



COMMISSION IMPLEMENTING REGULATION (EU) 2024/883

of 21 March 2024

amending Implementing Regulation (EU) 2021/535 as regards the second rear registration plate space for trailers and the mass of energy storage systems and correcting that Regulation

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 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, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166⁽¹⁾, and in particular Articles 4(7) and 10(3) thereof,

Whereas:

- (1) Commission Implementing Regulation (EU) 2021/535⁽²⁾ provides rules concerning uniform procedures and technical specifications for the type-approval of vehicles, and of certain systems, components and separate technical units regarding their general safety. In that context, Implementing Regulation (EU) 2021/535 introduces a technical requirement for a second rear registration plate space for trailers. However, more time is needed for manufacturers to adjust to that new requirement with regard to the space for mounting and fixing of the second rear registration plates for vehicles of category O₃ and O₄. Therefore, the transitional provisions in Implementing Regulation (EU) 2021/535 need to be modified to ensure that those requirements will first apply to new vehicle types. In addition, vehicles of category O₂ should be exempted from that requirement because of the design restrictions and the lack of space.
- (2) It is appropriate to provide rules for the marking of the vehicle identification number (VIN) on the vehicle and for ensuring the traceability of the vehicle by means of the VIN.
- (3) It is also appropriate to provide for certain flexibility in the positioning of the front registration plate in order to take into account possible technical and design constraints as regards sensors, radars and cameras to be installed in front of the vehicles for the safety systems provided under Regulation (EU) 2019/2144.
- (4) It is necessary to complement the technical requirements for the windscreen washer systems to consider the cases where such systems incorporate a function to mitigate excessive pressures when the nozzles are blocked.
- (5) It is also suitable to optimise the test procedures for the windscreen defrosting and demisting systems by providing more efficient sequence of the activities in the test chamber and flexibilities in the choice of the degreaser, while at the same time ensuring better health and working conditions for the persons performing the tests.

⁽¹⁾ OJ L 325, 16.12.2019, p. 1.

⁽²⁾ Commission Implementing Regulation (EU) 2021/535 of 31 March 2021 laying down rules for the application of Regulation (EU) 2019/2144 of the European Parliament and of the Council as regards uniform procedures and technical specifications for the type-approval of vehicles, and of systems, components and separate technical units intended for such vehicles, as regards their general construction characteristics and safety (OJ L 117, 6.4.2021, p. 1).

- (6) It is necessary to provide rules for towing capability of stranded motor vehicles in order to ensure that they can be safely removed from the road when obstructing the road traffic. In addition, transitional provisions need to be provided to ensure that the new requirements as regards the towing capability will first apply to new vehicle types.
- (7) The additional mass of the specific energy storage systems applied in zero-emission vehicles may cause the reference mass of such vehicles to be higher than that of similar conventional vehicles. The excess reference mass needs to be taken into account to allow zero-emission vehicles of category N that would otherwise fall outside the scope of Regulation (EU) 2019/631 of the European Parliament and of the Council ⁽³⁾ to be considered for the calculation of the average specific emissions of N₁ vehicles for the manufacturers concerned from 1 January 2025. Therefore, a requirement should be established for the inclusion of a formal record of the mass of the energy storage system in the certificate of conformity, which is to be made available as part of the CO₂ monitoring data.
- (8) Following the date of application of Implementing Regulation (EU) 2021/535, certain errors have been detected in the form of incorrect references.
- (9) Implementing Regulation (EU) 2021/535 should therefore be amended and corrected accordingly.
- (10) In order to enable manufacturers and approval authorities of the Member States to make the necessary adaptations and to prepare for the application of the requirements concerning the mass of the energy storage systems of zero-emission vehicles, the date of application of the respective provisions of this Regulation should be deferred and aligned with the date set out in Regulation (EU) 2019/631.
- (11) The measures provided for in this Regulation are in accordance with the opinion of the Technical Committee – Motor Vehicles,

HAS ADOPTED THIS REGULATION:

Article 1

Amendments to Implementing Regulation (EU) 2021/535

Implementing Regulation (EU) 2021/535 is amended as follows:

(1) Article 12 is amended as follows:

(a) the following paragraph 3a is inserted:

‘3a. With effect from 7 July 2024, type-approval authorities shall refuse to grant EU type-approval in respect of new types of vehicles, with regard to the space for mounting and fixing of the second rear registration plate for vehicle categories O₃ and O₄, which do not comply with the technical specifications set out in Part 2 of Annex III with regard to the respective requirements listed in Annex II to Regulation (EU) 2019/2144.’;

