EUROPEAN
COMMISSION

Brussels, 17.4.2023
C(2023) 2448 final

COMMISSION REGULATION (EU) …/…

of 17.4.2023

laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 1275/2008 and Commission Regulation (EC) No 107/2009

(Text with EEA relevance)

{SEC(2023) 149 final} - {SWD(2023) 86 final} - {SWD(2023) 87 final}

COMMISSION REGULATION (EU) …/…

of 17.4.2023

laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 1275/2008 and Commission Regulation (EC) No 107/2009

(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 products[1], and in particular Article 15(1) thereof,

Whereas:

(1) Under Directive 2009/125/EC the Commission is to set ecodesign requirements for energy-related products which account for significant volumes of sales and trade in the EU, have a significant environmental impact and present significant potential for improvement through design in terms of their environmental impact, without entailing excessive costs.

(2) Communication COM(2016)773[2] sets out the working priorities under the ecodesign and energy labelling framework for 2016-2019. The 2016 ecodesign working plan sets out the energy-related product groups to be considered as priorities for undertaking preparatory studies and possibly adopting implementing measures, and provides for a review of Commission Regulation (EC) No 1275/2008[3].

(3) The energy consumption of electrical and electronic household and office equipment in off mode, standby mode and networked standby is one of the measures listed in the Communication, with an estimated 4 TWh of annual final energy savings by 2030, corresponding to reducing greenhouse gas emissions by 1.36 million tonnes of CO_2 equivalent.

(4) The Commission established ecodesign requirements for off mode and standby mode energy consumption of electrical and electronic household and office equipment in Regulation (EC) No 1275/2008 and added requirements for networked standby energy

[1] OJ L 285, 31.10.2009, p. 10.

[2] Communication from the Commission of 30 November 2016, Ecodesign working plan 2016-2019, COM(2016) 773 final,.

[3] Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment (OJ L 339, 18.12.2008, p. 45).

consumption in Commission Regulation (EU) No 801/2013[4]. Under those Regulations the Commission is to review the ecodesign requirements in the light of technological progress.

(5) The Commission has reviewed Regulation (EC) No 1275/2008 and analysed the technical, environmental and economic aspects of energy consumption of electrical and electronic household and office equipment in off mode, standby mode, and networked standby, as well as real-life user behaviour. The review was carried out in close cooperation with stakeholders and interested parties from the Union and third 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 shows the benefit of continued and improved requirements, adapted to technological progress, regarding the energy consumption of electrical and electronic household and office equipment in off mode, standby mode, and networked standby.

(7) The annual energy consumption in off mode, standby mode and networked standby of products subject to this Regulation in the EU was estimated in the review at 59.4 TWh in 2015, corresponding to 23.8 million tonnes of CO_2 equivalent greenhouse gas emissions. In a business-as-usual scenario, that energy consumption is projected to decrease by 2030, mostly because of the gradual application of ecodesign requirements introduced by Regulation (EU) No 801/2013. However, that decrease is expected to slow down unless the applicable ecodesign requirements are updated.

(8) The application of this Regulation should be limited to products corresponding to household and office equipment intended for use in the domestic environment, which, for information technology equipment, corresponds to class B equipment as set out in the EN 55022:2010 standard.

(9) Operating modes not covered by this Regulation, such as the ACPI S3 mode of computers, should be considered in product-specific implementing measures under Directive 2009/125/EC.

(10) Requirements on off mode, standby mode, and networked standby should be set out in product-specific implementing measures under Directive 2009/125/EC where possible, taking into account the specificities of each product group and the possibility to deliver additional energy and greenhouse gas emission savings.

(11) Products equipped with low voltage external power supplies, which were exempted from the scope of Regulation (EC) No 1275/2008 by Commission Regulation (EC) No 278/2009[5], are rapidly evolving in terms of their functionalities and are being placed on the EU market in increasing numbers. They should therefore be included in scope of this Regulation to ensure further energy savings and provide a level playing field for manufacturers.

