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⁽¹⁾ Text with EEA relevance.

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⁽¹⁾ Text with EEA relevance.

II

(Non-legislative acts)

REGULATIONS

COMMISSION IMPLEMENTING REGULATION (EU) 2020/1163

of 6 August 2020

authorising the placing on the market of vitamin D₂ mushroom powder as a novel food under Regulation (EU) 2015/2283 of the European Parliament and of the Council and amending Commission Implementing Regulation (EU) 2017/2470

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2015/2283 of the European Parliament and of the Council of 25 November 2015 on novel foods, amending Regulation (EU) No 1169/2011 of the European Parliament and of the Council and repealing Regulation (EC) No 258/97 of the European Parliament and of the Council and Commission Regulation (EC) No 1852/2001 ⁽¹⁾, and in particular Article 12 thereof,

Whereas:

- (1) Regulation (EU) 2015/2283 provides that only novel foods authorised and included in the Union list may be placed on the market within the Union.
- (2) Pursuant to Article 8 of Regulation (EU) 2015/2283, Commission Implementing Regulation (EU) 2017/2470 ⁽²⁾ establishing a Union list of authorised novel foods was adopted.
- (3) Pursuant to Article 12 of Regulation (EU) 2015/2283, the Commission is to decide on the authorisation and on the placing on the Union market of a novel food and on the update of the Union list.
- (4) On 17 July 2018, the company Oakshire Naturals, LP. ('the applicant') submitted a request to the Commission in accordance with Article 10(1) of Regulation (EU) 2015/2283 to place vitamin D₂ mushroom powder on the Union market as a novel food. The application concerns the use of vitamin D₂ mushroom powder in a variety of foods and beverages for consumption by the general population, in foods for special medical purposes as defined in Regulation (EU) No 609/2013 of the European Parliament and of the Council ⁽³⁾ excluding those intended for infants, and in food supplements as defined in Directive 2002/46/EC of the European Parliament and of the Council ⁽⁴⁾, intended for individuals above 7 months of age.

⁽¹⁾ OJ L 327, 11.12.2015, p. 1.

⁽²⁾ Commission Implementing Regulation (EU) 2017/2470 of 20 December 2017 establishing the Union list of novel foods in accordance with Regulation (EU) 2015/2283 of the European Parliament and of the Council on novel foods (OJ L 351, 30.12.2017, p. 72).

⁽³⁾ Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 (OJ L 181, 29.6.2013, p. 35).

⁽⁴⁾ Directive 2002/46/EC of the European Parliament and of the Council of 10 June 2002 on the approximation of the laws of the Member States relating to food supplements (OJ L 183, 12.7.2002, p. 51).

- (5) The applicant also introduced a request to the Commission for protection of proprietary data for scientific data submitted in support of the application, namely, the specifications for the raw materials and processing aids ⁽⁵⁾, the certificates of analysis and batch data of vitamin D₂ mushroom powder ⁽⁶⁾, and the vitamin D₂ mushroom powder stability reports ⁽⁷⁾.
- (6) On 18 October 2018, the Commission consulted the European Food Safety Authority ('the Authority') asking it to carry out an assessment of vitamin D₂ mushroom powder as a novel food in accordance with Article 10(3) of Regulation (EU) 2015/2283.
- (7) On 28 November 2019, the Authority adopted its scientific opinion 'Safety of vitamin D₂ mushroom powder as a novel food pursuant to Regulation (EU) 2015/2283' ⁽⁸⁾. That scientific opinion is in accordance with the requirements of Article 11 of Regulation (EU) 2015/2283.
- (8) In its scientific opinion, the Authority concluded that vitamin D₂ mushroom powder is safe under the proposed uses and uses levels, when used in a variety of foods and beverages, in foods for special medical purposes excluding those intended for infants, and when used in food supplements intended for the general population above the age of 1 year. The Authority also noted, that in situations of high consumption of other foods containing or being fortified with vitamin D, the intake by infants of 7 to 12 months of food supplements containing the vitamin D₂ mushroom powder at levels equivalent to 10 µg of vitamin D, could result in combined overall intakes of vitamin D, which would exceed the Tolerable Upper Intake Levels ('UL') for vitamin D ⁽⁹⁾. It is therefore appropriate to conclude that the intake of vitamin D from food supplements containing the vitamin D₂ mushroom powder at levels equivalent to 10 µg of vitamin D by infants 7 to 12 months of age, may not be in accordance with the conditions set out in Article 7 of Regulation (EU) 2015/2283 and such use should therefore not be authorised for this novel food.
- (9) Therefore the scientific opinion gives sufficient grounds to establish that vitamin D₂ mushroom powder, under the proposed uses and uses levels, and when used in food supplements intended for the general population above the age of one year, complies with Article 12(1) of Regulation (EU) 2015/2283.
- (10) In its scientific opinion, the Authority considered that the data from the specifications for the raw materials and processing aids, the certificates of analysis and batch data of vitamin D₂ mushroom powder and the vitamin D₂ mushroom powder stability reports served as a basis to establish the safety of the novel food. On this basis the Commission considers that the conclusions on the safety of vitamin D₂ mushroom powder could not have been reached without the data from the report of these studies.
- (11) Following the receipt of the Authority's scientific opinion, the Commission requested the applicant to further clarify the justification provided with regard to their proprietary data from Annex I (Raw materials and processing aids), Annex II (Certificates of Analysis and batch data) and Annex III (Stability reports) as regards vitamin D₂ mushroom powder, and to clarify their claim to an exclusive right of reference to these reports and studies, as referred to in points (a) and (b) of Article 26(2) of Regulation (EU) 2015/2283.
- (12) The applicant declared that, at the time the application was submitted, they held proprietary and exclusive rights of reference to the studies under national law and that therefore third parties could not lawfully access or use these studies.
- (13) The Commission assessed all the information provided by the applicant and considered that the latter has sufficiently substantiated the fulfilment of the requirements laid down in Article 26(2) of Regulation (EU) 2015/2283. Therefore, the data from these studies contained in the applicant's file which served as a basis for the Authority to establish the safety of the novel food and without which the novel food could not have been assessed by the Authority, should not be used by the Authority for the benefit of a subsequent applicant for a period of five years from the date of entry into force of this Regulation. As a consequence, the placing on the market within the Union of the novel food authorised by this Regulation should be restricted to the applicant for a period of five years.

⁽⁵⁾ Oakshire Naturals 2017 (unpublished).

⁽⁶⁾ Oakshire Naturals 2016 (unpublished).

⁽⁷⁾ Oakshire Naturals 2018 (unpublished).

⁽⁸⁾ *EFSA Journal* 2020; 18(1): 5948.

⁽⁹⁾ *EFSA Journal* 2018; 16(8): 5365.

- (14) However, restricting the authorisation of vitamin D₂ mushroom powder and of the reference to the scientific data contained in the applicant's file for the sole use of the applicant does not prevent other applicants from applying for an authorisation to place on the market the same novel food provided that their application is based on lawfully obtained information supporting the authorisation under this Regulation.
- (15) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS REGULATION:

Article 1

1. Vitamin D₂ mushroom powder as specified in the Annex to this Regulation shall be included in the Union list of authorised novel foods established by Implementing Regulation (EU) 2017/2470.

2. For a period of five years from the date of entry into force of this Regulation only the applicant:

— Company: Oakshire Naturals, LP.

— Address: PO Box 388, Kennett Square, Pennsylvania 19348, United States

is authorised to place on the market within the Union the novel food referred to in paragraph 1, unless a subsequent applicant obtains authorisation for that novel food without reference to the data protected pursuant to Article 2 or with the agreement of Oakshire Naturals, LP.

3. The entry in the Union list referred to in paragraph 1 shall include the conditions of use and labelling requirements laid down in the Annex to this Regulation.

Article 2

The studies and reports contained in the applicant's file on the basis of which the novel food referred to in Article 1 has been assessed by the Authority, claimed by the applicant as fulfilling the requirements laid down in Article 26(2) of Regulation (EU) 2015/2283, shall not be used for the benefit of a subsequent applicant for a period of five years from the date of entry into force of this Regulation without the agreement of Oakshire Naturals, LP.

Article 3

The Annex to Implementing Regulation (EU) 2017/2470 is amended in accordance with the Annex to this Regulation.

Article 4

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

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

The Annex to Implementing Regulation (EU) 2017/2470 is amended as follows:

(1) in Table 1 (Authorised novel foods), the following entry is inserted in alphabetical order:

Authorised novel food	Conditions under which the novel food may be used		Additional specific labelling requirements	Other requirements	Data protection
Vitamin D₂ mushroom powder	<i>Specified food category</i>	<i>Maximum levels of vitamin D₂ (e)</i>	The designation of the novel food on the labelling of the foodstuffs containing it shall be “UV-treated mushroom powder containing vitamin D” or “UV-treated mushroom powder containing vitamin D ₂ ” The labelling of food supplements containing vitamin D ₂ mushroom powder shall bear a statement that they should not be consumed by infants		Authorised on 27 August 2020. This inclusion is based on proprietary scientific evidence and scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283. Applicant: Oakshire Naturals, LP., PO Box 388 Kennett Square, Pennsylvania 19348, United States. During the period of data protection, the novel food vitamin D ₂ mushroom powder is authorised for placing on the market within the Union only by Oakshire Naturals, LP., unless a subsequent applicant obtains authorisation for the novel food without reference to the proprietary scientific evidence or scientific data protected in accordance with Article 26 of Regulation (EU) 2015/2283 or with the agreement of Oakshire Naturals, LP. End date of the data protection: 27 August 2025.
	Breakfast cereals	2,25 µg of vitamin D ₂ /100 g			
	Yeast-leavened bread and pastries	2,25 µg of vitamin D ₂ /100 g			
	Grain products and pastas	2,25 µg of vitamin D ₂ /100 g			
	Fruit juice and fruit/vegetable blend beverages	1,125 µg of vitamin D ₂ /100 mL			
	Milk and dairy products (excluding fluid milks)	2,25 µg of vitamin D ₂ /100 g/1,125 µg of vitamin D ₂ /100 mL (beverages)			
	Cheese (excluding cottage cheese, ricotta cheese, and hard-grating cheeses)	2,25 µg of vitamin D ₂ /100 g			
	Meal replacement bars and beverages	2,25 µg of vitamin D ₂ /100 g/1,125 µg of vitamin D ₂ /100 mL (beverages)			
	Dairy analogues	2,25 µg of vitamin D ₂ /100 g/1,125 µg of vitamin D ₂ /100 mL (beverages)			
	Meat analogues	2,25 µg of vitamin D ₂ /100 g			
	Soups and broths	2,25 µg of vitamin D ₂ /100 g			
	Extruded vegetable snacks	2,25 µg of vitamin D ₂ /100 g			
	Foods for Special Medical Purposes as defined under Regulation (EU) No 609/2013 excluding those intended for infants	15 µg/day			
Food supplements as defined in Directive 2002/46/EC intended for the general population excluding infants	15 µg/day				

(e) The minimum specification for vitamin D content in vitamin D₂ mushroom powder of 1 000 µg vitamin D₂/gram of mushroom powder is used.

(2) in Table 2 (Specifications), the following entry is inserted in alphabetical order:

Authorised Novel Food	Specification
Vitamin D₂ mushroom powder	<p>Description/Definition Vitamin D₂ mushroom powder is a granular powder made from homogenised <i>Agaricus bisporus</i> mushrooms that have been exposed to UV light. The mushrooms are washed, homogenised and suspended in water to produce a mushroom slurry. The mushroom slurry is passed under a UV lamp. The slurry is then filtered, dried and ground, producing vitamin D₂ mushroom powder. UV radiation: A process of radiation in ultraviolet light within a range of wavelength similar to those UV-treated novel foods authorised under the novel food regulation.</p> <p>Characteristics/Composition Vitamin D₂ content: 1 000–1 300 µg/g of mushroom powder (*) Moisture: ≤ 10,0 % Ash: ≤ 13,5 %</p> <p>Heavy Metals Lead (as Pb): ≤ 0,5 mg/kg Cadmium: ≤ 0,5 mg/kg Mercury: ≤ 0,1 mg/kg Arsenic: ≤ 0,3 mg/kg</p> <p>Mycotoxins Aflatoxins (sum of B1+B2+G1+G2): < 4 µg/kg</p> <p>Microbiological criteria: Total plate count: ≤ 5 000 CFU (**)/g Yeast and mould: ≤ 100 CFU/g <i>Salmonella</i> sp.: Absent in 25 g <i>Staphylococcus aureus</i>: ≤ 10 CFU/g <i>Escherichia coli</i>: ≤ 10 CFU/g Coliforms: ≤ 10 CFU/g <i>Enterobacteriaceae</i>: ≤ 10 CFU/g <i>Listeria monocytogenes</i>: Absent in 25 g</p>
<p>(*) Converted from International Units (IU) using the conversion factor of 0,025 µg = 1 IU. (**) CFU: Colony Forming Units.</p>	

COMMISSION IMPLEMENTING REGULATION (EU) 2020/1164

of 6 August 2020

providing for a temporary derogation from certain provisions of Implementing Regulation (EU) 2019/2072 in respect of measures to prevent the introduction into and the spread within the Union of the pest *Agrilus planipennis* Fairmaire from Canada and the United States

