and for 4 m Shall be substituted 10 m. 3. Field of view requirements do not apply to optional mirrors. "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.
B14	Acoustic Vehicle Alerting Systems devices	Regulation (EU) No 540/2014 Or UN Regulation No. 138.01	Scope: M and N Applicability: A or C.	No Alternatives or Variations

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C1	Steering equipment	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: A or C	In the case of a Manual or Power Assisted System, and where an approval has been granted 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. “Manual or Power Assisted System” means: a system that will operate in the event of failure of any power supply or assistance. For Schedule 1 Vehicles: 1. Compliance with Directive 70/311/EEC** is acceptable.
C2	Lane departure warning system	Regulation (EU) 2019/2144	Scope: M2, M3, N2 and N3 Applicability: X	No Alternatives or Variations
C3	Emergency lane keeping system	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: IF B	No Alternatives or Variations
C4	Braking	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: A	1. For O2, O3 and O4 trailers, the following alternative requirement may apply: Tests as prescribed in UN Regulation No. 13, or alternative equivalent technical requirements subject to the decision of the Approval Authority
C6	Brake assist	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: A	No Alternatives or Variations

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C7	Stability control	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B	No Alternatives or Variations
C8	Advanced emergency braking on heavy-duty vehicles	Regulation (EU) 2019/2144	Scope: M2, M3, N2 and N3 Applicability: X	No Alternatives or Variations
C9	Advanced emergency braking on light-duty vehicles	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: IF X	No Alternatives or Variations
C10	Tyre safety and environmental performance	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: X	No Alternatives or Variations
C11	Spare wheels and run-flat systems	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: N/A	No Alternatives or Variations
C13	Tyre pressure monitoring for light duty vehicles	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: IF X	No Alternatives or Variations
C14	Tyre pressure monitoring for heavy-duty vehicles	Regulation (EU) 2019/2144	Scope: M2, M3, N2, N3, O3 and O4 Applicability: IF X	1. Date for the refusal to grant national individual vehicle approval for trailers of Category O3 and O4: 31 December 2025.
C15	Tyre installation	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	No Alternatives or Variations

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D	Audible warning	Regulation (EU) 2019/2144	Scope: M and N Applicability: Component: X Installation: B or C	1. 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.
D2	Radio interference (electromagnetic compatibility)	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: A or B	1. No Alterations or Variations except the manufacturer may submit a declaration Compatibility 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. “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. 2. Until 31 December 2025, for extensions, compliance with Directive 72/245/EEC** is acceptable.
D3	Protection against unauthorised use, immobiliser and alarm systems	Regulation (EU) 2019/2144	Scope: M and N Applicability: M1 and N1: A M2, M3, N2 and N3: IF D	No Alterations or Variations For Schedule 1 Vehicles: 1. 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 the applicable regulatory act, and in such case an Installation Check will be conducted. 2. 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

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				<p>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 (e.g. 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. Any alarm system or immobiliser fitted to a vehicle shall comply with paragraph 1 or 2 as applicable.</p> <p>3. 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 mean “panic alarm”.</p> <p>An “Installation Check” means an inspection of installed components as</p>

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				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.
D4	Protection of vehicle against cyberattacks	Regulation (EU) 2019/2144	Scope: M and N Applicability: M1 and N1:X M2, M3, N2, N3: B	No Alterations or Variations
D5	Speedometer	Regulation (EU) 2019/2144	Scope: M and N Applicability: B or C	1. Until 31 December 2025, compliance with Directive 75/443/EEC** is acceptable
D6	Odometer	Regulation (EU) 2019/2144	Scope: M and N Applicability:	No Alterations or Variations
D7	Speed limitation devices	Regulation (EU) 2019/2144	Scope: M2, M3, N2 and N3 Applicability: X	No Alterations or Variations
D8	Intelligent speed assistance	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alterations or Variations
D9	Identification of controls, tell-tales and indicators	Regulation (EU) 2019/2144	Scope: M and N Applicability: A or C	No Alterations or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
D10	Heating systems	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	No Alterations or Variations For Schedule 1 Vehicles: 1. The technical provisions of: Directive 2001/56/EC, paragraph 3 of Annex II excluding paragraph 3.1.
D11	Light signalling devices	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: X	No Alterations or Variations
D12	Road illumination devices	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: X	No Alterations or Variations
D13	Retro-reflective devices	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: X	No Alterations or Variations
D14	Light sources	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: X	No Alterations or Variations

