

Brussels, XXX
[...] (2018) XXX draft

COMMISSION REGULATION (EU) .../...

of XXX

**implementing Directive 2009/125/EC of the European Parliament and of the Council
with regard to ecodesign requirements for refrigerating appliances**

**repealing Regulation (EC) No 643/2009 with regard to ecodesign requirements for
household refrigerating appliances**

(Text with EEA relevance)

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

COMMISSION REGULATION (EU) .../...

of XXX

**implementing Directive 2009/125/EC of the European Parliament and of the Council
with regard to ecodesign requirements for refrigerating appliances**

**repealing Regulation (EC) No 643/2009 with regard to ecodesign requirements for
household refrigerating appliances**

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to Article 114 of the Treaty on the Functioning of the European Union,

Having regard to Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products¹, and in particular Article 15(1) thereof,

After consulting the Consultation Forum referred to in Article 18 of Directive 2009/125/EC,

Whereas:

- (1) Directive 2009/125/EC requires the Commission to set ecodesign requirements for energy-related products representing significant volumes of sales and trade, having a significant environmental impact and presenting significant potential for improvement through design in terms of their environmental impact, without entailing excessive costs.
- (2) Article 16(2)(a) of Directive 2009/125/EC provides that the Commission should, where appropriate, introduce implementing measures for products which offer significant potential for reducing greenhouse gas emissions in a cost-effective way, such as the refrigerating appliance in the scope of this Regulation. These implementing measures should be introduced in accordance with the procedure referred to in Article 19(3) and the criteria set out in Article 15(2) of the same Directive.
- (3) The Commission established ecodesign requirements for household refrigerating appliances in Commission Regulation (EU) No 643/2009 implementing Directive 2009/125/EC².
- (4) Article 7 of Commission Regulation (EU) No 643/2009 requires the Commission to review the Regulation in light of technological progress.
- (5) The Commission has reviewed Commission Regulation (EU) No. 643/2009 and analysed the technical, environmental and economic aspects of refrigerating appliances as well as real-life user behaviour. The review was undertaken in close cooperation with stakeholders and interested parties from the Union and third

¹ OJ L 285, 31.10.2009, p. 10.

² OJ L 193, 23.07.2009, p. 53.

countries. The results of the review were made public and presented to the Consultation Forum established by Article 18 of Directive 2009/125/EC.

- (6) The review study shows the benefit of continued and improved requirements, adapted in stringency to the technological progress of refrigerating appliances. Specifically, it shows that energy efficiency requirements for wine storage appliances can be introduced and that correction factors can be eliminated or significantly reduced.
- (7) The annual energy consumption of products subject to this Regulation in the Union was estimated at 86 TWh in 2015, corresponding to 34 million tonnes of CO₂ equivalent. While the projected energy consumption of refrigerating appliances in a business as usual scenario will decrease by 2030, this reduction is expected to slow down unless the existing ecodesign requirements are updated.
- (8) The environmental aspects of the refrigerating appliances in the scope of this Regulation that have been identified as significant for the purposes of this Regulation are energy consumption in the use phase, increased energy use over the product life due to leaking door gaskets, poor reparability and suboptimal food preservation options resulting in avoidable food waste.
- (9) The Commission Communications on circular economy³ and on the ecodesign working plan⁴ underline the importance of using the ecodesign framework to support the move towards a more resource efficient and circular economy. The WEEE Directive 2012/19/EU⁵ refers to Directive 2009/125/EC indicating that ecodesign requirements should facilitate the re-use, dismantling and recovery of WEEE by tackling the issues upstream. Therefore this Regulation should lay down appropriate requirements contributing to circular economy objectives.
- (10) Refrigerating appliances with a direct sales function should be subject to a separate ecodesign regulation which is under preparation at the time of publication of this Regulation.
- (11) Wine storage appliances and low noise refrigerating appliances (e.g. minibars), including those with transparent doors, do not have a direct sales function. Wine bars are usually either used in household environments or in restaurants; mini bars are usually used in hotel rooms. Therefore, wine storage appliances and mini bars, including those with transparent doors should be in the scope of this Regulation.
- (12) Measurements of the relevant product parameters should be performed through reliable, accurate and reproducible measurement methods, which take into account the recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012⁶.
- (13) In accordance with Article 8 of Directive 2009/125/EC, this Regulation should specify the applicable conformity assessment procedures.
- (14) To facilitate compliance checks, manufacturers should provide information in the technical documentation referred to in Annexes IV and V to Directive 2009/125/EC in so far as that information relates to the requirements laid down in this Regulation.

³ COM/2015/0614 final of 02.12/2015

⁴ COM(2016) 773 final of 30.11.2016

⁵ OJ L 197, 24.7.2012, p. 38

⁶ OJ L 316, 14.11.2012, p. 12

- (15) For market surveillance purposes, manufacturers should be allowed to refer to the product database if the technical documentation as per Regulation [Regulation number product specific energy labelling Regulation] contains the same information.
- (16) To improve the effectiveness and credibility of the Regulation and to protect consumers, products that automatically alter their performance in test conditions to improve the declared parameters should be prohibited.
- (17) In addition to the legally binding requirements laid down in this Regulation, indicative benchmarks for best available technologies should be identified to make information on the life-cycle environmental performance of products subject to this Regulation widely available and easily accessible, in accordance with Directive 2009/125/EC, Annex 1, part 3(2).
- (18) A review of this Regulation should assess the appropriateness and effectiveness of its provisions in achieving its goals. The timing of the review should allow for all provisions to be implemented and show an effect on the market.
- (19) Commission Regulation (EU) No 643/2009 should be repealed and new provisions should be laid down by this Regulation to ensure that the ecodesign requirements for refrigerating appliances continue to accelerate the market transformation towards energy-efficient technologies.
- (20) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 19(1) of Directive 2009/125/EC.