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2016/2031 of the European Parliament and of the Council of 26 October 2016 on protective measures against pests of plants, amending Regulations (EU) No 228/2013, (EU) No 652/2014 and (EU) No 1143/2014 of the European Parliament and of the Council and repealing Council Directives 69/464/EEC, 74/647/EEC, 93/85/EEC, 98/57/EC, 2000/29/EC, 2006/91/EC and 2007/33/EC⁽¹⁾, and in particular Article 41(2) thereof,

Whereas:

- (1) Council Directive 2000/29/EC⁽²⁾ has been repealed and replaced by Regulation (EU) 2016/2031, while the provisions of its Annexes have been replaced by the provisions of Commission Implementing Regulation (EU) 2019/2072⁽³⁾.
- (2) *Agrilus planipennis* Fairmaire is a pest listed in Annex II, Part A, to Regulation (EU) 2019/2072 as an organism not known to occur in the Union. It is also listed as priority pest in Commission Delegated Regulation (EU) 2019/1702⁽⁴⁾.
- (3) Following the information collected in 2018 during two Commission audits in Canada and the United States the implementation of the conditions set out under option (b) of point 2.3 of Annex IV, Part A, Section I to Directive 2000/29/EC were not sufficiently verified prior to export. Commission Implementing Decision (EU) 2018/1959⁽⁵⁾ therefore only allowed the introduction into the Union of wood of *Fraxinus* L., *Juglans ailantifolia* Carr., *Juglans mandshurica* Maxim., *Ulmus davidiana* Planch. and *Pterocarya rhoifolia* Siebold and Zucc. originating in Canada and the United States ('the specified wood') under official statements referred to in options (a) and (c) of point 2.3 of Annex IV, Part A, Section I to Directive 2000/29/EC. Implementing Decision (EU) 2018/1959 expired on 30 June 2020.
- (4) The provisions set out under point 87 of Annex VII to Regulation (EU) 2019/2072 establish special requirements to prevent the introduction into and the spread within the Union of the pest *Agrilus planipennis* Fairmaire through wood originating in certain third countries. The provisions of option (b) of point 2.3 of Annex IV, Part A, Section I to Directive 2000/29/EC are now reflected under option (b) of point 87 of Annex VII to Regulation (EU) 2019/2072.
- (5) In view of the results of the Commission audits carried out in Canada and the United States in 2018, it is still considered appropriate to only allow the introduction into the Union of wood of *Fraxinus* L., *Juglans ailantifolia* Carr., *Juglans mandshurica* Maxim., *Ulmus davidiana* Planch. and *Pterocarya rhoifolia* Siebold and Zucc. originating in those third countries under official statements referred to in options (a) and (c) of point 87 of Annex VII to Regulation (EU) 2019/2072.
- (6) This Regulation should apply until 30 June 2023, to allow for the review of point 87 of Annex VII to Regulation (EU) 2019/2072 on the basis of scientific and technical developments.
- (7) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

⁽¹⁾ OJ L 317, 23.11.2016, p. 4.

⁽²⁾ Council Directive 2000/29/EC of 8 May 2000 on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community (OJ L 169, 10.7.2000, p. 1).

⁽³⁾ Commission Implementing Regulation (EU) 2019/2072 of 28 November 2019 establishing uniform conditions for the implementation of Regulation (EU) 2016/2031 of the European Parliament and of the Council, as regards protective measures against pests of plants, and repealing Commission Regulation (EC) No 690/2008 and amending Commission Implementing Regulation (EU) 2018/2019 (OJ L 319, 10.12.2019, p. 1).

⁽⁴⁾ Commission Delegated Regulation (EU) 2019/1702 of 1 August 2019 supplementing Regulation (EU) 2016/2031 of the European Parliament and of the Council by establishing the list of priority pests (OJ L 260, 11.10.2019, p. 8).

⁽⁵⁾ Commission Implementing Decision (EU) 2018/1959 of 10 December 2018 derogating from Council Directive 2000/29/EC as regards measures to prevent the introduction into and the spread within the Union of the harmful organism *Agrilus planipennis* (Fairmaire) through wood originating in Canada and in the United States of America (OJ L 315, 12.12.2018, p. 27).

HAS ADOPTED THIS REGULATION:

Article 1

By way of derogation from the provisions set out under point 87 in Annex VII to Regulation (EU) 2019/2072, the introduction into the Union territory of wood of *Fraxinus* L., *Juglans ailantifolia* Carr., *Juglans mandshurica* Maxim., *Ulmus davidiana* Planch. and *Pterocarya rhoifolia* Siebold and Zucc. ('the specified wood'), as described in the Annex to this Regulation, originating in Canada and the United States, shall only be allowed under official statements referred to in options (a) and (c) of that point 87.

Article 2

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

It shall apply until 30 June 2023.

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Specified wood as referred to in Article 1

Specified wood shall mean wood as described in the following table:

Plants, plant products and other objects	CN codes
Wood of <i>Fraxinus</i> L., <i>Juglans ailantifolia</i> Carr., <i>Juglans mandshurica</i> Maxim., <i>Ulmus davidiana</i> Planch. and <i>Pterocarya rhoifolia</i> Siebold & Zucc., other than in the form of	ex 4401 12 00 ex 4403 12 00 ex 4403 99 00
— chips, particles, sawdust, shavings, wood waste and scrap, obtained in whole or part from these trees,	ex 4404 20 00 ex 4406 12 00
— wood packaging material, in the form of packing cases, boxes, crates, drums and similar packings, pallets, box pallets and other load boards, pallet collars, dunnage, whether or not actually in use in the transport of objects of all kinds, except dunnage supporting consignments of wood, which is constructed from wood of the same type and quality as the wood in the consignment and which meets the same Union phytosanitary requirements as the wood in the consignment, but including wood which has not kept its natural round surface, and furniture and other objects made of untreated wood	ex 4406 92 00 4407 95 10 4407 95 91 4407 95 99 ex 4407 99 27 ex 4407 99 40 ex 4407 99 90 ex 4408 90 15 ex 4408 90 35 ex 4408 90 85 ex 4408 90 95 ex 4416 00 00 ex 9406 10 00

COMMISSION IMPLEMENTING REGULATION (EU) 2020/1165**of 6 August 2020****amending Implementing Regulation (EU) 2020/353 imposing a definitive anti-dumping duty and definitively collecting the provisional duty imposed on imports of steel road wheels originating in the People's Republic of China**

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2016/1036 of the European Parliament and of the Council of 8 June 2016 on protection against dumped imports from countries not members of the European Union ⁽¹⁾, and in particular Article 9(4) thereof,

Whereas:

- (1) By Commission Implementing Regulation (EU) 2020/353 ⁽²⁾, definitive anti-dumping duties were imposed and provisional duties were definitively collected on imports of steel road wheels originating in the People's Republic of China.
- (2) Article 4 of Implementing Regulation (EU) 2020/353 mentions: 'Where a declaration for release for free circulation is presented in respect of the products referred to in Article 1, the number of pieces of the products imported shall be entered in the relevant field of that declaration'. The Commission services received comments from Member States and traders concerning the origin of the products imported.
- (3) It should be clarified that the number of pieces should be declared for imports of steel road wheels, irrespective their origin, and that Member States should inform the Commission of the number of pieces imported.
- (4) In this respect, the Commission has decided to amend Article 4 of Implementing Regulation (EU) 2020/353.
- (5) The term 'pieces' is replaced by 'items' for consistency with the supplementary unit 'number of items', defined in the Combined Nomenclature ⁽³⁾.
- (6) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 15(1) of Regulation (EU) 2016/1036,

HAS ADOPTED THIS REGULATION:

Article 1

Recital (88) of Implementing Regulation (EU) 2020/353 is replaced by the following:

'(88) Statistics of SRW are frequently expressed in number of items. However, there is no such supplementary unit for SRW specified in the Combined Nomenclature laid down in Annex I to Council Regulation (EEC) No 2658/87 ⁽¹⁾. It is therefore necessary to provide that not only the weight in kg or tonnes but also the number of items for the imports of the product concerned must be entered in the declaration for release for free circulation. Items should be indicated for TARIC codes 8708 70 10 80, 8708 70 10 85, 8708 70 99 20, 8708 70 99 80, 8716 90 90 95 and 8716 90 90 97.'

⁽¹⁾ OJ L 176, 30.6.2016, p. 21.

⁽²⁾ Commission Implementing Regulation (EU) 2020/353 of 3 March 2020 imposing a definitive anti-dumping duty and definitively collecting the provisional duty imposed on imports of steel road wheels originating in the People's Republic of China (OJ L 65, 4.3.2020, p. 9).

⁽³⁾ Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ L 256, 7.9.1987, p. 1).

Article 2

Article 1(3) of Implementing Regulation (EU) 2020/353 is replaced by the following:

'3. The application of the individual duty rates specified for the companies mentioned in paragraph 2 shall be conditional upon presentation to the Member States' customs authorities of a valid commercial invoice, on which shall appear a declaration dated and signed by an official of the entity issuing such invoice, identified by name and function, drafted as follows: 'I, the undersigned, certify that the (number of items) (product concerned) sold for export to the European Union covered by this invoice was manufactured by (company name and address) (TARIC additional code) in [country concerned]. I declare that the information provided in this invoice is complete and correct.' If no such invoice is presented, the duty applicable to all other companies shall apply.'

Article 3

Article 4 of Commission Implementing Regulation (EU) 2020/353 is replaced by the following:

'Article 4

Where a declaration for release for free circulation is presented in respect of the products referred to in Article 1(1), irrespective of their origin, the number of items of the products imported shall be entered in the relevant field of that declaration.

Member States shall, on a monthly basis, inform the Commission of the number of items imported under TARIC codes 8708 70 10 80, 8708 70 10 85, 8708 70 99 20, 8708 70 99 80, 8716 90 90 95 and 8716 90 90 97, and of their origin'.

Article 4

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

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

COMMISSION IMPLEMENTING REGULATION (EU) 2020/1166**of 6 August 2020****amending Annex I to Regulation (EC) No 798/2008 as regards the entry for the United States in the list of third countries, territories, zones or compartments from which certain poultry commodities may be imported into or transit through the Union in relation to highly pathogenic avian influenza****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

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

Having regard to Council Directive 2002/99/EC of 16 December 2002 laying down the animal health rules governing the production, processing, distribution and introduction of products of animal origin for human consumption ⁽¹⁾, and in particular the introductory phrase of Article 8, the first subparagraph of paragraph 1 of Article 8, paragraph 4 of Article 8 and Article 9(4)(c) thereof,

Having regard to Council Directive 2009/158/EC of 30 November 2009 on animal health conditions governing intra-Community trade in, and imports from third countries of, poultry and hatching eggs ⁽²⁾, and in particular Articles 23(1), 24(2) and 25(2) thereof,

Whereas:

- (1) Commission Regulation (EC) No 798/2008 ⁽³⁾ lays down veterinary certification requirements for imports into and transit, including storage during transit, through the Union of poultry and poultry products ('the commodities'). It provides that the commodities are only to be imported into and transit through the Union from the third countries, territories, zones or compartments listed in columns 1 and 3 of the table in Part 1 of Annex I thereto.
- (2) Regulation (EC) No 798/2008 also lays down the conditions for a third country, territory, zone or compartment to be considered as free from highly pathogenic avian influenza (HPAI).
- (3) The United States is listed in Part 1 of Annex I to Regulation (EC) No 798/2008 as a third country from which imports into and transit through the Union of the commodities are not restricted due to the presence of HPAI.
- (4) The Agreement between the European Community and the United States of America on sanitary measures to protect public and animal health in trade in live animals and animal products ('the Agreement') ⁽⁴⁾, approved by Council Decision 98/258/EC ⁽⁵⁾, provides for the mutual recognition of regionalisation measures in the event of outbreaks of a disease in the Union or in the United States.
- (5) On 8 April 2020, the United States confirmed the presence of HPAI of subtype H7N3 in a poultry holding in Chesterfield County in the State of South Carolina. Following the outbreak of HPAI, the veterinary authorities of the United States placed a 10 km control zone around the affected holding, which included parts of Chesterfield, Lancaster and Kershaw counties in the State of South Carolina and implemented a stamping-out policy in order to control HPAI and limit the spread of that disease.

⁽¹⁾ OJ L 18, 23.1.2003, p. 11.

⁽²⁾ OJ L 343, 22.12.2009, p. 74.

⁽³⁾ Commission Regulation (EC) No 798/2008 of 8 August 2008 laying down a list of third countries, territories, zones or compartments from which poultry and poultry products may be imported into and transit through the Community and the veterinary certification requirements (OJ L 226, 23.8.2008, p. 1).

⁽⁴⁾ OJ L 118, 21.4.1998, p. 3.

⁽⁵⁾ Council Decision 98/258/EC of 16 March 1998 on the conclusion of the Agreement between the European Community and the United States of America on sanitary measures to protect public and animal health in trade in live animals and animal products (OJ L 118, 21.4.1998, p. 1).