---

[4] Commission Regulation (EU) No 801/2013 of 22 August 2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions (OJ L 225, 23.8.2013, p. 1).

[5] Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies (OJ L 93, 7.4.2009, p. 3).

(12) Portable battery-operated products with a recharging circuit that have to be plugged in to recharge should be covered by this regulation, because they depend on energy input from the mains.

(13) Products containing a recharging circuit, where the power is consumed in off mode and standby mode while the battery is not being charged, should be included in the scope of this regulation to ensure energy savings.

(14) Printing equipment that generates printed output from electronic input on paper or other media should be covered by this Regulation to ensure energy savings, while three-dimensional printing equipment should be excluded for the time being from this Regulation.

(15) Simple set-top boxes covered by Regulation (EC) No 107/2009 are no longer significant part of the market and their remaining standby and off mode power consumption should be covered by this Regulation. Regulation (EC) No 107/2009 should therefore be repealed.

(16) Motor-operated adjustable furniture operated by electric means and motor-operated building elements spend extensive amounts of time in off mode, standby mode, and networked standby and so offer significant potential for improved energy consumption while in those modes. Therefore, they should also be included in scope of this Regulation.

(17) Ecodesign requirements should align across the EU, levels of the energy consumption by electrical and electronic household and office equipment in off mode, standby mode, and networked standby. This will contribute to the functioning of the single market. It should also improve the environmental performance of electrical and electronic household and office equipment.

(18) The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation organisations, listed in Annex I to Regulation (EU) No 1025/2012[6].

(19) In accordance with Article 8 of Directive 2009/125/EC, this Regulation should specify the applicable conformity assessment procedures.

(20) In order to improve the effectiveness and credibility of this Regulation and protect consumers, products that automatically alter their performance in test conditions with the objective of reaching a more favourable level for any of the parameters specified in this Regulation should not be allowed to be placed on the market.

(21) In addition to the requirements laid down in this Regulation, benchmarks for best available technologies should be identified to make information on products' environmental performance over their life cycle subject to this Regulation widely available and easily accessible, in accordance with point 2 of Part 3 of Annex I to Directive 2009/125/EC.

---

[6] Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).

(22) A review of this Regulation should assess the appropriateness and effectiveness of its provisions in achieving its goals.

(23) In view of the scope of new and modified ecodesign requirements set out in this Regulation and in order to ensure better clarity, Regulation (EC) No 1275/2008 should be repealed.

(24) 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

This Regulation establishes ecodesign requirements related to off mode, standby mode, and networked standby energy consumption for the placing on the market or putting into service of electrical and electronic household and office equipment.

Article 2
Definitions

For the purposes of this Regulation, the following definitions apply:

(1) 'electrical and electronic household and office equipment' or 'equipment' means any energy-related product listed in Annex II which fulfils the following conditions:

(a) it is dependent on energy input from the mains power source in order to work as intended;

(b) it is designed for use with a nominal voltage rating of 250 V or below;

(2) 'mains' means the electricity supply from the grid of 230 (±10 %) volts of alternating current at 50 Hz;

(3) 'standby mode' means a condition where the equipment is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only one or more of the following functions, which may persist for an indefinite time:

(a) reactivation function;

(b) reactivation function and only an indication of enabled reactivation function;

(c) information or status display;

(4) 'reactivation function' means a function that via a remote switch, a remote control, an internal sensor or timer provides a switch from standby mode to another mode, including active mode, providing additional functions;

(5) 'main function' means a function delivering the main service(s) for which the equipment is designed, tested and marketed, and which corresponds to the intended use of the equipment;

(6) 'information or status display' means a continuous function providing information or indicating the status of the equipment on a display, including clocks. A simple light indicator is not considered a status display;

(7) 'active mode' means a condition in which the equipment is connected to the mains power source and at least one of the main functions has been activated;