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D15	Installation of light signalling, road illumination and retro-reflective devices	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	<p>1. The requirements are 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 UN Regulation No. 48.</p> <p>2. Dipped beam headlamps shall be suitable for left hand rule of the road traffic*.</p> <p>3. If there is only one rear fog lamp, it shall be on the right-hand side of the vehicle*.</p> <p>4. For category M1 and N1:</p> <p>(a) 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;</p> <p>(b) 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 UN Regulation No. 48 shall apply as if for “400 mm” there were substituted “480 mm”.</p>
D16	Emergency Stop Signal	Regulation (EU) 2019/2144	Scope: M and N Applicability: X	No Alterations or Variations
D17	Headlamp cleaners	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF X	No Alterations or Variations
D18	Gear shift indicator	Regulation (EU) 2019/2144	Scope: M1 Applicability: N/A	No Alterations or Variations
E1	Alcohol interlock installation facilitation	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF A	No Alterations or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
E2	Driver drowsiness and attention warning	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	1. Not required on vehicles that are limited to 65km/h as per the certificate of conformity.
E4	Driver availability monitoring system	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alterations or Variations
E5	Event data recorder	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alterations or Variations
E6	Systems to replace driver's control	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alterations or Variations
E7	Systems to provide the vehicle with information on state of vehicle and surrounding area	Regulation (EU) 2019/2144	Scope: M and N Applicability: IF B	No Alterations or Variations
F1	Registration plate space	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	1. Compliance with Directive 70/222/EEC** is acceptable. For Schedule 1 Vehicles: 1. 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.
F2	Reversing motion	Regulation (EU) 2019/2144	Scope: M and N Applicability: B	No Alternatives or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
F3	Door latches and hinges	Regulation (EU) 2019/2144	Scope: M1 and N1 Applicability: B or C	No Alternatives or Variations
F4	Door entry steps, handholds and running boards	Regulation (EU) 2019/2144	Scope: M1, N1, N2 and N3 Applicability: B or C	No Alternatives or Variations
F5	External projections	Regulation (EU) 2019/2144	Scope: M1 Applicability: A or C	<p>1. 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>2. 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 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</p>

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
				<p>than 15 mm from the external surface should the return mechanism fail.</p> <p>3. Until 31 December 2025, compliance with Directive 74/483/EEC** is acceptable.</p>
F6	External projections of commercial vehicle cabs	Regulation (EU) 2019/2144	Scope: N Applicability: B	No Alternatives or Variations
F7	Statutory plate and vehicle identification number	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	1. At the discretion of the Approval Authority, the individual vehicle approval number shall not be required on the multi-stage statutory plate.
F8	Towing devices	Regulation (EU) 2019/2144	Scope: M and N Applicability: B or C	1. 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.
F9	Wheel guards	Regulation (EU) 2019/2144	Scope: M1 Applicability: B or C	No Alternatives or Variations
F10	Spray suppression systems	Regulation (EU) 2019/2144	Scope: N and O Applicability:	No Alternatives or Variations
F11	Masses and dimensions	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: B or C	1. Until 31 December 2025, compliance with Directive 97/27/EC** is acceptable, subject to S.I. No. 5/2003. 2. 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. 3. Until 31 December 2025, compliance with Directive 92/21/EEC** is acceptable

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
F12	Mechanical couplings	Regulation (EU) 2019/2144	Scope: M, N and O Applicability: IF Component: A Installation: B or C	No Alterations or Variations plus An Installation Check and Securely attached to structural parts of the vehicle. Couplings fitted as original equipment to mass produced vehicles which are compatible with trailer coupling devices complying with the requirements of Annex 5 to UN Regulation No. 55 are permitted. “Installation Check” means confirmation that the components are “e” / “E” marked and securely installed in accordance with supporting information provided by the vehicle manufacturer.
F13	Vehicles intended for the transportation of dangerous goods	Regulation (EU) 2019/2144	Scope: N and O Applicability: A or B	No Alternatives or Variations
F14	General bus construction	Regulation (EU) 2019/2144	Scope: M2 and M3 Applicability: B or C	No Alternatives or Variations
F15	Bus strength of superstructure	Regulation (EU) 2019/2144	Scope: M2 and M3 Applicability: N/A	No Alternatives or Variations
F16	Flammability in buses	Regulation (EU) 2019/2144	Scope: M3 Applicability: B	No Alternatives or Variations
G1	Sound level	Regulation (EU) No 540/2014	Scope: M and N	No Alternatives or Variations
		Or UN Regulation No. 51.03	Applicability: A or C	For Schedule 1 Vehicles: 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. 2. When- (a) the vehicle is held stationary on a level surface such that there is an