- (6) By adopting Commission Implementing Regulation (EU) 2020/544 ⁽⁶⁾, the Commission placed restrictions on the introduction into the Union of poultry commodities from the area in the State of South Carolina affected by HPAI, which the veterinary authorities of the United States had placed under restrictions due to the outbreak of HPAI.
- (7) The United States has submitted updated information on the epidemiological situation on its territory and the measures it has taken to prevent the further spread of HPAI, which have now been evaluated by the Commission. In addition, the United States has reported on the completion of cleaning and disinfection measures on 7 May 2020 following the stamping out policy on the poultry holding where the HPAI outbreak was confirmed in April 2020.
- (8) On the basis of the evaluation of the information provided by the United States, it is appropriate to indicate in Part 1 of Annex I to Regulation (EC) No 798/2008 the date of 5 August 2020, i.e. 90 days after the completion of the stamping out policy and cleaning and disinfection measures, as of when that third country may again, in accordance with Article 9 of Regulation (EC) No 798/2008, be considered free from HPAI and imports into and transit through the Union of certain poultry commodities originating in that third country should be authorised again.
- (9) The entry for the United States in the table set out in Part 1 of Annex I to Regulation (EC) No 798/2008 should therefore be amended to take account of the eradication of HPAI in that third country. Annex I to Regulation (EC) No 798/2008 should therefore be amended accordingly.
- (10) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS REGULATION:

Article 1

Part 1 of Annex I to Regulation (EC) No 798/2008 is amended in accordance with the Annex to this Regulation.

Article 2

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

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

⁽⁶⁾ Commission Implementing Regulation (EU) 2020/544 of 20 April 2020 amending Annex I to Regulation (EC) No 798/2008 as regards the entry for the United States in the list of third countries, territories, zones or compartments from which certain poultry commodities may be imported into or transit through the Union in relation to highly pathogenic avian influenza (OJ L 121 I, 20.4.2020, p. 1).

ANNEX

In Part 1 of Annex I to Regulation (EC) No 798/2008, the entry for the United States is replaced by the following:

ISO code and name of third country or territory	Code of third country, territory, zone or compartment	Description of third country, territory, zone or compartment	Veterinary certificate		Specific conditions	Specific conditions		Avian influenza surveillance status	Avian influenza vaccination status	Salmonella Control Status ⁽⁶⁾
			Model(s)	Additional guarantees		Closing date ⁽¹⁾	Opening date ⁽²⁾			
1	2	3	4	5	6	6A	6B	7	8	9
US – United States	US-0	Whole country	SPF							
			EP, E							S4
	US-1	The whole country of the United States excluding area US-2	WGM	VIII						
			POU, RAT		N					
			BPP, BPR, DOC, DOR, HEP, HER, SRP, SRA, LT20					A		S3, ST1
	US-2	Territory of the United States corresponding to:								
	US-2.1	State of Tennessee: Lincoln County Franklin County Moore County	WGM	VIII	P2	4.3.2017	11.8.2017			
			POU, RAT		N P2					
			BPR, BPP, DOC, DOR, HEP, HER, SRP, SRA, LT20						A	
	US-2.2	State of Alabama: Madison County Jackson County	WGM	VIII	P2	4.3.2017	11.8.2017			
POU, RAT				N P2						
BPR, BPP, DOC, DOR, HEP, HER, SRP, SRA, LT20								A		S3, ST1

	US-2.3	<p>State of South Carolina: Chesterfield county/Lancaster county/Kershaw county: A zone of a 10 km radius starting with N point on the circular Chesterfield 02 premise Control Zone border and extending in a clockwise fashion: (a) North: 2 km south from Highway 9, 0,03 km east from intersection of Airport Rd and Raymond Deason Rd. (b) Northeast: 1 km southwest from intersection of Highway 268 and Cross Roads Church Rd. (c) East: 5,1 km west from State Highway 109, 1,6 km west from Angelus Rd and Refuge Dr (d) Southeast: 3,2 km northwest from intersection of Highway 145 and Lake Bee Rd. (e) South: 2,7 km east from intersection of Highway 151 and Catarah Rd. (f) Southwest: 1,5 km east from intersection of McBee Hwy and Mt Pisgah Rd. (g) West: 1,3 km east from intersection of Texahaw Rd and Buzzards Roost Rd. (h) Northwest: Intersection of White Plains Church Rd and Graves Rd.</p>	WGM	VIII	P2	8.4.2020	5.8.2020			
			POU, RAT		N P2					
			BPR, BPP, DOC, DOR, HEP, HER, SRP, SRA, LT20					A		S3, ST1'

DECISIONS

COMMISSION IMPLEMENTING DECISION (EU) 2020/1167

of 6 August 2020

on the approval of the technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter for use in conventional combustion engine and certain hybrid electric passenger cars and light commercial vehicles as an innovative technology pursuant to Regulation (EU) 2019/631 of the European Parliament and of the Council)

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2019/631 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 ⁽¹⁾, and in particular Article 11(4) thereof,

Whereas:

- (1) On 10 October 2019, the supplier SEG Automotive Germany GmbH submitted a request ('the request') in accordance with Article 12a of the respective Commission Implementing Regulations (EU) No 725/2011 ⁽²⁾ and (EU) No 427/2014 ⁽³⁾ to amend Commission Implementing Decisions (EU) 2019/314 ⁽⁴⁾ and (EU) 2019/313 ⁽⁵⁾ with a view to taking into account the Worldwide Harmonised Light Vehicles Test Procedure (WLTP) set out in Commission Regulation (EU) 2017/1151 ⁽⁶⁾.
- (2) On 31 October 2019, the manufacturers Audi AG, Bayerische Motoren Werke AG, Daimler AG, FCA Italy S.p.A, Ford-Werke GmbH, Honda Motor Europe Ltd, Hyundai Motor Europe Technical Center GmbH, Jaguar Land Rover LTD, Renault, Toyota Motor Europe NV/SA, Volkswagen AG, Volkswagen Nutzfahrzeuge and the suppliers SEG Automotive Germany GmbH, Valeo Electrical systems and Mitsubishi Electric Corporation, submitted a joint application ('the application') for the approval as an innovative technology of the technology used in 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter for use in passenger cars and light commercial vehicles with conventional internal combustion powertrains (conventional ICE vehicles) and in certain not-off vehicle charging hybrid electric vehicles (NOVC-HEVs). The application refers to CO₂ emissions savings that cannot be demonstrated by measurements performed in accordance with the WLTP as set out in Regulation (EU) 2017/1151.

⁽¹⁾ OJ L 111, 25.4.2019, p. 13.

⁽²⁾ Commission Implementing Regulation (EU) No 725/2011 of 25 July 2011 establishing a procedure for the approval and certification of innovative technologies for reducing CO₂ emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 194, 26.7.2011, p. 19).

⁽³⁾ Commission Implementing Regulation (EU) No 427/2014 of 25 April 2014 establishing a procedure for the approval and certification of innovative technologies for reducing CO₂ emissions from light commercial vehicles pursuant to Regulation (EU) No 510/2011 of the European Parliament and of the Council (OJ L 125, 26.4.2014, p. 57).

⁽⁴⁾ Commission Implementing Decision (EU) 2019/314 of 21 February 2019 on the approval of the technology used in SEG Automotive Germany GmbH High efficient 48V motor generator (BRM) plus 48V/12V DC/DC converter for use in conventional combustion engine and certain hybrid powered passenger cars as an innovative technology for reducing CO₂ emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 51, 22.2.2019, p. 42).

⁽⁵⁾ Commission Implementing Decision (EU) 2019/313 of 21 February 2019 on the approval of the technology used in SEG Automotive Germany GmbH High efficient 48V motor generator (BRM) plus 48V/12V DC/DC converter for use in conventional combustion engine and certain hybrid powered light commercial vehicles as an innovative technology for reducing CO₂ emissions from light commercial vehicles pursuant to Regulation (EU) No 510/2011 of the European Parliament and of the Council (OJ L 51, 22.2.2019, p. 31).

⁽⁶⁾ Commission Regulation (EU) 2017/1151 of 1 June 2017 supplementing Regulation (EC) No 715/2007 of the European Parliament and of the Council 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, amending Directive 2007/46/EC of the European Parliament and of the Council, Commission Regulation (EC) No 692/2008 and Commission Regulation (EU) No 1230/2012 and repealing Commission Regulation (EC) No 692/2008 (OJ L 175, 7.7.2017, p. 1).

- (3) The request and the application have been assessed in accordance with Article 11 of Regulation (EU) 2019/631, Implementing Regulations (EU) No 725/2011 and (EU) No 427/2014 and the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council ⁽⁷⁾ and (EU) No 510/2011 of the European Parliament and of the Council ⁽⁸⁾ (July 2018 version) ⁽⁹⁾. In accordance with Article 11(3) of Regulation (EU) 2019/631, the request and the application were accompanied by verification reports undertaken by independent and certified bodies.
- (4) Considering that the request and the application refer to the same innovative technology and that the same conditions should apply for its use in the vehicle categories concerned, it is appropriate to address both the request and the application in one single decision.
- (5) The 48 Volt motor-generator may operate as either an electric motor converting electrical energy into mechanical energy, or as a generator converting mechanical energy into electrical energy, i.e. as a standard alternator. The 48 Volt/12 Volt DC/DC converter enables the 48 Volt motor-generator to provide electric energy at the voltage required to power the 12 Volt electric power board of the vehicle and/or charging the 12 Volt battery.
- (6) The technology used in the 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter supplied by SEG Automotive Germany GmbH has already been approved for use in conventional ICE powered and certain NOVC-HEV passenger cars by Implementing Decision (EU) 2019/314 as well as for use in conventional ICE powered and certain NOVC-HEV light commercial vehicles by Implementing Decision (EU) 2019/313, as an innovative technology capable of saving CO₂ emissions in a way that is only partially covered by the measurements performed as part of the emission test under the New European Driving Cycle (NEDC) set out in Commission Regulation (EC) No 692/2008 ⁽¹⁰⁾. The technology has also been approved as a generic innovative technology by reference to NEDC conditions by Commission Implementing Decision (EU) 2020/1102 ⁽¹¹⁾.
- (7) The request and the application refer, however, to the WLTP set out in Regulation (EU) 2017/1151. It has been demonstrated that the measurements performed as part of the emissions test under the WLTP only partially cover the CO₂ savings resulting from the technology used in 48 Volt efficient motor-generators combined with a 48 Volt/12 Volt DC/DC converter.
- (8) Based on the experience gained from the assessment of the applications approved by Implementing Decisions (EU) 2019/313, (EU) 2019/314 and (EU) 2020/1102, and taking into account the information provided with the present request and application, it has been satisfactorily and conclusively demonstrated that the technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter meets the criteria referred to in Article 11(2) of Regulation (EU) 2019/631 and the eligibility criteria specified in Article 9(1)(b) of Implementing Regulations (EU) No 725/2011 and (EU) No 427/2014.
- (9) The innovative technology should be used in conventional ICE passenger cars or light commercial vehicles, or in NOVC-HEVs of those categories for which uncorrected measured fuel consumption and CO₂ emission values may be used in accordance with paragraph 1.1.4 of Appendix 2 to Sub-annex 8 to Annex XXI to Regulation (EU) 2017/1151.

⁽⁷⁾ Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles (OJ L 140, 5.6.2009, p. 1).

⁽⁸⁾ Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO₂ emissions from light-duty vehicles (OJ L 145, 31.5.2011, p. 1).

⁽⁹⁾ <https://circabc.europa.eu/sd/a/a19b42c8-8e87-4b24-a78b-9b70760f82a9/july%202018%20Technical%20Guidelines.pdf>

⁽¹⁰⁾ Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council 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 (OJ L 199, 28.7.2008, p. 1).

⁽¹¹⁾ Commission Implementing Decision (EU) 2020/1102 of 24 July 2020 on the approval of the technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter for use in conventional combustion engine and certain hybrid electric passenger cars and light commercial vehicles as an innovative technology pursuant to Regulation (EU) 2019/631 of the European Parliament and of the Council and by reference to the New European Driving Cycle (NEDC) (OJ L 241, 27.7.2020, p. 38).