(8) ‘off mode’ means a condition in which the equipment is connected to the mains power source and is not providing any function, or it is in a condition providing only:

(a) an indication of off mode condition;

(b) functionalities intended to ensure electromagnetic compatibility under Directive 2014/30/EU[7];

(9) ‘network’ means a communication infrastructure with a topology of links, an architecture, including the physical components, organisational principles, communication procedures and formats (protocols);

(10) ‘networked standby’ means a condition in which the equipment is able to resume a function by way of a remotely initiated trigger from a network connection;

(11) ‘remotely initiated trigger’ means a signal that comes from outside the equipment via a network;

(12) ‘model identifier’ means a code, usually alphanumeric, which distinguishes a specific equipment model from other models with the same trade mark or the same manufacturer’s, importer’s or authorised representative’s name;

(13) ‘equivalent model’ means an equipment model which has the same technical characteristics relevant for the technical information to be provided in accordance with Annex II, but which is placed on the market or put into service by the same manufacturer, importer or authorised representative as another equipment model with a different model identifier;

(14) ‘declared values’ means the values provided by the manufacturer, importer or authorised representative for the stated, calculated or measured technical parameters in accordance with Article 4, for the verification of compliance by the Member State authorities.

Article 3

Ecodesign requirements

The ecodesign requirements are set out in Annex III.

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. For the purposes of conformity assessment under Article 8 of Directive 2009/125/EC, the technical documentation shall contain the information set out in point 3(b) of Annex III to this Regulation and the details and results of the calculations made in accordance with Annex IV to this Regulation.

3. Where the information included in the technical documentation for that particular model has been obtained, alternatively:

[7] Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (OJ L 96, 29.3.2014, p. 79).

(a) from a model that has the same technical characteristics relevant for the technical information to be provided in accordance with Annex III but is produced by a different manufacturer;

(b) by calculation on the basis of design or extrapolation from another model of the same or a different manufacturer, or both,

the technical documentation for a model shall include the details and results of the calculations or extrapolations, the assessment made by the manufacturer to verify the accuracy of the calculations and, where appropriate, the declaration of identity between the models of different manufacturers.

The technical documentation shall include a list of equivalent models referred to in the first and second subparagraph, including the model identifiers.

4. The technical documentation shall include the information listed in Annex III point 3(a)

Article 5

Verification procedure for market surveillance purposes

Member States' authorities shall apply the verification procedure laid down in Annex V to this Regulation where they perform the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC.

Article 6

Circumvention and software updates

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

The energy consumption of the equipment and any of the other declared parameters shall not deteriorate after a software or firmware update where measured with the same test standard originally used for the declaration of conformity, unless the user explicitly consents to this before the update. No performance change shall occur as result of rejecting the update.

A software update shall not have the effect of changing the equipment's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.

Article 7

Indicative benchmarks

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

Article 8

Review

The Commission shall review this Regulation in the light of technological progress and present the results of this review to the Consultation Forum, no later than *[OP please insert the date – 4 years after the entry into force of this Regulation]*.

The review shall in particular assess the appropriateness of:

(a) the requirements for standby, off mode and networked standby;

(b) the requirements for networked standby for HiNA equipment and equipment with HiNA functionality and their distinction with non-HiNA equipment;

(c) including in the scope of this Regulation other relevant product groups, including products used in the services sector;

(d) setting requirements for the battery maintenance mode of battery chargers.

Article 9

Repeal

Regulation (EC) No 1275/2008 is repealed with effect from *[OP please insert the date – two years after the entry into force of this Regulation]*.

Regulation (EC) No 107/2009 is repealed with effect from *[OP please insert the date – the entry of application of this Regulation]*.

Article 10

Entry into force and application

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

It shall apply from *[OP please insert the date – two years after the entry into force of this Regulation]*. However, Article 6 first paragraph shall apply when the Regulation enters into force.

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

Done at Brussels, 17.4.2023

For the Commission
The President
Ursula VON DER LEYEN