

Brussels, XXX [...](2015) XXX draft

COMMISSION REGULATION (EU) No .../..

of XXX

implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters

(Text with EEA relevance)

COMMISSION REGULATION (EU) No .../..

of XXX

implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters and replacing and repealing Commission Regulation (EU) 2015/1188 of 28 April 2015

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to 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 that represent significant volumes of sales and trade, that have a significant environmental impact and that present significant potential for improvement in terms of their environmental impact without entailing excessive costs.
- (2) Article 15(2) of Directive 2009/125/EC provides that in accordance with the procedure referred to in Article 19(3) and the criteria set out in Article 15(2), and after consulting the Consultation Forum, the Commission should, as appropriate, introduce implementing measures for products offering a high potential for cost-effective reduction of greenhouse gas emissions, such as local space heaters.
- (3) The proposal for a revised Energy Efficiency Directive (EED) requires Member States to enhance their National Energy and Climate Plans (NECPs) to achieve at least an overall 9% reduction in EU energy consumption in 2030 compared to the EU Reference Scenario 2020. In this context, the ecodesign and energy labelling rules for products arise as important instruments to realise EU's energy and decarbonisation objectives.
- (4) Annual energy consumption from local space heaters amounted to 15Mtoe in 2020, equivalent to 1,7% of the EU total final energy consumption and 4% of the final energy consumption from households and services. This is a significant amount that should be reduced by means of additional ecodesign measures.
- (5) The Commission has carried out a review study to analyse the technical, environmental and economic aspects of local space heaters typically used for heating purposes in residential and commercial buildings. The study has been carried out with stakeholders and interested parties from the Union and third countries, and the results have been made publicly available. The review study reveals that the ecodesign

OJ L 285, 31.10.2009, p. 10.

- measures contained in Regulation (EU) 2015/1188 have significantly contributed to reduce energy consumption and greenhouse gas emissions. Nevertheless, in the absence of further regulatory action, energy savings shall stagnate after 2030.
- (6) In addition to the review study, the Commission has carried out an impact assessment on different policy options to reduce energy consumption from local space heaters as from 2025. According to the impact assessment new ecodesign measures can reduce energy consumption and greenhouse gas emissions by 2 Mtoe and 1,8 Mt CO₂-eq respectively by 2030.
- (7) The impact assessment indicates that Regulation (EU) 2015/1188 presents barriers that impede gaining further energy savings because the legislative scope does not clearly delimit the types of local space heaters that must fulfil the ecodesign requirements. This aspect has been underlined by industry and Member States, which declare that the scope of the Regulation is a source of confusion among manufacturers on the one hand, which are not sure about whether their products must or not fulfil the ecodesign rules, and among national authorities on the other hand, which have doubts about the products that they must inspect.
- (8) The inadequate and confusing regulatory scope in Regulation (EU) 2015/1188 hinders the level playing field for manufacturers across the EU by creating a competitive disadvantage between those manufacturers that fulfil the ecodesign rules in force and those who do not. The good functioning of the internal market for local space heaters needs to be assured through EU action by modifying the regulatory scope to stablish that level playing field.
- (9) The exclusion of slave heaters from the scope of Regulation (EU) 2015/1188 minimises the potential of the legislation to reduce energy consumption, and creates loopholes whereby local space heaters are sold as slave heaters when in practice they are not operated as such. It is therefore necessary to include slave heaters in the scope of the measures on ecodesign.
- (10) Towel rails are local space heaters, since they are not only intended to heat towels but are also able to heat the space in which they are placed to contribute to thermal comfort. However, according to the impact assessment, while some manufacturers declare towel rails as local space heaters the majority do not, thus creating an unlevelled playing field between manufacturers and leading to missed energy savings. It is therefore necessary to set out specific ecodesign requirements for towel rails.
- (11) Regulation (EU) 2015/1188 does not include all low power modes that are currently implemented in local space heaters. Additional low power modes such as idle mode or networked standby mode must also be considered because they generate additional energy consumption. Minimum energy efficiency requirements should be set for all low power modes.
- (12) Ecodesign measures can only be addressed at EU level since they act directly on the product, which uniformity needs to be assured to avoid that different national rules undermine the EU internal market for that product.
- (13) The ecodesign requirements should not affect the functionality or affordability of local space heaters to the end-user. In this respect, further energy savings from local space heaters should not depend on technological improvements that would normally make the product more expensive, but rather on setting the basis for heaters to be fitted with suitable controls, which in most cases are already available on the market.