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
				<p>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 $\frac{3}{4} S$ ("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 99 db(A).</p>
G2	Tailpipe emissions of vehicle in lab	Regulation (EC) No 715/2007	<p>Scope: M1, M2, N1 and N2</p> <p>Applicability: A</p>	<p>No Alternatives or Variations</p> <hr/> <p>For Schedule 1 Vehicles:</p> <p>1. The vehicle shall not emit any avoidable smoke or avoidable visible vapour. 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>2. 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. A free acceleration</p>

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
				<p>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 or</p> <p>b) for an N2, M2, N3 or M3 vehicle:</p> <p>i) if the engine of the vehicle is turbocharged, 3.0 per metre or</p> <p>ii) 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>
G3	Tailpipe emissions of engine in lab	Regulation (EC) No 595/2009	Scope: M and N Applicability: A	No Alternatives or Variations
G4	Tailpipe emissions on the road	Regulation (EC) No 715/2007 Regulation (EC) No 595/2009	Scope: M and N Applicability: A	No Alternatives or Variations
G5	Durability of tailpipe emissions	Regulation (EC) No 715/2007 Regulation (EC) No 595/2009	Scope: M and N Applicability: A	No Alternatives or Variations
G6	Crankcase emissions	Regulation (EC) No 715/2007 Regulation (EC) No 595/2009	Scope: M and N Applicability: A	No Alternatives or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
G7	Evaporative emissions	Regulation (EC) No 715/2007	Scope: M1, M2, N1 and N2 Applicability: A	No Alternatives or Variations
G8	Low-temperature tailpipe emissions in lab	Regulation (EC) No 715/2007	Scope: M1, M2, N1 and N2 Applicability: A	No Alternatives or Variations
G9	On-board diagnostics	Regulation (EC) No 715/2007 Regulation (EC) No 595/2009	Scope: M and N Applicability: A	1. For vehicle approved to Regulation (EC) No. 595/2009: Additional provisions concerning monitoring requirements as set out in Paragraph 2.3.1.2. of Annex 9A to UNECE Regulation No. 49.
G10	Absence of defeat device	Regulation (EC) No 715/2007	Scope: M and N Applicability: A	No Alternatives or Variations
G11	Auxiliary emissions strategies	Regulation (EC) No 715/2007	Scope: M and N Applicability: A	No Alternatives or Variations
G12	Anti-tampering	Regulation (EC) No 715/2007	Scope: M and N Applicability: A	No Alternatives or Variations
G13	Recyclability	Directive 2005/64/EC	Scope: M1 and N1 Applicability: N/A	No Alternatives or Variations
G14	Air-conditioning systems	Directive 2006/40/EC	Scope: M1 and N1 Applicability: B	No Alternatives or Variations

No.	Subject	Regulatory Act	Scope and Applicability	Alternative Technical Requirements for national individual vehicle approval
H1	Access to vehicle OBD information and vehicle repair and maintenance information	Regulation (EU) 2018/858, Articles 61 to 66 and Annex X.	Scope: M, N and O Applicability: B or C	1. This requirement shall not apply for national individual vehicle approval.
H2	Software update	Regulation (EU) 2018/858, Annex IV UN Regulation No 156	Scope: M, N and O Applicability: X	No Alternatives or Variations



GIVEN under my Official Seal,
13 May, 2024.

EAMON RYAN,
Minister for Transport.

EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

These Regulations give full effect to Regulation (EU) 2019/2144 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, and give full effect to Articles 11 and 13 of Regulation (EC) No 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information and Articles 9 and 11 of Regulation (EC) No 595/2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information.

These Regulations replace Schedules 1 and 2 to the European Union (Road Vehicles: Type-Approval and Market Surveillance) Regulations 2020 (SI 556/2020) relating to national type approvals:

Schedule 1 describes the certain varieties of vehicle that are eligible for national individual vehicle approval. These Regulations remove the following varieties of vehicle from Schedule 1:

- Ambulances
- Armoured vehicles
- Vehicles that were previously registered in another jurisdiction
- Vehicles that were manufactured using parts from a registered vehicle.

Schedule 2 updates the requirements for national small series type-approval and national individual vehicle approval, including special purpose vehicles pursuant to these schemes with respect to the systems provided for in Regulation (EU) 2019/2144 and in the delegated acts and implementing acts adopted pursuant to that Regulation. It incorporates the systems provided for in Regulation (EU) 2019/2144 and in the delegated acts and implementing acts adopted pursuant to that Regulation into the national small series type-approval and national individual vehicle approval schemes.

These Regulations revoke a number of statutory instruments in full or part of, that have until now, regulated some of the matters that these Regulations address. The requirements for defeat devices, defeat strategies and pollution control devices are carried forward into these Regulations.

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