- (10) Both the request and the application refer to the methodology for determining the CO₂ savings from the use of the 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter in passenger cars and light commercial vehicles set out in point 3 of the Annex to Implementing Decisions (EU) 2019/313 and (EU) 2019/314, i.e. the 'separate method'.
- (11) The methodology proposed in the application differs, however, from the 'separate method' with regard to the voltage level to be used for the efficiency measurement of the 48 Volt motor-generator, which is proposed to be set to 48 Volt, instead of 52 Volt. In addition the output current for the efficiency measurement of the 48 Volt/12 Volt DC/DC converter is proposed to be set as half the nominal power of the DC/DC converter divided by 14,3 Volt, instead of the nominal power of the DC/DC converter divided by 14,3 Volt. Moreover, in the application it is proposed to introduce a run-in procedure for the 48 Volt motor-generator.
- (12) With regard to the changes proposed to the 'separate method' set out in Implementing Decisions (EU) 2019/313 and (EU) 2019/314 regarding the voltage level of the efficiency measurement of the 48 Volt motor-generator and the output current of the efficiency measurement of the 48 Volt/12 Volt DC/DC converter, it is found that those changes may lead to less conservative results in terms of CO₂ savings. The applicants have claimed that the changes are justified as they would be more representative of real world driving conditions. The evidence provided in support of that claim can, however, not be considered sufficient, in particular due to the limited studies performed in support of the application and the absence of evidence supporting the change of the output current for the efficiency measurement of the 48 Volt/12 Volt DC/DC converter. Against that background, it is considered that these aspects of the 'separate method' set out in point 3 of the Annex to the respective Implementing Decisions (EU) 2019/313 and (EU) 2019/314 should not be changed based on the information provided in the applications.
- (13) With regard to the proposed addition to the testing methodology of a run-in procedure for the 48 Volt motor-generator, the application does not set out with sufficient precision the details for how such run-in should be performed nor how the run-in effect should be taken into account. As the efficiency of the 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt converter is determined on the basis of the average of the measurement results, any run-in effects, positive or negative, may be adequately taken into account in the final efficiency determination, where necessary by increasing the number of measurements. Against that background, it is not appropriate to complement the testing methodology with an additional specific run-in procedure such as that proposed in the application.
- (14) It is proposed in the request to modify the average speed from the one of the NEDC (33,58 km/h) to the one of the WLTP (46,6 km/h). As the conditions of the WLTP should be taken into account, the average speed should be set accordingly.
- (15) It follows implicitly from the 'separate method' that the input voltage for testing the efficiency of the 48 Volt/12 Volt DC/DC converter should be the same as the output voltage of the 48 Volt motor-generator, i.e. 52 Volt. In order to ensure that the efficiency tests are performed in a harmonised way, it is appropriate to clarify in the testing methodology that the value of the input voltage should be set to 52 Volt.
- (16) Manufacturers should have the possibility to apply to a type-approval authority for the certification of CO₂ savings from the use of the innovative technology where the conditions laid down in this Decision are met. Manufacturers should for that purpose ensure that the application for certification is accompanied by a verification report from an independent and certified body confirming that the innovative technology complies with the conditions laid down in this Decision and that the savings have been determined in accordance with the testing methodology referred to in this Decision.
- (17) In order to facilitate a wider deployment of the innovative technology in new vehicles, a manufacturer should also have the possibility to submit a single application for the certification of the CO₂ savings from several 48 Volt efficient motor generators combined with a 48 Volt/12 Volt DC/DC converter. It is, however, appropriate to ensure that, where that possibility is used, a mechanism is applied that incentivises the deployment of only those innovative technologies that offer the highest CO₂ savings.
- (18) It is the responsibility of the type-approval authority to verify thoroughly that the conditions for certifying the CO₂ savings from the use of an innovative technology as specified in this Decision are met. Where the certification is issued, the responsible type-approval authority should ensure that all elements considered for the certification are recorded in a test report and kept together with the verification report and that this information is made available to the Commission on request.

- (19) For the purpose of determining the general eco-innovation code to be used in the relevant type-approval documents in accordance with Annexes I, VIII and IX to Directive 2007/46/EC of the European Parliament and of the Council ⁽¹²⁾, it is necessary to attribute an individual code to the innovative technology.
- (20) From 2021, manufacturers' compliance with their specific CO₂ emissions targets is to be established on the basis of CO₂ emissions determined in accordance with the WLTP. CO₂ savings from the innovative technology certified by reference to this Decision may therefore be taken into account for the calculation of manufacturers average specific CO₂ emissions from the calendar year 2021 onwards,

HAS ADOPTED THIS DECISION:

Article 1

Innovative technology

The technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter is approved as an innovative technology within the meaning of Article 11 of Regulation (EU) 2019/631 taking into account that the CO₂ savings it delivers are only partially covered by the standard test procedure set out in Regulation (EU) 2017/1151, and provided that the technology conforms to the following:

- (a) it is fitted in passenger cars (M₁) or light commercial vehicles (N₁) powered by internal combustion engines running on petrol or diesel (conventional ICE powered M₁ and N₁ vehicles) or in not-off-vehicle charging hybrid electric vehicles of category M₁ or N₁ for which uncorrected measured fuel consumption and CO₂ emission values may be used in accordance with paragraph 1.1.4 of Appendix 2, Sub-annex 8 to Annex XXI to Regulation (EU) 2017/1151;
- (b) its efficiency, which is the product of the efficiency of the 48 Volt motor-generator and the efficiency of the 48 Volt/12 Volt DC/DC converter, determined in accordance with point 2.3 of the Annex, is at least
- (i) 73,8 % for petrol-fuelled vehicles other than turbo-charged;
- (ii) 73,4 % for turbo-charged petrol-fuelled vehicles;
- (iii) 74,2 % for diesel-fuelled vehicles.

Article 2

Application for certification of CO₂ savings

1. A manufacturer may apply to a type-approval authority for certification of the CO₂ savings from the use of the technology approved in accordance with Article 1 ('the innovative technology') by reference to this Decision.
2. The manufacturer shall ensure that the application for the certification is accompanied by a verification report from an independent and certified body confirming that the technology conforms to points (a) and (b) of Article 1.
3. Where CO₂ savings have been certified in accordance with Article 3, the manufacturer shall ensure that the certified CO₂ savings and the eco-innovation code referred to in Article 4(1) are recorded in the certificate of conformity of the vehicles concerned.

Article 3

Certification of CO₂ savings

1. The type-approval authority shall ensure that CO₂ savings achieved from the use of the innovative technology have been determined using the methodology set out in the Annex.
2. Where a manufacturer applies for the certification of the CO₂ savings for more than one type of 48 Volt motor-generator combined with a 48 Volt/12 Volt DC/DC converter in relation to one vehicle version, the type-approval authority shall determine which of the 48 Volt motor-generators combined with a 48 Volt/12 Volt DC/DC converter tested delivers the lowest CO₂ savings. That value shall be used for the purpose of paragraph 4.

⁽¹²⁾ Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive) (OJ L 263, 9.10.2007, p. 1).

3. The type approval authority shall record the certified CO₂ savings calculated in accordance with point 4 of the Annex, and the eco-innovation code referred to in Article 4(1) in the relevant type-approval documentation.
4. The type-approval authority shall record all the elements considered for the certification in a test report and keep that together with the verification report referred to in Article 2(2), and shall make that information available to the Commission on request.
5. The type-approval authority shall only certify CO₂ savings from the use of the innovative technology if it finds that the technology conforms with points (a) and (b) of Article 1, and if the CO₂ savings determined in accordance with point 3.5 of the Annex are 0,5 g CO₂/km or higher, as specified in Article 9(1)(b) of Implementing Regulation (EU) No 725/2011 in the case of passenger cars, or in Article 9(1)(b) of Implementing Regulation (EU) No 427/2014 in the case of light commercial vehicles.

Article 4

Eco-innovation code

1. The innovative technology approved by this Decision is attributed with the eco-innovation code 32.
2. The certified CO₂ savings recorded by reference to that eco-innovation code may be taken into account for the calculation of the average specific emissions of manufacturers starting from the calendar year 2021.

Article 5

Entry into force

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Methodology to determine the CO₂ savings of the technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter for conventional combustion engine and certain hybrid electric passenger cars and light commercial vehicles

1. INTRODUCTION

This Annex sets out the methodology to determine the CO₂ (carbon dioxide) emission savings from the use of a 48 Volt efficient motor-generator ('48V motor-generator'), combined with a 48 Volt/12 Volt DC/DC converter ('48V/12V DC/DC converter'), in an M₁ or N₁ vehicle as specified in Article 1(a)).

2. DETERMINATION OF THE EFFICIENCIES

The efficiency of the 48V motor-generator and the 48V/12V DC/DC converter is to be determined separately as specified in points 2.1 and 2.2. The resulting values are to be used as input for the calculation of the total efficiency of the 48V motor-generator combined with the 48V/12V DC/DC converter in accordance with point 2.3.

2.1. 48V motor-generator efficiency

The efficiency of the 48V motor-generator shall be determined in accordance with ISO 8854:2012, with the following precisions.

The manufacturer shall provide evidence to the type-approval authority that the frequency ranges of the 48V motor-generator are the same as or equivalent to those set out in Table 1.

The efficiency of the 48V motor-generator shall be determined on the basis of measurements at each of the operating points listed in Table 1.

The current intensity of the 48V motor-generator at each operating point shall be half the rated current. For each operating point, the voltage and the output current of the 48V motor-generator shall be kept constant during the measurement, with the voltage at 52V.

Table 1

Operating point i	Holding time [s]	Rotational frequency n _i [min ⁻¹]	Frequency of operating points h _i
1	1 200	1 800	0,25
2	1 200	3 000	0,40
3	600	6 000	0,25
4	300	10 000	0,10

The efficiency of the 48V motor-generator at each operating point i (η_{MG_i}) [%] shall be calculated in accordance with Formula 1.

Formula 1

$$\eta_{MG_i} = \frac{60 \cdot U_i \cdot I_i}{2\pi \cdot M_i \cdot n_i} \cdot 100$$

where, for each operating point i,

U_i is the voltage [V];

I_i is the current intensity [A];

M_i is the torque [Nm];

n_i is the rotational frequency [min⁻¹].

For each operating point, the measurements are to be performed at least five times consecutively and the efficiency shall be calculated for each of those measurements (η_{MG_j}) with j being the index referring to one set of measurements.

For each operating point, the average of those efficiencies ($\overline{\eta_{MG_i}}$) shall be calculated.

The efficiency of the 48V motor-generator (η_{MG}) [%] shall be calculated in accordance with Formula 2.

Formula 2

$$\eta_{MG} = \sum_{i=1}^4 h_i \cdot \overline{\eta_{MG_i}}$$

where

$\overline{\eta_{MG_i}}$ is the mean efficiency of the 48V motor-generator determined for operating point i [%]
 h_i is the frequency of operating point i , as set out in Table 1.

2.2. 48V/12V DC/DC converter efficiency

The efficiency of the 48V/12V DC/DC converter shall be determined under the following conditions:

- Input voltage of 52 V
- Output voltage of 14,3 V
- Output current: nominal power of the 48V/12V DC/DC converter divided by the output voltage of 14,3 V

The nominal power of the 48V/12V DC/DC converter shall be the continuous output power certified by the supplier in accordance with the requirements specified in ISO 8854:2012.

The efficiency of the 48V/12V DC/DC converter ($\eta_{DC/DC}$) [%] shall be calculated from the current and voltage intensity measurements according to Formula 3.

Formula 3

$$\eta_{DC/DC} = \frac{U_{12V} \cdot I_{12V}}{U_{48V} \cdot I_{48V}}$$

where

U_{48V} is the input voltage, which shall be set to 52 [V]
 I_{48V} is the current intensity measured on the input side [A]
 U_{12V} is the output voltage, which shall be set to 14,3 [V]
 I_{12V} is the current intensity measured on the output side, which should be equal to the nominal power of the 48V/12V DC/DC converter divided by the output voltage [A]

The measurements and efficiency calculations shall be repeated at least five (5) times consecutively.

The average of those efficiencies shall then be the efficiency of the 48V/12V DC/DC converter ($\overline{\eta_{DC/DC}}$) [%].

2.3. Combined efficiency

The efficiency of the 48V motor generator combined with the 48V/12V DC/DC converter (η_{TOT}) [%] is calculated in accordance with Formula 4.

Formula 4

$$\eta_{TOT} = \eta_{MG} \cdot \overline{\eta_{DC/DC}}$$

η_{MG} : is the efficiency of the 48V motor-generator, as determined in point 2.1 [%]

$\overline{\eta_{DC/DC}}$ is the efficiency of the 48V/12V DC/DC converter, as determined in point 2.2 [%]

3. CALCULATION OF THE CO₂ SAVINGS

3.1. Saved mechanical power

The difference (ΔP_m) [W] between the saved mechanical power when using the 48V motor generator combined with the 48V/12V DC/DC converter under real-world conditions (ΔP_{mRW}) and the saved mechanical power when using the 48V motor generator combined with the 48V/12V DC/DC converter under type-approval conditions (ΔP_{mTA}) shall be calculated in accordance with Formula 5.

Formula 5

$$\Delta P_m = \Delta P_{mRW} - \Delta P_{mTA}$$

where

ΔP_{mRW} shall be calculated in accordance with Formula 6 and ΔP_{mTA} in accordance with Formula 7.

Formula 6

$$\Delta P_{mRW} = \frac{P_{RW}}{\eta_B} - \frac{P_{RW}}{\eta_{TOT}}$$

Formula 7

$$\Delta P_{mTA} = \frac{P_{TA}}{\eta_B} - \frac{P_{TA}}{\eta_{TOT}}$$

where,

η_{TOT} is the efficiency of the 48V motor-generator combined with the 48V/12V DC/DC converter, as determined in point 2.3 [%]

P_{RW} is the power requirement under 'real-world' conditions, which is 750 W

P_{TA} is the power requirement under 'type-approval' conditions, which is 350 W

η_B is the efficiency of the baseline alternator, which is 67 %

3.2. Calculation of the CO₂ savings

The CO₂ savings of the 48V motor-generator combined with the 48V/12V DC/DC converter (C_{CO_2}) [g CO₂/km] shall be calculated in accordance with Formula 8.

Formula 8

$$C_{CO_2} = \Delta P_m \cdot \frac{V_{Pe} \cdot CF}{v}$$

where,

ΔP_m is the difference between the saved mechanical power under real-world conditions and the saved mechanical power under type-approval conditions, as determined in point 3.1

v is the mean driving speed of the WLTP, which is 46,6 km/h

V_{Pe} is the consumption of effective power as specified in Table 2 [l/kWh]

CF is the conversion factor as set out in Table 3 [gCO₂/l]

Table 2

Type of engine	Consumption of effective power (V_{Pe}) [l/kWh]
Petrol-fuelled other than turbo-charged	0,264
Turbo-charged petrol-fuelled	0,280
Diesel-fuelled	0,220

Table 3

Type of fuel	Conversion factor (CF) [gCO ₂ /l]
Petrol	2 330
Diesel	2 640

3.3. Calculation of the uncertainty of the CO₂ savings

The uncertainty of the CO₂ savings calculated in accordance with point 3.2 shall be quantified.

