

Disclaimer:

This is a working document supporting the revision of COMMISSION REGULATION (EU) 2019/1782 of 1 October 2019 laying down ecodesign requirements for external power supplies. It sets out a draft of the revised legal text to support the stakeholders' consultation process, in particular the Consultation Forum meeting of 24 November 2023.

Please note that while this draft document has been prepared by DG ENER staff and its consultants, it is by no means an official document endorsed by the European Commission.

Working document

supporting the Revision of

COMMISSION REGULATION (EU) 2019/1782

of 1 October 2019

laying down ecodesign requirements for external power supplies pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 278/2009

Draft Main Act

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

of XXX

**laying down ecodesign requirements for external power supplies and wireless chargers
pursuant to Directive 2009/125/EC of the European Parliament and of the Council**

and repealing Commission Regulation (EC) No 2019/1782

(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,

Whereas:

(1)

(2)

(8)

(15) Regulation (EC) No 2019/1782 should therefore be repealed.

(16) 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 the placing on the market or putting into service of external power supplies, battery chargers, charging cradles, wireless chargers, wireless charging pads
2. This Regulation shall not apply to:
 - (a) [voltage converters;]
 - (b) uninterruptible power supplies;;
 - (d) separate control gears for lighting applications, as defined in Commission Regulation (EU) 2019/2020;

¹ OJ L 285, 31.10.2009, p. 10.

- (e) external power supplies for medical devices;
- (g) docking stations for autonomous appliances;
- (h) external power supplies for means of transport for persons or goods;
- (h) external power supplies placed on the market before [two years after date of application] solely as a service part or spare part for replacing an identical external power supply placed on the market before [date of application], under the condition that the service part or spare part, or its packaging, clearly indicate 'External power supply to be used exclusively as spare part for' and the primary load product(s) it is intended to be used with.

Article 2
Definitions

For the purpose of this Regulation the following definitions shall apply:

- (1) 'external power supply' means a device which meets all of the following criteria:
 - (a) it is designed to convert alternating current (AC) power input from the mains power source input into one or more lower voltage direct current (DC) or AC outputs;
 - (b) it is used with one or more separate devices that constitute the primary load;
 - (c) it is contained in a physical enclosure separate from the device or devices that constitute the primary load;
 - (d) it is connected to the device or devices that constitute the primary load with removable or hard-wired electrical connectors, cables or other wirings;
 - (e) its nameplate output power does not exceed 250 W;
 - (f) its nameplate output voltage does not exceed 60 V;
- (2) 'low voltage external power supply' means an external power supply with a nameplate output voltage less than 6 V and a nameplate output current greater than or equal to 550 mA;
- (3) 'multiple output voltage external power supply' means an external power supply able to convert AC power input from the mains power source into more than one simultaneous output at lower DC or AC voltage;
- (4) ['voltage converter' means a device converting the 230 V mains power source input to 110 V power output with characteristics similar to mains power source input characteristics;]
- (5) 'uninterruptible power supply' means a device that automatically provides backup power from storage when the electrical power from the mains power source drops to an unacceptable voltage level;
- (6) 'battery pack' means any set of battery cells or modules that are connected together whether or not encapsulated within an outer casing, to form a complete unit which is not meant to be split up or opened by the end-user;