(b) paragraph 4 is replaced by the following:

‘4. With effect from 7 July 2026, national authorities shall refuse, on grounds relating to the space for mounting and fixing of the front registration plates and to the space for mounting and fixing of the second rear registration plate for vehicle categories O₃ and O₄, the registration, placing on the market and entry into service of vehicles, which do not comply with the technical specifications set out in Part 2 of Annex III with regard to the respective requirements listed in Annex II to Regulation (EU) 2019/2144.’;

(c) the following paragraphs 4a and 4b are inserted:

‘4a. With effect from 7 July 2025, type-approval authorities shall refuse to grant EU type-approval in respect of new types of vehicles, with regard to the towing devices, which do not comply with the technical specifications for towing capability set out in Part 2 of Annex VII with regard to the respective requirements listed in Annex II to Regulation (EU) 2019/2144.

⁽³⁾ Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO₂ emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 (OJ L 111, 25.4.2019, p. 13).

4b. With effect from 7 July 2027, national authorities shall refuse, on grounds relating to the towing devices, the registration, placing on the market and entry into service of vehicles, which do not comply with the technical specifications for towing capability set out in Part 2 of Annex VII with regard to the respective requirements listed in Annex II to Regulation (EU) 2019/2144.;

(2) Annexes II, III, IV, VI, VII and XIII are amended in accordance with Annex I to this Regulation.

Article 2

Corrections to Implementing Regulation (EU) 2021/535

Implementing Regulation (EU) 2021/535 is corrected as follows:

(1) in Article 6, paragraphs 3 and 4 are replaced with the following:

‘3. In accordance with the second subparagraph of Article 6(5) of Regulation (EU) 2018/858, an EU type-approval may be granted for vehicles exceeding the maximum authorised dimensions set out in point 1.1 of Sections C, D and E of Part 2 of Annex XIII to this Regulation, in which case the remark “maximum authorised dimensions derogation” shall be included in point 52 of the type-approval certificate and the certificate of conformity.

4. An EU type-approval may be granted for vehicles intended for the transport of indivisible loads, the dimensions of which exceed the maximum authorised dimensions set out in point 1.1 of Sections C, D and E of Part 2 of Annex XIII to this Regulation, in which case the type-approval certificate and the certificate of conformity shall clearly indicate that the vehicle is intended for the transport of indivisible loads only.’;

(2) Annexes II, VIII, XIII and XIV are corrected in accordance with Annex II to this Regulation.

Article 3

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Annex I, point (6) shall apply from 1 January 2025.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 21 March 2024.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX I

Annexes II, III, IV, VI, VII and XIII are amended as follows:

(1) in Annex II, Part 2, Section A, the following points are inserted before point 2.1:

‘2.0.1. A VIN shall be marked on each vehicle.

2.0.2. The VIN shall be unique and unequivocally attributed to a particular vehicle.

2.0.3. The VIN shall be marked on the chassis or the vehicle when the vehicle leaves the production line.

2.0.4. The manufacturer shall ensure the traceability of the vehicle by means of the VIN over a period of 30 years.

2.0.5. The existence of measures taken by the manufacturer to ensure the traceability of the vehicle as referred to in point 2.0.4 may not be checked at the time of the type-approval.’;

(2) Annex III is amended as follows:

(a) Part 2 is amended as follows:

(i) point 2.1.2 is replaced by the following:

‘2.1.2. Vehicles of category O₃ and O₄ shall be equipped with two separate spaces for mounting and fixing of rear registration plates (i.e. allowing for the optional identification of a towing vehicle where required by a national authority).’;

(ii) in point 2.3.4.1.3, the following sentence is added:

‘However, the type-approval authority may allow a tolerance up to $\pm 15^\circ$ when requested by the manufacturer for the purpose of positioning the front registration plate off the centreline at the front of the vehicle for technical, aerodynamic or other reasons.’;

(b) in Part 3, the Addendum to Section II of the EU type-approval certificate, point 2.3 is replaced by the following:

‘2.3. Second rear registration plate in case of vehicles of category O₃ and O₄: 520 × 120/340 × 240 (°)’;

(3) in Annex IV, Part 2 is amended as follows:

(a) the following point 2.2.3.1 is inserted:

‘2.2.3.1. Where the windscreen washer system is designed to incorporate a function to mitigate excessive pressures when the nozzles are blocked (e.g. relief valve), such function shall, by way of derogation from point 2.2.3, second sentence, be permitted provided that the following conditions are met:

