

## II

(Acts whose publication is not obligatory)

## COMMISSION

## COMMISSION DECISION

of 11 April 2005

**establishing ecological criteria and the related assessment and verification requirements for the award of the Community eco-label to personal computers**

(notified under document C(2005) 1024)

(Text with EEA relevance)

(2005/341/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 1980/2000 of the European Parliament and of the Council of 17 July 2000 on a revised Community eco-label award scheme <sup>(1)</sup>, and in particular the second subparagraph of Article 6(1) thereof,

After consulting the European Union Eco-Labeling Board,

Whereas:

(1) Under Regulation (EC) No 1980/2000, the Community eco-label may be awarded to a product possessing characteristics which enable it to contribute significantly to improvements in relation to key environmental aspects.

(2) Regulation (EC) No 1980/2000 provides that specific eco-label criteria, drawn up on the basis of the criteria drafted by the European Union Eco-Labeling Board, are to be established according to product groups.

(3) It also provides that the review of eco-label criteria, as well as of the assessment and verification requirements related to those criteria, is to take place in good time before the end of the period of validity of the criteria specified for the product group concerned.

(4) It is appropriate, in order to reflect developments on the market, to revise the ecological criteria established by Commission Decision 2001/686/EC of 22 August 2001 establishing ecological criteria for the award of the Community eco-label to personal computers <sup>(2)</sup>.

(5) Furthermore, in order to specify that servers are excluded, it is necessary to modify the definition of the product group laid down in that Decision.

(6) In the interests of clarity, Decision 2001/686/EC should therefore be replaced.

(7) The revised ecological criteria and the related assessment and verification requirements should be valid for a period of four years.

<sup>(1)</sup> OJ L 237, 21.9.2000, p. 1.

<sup>(2)</sup> OJ L 242, 12.9.2001, p. 4.

(8) It is appropriate to allow a transitional period of not more than 12 months for producers whose products have been awarded the eco-label before the date of notification of this Decision or who have applied for such an award before that date, so that they have sufficient time to adapt their products to comply with the revised criteria and requirements.

(9) The measures provided for in this Decision are in accordance with the opinion of the Committee instituted by Article 17 of Regulation (EC) No 1980/2000,

HAS ADOPTED THIS DECISION:

*Article 1*

The product group 'personal computers' shall comprise computers designed for use in a fixed location, such as on a desk, and consisting of a system unit and display, whether or not combined in a single case, as well as a keyboard.

That product group shall also cover system units, keyboards and displays designed for use with personal computers.

The product group shall not cover servers.

*Article 2*

In order to be awarded the Community eco-label for personal computers, under Regulation (EC) No 1980/2000, an appliance must fall within the product group 'personal computers' and must comply with the ecological criteria set out in the Annex to this Decision.

*Article 3*

The ecological criteria for the product group 'personal computers', as well as the related assessment and verification requirements, shall be valid until 30 April 2009.

*Article 4*

For administrative purposes, the code number assigned to the product group 'personal computers' shall be '013'.

*Article 5*

Decision 2001/686/EC is repealed.

*Article 6*

Eco-labels awarded before the date of notification of this Decision in respect of products falling within the product group 'personal computers' may continue to be used until 31 March 2006.

Where applications have been submitted before the date of notification of this Decision for award of the eco-label in respect of products falling within the product group 'personal computers', those products may be awarded the eco-label under the conditions laid down in Decision 2001/686/EC. In such cases the eco-label may be used until 31 March 2006.

*Article 7*

This Decision is addressed to the Member States.

Done at Brussels, 11 April 2005.

*For the Commission*

Stavros DIMAS

*Member of the Commission*

## ANNEX

## FRAMEWORK

In order to qualify for the eco-label, a personal computer, a system unit, a display or a keyboard (hereinafter referred to as the product) must fall within the product group as defined in Article 1, and must comply with the following criteria in this Annex (each individual part may apply for the eco-label except the mouse):

	System Unit	Display	Keyboard	Personal computer
Energy savings: system unit	X			X
Energy savings: monitor		X		X
Life-time extension: system unit	X			X
Life-time extension: monitor		X		X
Mercury content of liquid crystal display (LCD) monitor		X (where applicable)		X (where applicable)
Noise	X			X
Electromagnetic emissions		X		X
Take-back and recycling	X	X (as applicable)	X (as applicable)	X (as applicable)
User instructions	X	X	X (as applicable)	X (as applicable)

Tests shall be carried out on application as indicated in the criteria, and shall be performed by laboratories that meet the general requirements expressed in standard EN ISO 17025. Where appropriate, other test methods may be used if their equivalence is accepted by the competent body assessing the application. Where no tests are mentioned, or are mentioned as being for use in verification or monitoring, competent bodies should rely as appropriate on declarations and documentation provided by the applicant and/or independent verifications.

The competent bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS or ISO 14001, when assessing applications and monitoring compliance with the criteria in this Annex. (Note: it is not required to implement such management schemes.)