- (14) The new Circular Economy Action Plan adopted by the Commission in March 2020 sets out steps to reduce product environmental impacts through promoting longer product lives, greater resource efficiency and enhancing recycling and recycled content. Mandatory availability of spare parts and improved information for dismantling at end-of-life can contribute to increase the lifetime of local space heaters, reduce the amount of natural resources used for their production and downplay the amount of waste generated.
- (15) The transitional period for introducing the ecodesign requirements should be sufficient for the manufacturers to adapt their products to the new requirements. That period should take into account any cost impact for manufacturers, in particular for small and medium-sized enterprises while ensuring achievement of the objectives of this Regulation.
- (16) Product parameters should be measured and calculated using reliable, accurate and reproducible measurement and calculation methods including, where available, harmonised standards adopted by the European standardisation organisations following a request by the Commission in accordance with the procedures laid down in Regulation (EU) 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation².
- (17) In accordance with Article 8 of Directive 2009/125/EC, this Regulation specifies which conformity assessment procedures apply.
- (18) In order to facilitate compliance checks, manufacturers should provide the information contained in the technical documentation referred to in Annexes IV and V to Directive 2009/125/EC insofar as that information relates to the requirements laid down in this Regulation.
- (19) In addition to the legally binding requirements laid down in this Regulation, indicative benchmarks for best available technologies should be determined to ensure that information on the life-cycle environmental performance of local space heaters is widely available and easily accessible.
- (20) The measures provided for in this Regulation are in accordance with the opinion of the Committee established under Article 19(1) of Directive 2009/125/EC,

HAS ADOPTED THIS REGULATION:

Article 1 Subject matter and scope

This Regulation establishes ecodesign requirements for the placing on the market and putting into service of domestic local space heaters with a nominal heat output of 50 kW or less and commercial local space heaters with a nominal heat output of the product or of a single segment of $\frac{120300}{8}$ kW or less.

This Regulation shall not apply to:

(a) local space heaters using a vapour compression cycle or sorption cycle for the generation of heat driven by electric compressors or fuel;

EN EN

_

² OJ L 316, 14.11.2012, p. 12.

local space heaters specified for purposes other than indoor space heating to reach and maintain a certain thermal comfort of human beings by means of heat convection or heat radiation;

- (b) local space heaters that are specified for outdoor use only;
- (c) local space heaters of which the direct heat output is less than 6% of the combined direct and indirect heat output at nominal heat output;
- (d) air heating products;
- (e) sauna stoves;
- (f) slave heaters cooking appliances.

Article 2 **Definitions**

In addition to the definitions set out in Article 2 of Directive 2009/125/EC, the following definitions shall apply:

- 1. 'local space heater' means a means a space heating device that is equipped with one or more heat generators with the purpose of converting electricity or gaseous or liquid fuelsemits heat by directly into heat transfer to contributeor by direct heat transfer in combination with heat transfer to a fluid, in order to reach and maintain a certain level of human thermal comfort within thean enclosed space in which ithe product is situated by, possibly combined with a heat output to other spaces and is equipped with one or more heat generators that convert electricity or gaseous or liquid fuels directly into heat transfer, possibly combined with a heat output to other spaces or with heat transfer to a fluid through use of the Joule effect or combustion of fuels respectively;
- 2. 'domestic local space heater' means a local space heater other than a commercial one;
- 3. 'gaseous fuel local space heater' means an open fronted local space heater or a closed fronted local space heater using gaseous fuel;
- 4. 'liquid fuel local space heater' means an open fronted local space heater or a closed fronted local space heater using liquid fuel;
- 5. 'electric local space heater' means a local space heater using the electric Joule effect to generate heat;
- 6. 'commercial local space heater' means either a luminous commercial local space heater or tube <u>commercial</u> local space heater;
- 7. 'open combustion, open fronted local space heater' means a local space heater, using a gaseous or a liquid fuels, of which combustion chamber the fire bed and combustion gases are is open not sealed fromto the space room in which the product local space heater is fitted located, where the air intake cannot be adjusted and which is connected sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of the products of combustion;
- 8. 'closed fronted, open combustion local space heater' means a local space heater, using a gaseous or a liquid fuels, of which the combustion chamber fire bed and combustion gases are is separated sealed from the space in which the local space heaterproduct is fitted located by a pane or similar, which takes the air necessary for