(a) any fluid exiting the system does not enter any vehicle compartment including the under-bonnet area, unless specifically channeled or directed towards the ground surface, at standstill and under normal driving conditions;

(b) the windscreen washer system is capable of operating normally upon complete removal of the blockage of the nozzles;

(c) normal operation is ensured without any further user intervention necessary to manually engage, adjust, reconnect or replace any part of the windscreen washer system, the windscreen wiper system, the electrical system or any other relevant system.’;

(b) point 3.2.1.1 is replaced by the following:

‘3.2.1.1. All nozzle outlets shall be plugged at the location where the fluid exits those outlets and the windscreen washer control shall be actuated six times in one minute, each time for at least three seconds. However, where plugging is technically not feasible where the fluid exits, it can be performed inside the nozzle outlet(s).’;

(4) in Annex VI, Part 2 is amended as follows:

(a) in point 3.1.1.1, the following sentence is added:

‘However, where it is possible to check whether the cold chamber’s temperature, measured at representative positions such as the air outlet or the walls, is stabilised at the specified test temperature, the period of 24 hours may be shortened.’;

(b) point 3.1.2 is replaced by the following:

‘3.1.2. Before the vehicle is placed in the test chamber, the inner and outer surfaces of the windscreen shall be thoroughly degreased by means of methylated spirit or an equivalent degreasing agent. After drying, a solution of ammonia of maximum 2 % or a commercial ammonia solution, with no addictive fragrances added, shall be applied. The surfaces shall be allowed to dry again and then be wiped with a dry cotton cloth.’;

(c) point 3.1.6.4 is deleted;

(d) point 3.1.6.5 is replaced by the following:

‘3.1.6.5. The temperature in the test chamber shall be measured at the level of the windscreen, at a point not significantly affected by heat from the vehicle under test.’;

(e) point 3.2.1 is replaced by the following:

‘3.2.1. Before the vehicle is placed in the test chamber, the inner and outer surfaces of the windscreen shall be thoroughly degreased by means of methylated spirit or an equivalent degreasing agent. After drying, a solution of ammonia of maximum 2 % or a commercial ammonia solution, with no addictive fragrances added, shall be applied. The surfaces shall be allowed to dry again and then be wiped with a dry cotton cloth.’;

(f) point 3.2.2.1 is replaced by the following:

‘3.2.2.1. The temperature in the test chamber shall be measured at the level of the windscreen, at a point not significantly affected by heat from the vehicle under test.’;

(g) points 3.2.4 and 3.2.5 are replaced by the following:

‘3.2.4. The inner surface of the windscreen shall be cleaned as set out in point 3.2.1 before the vehicle is placed in the environmental chamber. The ambient air temperature shall then be lowered and stabilized at -3 ± 1 °C. The vehicle shall be switched off and shall be kept at the test temperature for not less than 10 hours prior to commencement of the test. However, where it is possible to check whether the vehicle’s engine coolant and lubricant are stabilized at the specified test temperature, the period of 10 hours may be shortened.

3.2.5. The steam generator shall be placed with its outlets in the median longitudinal plane of the vehicle in the second row of vehicle seats. It shall normally be placed behind the front seats. Where the design of the vehicle precludes this, the generator shall be placed in front of the backrests, in the nearest convenient position to that mentioned above.’;

(h) point 3.2.7.4. is deleted;

(5) in Annex VII, Part 2, the following points 1.3 and 1.3.1 are inserted:

‘1.3. Towing capability

1.3.1. In order to allow for a stranded motor vehicle to be removed from the road, rolling on its own wheels, it shall be possible to tow the vehicle or to put it in a towing-capable mode, with the vehicle’s key present and without the use of special tools or disassembly of parts, which are not designed for that purpose, following the procedure indicated by the manufacturer in the motor-vehicle’s user instructions. The manufacturer may restrict the towing conditions in the user instructions in terms of towable speed and distance in view to avoid irreversible damage, however, this shall allow a minimum towing distance of 100 m in less than 10 minutes.

In case of motor vehicles of category M₁ or N₁, whose wheels are directly driven by electric motors, the manufacturer shall provide instructions in the vehicle's user manual to allow roadside assistance services to remove the vehicle with special tools if rotation of the wheels of the vehicle while towing is not possible.