- (7) 'battery charger' means a device that connects directly to a removable battery or battery pack at its output interface and transfers energy into it
- (8) 'charging cradle' means a device which connects directly by means of conduction to a battery-powered appliance which is placed in it for the purpose of charging.
- (9) 'wireless charging pad' means a device that meets all of the following criteria:
 - (a) it is designed to transmit power not exceeding 250 W by inductive coupling;
 - (b) it does not contain a power supply.
 - (c) it is used with one or more separate devices that constitute the primary load;
 - (d) it is contained in a physical enclosure separate from the device or devices that constitute the primary load;
 - (e) it is able to be used with electrical and electronic equipment in scope of this regulation;
- (10) 'wireless charger' means a wireless charging pad with an external power supply or a power supply integrated into the same unit.
- (11) 'USB Type-A receptacle' means a receptacle as referred to in EN IEC 62680-2-1:2015 - Part 2-1: 'Universal Serial Bus Specification', Revision 2.0, or in EN IEC 62680-1-1:2015 'Universal serial bus interfaces for data and power - Part 1-1: Common components - USB Battery Charging Specification', Revision 1.2
- (12) 'USB Type-C receptacle' means a receptacle as referred to in EN IEC 62680-1-3:2022 'Universal serial bus interfaces for data and power – Part 1-3: Common components – USB Type-C® Cable and Connector Specification'.
- (13) 'adaptive external power supply' means an external power supply that can alter its output voltage during active-mode based on an established digital communication protocol with the end-use application without any user-triggered action.
- (14) 'USB power delivery (USB-PD) power supply' means an adaptive external power supply as referred to in EN IEC 62680-1-2:2022 'Universal serial bus interfaces for data and power – Part 1-2: Common components – USB Power Delivery specification'.
- (15) 'USB power supply' means an external power supply fitted with at least one or more USB Type-C or USB Type-A receptacles.
- (16) ['active power over Ethernet injector' means a device that converts the mains power source input to a lower DC voltage output, has one or more Ethernet input and/or one or more Ethernet output ports, delivers power to one or several devices connected to the Ethernet output port(s), and provides the rated voltage at the output ports(s) only when compatible devices are detected following a standardised process;]
- (17) 'docking station for autonomous appliances' means a device in which a battery-operated appliance that executes tasks requiring the appliance to move without any user intervention places itself for charging.

- (18) 'mains' means the electricity supply from the grid of 230 V ($\pm 10\%$) of alternating current at 50 Hz;
- (19) 'information technology equipment' means any equipment which has a primary function of either entry, storage, display, retrieval, transmission, processing, switching, or control, of data or of telecommunication messages or a combination of these functions and may be equipped with one or more terminal ports typically operated for information transfer;
- (20) 'domestic environment' means an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m of the equipment concerned;
- (21) 'nameplate output power' (P_O) means the maximum output power as specified by the manufacturer;
- (22) 'peak power demand' means the maximum power that can be required by the powered equipment from the external power supply for a very short time, usually in the order of milliseconds. It is significantly higher than the nameplate output power that can be supplied continuously by the external power supply.
- (23) 'no-load condition' means the condition in which the input of an external power supply is connected to the mains power source, but the output is not connected to any primary load;
- (24) 'active mode' means a condition in which the input of an external power supply is connected to the mains power source and the output is connected to a primary load that is in operation;
- (25) 'active mode efficiency' means the ratio of the power supplied by an external power supply in active mode to the input power required by the external power supply.;
- (26) 'low load efficiency' means the active mode efficiency at 10 % of the nameplate output power;
- (27) 'average active efficiency' means the average of the active mode efficiencies at 25 %, 50 %, 75 % and 100 % of the nameplate output power;
- (28) 'equivalent model' means a model which has the same technical characteristics relevant for all aspects of the the technical information to be provided, but which is placed on the market or put into service by the same manufacturer, importer or authorised representative as another model with a different model identifier;
- (29) 'model identifier' means the code, usually alphanumeric, which distinguishes a specific product model from other models with the same trade mark or the same manufacturer's, importer's or authorised representative's name.

Article 3

Ecodesign requirements

The ecodesign requirements set out in Annex I shall apply 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. For the purposes of the conformity assessment pursuant to Article 8 of Directive 2009/125/EC, the technical documentation shall contain the declared values of parameters listed in Annex I, point 4(h).
3. Where the information included in the technical documentation for a particular model has been obtained:
 - (a) from a model that has the same technical characteristics relevant for the technical information to be provided but is produced by a different manufacturer, or
 - (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 shall include the details and the results of such calculation, the assessment undertaken by manufacturers to verify the accuracy of the calculation and, where appropriate, the declaration of identity between the models of different manufacturers.

The technical documentation shall include a list of all equivalent models, including the model identifiers.

Article 5

Verification procedure for market surveillance purposes

Member States' authorities shall apply the verification procedure laid down in Annex III when performing the market surveillance checks referred to in Article 3, point 2 of Directive 2009/125/EC.

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 (for example, by 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 in the technical documentation or included in any 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 the 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 7
Benchmarks

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

Article 8
Review

The Commission shall review this Regulation in the light of technological progress and shall present the results of this review, including, if appropriate, a draft revision proposal, to the Consultation Forum by *[OP please insert date – 5 years after its entry into force]*.

Article 9
Repeal

Regulation (EC) No 2019/1782 is repealed as date.

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 date.

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

Done at Brussels,

For the Commission
The President