For this, the following calculations are needed.

First, the standard deviation of the efficiency of the 48V motor-generator at each operating point ($s_{\overline{\eta_{MG_i}}}$) [%] shall be calculated in accordance with Formula 9.

Formula 9

$$s_{\overline{\eta_{MG_i}}} = \sqrt{\frac{\sum_{j=1}^m (\eta_{MG_{ij}} - \overline{\eta_{MG_i}})^2}{m(m-1)}}$$

where

m is the number of measurements j undertaken at each operating point i for the 48V motor-generator efficiency, as referred to in point 2.1

$\eta_{MG_{ij}}$ is the efficiency of the 48V motor-generator calculated for an individual measurement j at operating point i as referred to in point 2.1 [%]

$\overline{\eta_{MG_i}}$ is the average efficiency of the 48V motor-generator calculated for an operating point i , as determined in point 2.1 [%]

Next, the standard deviation of the efficiency of the 48V motor-generator ($s_{\eta_{MG}}$) [%] shall be calculated in accordance with Formula 10.

Formula 10

$$s_{\eta_{MG}} = \sqrt{\sum_{i=1}^4 (h_i \cdot s_{\overline{\eta_{MG_i}}})^2}$$

where

$s_{\overline{\eta_{MG_i}}}$ is as determined by Formula 9 [%]

h_i is the frequency of operating point i , as set out in Table 1.

Then, the standard deviation of the efficiency of the 48V/12V DC/DC converter ($s_{\overline{\eta_{DC/DC}}}$) [%] shall be calculated in accordance with Formula 11.

Formula 11

$$s_{\overline{\eta_{DC/DC}}} = \sqrt{\frac{\sum_{l=1}^L (\eta_{DC/DC_l} - \overline{\eta_{DC/DC}})^2}{L(L-1)}}$$

where

L is the number of measurements l undertaken for the 48V/12V DC/DC converter, as referred to in point 2.2

η_{DC/DC_l} is the efficiency of the 48V/12V DC/DC converter calculated for an individual measurement l as referred to in point 2.2 [%]

$\overline{\eta_{DC/DC}}$ is the efficiency of the 48V/12V DC/DC converter, as determined in point 2.2 [%]

Finally, the uncertainty in the CO₂ savings ($s_{C_{CO_2}}$) [g CO₂/km] of the 48V motor-generator combined with the 48V/12V DC/DC converter shall be calculated in accordance with Formula 12 and shall not exceed 30 % of the CO₂ savings.

Formula 12

$$s_{C_{CO_2}} = \frac{(P_{RW} - P_{TA})}{\eta_{TOT}} \cdot \frac{V_{Pe} \cdot CF}{v} \cdot \sqrt{\left(\frac{s_{\eta_{MG}}}{\eta_{MG}}\right)^2 + \left(\frac{s_{\overline{\eta_{DC/DC}}}}{\overline{\eta_{DC/DC}}}\right)^2}$$

where

P_{RW} is the power requirement under 'real-world' conditions, which is 750 W

P_{TA} is the power requirement under type-approval conditions, which is 350 W

η_{TOT} is the total efficiency of the 48V motor-generator combined with the 48V/12V DC/DC converter as determined in point 2.3 [%]

V_{Pe} is the consumption of effective power as specified in Table 2 [l/kWh]

CF is the fuel conversion factor as specified in Table 3 [gCO₂/l]

v is the mean driving speed of the WLTP, which is 46,6 km/h

$s_{\eta_{MG}}$ is standard deviation of the efficiency of the 48V motor-generator as determined in accordance with Formula 10 [%]

η_{MG} is the efficiency of the 48V motor-generator, as determined in point 2.1 [%]

$s_{\overline{\eta_{DC/DC}}}$ is the standard deviation of the efficiency of the 48V/12V DC/DC converter, as determined in accordance with Formula 11 [%]

$\overline{\eta_{DC/DC}}$ is the efficiency of the 48V/12V DC/DC converter as determined in point 2.2 [%]

3.4. Rounding

The CO₂ savings (C_{CO_2}) calculated in accordance with point 3.2 and the uncertainty of the CO₂ savings ($s_{C_{CO_2}}$) calculated in accordance with point 3.3 shall be rounded to a maximum of two decimal places.

Each value used in the calculation of the CO₂ savings can be applied unrounded or must be rounded to the minimum number of decimal places which allows the maximum total impact (i.e. combined impact of all rounded values) on the savings to be lower than 0,25 gCO₂/km.

3.5. Check against the minimum CO₂ savings threshold

The type-approval authority shall ensure for each vehicle version fitted with the 48V motor-generator combined with the 48V/12V DC/DC converter that the minimum threshold criterion as specified in Article 9(1)(b) of Implementing Regulation (EU) No 725/2011 and Implementing Regulation (EU) No 427/2014 is met.

When verifying whether the minimum threshold criterion is met, the type-approval authority shall take into account, in accordance with Formula 13, the CO₂ savings determined in point 3.2, the uncertainty determined in point 3.3 and, where applicable, a CO₂ correction, in the case of a positive mass difference (Δm) between the 48V motor-generator combined with the 48V/12V DC/DC converter and the baseline alternator.

For the purpose of the positive mass correction, the mass of the baseline alternator shall be set to 7 kg.

The manufacturer shall provide to the type approval authority information on the mass of the 48V motor-generator combined with the 48V/12V DC/DC converter as certified by the supplier.

Formula 13

$$(C_{CO_2} - s_{CO_2} - \Delta CO_{2m}) \geq MT$$

where,

- MT is 0,5 g CO₂/km as specified in Article 9(1)(b) of Implementing Regulation (EU) No 725/2011 and Commission Implementing Regulation (EU) No 427/2014
- C_{CO₂} is the CO₂ savings as determined in point 3.2 [g CO₂/km]
- s_{CO₂} uncertainty of the total CO₂ savings as determined in point 3.3 [g CO₂/km]
- ΔCO_{2m} CO₂ correction, in the case of a positive mass difference (Δm) [kg] between the 48V motor-generator combined with the 48V/12V DC/DC converter and the baseline alternator, calculated in accordance with Table 4: [g CO₂/km]

Table 4

Type of fuel	CO ₂ correction (ΔCO _{2m}) [gCO ₂ /(km)]
Petrol	0,0277 Δm
Diesel	0,0383 Δm

4. CERTIFICATION OF CO₂ SAVINGS

The CO₂ savings to be certified by the type-approval authority in accordance with Article 11 of Implementing Regulations (EU) No 725/2011 or (EU) No 427/2014 (CS_{CO₂}) are those calculated in accordance with Formula 14. The CO₂ savings shall be recorded in the type approval certificate for each vehicle version fitted with the 48V motor-generator combined with the 48V/12V DC/DC converter.

Formula 14

$$CS_{CO_2} = (C_{CO_2} - s_{CO_2})$$

where,

C_{CO_2} is the CO₂ savings as determined in accordance with Formula 8 under point 3.2 [g CO₂/km]

S_{CO_2} is the uncertainty in the CO₂ savings of the 48V motor-generator combined with the 48V/12V DC/DC converter calculated in accordance with Formula 12 under point 3.3 [g CO₂/km]

COMMISSION IMPLEMENTING DECISION (EU) 2020/1168**of 6 August 2020****amending Implementing Decision (EU) 2016/587 as regards efficient vehicle exterior lighting using light emitting diodes in passenger cars capable of running on certain alternative fuels****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2019/631 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 ⁽¹⁾, and in particular Article 11(4) thereof,

Whereas:

- (1) On 19 November 2019, the manufacturers FCA Italy S.p.A, Jaguar Land Rover LTD, OPEL Automobile GmbH-PSA, Automobiles Citroen, Automobiles Peugeot, PSA Automobiles SA, Renault, Škoda Auto a.s and Ford-Werke GmbH (the requesters) jointly submitted a request pursuant to Article 12a of Commission Implementing Regulation (EU) No 725/2011 ⁽²⁾ for amendment of Commission Implementing Decision (EU) 2016/587 ⁽³⁾ so that the efficient vehicle exterior lighting using light emitting diodes (LED) approved as an innovative technology under that Decision cover the lighting in passenger cars capable of running on certain alternative fuels.
- (2) In particular, the requesters have requested that Implementing Decision (EU) 2016/587 covers the efficient vehicle exterior lighting using LED in passenger cars capable of running on liquefied petroleum gas (LPG), compressed natural gas (CNG) or ethanol (E85) and that certain factors in the testing methodology for determining CO₂ savings be adjusted accordingly.
- (3) The Commission assessed the request in accordance with Article 11 of Regulation (EU) 2019/631, Implementing Regulation (EU) No 725/2011 as well as the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council ⁽⁴⁾ and Regulation (EU) No 510/2011 of the European Parliament and of the Council ⁽⁵⁾ (July 2018 version) ⁽⁶⁾.
- (4) In view of the increasing use of LPG and CNG in new passenger cars, it is appropriate to clarify that CO₂ savings resulting from the use of efficient exterior LED lighting in vehicles capable of running on such fuels should be taken into account as CO₂ savings attributed to an innovative technology.
- (5) As regards LPG and CNG fuelled cars, subject to the addition of some fuel-specific factors, the testing methodology as set out in the Annex to Implementing Decision (EU) 2016/587 is considered appropriate for determining the CO₂ savings from LED lighting in passenger cars powered with those fuels.
- (6) As regards E85, due to its limited availability on the Union market as a whole, this fuel should not be distinguished from petrol for the purposes of the methodology to determine the CO₂ savings.
- (7) Implementing Decision (EU) 2016/587 should therefore be amended accordingly,

⁽¹⁾ OJ L 111, 25.4.2019, p. 13.

⁽²⁾ Commission Implementing Regulation (EU) No 725/2011 of 25 July 2011 establishing a procedure for the approval and certification of innovative technologies for reducing CO₂ emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 194, 26.7.2011, p. 19).

⁽³⁾ Commission Implementing Decision (EU) 2016/587 of 14 April 2016 on the approval of the technology used in efficient vehicle exterior lighting using light emitting diodes as an innovative technology for reducing CO₂ emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 101, 16.4.2016, p. 17).

⁽⁴⁾ Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles (OJ L 140, 5.6.2009, p. 1).

⁽⁵⁾ Regulation (EU) No 510/2011 of the European Parliament and of the Council of 11 May 2011 setting emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO₂ emissions from light-duty vehicles (OJ L 145, 31.5.2011, p. 1).

⁽⁶⁾ <https://circabc.europa.eu/sd/a/a19b42c8-8e87-4b24-a78b-9b70760f82a9/july%202018%20Technical%20Guidelines.pdf>

HAS ADOPTED THIS DECISION:

Article 1

Implementing Decision (EU) 2016/587 is amended as follows:

(1) paragraph 1 of Article 2 is amended as follows:

(a) the introductory phrase is replaced by the following:

'1 The manufacturer may apply for the certification of CO₂ savings from one or several exterior LED lighting intended for use in internal combustion engine M₁ vehicles or in not off-vehicle charging hybrid electric M₁ vehicles (NOVC-HEVs) that comply with point (3) of paragraph 5.3.2 of Annex 8 to Regulation No 101 of the Economic Commission for Europe of the United Nations, including such vehicles that are capable of running on liquefied petroleum gas (LPG), compressed natural gas (CNG) or E85 in addition to petrol or diesel, or a combination of those fuels, and provided that the vehicles are fitted with one or a combination of the following LED lights:'

(b) in the second subparagraph the reference to Article 9(1) is replaced by 'Article 9(1)(a)';

(2) in Article 3, the following paragraphs 3 and 4 are added:

'3. Where the efficient exterior vehicle LED lights are fitted in a bi-fuel or flex-fuel vehicle, the approval authority shall record the CO₂ savings as follows:

(a) for a bi-fuel vehicle using petrol and gaseous fuels, the CO₂ savings value with regard to LPG or CNG;

(b) for a flex-fuel vehicle using petrol and E85, the CO₂ savings value with regard to petrol.

4. The certified CO₂ savings recorded by reference to eco-innovation code No 19 may only be taken into account for the calculation of the average specific emissions of manufacturers until 31 December 2020.;

(3) the Annex is amended as follows:

(a) point 2 is amended as follows:

(i) the entry CF is replaced by the following:

'CF – Conversion factor as defined in Table 3';

(ii) the entry V_{pe} is replaced by the following:

'V_{pe} – Consumption of effective power as defined in Table 2';

(b) in point 6, the entry V_{pe}, including Table 2, and the entry CF, including Table 3, are replaced by the following:

'V_{pe}: Consumption of effective power as defined in Table 2

Table 2

Consumption of effective power

Type of Engine	Consumption of effective power (V _{pe}) [l/kWh]
Petrol/E85	0,264
Petrol/E85 Turbo	0,280
Diesel	0,220
LPG	0,342
LPG Turbo	0,363
	Consumption of effective power (V _{pe}) [m ³ /kWh]
CNG (G20)	0,259
CNG (G20) Turbo	0,275

CF: Conversion factor as defined in Table 3

Table 3

Fuel conversion factor (CF)

Type of fuel	Conversion factor (CF) [gCO ₂ /l]
Petrol/E85	2 330
Diesel	2 640
LPG	1 629
	Conversion factor (CF) [gCO ₂ /m ³]
CNG (G20)	1 795'

Article 2

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

Done at Brussels, 6 August 2020.

