Commission Regulation (EU) No 1230/2012 of 12 December 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with regard to type-approval requirements for masses and dimensions of motor vehicles and their trailers and amending Directive 2007/46/EC of the European Parliament and of the Council (Text with EEA relevance)

ANNEX I

TECHNICAL REQUIREMENTS

PART A

Vehicles of category M₁ and N₁

1. Maximum authorised dimensions

- 1.1. The dimensions shall not exceed the following values:
- 1.1.1. Length: 12,00 m.

1.1.2. Width:

(a) M ₁	:	2,55 m;
(b) N ₁	:	2,55 m;
(c) N ₁	:	2,60 m for vehicles fitted with a bodywork with insulated walls of at least 45 mm thick, as referred to in Appendix 2 of Part C of Annex II to Directive 2007/46/ EC;

- 1.1.3. Height: 4,00 m.
- 1.2. For the purposes of measurement of the length, width and height, the vehicle shall be at its mass in running order, placed on a horizontal and flat surface with tyres inflated at the pressure recommended by the manufacturer.
- [^{F1}1.3. The devices and equipment referred to in Appendix 1 shall not be taken into account for the determination of the length, width and height.]

Textual Amendments

F1 Substituted by Commission Regulation (EU) 2019/1892 of 31 October 2019 amending Regulation (EU) No 1230/2012 as regards type-approval requirements for certain motor vehicles fitted with elongated cabs and for aerodynamic devices and equipment for motor vehicles and their trailers (Text with EEA relevance).

2. Mass distribution

- 2.1. The sum of the technically permissible maximum mass on the axles shall not be less than the technically permissible maximum laden mass of the vehicle.
- 2.2. The technically permissible maximum laden mass of the vehicle shall not be less than the mass of the vehicle in running order plus the mass of the passengers plus the mass of the optional equipment plus the mass of the coupling if not included in the mass in running order.
- 2.3. Where the vehicle is laden to the technically permissible maximum laden mass, the mass on each axle shall not exceed the technically permissible maximum mass on that axle.

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- 2.4. Where the vehicle is laden to the technically permissible maximum laden mass, the mass on the front axle shall in no event be less than 30 % of the technically permissible maximum laden mass of the vehicle.
- 2.4.1. Where the vehicle is laden to the technically permissible maximum laden mass plus the technically permissible maximum mass at the coupling point, the mass on the front axle shall in no event be less than 20 % of the technically permissible maximum laden mass of the vehicle.
- 2.5. Where a vehicle is equipped with removable seats, the verification procedure shall be limited to the condition with the maximum number of seating positions.
- 2.6. For the purposes of verifying the requirements laid down in points 2.2, 2.3 and 2.4:
- (a) The seats shall be adjusted as prescribed in point 2.6.1
- (b) the masses of the passengers, the pay-mass and the mass of the optional equipment shall be distributed as prescribed in points 2.6.2 to 2.6.4.2.3.
- 2.6.1. Seat adjustment
- 2.6.1.1. The seats where adjustable shall be moved to their rearmost position.
- 2.6.1.2. Where there are other possibilities for adjusting the seat (vertical, angled, seat back, etc.) the adjusted positions shall be as specified by the vehicle manufacturer.
- 2.6.1.3. In the case of suspension seats, the seat shall be locked in the position specified by the manufacturer.
- 2.6.2. Distribution of the mass of passengers
- 2.6.2.1. The mass representing each passenger shall be 75 kg.
- 2.6.2.2. The mass for each passenger shall be located at the seating reference point (i.e. the 'R point' of the seat)
- 2.6.2.3. In the case of special purpose vehicle, the requirement of point 2.6.2.2 shall apply mutatis mutandis (for example, mass of an injured person lying on the stretcher in the case of an ambulance).
- 2.6.3. Distribution of the mass of the optional equipment
- 2.6.3.1. The mass of the optional equipment shall be distributed in accordance with the manufacturer's specifications.
- 2.6.4 Distribution of the pay-mass
- 2.6.4.1. M_1 vehicles
- 2.6.4.1.1.As regards M₁ vehicles, the pay-mass shall be distributed in accordance with the manufacturer's specifications in agreement with the technical service.
- 2.6.4.1.2. As regards motor caravans the minimum pay-mass (PM) shall meet the following requirement:

 $\mathrm{PM} \ \mathrm{in} \ \mathrm{kg} \geq 10 \ (n+L)$

Where

'n'

is the maximum number of passengers plus the driver and

- 'L' is the overall length of the vehicle in metre
- 2.6.4.2. N₁ vehicles
- 2.6.4.2.1.As regards vehicles with bodywork, the pay-mass shall be distributed uniformly on the cargo bed;
- 2.6.4.2.2. As regards vehicles without bodywork (e.g. chassis-cab), the manufacturer shall state the extreme permissible positions of the centre of gravity of the pay-mass increased by the mass of the equipment intended to accommodate goods (e.g. bodywork, tank, etc.) (for instance: from 0,50 m to 1,30 m in front of the first rear axle);
- 2.6.4.2.3. As regards vehicles intended to be fitted with a fifth wheel coupling, the manufacturer shall state the minimum and maximum fifth wheel lead.
- 2.7. Additional requirements where the vehicle is capable of towing a trailer
- 2.7.1. The requirements referred to in points 2.2, 2.3 and 2.4 shall apply taking into account the mass of the coupling and the technically permissible maximum mass at the coupling point.
- 2.7.2. Without prejudice to the requirements of point 2.4, the technically permissible maximum mass on the rear axle(s) may be exceeded by not more than 15 %.
- 2.7.2.1. Where the technically permissible maximum mass on the rear axle(s) is exceeded by not more than 15 %, the requirements of point 5.2 of Annex II to Commission Regulation (EU) No 458/2011⁽¹⁾ shall apply.
- 2.7.2.2. In the Member States where the road traffic legislation allows it, the manufacturer may indicate in an appropriate supporting document, such as the owner's manual or the maintenance book that the technically permissible maximum laden mass of the vehicle may be exceeded by not more than 10 % or 100 kg, whichever value is lower.