## ECOLOGICAL CRITERIA

### 1. Energy savings

#### System unit

- (a) The computer system unit shall have an easily accessible on-off switch.
- (b) The computer system unit shall meet the Energy Star <sup>(1)</sup> configuration requirements that enable energy efficiency modes.

*The applicant shall provide a declaration to the competent body certifying that the personal computer system unit satisfies the configuration requirements (Guidelines) outlined in Energy Star.*

- (c) The computer shall support the ACPI <sup>(2)</sup> S3 sleep state (suspend to RAM) to allow minimum energy consumptions of no more than 4 watts. The computer shall be able to wake up from this mode in response to a command from any of the following:
  - modem,
  - network connection,
  - keyboard or mouse action.

The default mode-change time from operation to the ACPI S3 sleep state shall be no more than 30 minutes of inactivity. The manufacturer must enable this feature, but the user may disable it.

The applicant shall provide the competent body with a report certifying that the level of power consumption in the ACPI S3 mode has been measured using the procedure in the current Energy Star computer memorandum of understanding. The report shall state the measured power consumption in this mode.

- (d) The off-mode power consumption shall be no more than 2 watts. In this context, the off-mode is the state initiated through the command to shut down the computer.

The applicant shall provide the competent body with a report certifying that the level of power consumption in the off mode has been measured using the procedure in the current Energy Star computer memorandum of understanding. The report shall state the measured power consumption in this mode.

#### Monitor

- (a) The monitor shall have an easily accessible on-off switch.
- (b) The monitor shall have a sleep mode <sup>(3)</sup> power consumption of no more than 2 watts. The default mode-change time from operation to the sleep state shall be no more than 30 minutes of inactivity. The manufacturer must enable this feature, but the user may disable it.
- (c) The monitor shall have an off-mode <sup>(4)</sup> power consumption of no more than 1 watt. In this context, the off-mode is the state initiated through the command to shut down the monitor.

---

<sup>(1)</sup> As defined by the United States Environmental Protection Agency and are in operation as at September 2004. See web site: [http://www.energystar.gov/index.cfm?c=computers.pr\\_crit\\_computers](http://www.energystar.gov/index.cfm?c=computers.pr_crit_computers).

<sup>(2)</sup> Advanced configuration and power interface.

<sup>(3)</sup> As defined for monitors in Energy Star Version 4. See web site: [http://www.energystar.gov/index.cfm?c=computers.pr\\_crit\\_computers](http://www.energystar.gov/index.cfm?c=computers.pr_crit_computers)

<sup>(4)</sup> *Ibidem*.

(d) Monitors shall not exceed the Energy Star Version 4 requirements for Tier 2, maximum active power consumption. Monitors must comply with the appropriate formula given below:

i) if  $X < 1$  then  $Y = 23$

ii) if  $X \geq 1$  then  $Y = 28X$

(where X is the number of mega-pixels and Y the energy consumption in watts)

*The applicant shall provide the competent body with a report certifying that the levels of power consumption in off-, sleep-, and on-modes have been measured using the procedure in the Energy Star Programme Requirements for Computer Monitors (Version 4.0). The report shall state the measured power consumptions in all three modes.*

## 2. Lifetime extension

- (a) The computer shall be designed so that the memory is readily accessible and can be changed.
- (b) The computer shall be designed so that the hard disk, and if available the CD drive and/or DVD drive, can be changed.
- (c) The computer shall be designed so that graphic cards are easily accessible and can be changed.

*The applicant shall declare the compliance of the product with these requirements to the competent body.*

## 3. Mercury content of a liquid crystal display (LCD) monitor

The background lighting of the LCD monitor shall not contain more than 3 mg of mercury on average per lamp.

*The applicant shall declare the compliance of the product with these requirements to the competent body.*

## 4. Noise

The 'Declared A-weighted Sound Power Level' (re 1 pW) of the personal computer system unit, according to paragraph 3.2.5 of ISO 9296, shall not exceed:

- 4,0 B(A) in the idle operating mode (equivalent to 40 dB(A))
- 4,5 B(A) when accessing a hard-disk drive (equivalent to 45 dB(A)).

*The applicant shall provide the competent body with a report, prepared by an independent test laboratory accredited to ISO 17025, certifying that the levels of noise emissions have been measured in accordance with ISO 7779 and declared in accordance with ISO 9296. The report shall state the measured levels of noise emissions in both the idle operating mode and when accessing a disk drive, which shall be declared in accordance with paragraph 3.2.5 of ISO 9296.*

## 5. Electromagnetic emissions

The personal computer monitor shall meet the requirements set out in EN50279, Category A.