For the Commission
The President
Ursula VON DER LEYEN

ACTS ADOPTED BY BODIES CREATED BY INTERNATIONAL AGREEMENTS

Only the original UN/ECE texts have legal effect under international public law. The status and date of entry into force of this Regulation should be checked in the latest version of the UN/ECE status document TRANS/WP.29/343, available at: <http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29fdocstts.html>

UN Regulation No 25 – Uniform provisions concerning the approval of head restraints (headrests), whether or not incorporated in vehicle seats [2020/1169]

Incorporating all valid text up to:

Supplement 1 to the 04 series of amendments – Date of entry into force: 15 June 2015

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ANNEXES

Annex 1 - Communication concerning the approval or refusal or extension or withdrawal of approval or production definitely discontinued of a type of head restraint, whether or not incorporated in a seat pursuant to Regulation No 25

Annex 2 - Arrangements of approval marks

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Annex 5 - Details of lines drawn and measurements taken during tests

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Annex 7 - Determination of dimension 'A' of head restraint gaps

1. SCOPE

1.1. This Regulation applies to head-restraint devices conforming to one of the types defined in paragraph 2.2 below. ⁽¹⁾

1.1.1. It does not apply to head-restraint devices which may be fitted to folding seats or seats facing towards the side or towards the rear.

1.1.2. It applies to seat backs themselves, when they are so designed as to serve also as head restraints as defined in paragraph 2.2 below.

2. DEFINITIONS

For the purposes of this Regulation,

2.1. 'Vehicle type' means a category of power-driven vehicles which do not differ in such essential respects as:

2.1.1. the lines and internal dimensions of the bodywork constituting the passenger compartment,

2.1.2. the types and dimensions of the seats,

2.1.3. type and dimensions of head-restraint attachment and of the relevant parts of the vehicle structure in the case of head restraint directly anchored to the vehicle structure;

2.2. 'Head restraint' means a device whose function is to limit the rearward displacement of an adult occupant's head in relation to his torso in order to reduce the danger of injury to the cervical vertebrae of that occupant in the event of an accident;

2.2.1. 'Integrated head restraint' means a head restraint constituted by the upper part of the seat back. Head restraints corresponding to the definitions in paragraphs 2.2.2 and 2.2.3 below, but which cannot be detached from the seat or the vehicle structure except by the use of tools or following the partial or total removal of the seat furnishings, correspond to this definition;

2.2.2. 'Removable head restraint' means a head restraint constituted by a component separable from the seat, designed for insertion and positive retention in the seat back structure;

2.2.3. 'Separate head restraint' means a head restraint constituted by a separate component of the seat, designed for insertion and/or positive retention in the structure of the vehicle;

2.3. 'Type of seat' means a category of seats which do not differ in their dimensions, in their framework or in their padding, although they may differ in finish and colour;

2.4. 'Type of head restraint' means a category of head restraints which do not differ in their dimensions, in their framework or in their padding, although they may differ in finish, in colour and in covering;

2.5. 'Reference point' of the seat ('H point') (see Annex 3 to this Regulation) means the trace, in a vertical plane longitudinal in relation to the seat, of the theoretical axis of rotation between the leg and the torso of a human body represented by a manikin;

⁽¹⁾ The head restraints which conform to the provisions of Regulation No 17 are not required to conform to the provisions of this Regulation. Seats of category M₂ vehicles with a maximum mass exceeding 3 500 kg and of category M₃ vehicles type approved according to Regulation No 80 are not required to conform to the provisions of this Regulation.

- 2.6. 'Reference line' means a straight line which, either on a test manikin having the weight and dimensions of a fiftieth percentile adult male or on a test manikin having identical characteristics, passes through the joint of the leg with the pelvis and the joint of the neck with the thorax. On the manikin reproduced in Annex 3 to this Regulation, for determining the H point of the seat, the reference line is that shown in fig. 1 in the appendix to that Annex;
- 2.7. 'Head line' means a straight line passing through the centre of gravity of the head and through the joint of the neck with the thorax. When the head is at rest the head line is situated in the extension of the reference line;
- 2.8. 'Folding seat' means an auxiliary seat intended for occasional use and normally folded;
- 2.9. 'Adjustment system' means the device by which the seat or its parts can be adjusted to a position suited to the morphology of the seated occupant.
This device may, in particular, permit:
- 2.9.1. longitudinal displacement,
- 2.9.2. vertical displacement,
- 2.9.3. angular displacement;
- 2.10. 'Displacement system' means a device by which the seat or one of its parts can be displaced or rotated, without a fixed intermediate position, to permit easy access to the space behind the seat concerned.
3. APPLICATION FOR APPROVAL
- 3.1. The application for approval shall be submitted by the holder of the trade name or mark of the seat or the head restraint or by his duly accredited representative.
- 3.2. It shall be accompanied by the undermentioned documents in triplicate:
- 3.2.1. a detailed description of the head restraint, specifying in particular the nature of the padding material or materials and, where applicable, the position and specifications of the braces and anchorage pieces for the type or types of seats for which approval of the head restraint is sought;
- 3.2.2. In the case of a 'removable' head restraint (see the definition in paragraph 2.2.2):
- 3.2.2.1. a detailed description of the type or types of seats for which approval of the head restraint is sought,
- 3.2.2.2. particulars identifying the type or types of vehicle on which the seats referred to in paragraph 3.2.2.1 above are intended to be fitted;
- 3.2.3. In the case of a 'separate' head restraint (see the definition in paragraph 2.2.3):
- 3.2.3.1. a detailed description of the structural zone to which the head restraint is intended to be fixed,
- 3.2.3.2. particulars identifying the type of vehicle to which the head restraints are intended to be fitted,
- 3.2.3.3. dimensional drawings of the characteristic parts of the structure and the head restraint, the drawings must show the position intended for the approval number in relation to the circle of the approval mark;
- 3.2.4. dimensioned drawings of the characteristic parts of the seat and the head restraint. The drawings must show the position intended for the approval number in relation to the circle of the approval mark.

- 3.3. The following shall be submitted to the technical service responsible for conducting the approval tests:
- 3.3.1. If the head restraint is of the 'integrated' type (see the definition in paragraph 2.2.1), four complete seats.
- 3.3.2. If the head restraint is of the 'removable' type (see the definition in paragraph 2.2.2):
- 3.3.2.1. two seats of each of the types to which the head restraint is to be fitted;
- 3.3.2.2. 4 + 2N head restraints, N being the number of types of seat to which the head restraint is to be fitted.
- 3.3.3. If the head restraint is of the 'separate' type (see the definition in paragraph 2.2.3), three head restraints and the relevant part of the vehicle structure, or a complete vehicle.
- 3.4. The technical service responsible for conducting the approval tests may request:
- 3.4.1. the delivery to that service of specific parts, or of specific samples of the materials used, and/or
- 3.4.2. the production to that service of vehicles of the type or types referred to in paragraph 3.2.2.2 above.
4. MARKINGS
- 4.1. The devices submitted for approval shall:
- 4.1.1. be clearly and indelibly marked with the trade name or mark of the applicant for approval;
- 4.1.2. provide, at a site shown in the drawings referred to in paragraphs 3.2.3.3 or 3.2.4 above, adequate space for the approval mark.
- 4.2. Where the head restraint is of the 'integrated' or 'removable' type (see definitions in paragraphs 2.2.1 and 2.2.2), the markings referred to in paragraphs 4.1.1 and 4.1.2 above may be reproduced on labels situated at a site shown in the drawings referred to in paragraph 3.2.4 above.
5. APPROVAL
- 5.1. If the type of head restraint submitted for approval pursuant to this Regulation meets the requirements of paragraphs 6 and 7 below, approval of that type of head restraint shall be granted.
- 5.2. An approval number shall be assigned to each type approved. Its first two digits (at present 03 corresponding to the 03 series of amendments which entered into force on 20 November 1989) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign this number to another type of head restraint.
- 5.3. Notice of approval or of extension or of refusal of approval of a type of head restraint pursuant to this Regulation shall be communicated to the Parties to the 1958 Agreement applying this Regulation, by means of a form conforming to the model in Annex I to this Regulation.
- 5.4. There shall be affixed to every head restraint defined in paragraphs 2.2.1, 2.2.2 and 2.2.3 approved under this Regulation, whether incorporated in a seat or not, an international approval mark consisting of:
- 5.4.1. a circle surrounding the letter 'E' followed by the distinguishing number of the country which has granted approval; ⁽²⁾
- 5.4.2. the approval number; and

⁽²⁾ The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev. 6 – <http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html>.

- 5.4.3. in the case of a head restraint incorporated in the seat back, in front of the approval number, the number of this Regulation, the letter 'R' and a dash.
- 5.5. The approval mark shall be affixed in the space referred to in paragraph 4.1.2 above.
- 5.6. The approval mark shall be clearly legible and be indelible.
- 5.7. Annex 2 to this Regulation gives examples of the arrangement of the approval marks.
6. GENERAL SPECIFICATIONS
- 6.1. The presence of the head restraint shall not be an additional cause of danger to occupants of the vehicle. In particular it shall not in any position of use exhibit any dangerous roughness or sharp edge liable to increase the risk or seriousness of injury to the occupants. Parts of the head restraint which are situated in the impact zone defined below shall be capable of dissipating energy in the manner specified in Annex 6 to this Regulation.
- 6.1.1. The impact zone is bounded laterally by two vertical longitudinal planes, one on each side of and each 70 mm distant from the plane of symmetry of the seat considered.
- 6.1.2. The impact zone is limited in height to the part of the head restraint situated above the plane perpendicular to the reference line R and 635 mm distant from the H point.
- 6.1.3. By derogation from the above provisions, the requirements concerning energy absorption shall not apply to the rear faces of head restraints for seats behind which there are no other seats.
- 6.2. Parts of the front and rear faces of the head restraint, excluding parts of the rear faces of head restraints designed to be installed in seats behind which no other seating positions are provided, which are situated outward of the longitudinal vertical planes defined above shall be so padded as to prevent any direct contact of the head with the components of the structure, which shall, in those areas which can be contacted by a sphere of 165 mm diameter, have a radius of curvature of not less than 5 mm.
- Alternatively, these components may be considered satisfactory if they pass the energy-absorption test described in Annex 6 to this Regulation. If the above-mentioned parts of the head restraints and their supports are covered with material softer than 50 Shore (A) hardness, the requirements of this paragraph, with the exception of those relating to energy absorption as defined in Annex 6 to this Regulation, shall apply only to the rigid parts.
- 6.3. The head restraint shall be anchored to the seat or, where appropriate, to the vehicle structure, in such a way that no rigid and dangerous part projects from the padding of the head restraint, from the anchorage or from the seat back as a result of the pressure exerted by the head during the test.
- 6.4. The height of the head restraint, measured in accordance with the requirements of paragraph 7.2 below, shall conform to the following specifications:
- 6.4.1. The height of head restraints shall be measured as described in paragraph 7.2 below.
- 6.4.2. For head restraints not adjustable for height, the height shall be not less than 800 mm in the case of front seats and 750 mm in the case of other seats.
- 6.4.3. For head restraints adjustable for height:
- 6.4.3.1. the height shall be not less than 800 mm in the case of front seats and 750 mm in the case of other seats; this value shall be obtained in a position between the highest and lowest positions to which adjustment is possible;
- 6.4.3.2. there shall be no 'use position' resulting in a height of less than 750 mm;
- 6.4.3.3. in the case of seats other than the front seats the head restraints may be such that they can be displaced to a position resulting in a height of less than 750 mm, provided that such position is clearly recognizable to the occupant as not being included for the use of the head restraint;

- 6.4.3.4. in the case of front seats head restraints may be such that they can be automatically displaced when the seat is not occupied, to a position resulting in a height of less than 750 mm, provided that they automatically return to the position of use when the seat is occupied.
- 6.4.4. The dimensions mentioned in paragraphs 6.4.2 and 6.4.3.1 above may be less than 800 mm in the case of front seats and 750 mm in the case of other seats to leave adequate clearance between the head restraint and the interior surface of the roof, the windows or any part of the vehicle structure; however, the clearance shall not exceed 25 mm. In the case of seats fitted with displacement and/or adjustment systems, this shall apply to all seat positions. Furthermore, by derogation to paragraph 6.4.3.2 above, there shall not be any 'use position' resulting in a height lower than 700 mm.
- 6.4.5. By derogation to the height requirements mentioned in paragraphs 6.4.2 and 6.4.3.1 above, the height of any head restraint designed to be provided in rear centre seats or seating positions shall be not less than 700 mm.
- 6.5. The height of the device on which the head rests, measured as prescribed in paragraph 7.2, shall in the case of a head restraint adjustable for height be not less than 100 mm.
- 6.6. There shall be no gap of more than 60 mm between the seat back and the head restraint in the case of a device not adjustable for height.
- 6.6.1. If the head restraint is adjustable for height it shall, in its lowest position, be not more than 25 mm from the top of the seat back.
- 6.6.2. In the case of a head restraint not adjustable for height, the area to be considered is:
- 6.6.2.1. above a plane perpendicular to the reference line at 540 mm from the R point and
- 6.6.2.2. between two vertical longitudinal planes passing at 85 mm on either side of the reference line.
- In this area, one or more gaps, which regardless of its shape can show a distance 'a' measured as described in paragraph 7.5 of more than 60 mm, are permitted provided that after the additional test under paragraph 7.4.3.4, the requirements of paragraph 7.4.3.6 are still met.
- 6.6.3. In the case of head restraints adjustable for height, one or more gaps, which regardless of its shape can show a distance 'a' measured as described in paragraph 7.5 of more than 60 mm, are permitted on the part of the device serving as the head restraint provided that, after the additional test under paragraph 7.4.3.4, the requirements of paragraph 7.4.3.6 are still met.
- 6.7. The width of the head restraint shall be such as to provide suitable support for the head of a person normally seated. In the plane of measurement of width defined in paragraph 7.3 below, the head restraint shall cover an area extending not less than 85 mm to each side of the plane of symmetry of the seat for which the head restraint is intended, that distance being measured as prescribed in paragraph 7.3.
- 6.8. The head restraint and its anchorage shall be such that the maximum backward displacement of the head permitted by the head restraint and measured in conformity with the static procedure prescribed in paragraph 7.4 below is less than 102 mm.
- 6.9. The head restraint and its anchorage shall be strong enough to bear without failure the load prescribed in paragraph 7.4.3.7 below.
- 6.10. If the head restraint is adjustable, it must not be possible to exceed the maximum prescribed height for use without voluntary action by the user in addition to adjusting operation.
7. TESTS
- 7.1. Determination of the reference point (H point) of the seat in which the head restraint is incorporated
This point shall be determined in conformity with the requirements of Annex 3 to this Regulation.
- 7.2. Determination of the height of the head restraint