- <u>combustion from that space</u>, and which is <u>sealed connected</u> to a <u>chimney or fireplace</u> opening or requires a flue duct for the evacuation of <u>the products</u> of combustion;
- 9. 'balanced flue local space heater' means a local space heater, using a gaseous or a liquid fuels, of which the fire bed and combustion chamber isgases are sealed from the room where the heaterspace in which the product is located fitted and which is connected sealed to a chimney or fireplace opening or requires a flue duct that provides the air necessary for combustion from the open air, being the combustion gases also evacuated via a flue duct for the evacuation of products of combustion;'
- 'electric portable local space heater' means an electric local space heater that is equipped with a cord supply and plug by the manufacturer which moderate weight and size allows the heater to be frequently changed between rooms according to the heating needs of the user. A portable appliance with features which can be used to fix it to a wall and/or floor is considered an electric fixed local space heater is not an electric fixed local space heater, electric underfloor local space heater, electric radiant local space heater, electric visibly glowing local space heater or slave heater;
- 110. 'electric fixed local space heater' means an electric local space heater not intended to accumulate thermal energy and designed to be used while fastened or secured in a specific location or wall mounted and not incorporated in the building structure or building finishing;
- 124. 'electric storage local space heater' means an electric local space heater designed to store heat in an accumulating isolated core and to discharge it for several hours after the accumulation phase;
- 13.2. 'electric underfloor local space heater' means an electric local space heater designed to be <u>embeddedused while incorporated</u> in the building structure or <u>in the</u> building finishing, including self-regulating heating cables and mats;
- 13. 'electric radiant local space heater' means an electric local space heater in which the heat emitting element is to be directed towards the place of use so that its thermal radiation directly warms the subjects to be heated and which has a temperature rise of the grill covering the heat emitting element of at least 130°C in normal use and/or a temperature rise of 100°C for other surfaces;
- 14. 'electric visibly glowing radiant local space heater' means an electric local space heater in which the heating element is visible from outside the heater and has a temperature of at least 650°C in normal use;
- 15. 'sauna stove' means a space heating product, incorporated in, or declared to be used in, dry or wet sauna's or similar environments;
- 16. 'slave heater' means an electric local space heater which is not capable of autonomous operation and needs to receive signals sent—from an external master controller, not being part of the heaterproduct but connected to it by pilot wire, wireless, power line communication or an equivalent technique, in order to regulate the emission of heat into the room in which the product is installed;
- 17. 'luminous <u>commercial</u> local space heater' means a local space heater, using gaseous or liquid fuel <u>which that</u> is equipped with a burner, which is to be installed above head level, directed towards the place of use so that the heat emission of the burner, being predominantly infrared radiation, directly warms the subjects to be heated.

<u>being</u> which emits the products of combustion <u>evacuated</u> in the space where <u>the</u> <u>heaterit</u> is <u>situated</u> placed;

- 18. 'tube <u>commercial</u> local space heater' means a local space heater; using gaseous or liquid fuel, <u>which that</u> is equipped with a burner; which is to be installed above head level, near the subjects to be heated, which heats the space primarily by infrared radiation from the tube or tubes heated by the internal passage of products of combustion, <u>being those</u> and of which the products of combustion are to be evacuated through a flue duct;
- 19 'tube heater system' means a tube <u>commercial</u> local space heater comprising more than one single burner, of which the products of combustion of one burner may feed into a next burner, and of which the products of combustion of multiple burners are to be evacuated by a single exhaust fan;
- 20. 'tube heater segment' means a part of a tube heater system that comprises all the elements needed for standalone operation and as such can be tested independently of the other tube heating system parts;
- 21. 'flueless_heater' means a local space heater other than a commercial local space heater, using gaseous or liquid fuel emitting the products of combustion into the space where the product is situated, other than a luminous local space heater;
- 22. 'open to chimney heater' means a local space heater using gaseous or liquid fuels intended to sit under a chimney or in a fireplace without sealing between the product and the chimney or fireplace opening, and allowing the products of combustion pass unrestricted from the fire bed to the chimney or flue;
- 'air heating product' means a device as defined in Article 2(1) of Regulation (EU) 2016/2281 product providing heat to an air-based heating system only that can be ducted and is designed to be used while fastened or secured in a specific location or wall mounted which distributes the air by means of an air moving device in order to reach and maintain a certain level of human thermal comfort within an enclosed space in which the product is situated;
- 24. 'direct heat output' means the heat output of the product by radiation and convection of heat, as emitted by or from the product itself to air, excluding the heat output of the product to a heat transfer fluid, expressed in kW;
- 25. 'indirect heat output' means the heat output of the product to a heat transfer fluid by the same heat generation process that provides the direct heat output of the product, expressed in kW;
- 26. 'indirect heating functionality' means the product is capable of transferring part of the total heat output to a heat transfer fluid, for use as space heating or domestic hot water generation;
- 27. 'nominal heat output' or('Pnom)' means the heat output of a local space heater comprising both direct heat output and indirect heat output (where applicable), when operating at the setting for the maximum heat output that can be maintained over an extended period, as declared by the manufacturer, expressed in kW;
- 28. 'minimum heat output' $\underline{\text{or}(P_{min})}$ ' means the heat output of a local space heater comprising both direct heat output and indirect heat output (where applicable), when operating at the setting for the lowest heat output, as declared by the manufacturer, expressed in kW;