*The applicant shall provide the competent body with a report showing that the monitor's emissions are compliant with the requirement.*

## 6. Take-back, recycling and hazardous substances

The manufacturer shall offer free of charge the take-back for refurbishment or recycling of the product, and for any component being replaced, except for items contaminated by users (e.g. in medical or nuclear applications). In addition, the product shall meet the following criteria:

- (a) one qualified person alone shall be able to dismantle it;
- (b) the manufacturer shall check the disassembly of the product and provide a disassembly report that shall be made available to third parties on request. Amongst other items, the report shall confirm that:
  - connections are easy to find and accessible,
  - connections are as standardised as possible,
  - connections are accessible with commonly available tools,
  - the background lighting lamps of LCD monitors are easily separable;
- (c) hazardous materials shall be separable;
- (d) 90 % (by weight) of the plastic and metal materials in the housing and chassis shall be technically recyclable;
- (e) if labels are required, they shall be easily separable or inherent;
- (f) plastic parts shall:
  - have no lead or cadmium intentionally added,
  - be of one polymer or compatible polymers, except for the cover, which shall consist of no more than two types of polymers which are separable and uncoated with, for example, paint,
  - contain no metal inlays that cannot be separated by a single person using simple tools;
- (g) plastic parts shall not contain poly-brominated biphenyl (PBB) or poly-brominated diphenyl ether (PBDE) flame retardants as listed in Article 4 to Directive 2002/95/EC of the European Parliament and of the Council <sup>(5)</sup>. This requirement shall take account of subsequent adaptations and amendments made to that Directive regarding the use of Deca-BDE.

Plastic parts shall not contain chloroparaffin flame retardants with chain length 10-17 carbon atoms and chlorine content greater than 50% by weight (CAS No 85535-84-8 and CAS No 85535-85-9).

*The applicant shall declare compliance with this requirement to the competent body;*

- (h) plastic parts heavier than 25 grams shall not contain flame retardant substances or preparations that are assigned at the time of applying for the ecolabel any of the risk phrases:

Dangerous for health;

R45 (may cause cancer)

R46 (may cause heritable genetic damage)

---

<sup>(5)</sup> OJ L 37, 13.2.2003, p. 19.

R60 (may impair fertility)

R61 (may cause harm to the unborn child)

Dangerous for the environment;

R50 (very toxic to aquatic organisms)

R50/R53 (very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment)

R51/R53 (toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment)

as defined in Council Directive 67/548/EEC <sup>(6)</sup>;

- (i) plastic parts shall have a permanent marking identifying the material, in conformity with ISO 11469: 2000. Excluded from this criterion are extruded plastic materials and the light-guide of flat panel displays;
- (j) batteries shall not contain more than 0,0001 % of mercury, 0,001 % of cadmium or 0,01 % of lead by weight of the battery.

*The applicant shall declare the compliance of the product with these requirements and shall provide to the competent body assessing the application a copy of the disassembly report.*

*With reference to criterion 6(h), the flame retardants that are used, if any, shall not have been assigned any of the above risk phrases nor shall they be named in Annex 1 to Directive 67/548/EEC or its subsequent amendments regarding the classification, packaging and labelling of dangerous substances. This requirement does not apply to flame retardants that on application change their chemical nature to no longer warrant classification under any of the R-phrases listed above, and where less than 0,1 % of the flame retardant in the treated part remains in the form as before application. Any flame retardants that are used in plastic parts >25g must be specified in the application documentation by giving their name and CAS number.*

## 7. User instructions

The product shall be sold with relevant user information, which provides advice on its proper environmental use and, in particular:

- (a) recommendations for the use of the power management features, including information that disabling these features can lead to higher consumption of energy and thus can increase the running costs;
- (b) information that the energy drawn from the mains can be reduced to zero if the computer is unplugged or if the wall socket is switched off;
- (c) information on the availability of spare parts. When it is appropriate for the consumer to upgrade or exchange components, information on the proper procedures shall be given;
- (d) information about the fact that the product has been designed to enable proper reuse of parts and recycling and should not be thrown away;
- (e) advice on how the consumer can make use of the manufacturer's take-back offer;
- (f) information as to how to make appropriate use of WLAN cards thus minimizing security risks;

---

<sup>(6)</sup> OJ L 196, 16.8.1967, p. 1.

- (g) information that the product has been awarded the Community eco-label with a brief explanation as to what this means together with an indication that more information on the eco-label can be found at the website address (<http://europa.eu.int/ecolabel>).

*The applicant shall declare the compliance of the product with these requirements, and shall provide a copy of the instruction manual to the competent body assessing the application.*

#### 8. Packaging

Packaging shall meet the following requirements:

- (a) all packaging components shall be easily separable by hand into individual materials to facilitate recycling.
- (b) where used, cardboard packaging shall consist of at least 80 % recycled material.

Assessment and verification: The applicant shall declare compliance with the requirement and provide a sample(s) of the packaging to the awarding competent body as part of the application.

#### 9. Information appearing on the eco-label

Box 2 of the eco-label shall include the following text:

- reduced energy consumption,
- designed to facilitate recycling,
- reduced noise level.

*The applicant shall declare the compliance of the product with this requirement, and shall provide a copy of the eco-label as it will appear on the packaging and/or product and/or accompanying documentation to the competent body.*

---