This requirement does not apply where the motor vehicle is damaged to such an extent that towing on its own wheels is physically not possible or would be unsafe or where due to a technical defect, the vehicle master control switch cannot be activated.;

(6) Annex XIII, Part 2, is amended as follows:

(a) in Section B, the following points 6, 6.1 and 6.2 are inserted:

‘6. Mass of the energy storage system:

6.1. In the case of zero-emission vehicles of category N₁, the mass of the energy storage system shall be established on the basis of the documentation provided by the manufacturer. The correctness of the declared information shall be verified by the Technical Service, to the satisfaction of the Type-Approval Authority.

6.2. In the case referred to in point 6.1, the manufacturer shall indicate the following additional symbol as well as the value of the mass of the energy storage system below or to the side of the mandatory inscriptions on the manufacturer's statutory plate, outside a clearly marked rectangle which shall enclose only the mandatory information.

“(EU) 2019/631 ARTICLE 2(1)(b) COMPLIANT – XXXX KG”

The height of the symbol's characters and stated value shall not be less than 4 mm.

In addition, until the introduction of a dedicated entry in the Certificate of Conformity, the value of the mass of the energy storage system shall be stated under “remarks” in the Certificate of Conformity, as to allow inclusion of this information in on-board vehicle registration papers, as follows:

“Additional mass due to batteries: kg” (*)

(*) In case of fuel cell hybrid vehicles (FCHV) or pure electric motor vehicles, the additional value for the mass shall be stated. This value results from the total mass of the high-voltage battery pack(s) minus the reference fuel tank mass (90 % filled). The value shall be rounded to whole kilograms, no decimals. In case of motor vehicles suitable for battery-swapping, the mass at the time of production of the motor vehicle shall be stated. If there is no reference internal combustion engine vehicle in production, this field is not applicable.;

(b) in Section D, points 2.1.4.1 and 2.1.4.2 are replaced by the following:

‘2.1.4.1. The additional weight required for alternative fuel or zero-emission technology in accordance with point 2.3 of Annex I to Directive 96/53/EC, and, for the purpose of Article 2(1)(b) of Regulation (EU) 2019/631, the mass of the energy storage system of zero-emission vehicles, shall be defined on the basis of the documentation provided by the manufacturer. The correctness of the declared information shall be verified by the Technical Service, to the satisfaction of the Type-Approval Authority.

2.1.4.2. The manufacturer shall indicate the following additional symbol as well as the value of the additional weight, in case of alternatively fuelled motor vehicles, or the mass of the energy storage system, in case of zero-emission motor vehicles, below or to the side of the mandatory inscriptions on the manufacturer's statutory plate, outside a clearly marked rectangle which shall enclose only the mandatory information.

“96/53/EC ARTICLE 10B COMPLIANT – XXXX KG”

“(EU) 2019/631 ARTICLE 2(1)(b) COMPLIANT – XXXX KG”

The height of the symbol's characters and stated value shall not be less than 4 mm.

In addition, until the introduction of a dedicated entry in the Certificate of Conformity, the value of the additional weight or the mass of the energy storage system shall be stated under “remarks” in the Certificate of Conformity, as to allow inclusion of this information in on-board vehicle registration papers, as follows:

“Additional mass due to batteries: kg” (*)

(*) In case of fuel cell hybrid vehicles (FCHV) or pure electric motor vehicles, the additional mass must be stated. This value results from the total mass of the high-voltage battery pack(s) minus the reference fuel tank mass (90 % filled). The value shall be rounded to whole kilograms, no decimals. In case of motor vehicles suitable for battery-swapping, the mass at the time of production of the motor vehicle shall be stated. If there is no reference internal combustion engine vehicle in production, this field is not applicable.

ANNEX II

Annexes II, VIII, XIII and XIV are corrected as follows:

(1) in Annex II, Part 2, Section C, point 1.4, the row for check digit 7 in the table is replaced by the following:

‘7	7/11	0,636’
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(2) in Annex VIII, Part 2, point 1.9 is replaced by the following:

‘1.9. “retractable axle” means an axle as defined in Annex XIII, Part 2, Section A, point 1.34.’;

(3) Annex XIII is corrected as follows:

(a) Part 2 is corrected as follows:

(i) in Section A, point 1.32 is replaced by the following:

‘1.32. “rear swing-out” means the distance between the initial point and the actual extreme point reached by the rear end of a vehicle when manoeuvring in the conditions specified in Section C, point 8, or Section D, point 7.’;

(ii) in Section B, point 1.3 is replaced by the following:

‘1.3. The devices and equipment referred to in Section F shall not be taken into account for the determination of the length, width and height.’;

(iii) in Section C, points 1.3 and 1.3.1 are replaced by the following:

‘1.3. The devices and equipment referred to in Section F shall not be taken into account for the determination of the length, width and height.