This allowance shall apply only when towing a trailer in the conditions specified in point 2.7.2.1 provided that the operating speed is restricted to 100 km/h or less.

3. Towable mass and mass at the coupling

- 3.1. As regards the technically permissible maximum towable mass, the following requirements shall apply:
- 3.1.1. Trailer fitted with a service braking system
- 3.1.1.1. The technically permissible maximum towable mass of the vehicle shall be the lowest of the following values:
- (a) the technically permissible maximum towable mass based on the construction features of the vehicle and the strength of the coupling;
- (b) the technically permissible maximum laden mass of the towing vehicle;
- (c) 1,5 times the technically permissible maximum laden mass of the towing vehicle in the case of an off-road vehicle as defined in Annex II to Directive 2007/46/EC.
- 3.1.1.2. However, the technically permissible maximum towable mass shall in no case exceed 3 500 kg.
- 3.1.2. Trailer without a service braking system

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- 3.1.2.1. The permissible towable mass shall be the lowest of the following values:
- (a) the technically permissible maximum towable mass based on the construction features of the vehicle and the strength of the coupling;
- (b) half of the mass in running order of the towing vehicle.
- 3.1.2.2. The technically permissible maximum towable mass shall in no case exceed 750 kg.
- 3.2. The technically permissible maximum mass at the coupling point shall not be less than 4 % of the maximum permissible towable mass and not be less than 25 kg.
- 3.3. The manufacturer shall specify in the owner's manual the technically permissible maximum mass at the coupling point, the mounting points of the coupling on the towing vehicle and the maximum permissible rear overhang for the coupling point.
- 3.4. The technically permissible maximum towable mass shall not be defined by reference to the number of passengers.

4. **Mass of the combination**

The technically permissible maximum laden mass of the combination shall not exceed the sum of the technically permissible maximum laden mass plus the technically permissible maximum towable mass.

 $MC \le M + TM$

5. Hill starting ability

- 5.1. The towing vehicle shall be able to start the vehicle combination five times on an uphill gradient of at least 12 % within five minutes.
- 5.2. In order to conduct the test described in point 5.1, the towing vehicle and the trailer shall be laden as to equal the technically permissible maximum laden mass of the combination.

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(**1**) OJ L 124, 13.5.2011, p. 11.

Changes to legislation:

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Changes and effects yet to be applied to :

- Annex 1 Pt. A point 1.1.3 omitted by S.I. 2022/1273 reg. 72(2)(a)(ii)
- Annex 1 Pt. A point 2.7.2.2 omitted by S.I. 2022/1273 reg. 72(2)(a)(iv)
- Annex 1 Pt. A point 1.1.3 omitted (temp.) by virtue of S.I. 2019/648, reg. A8(2)(a)(i) (with reg. 11) (as inserted) by S.I. 2020/1393 reg. 2(7)
- Annex 1 Pt. A point 1.1.2(c) words substituted by S.I. 2022/1273 reg. 72(2)(a)(i)
- Annex 1 Pt. A point 1.2 words substituted by S.I. 2022/1273 reg. 72(2)(a)(iii)
- Annex 1 Pt. A point 1.3 words substituted by S.I. 2022/1273 reg. 72(2)(a)(iii)
- Annex 1 Pt. A point 3.1.1.1(c) words substituted by S.I. 2022/1273 reg. 72(2)(a)(v)
- Annex 1 Pt. A point 1.2 words substituted (temp.) by S.I. 2019/648, reg. A8(2)(a)(ii) (with reg. 11) (as inserted) by S.I. 2020/1393 reg. 2(7)
- Annex 1 Pt. A point 1.3 words substituted (temp.) by S.I. 2019/648, reg. A8(2)(a)(ii) (with reg. 11) (as inserted) by S.I. 2020/1393 reg. 2(7)

Changes and effects yet to be applied to the whole legislation item and associated provisions

- Signature words omitted by S.I. 2022/1273 reg. 71(10)
- Annex 5 Pt. B s. 1 words substituted by S.I. 2022/1273 reg. 72(4)(c)(iii)
- Annex 5 Pt. B s. 2 words substituted by S.I. 2022/1273 reg. 72(4)(c)(iv)
- Annex 5 Pt. D s. 1 words substituted by S.I. 2022/1273 reg. 72(4)(e)(iii)
- Annex 1 Appendix 2 point 2.1 words substituted by S.I. 2022/1273 reg. 72(2)(e)(i)
- Annex 1 Appendix 2 point 2.2 words substituted by S.I. 2022/1273 reg. 72(2)(e)(ii) (aa)
- Annex 1 Appendix 2 point 2.2(c) words substituted by S.I. 2022/1273 reg. 72(2)(e)
 (ii)(bb)
- Annex 1 Appendix 4 point 1.3 words substituted by S.I. 2022/1273 reg. 72(2)(f)
- Art. 2(1) words substituted by S.I. 2022/1273 reg. 71(3)(b)
- Art. 2(2) words substituted by S.I. 2022/1273 reg. 71(3)(c)
- Art. 2(11) words substituted by S.I. 2022/1273 reg. 71(3)(d)
- Art. 2(40) words substituted by S.I. 2022/1273 reg. 71(3)(e)
- Art. 6(1)(1a) substituted for Art. 6(1) by S.I. 2022/1273 reg. 71(8)(a)