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

1. This Regulation establishes ecodesign requirements for placing on the market and putting into service of electric mains-operated refrigerating appliances with a volume higher than 10 litres and lower than or equal to 1500 litres;
2. This Regulation shall not apply to:
 - (a) products covered by Commission Regulation (EU) 2015/1095 with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers;
 - (b) low noise refrigerating appliances with a volume larger than 60 l;
 - (c) refrigerating appliances with a direct sales function;
 - (d) mobile refrigerating appliances.

Article 2

Definitions

For the purpose of this Regulation, the definitions in Article 2 of Directive 2009/125/EC shall apply. In addition, the definitions set out in Annex I of this Regulation and the following definitions shall apply:

1. 'mains' or 'electric mains' means the electricity supply from the grid of 230 ($\pm 10\%$) Volt of alternating current at 50 Hz;

2. 'refrigerating appliance' means an insulated cabinet with one or more compartments that are controlled at specific temperatures, cooled by natural or forced convection whereby the cooling is obtained by one or more energy consuming means;
3. 'volume' means the volume of the space within the inside liner of the refrigerating appliance, equal to the sum of the compartment volumes, in dm³ or litres;
4. 'low noise refrigerating appliance' is a refrigerating appliance with noise power emission lower than 20 dB(A);
5. 'refrigerating appliance with a direct sales function' means an refrigerating appliance used for the functions of displaying and selling items at specified temperatures below the ambient temperature to customers, accessible directly through open sides or via one or more doors, and/or drawers, including cabinets with areas used for storage or assisted serving of items not accessible by the customers;
6. 'mobile refrigerating appliance' means a refrigerating appliance used in vehicles or any other means of transport where there is no access to the mains electricity grid, that:
 - (a) can operate reliably and safely when exposed to mechanical vibrations and a tilted position, and
 - (b) use extra low-voltage electricity (<120V DC) and/or fossil fuel as the energy source for the refrigeration functionality, including those that in addition to extra low voltage electricity and/or fossil fuel can be electric mains operated;
7. 'energy efficiency index' (EEI) means an index number for the relative energy efficiency of a refrigeration appliance expressed in %, calculated as per Annex III.5;
8. 'wine storage appliance' means a dedicated refrigerating appliance for the storage of wine, with precision temperature control for the storage conditions and target temperature as defined Annex III, Table 3, and equipped with anti-vibration measures;
9. 'specific freezing capacity' (x) means the rate of heat extraction by an appropriately loaded compartment to bring the temperature of the light load from +25 to -18 °C at an ambient temperature of 25 °C, expressed in kg/12h, and in accordance with Annex III.1(i);
10. 'compartment' means an enclosed space within a refrigerating appliance, which is directly accessible through one or more external doors and may itself be divided into sub-compartments. For the purpose of this Regulation, unless specified otherwise, 'compartment' refers to both compartments and sub-compartments;
11. 'dedicated refrigerating appliance' means a refrigerating appliance with only one type of compartment;
12. 'external door' is the part of a cabinet that can be moved or removed to at least allow inserting the load from the exterior to the interior or extracting the load from the interior to the exterior of the cabinet;
13. 'sub-compartment' means a permanent enclosed space within a compartment having a different operating temperature range from the compartment within which it is located.

Article 3
Ecodesign requirements

Refrigerating appliances shall comply with the ecodesign requirements set out in Annex II from the dates indicated therein.

Article 4
Conformity assessment

1. The conformity assessment procedure referred to in Article 8 of Directive 2009/125/EC shall be the internal design control system set out in Annex IV to that Directive or the management system set out in Annex V to that Directive.
2. Where the information included in the technical documentation for a particular model has been obtained by calculation on the basis of design, or extrapolation from another model, or both, the documentation shall include details of such calculations or extrapolations, or both, and of tests undertaken by manufacturers to verify the accuracy of the calculations undertaken.

Article 5
Verification procedure for market surveillance purposes

Member States shall apply the verification procedure described in Annex IV to this Regulation when performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC.

Article 6
Circumvention

The manufacturer or importer shall not place on the market products that have been designed so that a model's performance is automatically altered in test conditions with the objective of reaching a more favourable level for any of the parameters declared by the manufacturer in the technical documentation or included in any of the documentation provided with the product.

Article 7
Indicative benchmarks

The indicative benchmarks for the best-performing products and technologies available on the market at the time of adopting this Regulation are set out in Annex V.

Article 8
Evaluation

The Commission shall assess this Regulation and shall present the results of this assessment, including, if appropriate, a draft revision proposal, to the Consultation Forum no later than five years after its entry into force.

This assessment shall review the requirements in the light of technological progress, in particular regarding the energy efficiency requirements for low noise refrigerating appliances and for wine storage appliances; the tolerances for energy use and specific freezing capacity; the appropriateness of a mandatory sound signal for long door openings, and the compensation factors.

Article 9

Repeal

Commission Regulation (EC) No 643/2009 shall be repealed as from 31 March 2021.

Article 10

Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.
2. This Regulation shall apply from 1 April 2021.

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

Done at Brussels,

For the Commission
Jean-Claude JUNCKER
The President