- 29. 'maximum continuous heat output' or ('Pmax,c)' means the declared heat output of a electric local space heater when operating at the setting for the maximum heat output that can be maintained continuously over an extended period, as declared by the manufacturer, expressed in kW;
- 30. 'intended for outdoor use' means the product is suitable for safe operation outside enclosed spaces, including possible use in outdoor conditions;
- 31. 'equivalent model' means a model placed on the market with the same technical parameters set out in Table 1, Table 2 or Table 3 of point 3 of Annex II as another model placed on the market by the same manufacturer.
- 32. 'towel rail' means an electric fixed local space heater which design allows to hold towels with the purpose of warming them is equipped with additional features to hold and dry or warm towels;
- <u>33.</u> 'cooking appliance' means an appliance or part of <u>itan appliance</u> <u>thatwhich</u> incorporates one or more cavities using electricity, <u>and/or</u> gas <u>or both</u>, to <u>prepare in which</u> food <u>is prepared</u> by use of a conventional or fan-forced mode;
- (33) 'closed combustion, open fronted local space heater' means a local space heater, using gaseous or liquid fuels, of which the combustion gases are not sealed from the space in which the product is fitted, but the front is closed and the air intake from the room can be adjusted. The product is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
- (34) 'balanced flue/closed combustion local space heater' means a local space heater, using gaseous fuel, of which the combustion chamber is closed by a glass or metal pane and is sealed from the space in which the product is fitted, and which requires a flue system for the evacuation of the products of combustion.';

For Annexes II to V, additional definitions are set out in Annex I.

Article 3 **Ecodesign requirements and timetable**

- 1. The ecodesign requirements for local space heaters are set out in Annex II shall apply from the dates indicated therein.
- 2. Local space heaters shall meet the requirements set out in Annex II from 1 January 2018.
- 3.2. Compliance with ecodesign the requirements set out in Annex II shall be measured and calculated in accordance with the methods set out in Annex III.

Article 4 Conformity assessment

- 1. The conformity assessment procedure referred to in Article 8(2) of Directive 2009/125/EC shall be the internal design control set out in Annex IV to that Directive or the management system set out in Annex V to that Directive.
- 2. For the purposes of the conformity assessment pursuant to Article 8 of Directive 2009/125/EC, the technical documentation shall contain the information set out in point 3(b) of Annex II to this Regulation.

3. Where the information included in the technical documentation for a model has been obtained by calculation on the basis of design, or extrapolation from other equivalent appliances, or both, the technical 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. In such cases, the technical documentation shall also include a list of all other equivalent models where the information contained in the technical documentation was obtained on the same basis.

Article 5 Verification procedure for market surveillance purposes

Member States shall apply the verification procedure set out in Annex IV to this Regulation when performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC to ensure compliance with the requirements set out in Annex II to this Regulation.

Article 6

Circumvention and software updates

The manufacturer, importer or authorised representative shall not place on the market products designed to be able to detect they are being tested (e.g. recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided.

The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to update. No performance change shall occur as a result of rejecting the update.

A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.

Article <u>7</u>6 Indicative benchmarks

The indicative benchmarks for best-performing local space heaters available on the market at the time of entry into force of this Regulation are set out in Annex V.

Article <u>8</u>7 **Review**

The Commission shall review this Regulation in the light of technological progress and present the result of that review to the Consultation Forum no later than <u>[OP - please insert date - five years after its entry into force]</u>.

In particular, the review shall assess:

- whether it is appropriate to set stricter ecodesign requirements for energy efficiency and for emissions of nitrogen oxides (NO_x);
- whether the verification tolerances should be modified;

- the validity of the correction factors used for assessing the seasonal space heating energy efficiency of local space heaters;
- the appropriateness of introducing third party certification;
- the appropriateness of fume and odour removal requirements;
- whether it is appropriate to include outdoor heaters in the scope;
- the appropriateness to set additional resource efficiency requirements in accordance with the objectives of the circular economy, including whether more spare parts should be included;
- whether the lifetime of local space heaters has decreased due to the introduction of more advanced control and the appropriateness of introducing requirements of a minimum lifetime and/or spare parts availability and/or upgradeability of controls.

Article 8 Transitional provisions

Until 1 January 2018 Member States may allow the placing on the market and putting into service of local space heaters which are in conformity with the national provisions in force regarding seasonal space heating energy efficiency and nitrogen oxides.

Article 9
Repeal

Regulation (EU) No 2015/1188 is repealed as of [OP – please insert date – entry into force of this Regulation]

Article <u>10</u>9 **Entry into force**

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

This Regulation shall be binding in its entirety and directly applicable in all Member States. Done at Brussels,

For the Commission
The President
Jean-Claude JUNCKER