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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

(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 16(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 Commission has carried out a preparatory 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.
- (4) The environmental aspects of local space heaters that have been identified as significant for the purposes of this Regulation are energy consumption and emissions nitrogen oxides in the use phase.
- (5) The preparatory study shows that further requirements regarding other ecodesign parameters referred to in Part 1 of Annex I to Directive 2009/125/EC are not necessary in the case of local space heaters.
- (6) The scope of this Regulation should include local space heaters designed to use gaseous or liquid fuels and electricity. Local space heaters that have an indirect fluid heating functionality are also within the scope of this Regulation.

¹ OJ L 285, 31.10.2009, p. 10.

- (7) Annual energy consumption related to local space heaters was estimated to have been 1673 PJ (40.0 Mtoe) in the Union in 2010 corresponding to 75.3 Mt of carbon dioxide (CO₂) emissions. Annual energy consumption related to local space heaters is expected to be 1630 PJ (39.0 Mtoe) in 2020 corresponding to 71.6 Mt of CO₂.
- (8) The energy consumption of local space heaters can be further reduced by applying existing, non-proprietary technologies without an increase in the combined costs of purchasing and operating these products.
- (9) Annual emissions of nitrogen oxides (NO_x) from local space heaters were estimated to have been 5.6 kton of sulphur oxides (SO_x) equivalent in 2010. As a result of specific measures adopted by Member States and technological development, these emissions are expected to be 4.9 kton of SO_x equivalent in 2020.
- (10) The emissions of local space heaters could be further reduced by applying existing, non-proprietary technologies without an increase in the combined costs of purchasing and operating those products.
- (11) Together, the ecodesign requirements set out in this Regulation and the Commission Delegated Regulation (EU) **No ... of ...** supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of local space heaters, [*Number of the Regulation and OJ reference in footnote to be inserted before publication in the OJ*] are expected to result by 2020 in estimated annual energy savings of approximately 157 PJ (3.8 Mtoe), with related CO₂ emission reduction of 6.7 Mt.
- (12) The ecodesign requirements set out in this Regulation are expected to result by 2020 in a reduction of equivalent SO_x emissions of 0.6 kton/year.
- (13) This Regulation covers products with different technical characteristics. If the same efficiency requirements were placed on them certain technologies would be banned from the market, which would result in a negative impact for consumers. For this reason ecodesign requirements relative to the potential of each technology create a level playing field in the market.
- (14) Ecodesign requirements should harmonise energy consumption and nitrogen oxides emission requirements for local space heaters throughout the Union, for the internal market to operate better and in order to improve the environmental performance of those products.
- (15) The energy efficiency of local space heaters decreases during real life operation when compared with energy efficiency as tested. In order to approach seasonal space heating energy efficiency to useful energy efficiency manufacturers should be encouraged to make use of controls. For this purpose, a global discount for this divergence between these two values is assumed. This discount can be recovered by choosing a number of control options.
- (16) The ecodesign requirements should not affect the functionality or affordability of local space heaters from the end-user's perspective and should not negatively affect health, safety or the environment.
- (17) The time frame for introducing the ecodesign requirements should be sufficient for the manufacturers to redesign their products subject to this Regulation. The timing should take into account any cost impact for manufacturers, in particular for small and medium-sized enterprises, is taken into account, while ensuring timely achievement of the objectives of this Regulation.

- (18) Product parameters should be measured and calculated using reliable, accurate and reproducible measurement and calculation methods which take into account the recognised state-of-the-art measurement 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.
- (19) In accordance with Article 8 of Directive 2009/125/EC, this Regulation specifies which conformity assessment procedures apply.
- (20) 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.
- (21) To further limit the environmental impact of local space heaters, manufacturers should provide information on disassembly, recycling and disposal.
- (22) 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.
- (23) 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 120 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;
- (b) 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;
- (c) local space heaters that are specified for outdoor use only;
- (d) 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;
- (e) air heating products;
- (f) sauna stoves;
- (g) slave heaters.

² OJ L 316, 14.11.2012, p. 12.

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 space heating device that emits heat by direct heat transfer or 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 an enclosed space in which the product is situated, 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, 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 local space heater or tube local space heater;
7. 'open fronted local space heater' means a local space heater, using gaseous or liquid fuels, of which the fire bed and combustion gases are not sealed from the space in which the product is fitted and which is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
8. 'closed fronted local space heater' means a local space heater, using gaseous or liquid fuels, of which the fire bed and combustion gases are sealed from the space in which the product is fitted and which is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
9. 'electric portable local space heater' means an electric local space heater which is not an electric fixed local space heater, electric storage local space heater, electric underfloor local space heater, electric radiant local space heater, electric visibly glowing local space heater or slave heater;
10. '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;
11. '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;
12. 'electric underfloor local space heater' means an electric local space heater designed to be used while incorporated in the building structure or building finishing;
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 saunas 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 product 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 local space heater' means a local space heater, using gaseous or liquid fuel which 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 and which emits the products of combustion in the space where it is situated;
18. 'tube local space heater' means a local space heater, using gaseous or liquid fuel, which 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 and of which the products of combustion are to be evacuated through a flue duct;
19. 'tube heater system' means a tube 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 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;
23. 'air heating product' means a 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’ (P_{nom}) 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’ (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’ ($P_{max,c}$) 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.

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.
2. Local space heaters shall meet the requirements set out in Annex II from 1 January 2018.
3. Compliance with ecodesign requirements 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

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 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 1 January 2019. 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.

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

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