1.3.1. Additional requirements for aerodynamic devices referred to in Section F.’;

(iv) in Section D, point 3.1, the following formula is added:

$$MC \leq M + TM;$$

(v) in Section D, point 1.4.1 is replaced by the following:

‘1.4.1. Where the front fascia of the motor vehicle’s cab location, including all external projections of for example the chassis, bumper, wheel guards and wheels, fully conforms to parameters of the three-dimensional envelope as set out in Section J and the length of the loading area does not exceed 10,5 m, the vehicle may exceed the maximum authorised length set out in point 1.1.1.’;

(vi) in Section F, Table I, Vehicle Length, the row for item 13 is replaced by the following:

‘13.	Devices for securing the tarpaulin and their protection	—	—	—	x	x	x	x	x	x	x’
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(b) in Part 3, Section A, point 1.1 in the Addendum to Section II of the EU type-approval certificate is replaced by the following:

‘1.1. The vehicle has been type-approved in accordance with Article 6(3) or (4) of Regulation (EU) 2021/535 (i.e. the outermost dimensions of the vehicle exceeds the maximum dimensions mentioned in point 1.1 of Annex XIII, Part 2, Sections B, C, D or E): yes/no (’);’;

(4) in Annex XIV, Part 1, Sections A and B are replaced by the following:

‘Section A

Information document relating to the EU type-approval of a vehicle with regard to its hydrogen system

MODEL

Information document No ... relating to the EU type-approval of a type of vehicle with regard to its hydrogen system.

The following information shall be supplied in triplicate and include a list of contents. Any drawings or pictures shall be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, shall show sufficient detail.

0.

0.1.

0.2.

0.2.1.

0.3.

0.3.1.

0.4.

0.5.

0.8.

0.9.

3.9.

3.9.1.

3.9.1.1.

3.9.1.2.

3.9.1.3.

3.9.1.11.

3.9.1.11.1.

3.9.1.11.2.

3.9.1.17.

3.9.1.17.1.

3.9.1.17.2.

3.9.2.6.

Explanatory note:

This information document is based on the template laid down in Annex I to Implementing Regulation (EU) 2020/683 and shall be completed with the relevant information under the point numbers listed above as defined in that template.

Section B

Information document relating to the EU type-approval of hydrogen components

MODEL

Information document No ... relating to the EU type-approval of a hydrogen component.

The following information shall be supplied in triplicate and include a list of contents. Any drawings or pictures shall be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, shall show sufficient detail.

0.

0.1.

0.2.
0.2.1.
0.5.
0.8.
0.9.
3.9.
3.9.1.
3.9.1.1.
3.9.1.2.
3.9.1.3.
3.9.1.4.
3.9.1.4.1.
3.9.1.4.2.
3.9.1.4.3.
3.9.1.4.4.
3.9.1.4.5.
3.9.1.4.6.
3.9.1.4.7.
3.9.1.4.8.
3.9.1.4.9.
3.9.1.4.10.
3.9.1.5.
3.9.1.5.1.
3.9.1.5.2.
3.9.1.5.3.
3.9.1.5.4.
3.9.1.5.5.
3.9.1.5.6.
3.9.1.5.7.
3.9.1.5.8.
3.9.1.5.9.
3.9.1.5.10.
3.9.1.6.
3.9.1.6.1.
3.9.1.6.2.
3.9.1.6.3.
3.9.1.6.4.
3.9.1.6.5.
3.9.1.6.6.
3.9.1.6.7.
3.9.1.6.8.
3.9.1.6.9.
3.9.1.6.10.
3.9.1.6.11.

- 3.9.1.15.
- 3.9.1.15.1.
- 3.9.1.15.2.
- 3.9.1.15.3.
- 3.9.1.15.4.
- 3.9.1.15.5.
- 3.9.1.15.6.
- 3.9.1.15.7.
- 3.9.1.15.8.
- 3.9.1.15.9.
- 3.9.1.15.10.
- 3.9.1.15.11.

Explanatory note:

This information document is based on the template laid down in Annex I to Implementing Regulation (EU) 2020/683 and shall be completed with the relevant information under the point numbers listed above as defined in that template.'