- 7.2.1. All lines shall be drawn in the plane of symmetry of the seat considered, the intersection of which plane with the seat determines the contour of the head restraint and of the seat back (see Annex 4, fig. 1, to this Regulation).
- 7.2.2. The manikin corresponding to a fiftieth percentile adult male or the manikin shown in Annex 3 to this Regulation shall be placed in a normal position on the seat. The seat back, if inclinable, shall be locked in a position corresponding to a rearward inclination of the reference line of the manikin's torso of as nearly as possible 25° from the vertical.
- 7.2.3. The projection of the reference line of the manikin shown in Annex 3 shall in the case of the seat considered be drawn in the plane specified in paragraph 7.2.1. The tangent S to the top of the head restraint shall be drawn perpendicular to the reference line.
- 7.2.4. The distance h from the H point to the tangent S is the height to be taken into consideration in implementing the requirement of paragraph 6.4.
- 7.3. Determination of the width of the head restraint (see Annex 4, fig. 2, to this Regulation).
- 7.3.1. The plane S₁ perpendicular to the reference line and situated 65 mm below the tangent S defined in paragraph 7.2.3 defines a section in the head restraint bounded by the outline C. The direction of the straight lines tangential to C representing the intersection of the vertical planes (P and P'), parallel to the plane of symmetry of the seat considered, with the plane S₁ shall be traced in the plane S₁.
- 7.3.2. The width of the head restraint to be taken into consideration in implementing the requirement of paragraph 6.7 is the distance L separating the traces of planes P and P' in plane S₁.
- 7.3.3. The width of the head restraint shall if necessary also be determined 635 mm above the reference point of the seat, this distance being measured along the reference line.
- 7.4. Determination of the effectiveness of the device
- 7.4.1. The effectiveness of the head restraint shall be checked by the static test described below.
- 7.4.2. Preparation for the test
- 7.4.2.1. If the head restraint is adjustable it shall be set in the highest position.
- 7.4.2.2. In the case of a bench seat, where part or all of the supporting frame (including that of the head restraints) is common to more than one seating position, the test shall be conducted simultaneously for all those seating positions.
- 7.4.2.3. If the seat or the seat-back is adjustable relative to a head restraint anchored to the vehicle structure, it shall be placed in the most unfavourable position as considered by the technical service.
- 7.4.3. Testing
- 7.4.3.1. All lines shall be drawn in the vertical plane of symmetry of the seat considered (see Annex 5 to this Regulation).
- 7.4.3.2. A projection of the reference line R shall be drawn in the plane referred to in paragraph 7.4.3.1.
- 7.4.3.3. The displaced reference line R₁ shall be determined by applying to the part simulating the back in the manikin referred to in Annex 3 to this Regulation an initial force producing a rearward moment of 37,3 daNm about the H point.
- 7.4.3.4. By means of a spherical head 165 mm in diameter an initial force producing a moment of 37,3 daNm about the H point shall be applied at right angles to the displaced reference line R₁ at a distance of 65 mm below the top of the head restraint the reference line being retained in its displaced position R₁ as determined in accordance with the requirements of paragraph 7.4.3.3 above.
- 7.4.3.4.1. If the presence of gaps prevents the application of the force prescribed above at 65 mm from the top of the head restraint, the distance may be reduced so that the axis of the force passes through the centre line of the frame element nearest to the gap.

- 7.4.3.4.2. In the case described in paragraphs 6.6.2 and 6.6.3 above, the test shall be repeated by applying to each gap, using a sphere of 165 mm in diameter, a force:
passing through the centre of gravity of the smallest of the sections of the gap, along transversal planes parallel to the reference line, and reproducing a moment of 37,3 daNm about the 'R' point.
- 7.4.3.5. The tangent Y to the spherical head, parallel to the displaced reference line R_1 , shall be determined.
- 7.4.3.6. The distance X between the tangent Y and the displaced reference line R_1 shall be measured. The requirement of paragraph 6.8 shall be considered to be met if the distance X is less than 102 mm.
- 7.4.3.7. In cases where the force prescribed in paragraph 7.4.3.4 is applied at a distance of 65 mm or less below the top of the head restraint, and only in such cases, it shall be increased to 89 daN unless breakage of the seat or its back occurs earlier.
- 7.5. Determination of distance 'a' of head restraint gaps (see Annex 7 to this Regulation)
- 7.5.1. The distance 'a' shall be determined for each gap and in relation to the front face of the head restraint, by means of a sphere having a diameter of 165 mm;
- 7.5.2. The sphere shall be put into contact with the gap in a point of the gap area which allows the maximum sphere intrusion considering no load to be applied;
- 7.5.3. The distance between the two points of contact of the sphere with the gap will constitute the distance 'a' to be considered for the evaluation of the provisions under paragraph 6.6.2 and 6.6.3.
8. CONFORMITY OF PRODUCTION
- 8.1. Every head restraint or seat bearing an approval mark in conformity with Annex 2 shall conform to the type of head restraint approved and comply with the conditions prescribed in paragraphs 6 and 7 above.
- 8.2. In order to verify conformity as aforesaid, a sufficient number of random checks shall be performed on serially-produced head restraints.
- 8.3. Head restraints offered or to be offered for sale shall be used for the tests.
- 8.4. Head restraints selected for verification of conformity with an approved type shall undergo the test described in paragraph 7 of this Regulation.
9. PENALTIES FOR NON-CONFORMITY OF PRODUCTION
- 9.1. Approved head restraints
The approval granted in respect of a type of head restraint pursuant to this Regulation may be withdrawn if head restraints bearing the particulars referred to in paragraph 5.4 above fail to pass the random checks or do not conform to the type approved.
- 9.2. If a Contracting Party to the Agreement applying this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation, by means of a communication form conforming to the model in Annex 1 to this Regulation.
10. MODIFICATION AND EXTENSION OF APPROVAL OF A TYPE OF HEAD RESTRAINT
- 10.1. Every modification of the type of head restraint shall be notified to the Type Approval Authority which approved the type of head restraint. The Authority may then either:
- 10.1.1. Consider that the modifications made are unlikely to have an appreciable adverse effect and that in any case the head restraint still complies with the requirements; or

- 10.1.2. Require a further test report from the technical service responsible for conducting the tests.
- 10.2. Confirmation or refusal of approval, specifying the alterations shall be communicated by the procedure specified in paragraph 5.3 above to the Parties to the Agreement applying this Regulation.
- 10.3. The competent authority issuing the extension of approval shall assign a series number for such an extension and inform thereof the other Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation.
11. INSTRUCTIONS
- The manufacturer shall supply, with each model conforming to a type of head restraint approved, particulars of the types and characteristics of the seats for which the head restraint is approved. When the head restraint is adjustable, the adjusting and/or release operations must be clearly stated in this notice.
12. PRODUCTION DEFINITELY DISCONTINUED
- If the holder of the approval completely ceases to manufacture a head restraint approved in accordance with this Regulation, he shall so inform the authority which granted the approval. Upon receiving the relevant communication that authority shall inform thereof the other Parties to the 1958 Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation.
13. TRANSITIONAL PROVISIONS
- 13.1. As from the official date of entry into force of the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as amended by the 04 series of amendments.
- 13.2. As from 24 months after the date of entry into force of the 04 series of amendments, Contracting Parties applying this Regulation shall grant ECE approval only if the vehicle type to be approved complies with the requirements of this Regulation as amended by the 04 series of amendments.
- 13.3. As from 48 months after the date of entry into force of the 04 series of amendments, existing approvals to this Regulation shall cease to be valid, except in the case of vehicle types which comply with the requirements of this Regulation as amended by the 04 series of amendments.
14. NAMES AND ADDRESSES OF TECHNICAL SERVICES RESPONSIBLE FOR CONDUCTING APPROVAL TESTS AND OF TYPE APPROVAL AUTHORITIES
- The Parties to the 1958 Agreement applying this Regulation shall communicate to the Secretariat of the United Nations the names and addresses of the technical services responsible for conducting approval tests and of the Type Approval Authorities which grant approval and to which forms certifying approval or extension or refusal or withdrawal of approval, issued in other countries, are to be sent.
-

ANNEX 1

Communication

(maximum format: A4 (210 × 297 mm))



Issued by: Name of administration:

.....
.....

- concerning: ^(?) Approval granted
- Approval extended
- Approval refused
- Approval withdrawn
- Production definitively discontinued

of a type of head restraint, whether or not incorporated in a seat pursuant to Regulation No 25

Approval No. Extension No.

1. Trade name or mark
2. Manufacturer's name
3. If applicable, name of manufacturer's representative
4. Address
5. Submitted for approval on
6. Technical service conducting tests
7. Brief description of the head restraint ^(?)
8. Type and characteristics of the seats for which the head restraint is intended or in which it is incorporated
9. Types of vehicles for which the seats for which the head restraint is designed are intended
10. Date of report issued by the technical service
11. Number of report issued by the technical service
12. Approval granted/refused/extended/withdrawn ^(?)
13. Place

⁽¹⁾ Distinguishing number of the country which has granted, extended, refused or withdrawn approval (see approval provisions in the Regulation).

⁽²⁾ Strike out which does not apply.

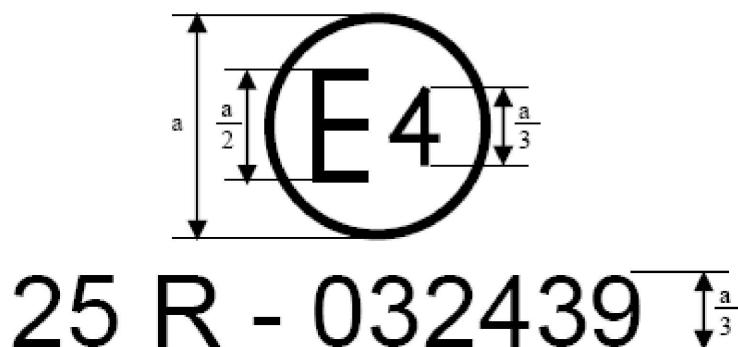
⁽³⁾ In the case of 'integrated' or 'removable' head restraints (see the definitions in paragraphs 2.2.1 and 2.2.2 of this Regulation), this item need not be completed if all the necessary characteristics and particulars are entered under item 8.

- 14. Date
- 15. Signature
- 16. The list of documents deposited with the Type Approval Authority which has granted approval is annexed to this communication and may be obtained on request.

ANNEX 2

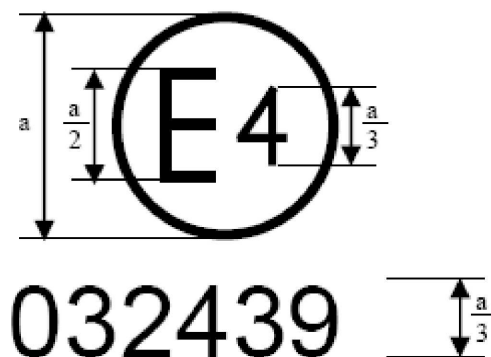
Arrangements of approval marks *

Approval mark for an 'integrated' or 'removable' type head restraint (see the definitions in paragraphs 2.2.1 and 2.2.2 of this Regulation).



The above approval mark affixed to one or more 'integrated' or 'removable' type head restraints shows that, pursuant to Regulation No 25, the type of head restraint has been approved in the Netherlands (E4) under approval number 032439. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No 25 as amended by the 03 series of amendments.

Approval mark for a 'separate' type head restraint (see the definition in paragraph 2.2.3 of this Regulation).



The above approval mark affixed to a head restraint shows that the head restraint in question has been approved and that it is a 'separate' head restraint, approved in the Netherlands (E4), under approval number 032439. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No 25, as amended by the 03 series of amendments.

* The approval number must be placed close to the circle and either above or below the 'E', or to the left or right of that letter

ANNEX 3

Procedure for determining the 'H' point and the actual torso angle for seating positions in motor vehicles ⁽¹⁾

⁽¹⁾ The procedure is described in Annex 1 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.6.

Appendix 1 to Annex 3

Description of the three-dimensional 'H' point machine (3-D H machine) ⁽²⁾

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⁽²⁾ The 3-D H point machine is described in Annex 1, Appendix 1 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.6.

Appendix 2 to Annex 3

Three-dimensional reference system ⁽³⁾

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⁽³⁾ As described in Annex 1 Appendix 2 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.6.

Appendix 3 to Annex 3

Reference data concerning seating positions ⁽⁴⁾

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⁽⁴⁾ As described in Annex 1, Appendix 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.6.

ANNEX 4

Determination of height and width of head restraint

Figure 1

Height

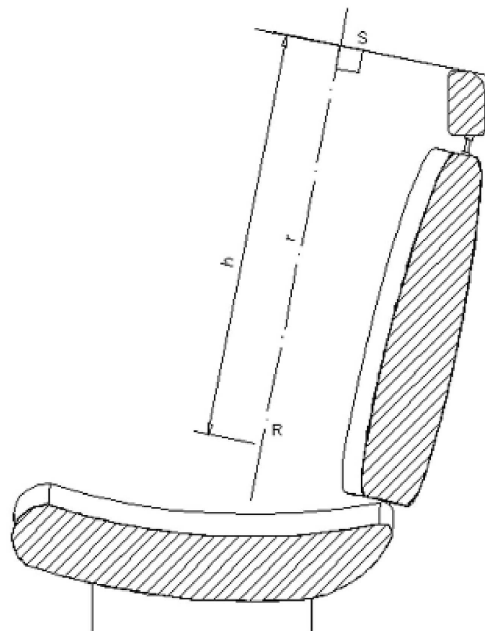
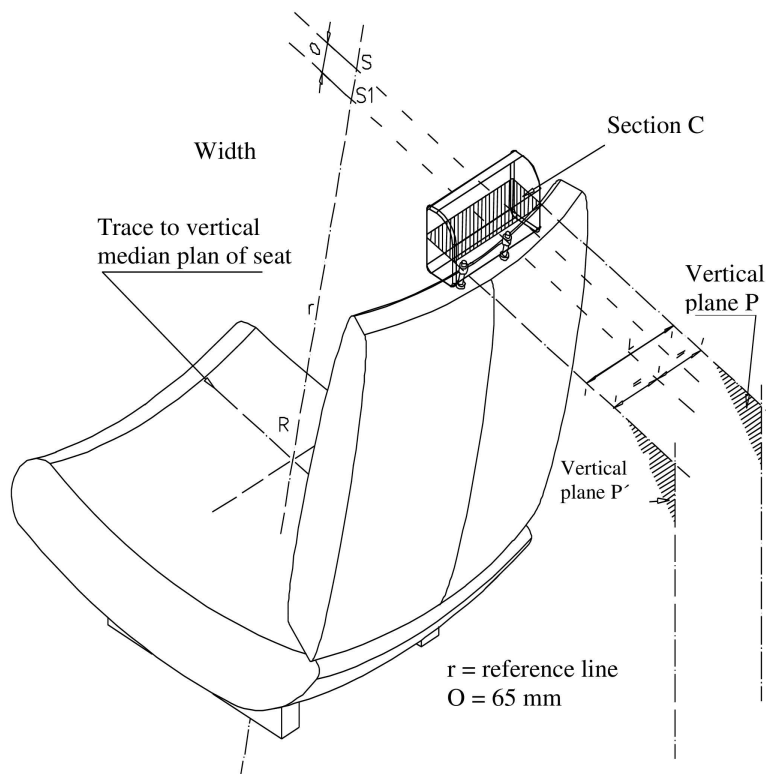
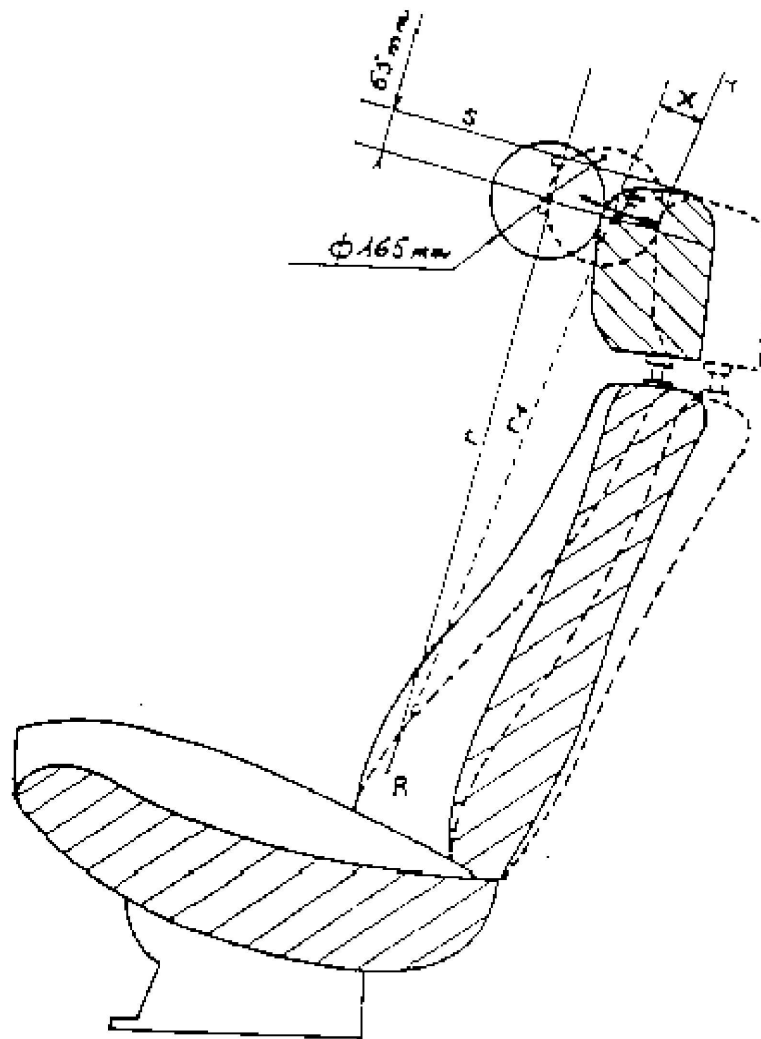


Figure 2



ANNEX 5

Details of lines drawn and measurements taken during tests



_____ Outline of Initial position

- - - - - Outline of Position under load

r: reference line

r1: displaced reference line

Moment of F in relation to r: 37,3 daNm

ANNEX 6

Test procedure for checking energy dissipation

1. Installation, test apparatus, recording instruments and procedure

1.1. Installation

The head restraint covered with an energy dissipating material shall be fitted and tested on the seat or the structural part of the vehicle in which it is installed. The structural component shall be firmly secured to the test bench so as to remain stationary when the impact is applied, and the base on which it rests shall, in the absence of a particular specification for which reasons are given, be approximately horizontal. The seat back, if it can be adjusted, shall be bolted into the position described in paragraph 7.2.2 of this Regulation.

The head restraint shall be mounted on the seat back, as it is presented in the vehicle. In the case of a separate head restraint, it shall be secured to the part of the vehicle structure to which it is normally secured.

If the head restraint is adjustable it shall be placed in the most unfavourable position the adjustment device permits.

1.2. Test apparatus

1.2.1. This apparatus consists of a pendulum whose pivot is supported by ball-bearings and whose reduced mass * at its centre of percussion is 6,8 kg. The lower extremity of the pendulum consists of a rigid headform 165 mm in diameter whose centre is identical with the centre of percussion of the pendulum.

1.2.2. The headform shall be fitted with two accelerometers and a speed-measuring device, all capable of measuring values in the direction of impact.

1.3. Recording instruments

The recording instruments used shall be such that measurements can be made with the following degrees of accuracy:

1.3.1. Acceleration:

accuracy = ± 5 % of the actual value

frequency class of the measurement chain: CFC 600 corresponding to the characteristics of ISO standard 6487 (1987)

Transverse sensitivity ≤ 5 % of the lowest point on the scale.

1.3.2. Speed:

accuracy = $\pm 2,5$ % of the real value;

sensitivity = 0,5 km/h

1.3.3. Time recording

the instrumentation shall enable the action to be recorded throughout its duration and readings to be made within one one-thousandth of a second:

the beginning of the impact at the moment of first contact between the headform and the item being tested shall be detected on the recordings used for analysing the test.

1.4. Test procedure

1.4.1. With the head restraint installed and adjusted as indicated in paragraph 1.1 of this Annex, the impact shall take place at points selected by the laboratory in the impact zone defined in paragraph 6.1 of this Regulation and possibly outside the impact zone defined in paragraph 6.2 of this Regulation on surfaces with a radius of curvature of less than 5 mm.

* The relationship of the reduced mass 'm_r' of the pendulum to the total mass 'm' of the pendulum at a distance 'a' between the centre of percussion and the axis of rotation and at a distance 'l' between the centre of gravity and the axis of rotation is given by the formula: $m_r = m (l/a)$

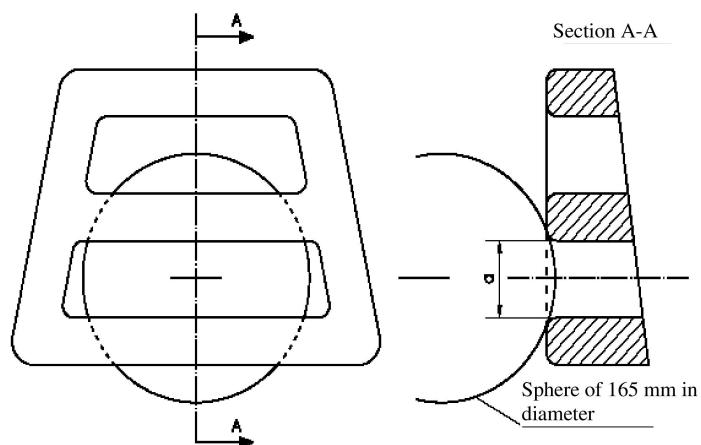
- 1.4.1.1. On the rear surface, the direction of impact from the rear towards the front in a longitudinal plane shall be at an angle of 45° to the vertical.
 - 1.4.1.2. On the front surface, the direction of impact from the front towards the rear, in a longitudinal plane, shall be horizontal.
 - 1.4.1.3. The front and rear zones are bounded by the horizontal plane tangential to the top of the head restraint as determined in paragraph 7.2 of this Regulation.
 - 1.4.2. The headform shall strike the test item at a speed of 24,1 km/h; this speed shall be achieved either by the mere energy of propulsion or by using an additional impelling device.'
 2. Results
In tests carried out by the above procedure the deceleration of the headform shall not exceed 80 g continuously for more than 3 milliseconds. The deceleration rate shall be taken as the average of the readings on the two accelerometers.
 3. Equivalent procedures
 - 3.1. Equivalent test procedures shall be permitted on condition that the results required in paragraph 2 above can be obtained, in particular, items of test apparatus may be oriented differently so long as the relative angles between the head restraint and the direction of impact are respected.
 - 3.2. Responsibility for demonstrating the equivalence of a method other than that described in paragraph 1 shall rest with the person using that other method.
-

ANNEX 7

Determination of dimension 'a' of head restraint gaps

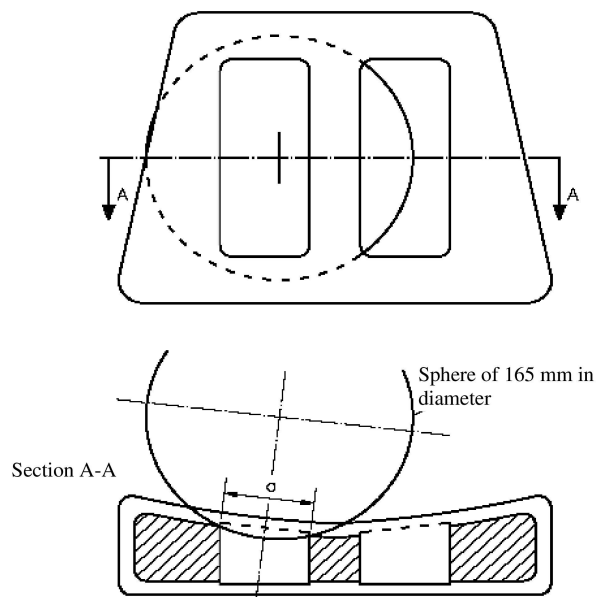
(see paragraphs 6.6.2 and 6.6.3 of this Regulation)

Figure 1

Example of horizontal gaps

Note: Section A-A is to be made in a point of the gap area which allows the maximum sphere intrusion, without exerting any load.

Figure 2

Example of vertical gaps

Note: Section A - A is to be made in a point of the gap area which allows the maximum sphere intrusion, without exerting any load.

CORRIGENDA

Corrigendum to Commission Implementing Regulation (EU) 2018/1566 of 18 October 2018 concerning the authorisation of the preparation of endo-1,3(4)-beta-glucanase and endo-1,4-beta-xylanase produced by *Aspergillus niger* (NRRL 25541) and alpha-amylase produced by *Aspergillus niger* (ATCC66222) as a feed additive for weaned piglets and minor porcine species (weaned) and amending Regulation (EC) No 1453/2004 (holder of authorisation Andrès Pinaluba S.A.)

(Official Journal of the European Union L 262 of 19 October 2018)

In the title, in the text and in Annex:

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