



Brussels, **XXX**
[...] (2012) **XXX** draft

COMMISSION DECISION

of **XXX**

**establishing the ecological criteria for the award of the EU Ecolabel for imaging
equipment devices**

(Text with EEA relevance)

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COMMISSION DECISION

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establishing the ecological criteria for the award of the EU Ecolabel for imaging equipment devices

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel¹, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

- (1) Under Regulation (EC) No 66/2010, the EU Ecolabel may be awarded to products which have a reduced environmental impact during their entire life cycle.
- (2) Regulation (EC) No 66/2010 provides that specific EU Ecolabel criteria are to be established according to product groups.
- (3) The criteria aim, in particular, at promoting products that have a reduced environmental impact along their life cycle, which performance is resource efficient and energy efficient, and which contain a limited amount of hazardous substances. Since the main environmental impacts along the life cycle are related to the use of paper, energy consumption and the use of hazardous substances the products with improved performance on these aspects shall be promoted and therefore it is appropriate to establish EU Ecolabel criteria for this product group.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 16 of Regulation (EC) No 66/2010,

¹ OJ L 27, 30.1.2010, p. 1.

HAS ADOPTED THIS DECISION:

Article 1

The product group “imaging equipment” shall comprise products which are used in the office (private or professional) and their function is:

- i) to produce a printed image (paper document or photo) through a marking process either from a digital image (provided by a network/card interface) or from a hardcopy through a scanning/copying process or/and
- ii) to produce a digital image from a hard copy through a scanning/copying process.

This decision applies to products which are marketed as printers, copiers and multifunctional devices (MFD). Other type of imaging equipment devices i.e. fax machines, digital duplicators, mailing machines, scanners are excluded from the scope of this decision.

Large products which are not typically used in household and office equipment with the following technical specifications:

- Standard black and white format products with maximum speed over 66 A4 images per minute
- Standard Colour format products with maximum speed over 51 A4 images per minute
- Designed for A2 media and larger
- Products marketed as plotters

Speed to be rounded to the nearest integer as prescribed in the ENERGY STAR agreement.

are also excluded from the scope of this decision.

Article 2

For the purpose of this Decision, the following definitions shall apply:

- (1) A "printer" is a commercially available imaging product that serves as a hard copy output device, and is capable of receiving information from single-user or networked computers, or other input devices (e.g. digital cameras). The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as printers, including printers that can be upgraded into MFDs while in use.

- (2) A "copier" is a commercially available imaging product which sole function is the production of hard copy duplicates from graphic hard copy originals. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as copiers or upgradeable digital copiers.
- (3) A "multifunction device (MFD)" is a commercially available imaging product which is a physically integrated device or a combination of functionally integrated components that performs two or more of the core functions of copying, printing, scanning, or faxing. The copy functionality, as addressed in this definition, is considered to be distinct from single sheet convenience copying offered by fax machines. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as MFDs or multifunction products (MFPs).
- (4) "Packaging" means all products made of any materials of any nature used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.
- (5) "Recycling" means any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and reprocessing into materials that are to be used as fuels or for backfilling operations.
- (6) 'Re-use' means any operation by which products or components that are not waste are used again for the same purpose for which they were conceived
- (7) "Re-used content" of a product means the content of a product which has undergone a re-use operation
- (8) "Cartridge anti re-utilisation devices/practises, ARUD" are both devices fitted on the cartridge as well software/hardware that is necessary for the cartridge functioning that result to hamper the direct cartridge reuse. Examples of ARUD are (clever) chips that restrict the cartridge reuse to single models, embedded software restricting the cartridge reuse, welding, glue, blind screws or conjoined part
- (9) "Spare parts" are those parts of the product which typically have the potential to fail during the normal use of the product.
- (10) "Consumables" means articles that are marketed also separately from the main Imaging devise and that the user needs to purchase along the product use phase and its operation. Typical consumables are ink and/or toner cartridges. The supply of electricity is not covered by the scope of consumable here.
- (11) 'Networked equipment' means equipment that has the ability to connect to a network and has one or more network ports;
- (12) 'Networked equipment with high network availability' (HiNA equipment) means an equipment with one or more of the following functionalities but no other, as the main function(s): router, network switch, hub, modem, wireless network access point (not being a terminal), VoIP telephone, video phone;

- (13) 'Networked equipment with high network availability functionality' (equipment with HiNA functionality) means equipment with the functionality of a router, network switch, hub, wireless network access point (not being a terminal) or combination thereof included, but not being HiNA equipment;

Added: (14) "Large format printer" is a printer that can handle very large drawing or photo files that require an embedded computing capability".

Article 3

The criteria for awarding the EU Ecolabel under Regulation (EC) No 66/2010, for a product falling within the product group "imaging equipment devices" defined in Article 1 of this Decision as well as the related assessment and verification requirements are set out in the Annex to this Decision.

Article 4

The criteria and the related assessment requirements set out in the Annex, shall be valid for four years from [insert date - the date of adoption of this Decision].

Article 5

For administrative purposes, the code number assigned to the product group "imaging equipment devices" shall be "x".

Article 6

This Decision is addressed to the Member States.

Done at Brussels,

For the Commission
Janez POTOČNIK
Member of the Commission

ANNEX

EU ECOLABEL CRITERIA AND ASSESSMENT AND VERIFICATION REQUIREMENTS

Criteria for awarding the EU Ecolabel to imaging equipment devices:

PAPER MANAGEMENT

Criterion 1. Availability of N-up printing

Criterion 2. Duplex printing requirement

Criterion 3. Use of recycled paper

ENERGY EFFICIENCY

Criterion 4. Energy efficiency

INDOOR AIR EMISSIONS

Criterion 5. Restriction on indoor emissions

NOISE EMISSIONS

Criterion 6. Noise emissions

SUBSTANCES AND MIXTURES IN IMAGING EQUIPMENT

Criterion 7. Excluded or limited substances and mixtures

(a) Hazardous substances and mixtures

(b) Substances listed in accordance with article 59(1) of Regulation (EC) No 1907/2006

Criterion 8. Mercury in light sources

REUSE, RECYCLING AND END-OF-LIFE MANAGEMENT

Criterion 9. Design for disassembly

Criterion 10. Recycled and reused content

INK AND TONER CONSUMABLES

Criterion 11. Design for recycling and/or reuse of toner and/or ink cartridges

Criterion 12. Toner and/or ink cartridge take-back requirement

Criterion 13. Substances in ink and toners

OTHER CRITERIA

Criterion 14. Requirements on packaging

Criterion 15. Warranty, guarantee of repairs and supply of spare parts

Criterion 16. User Information

Criterion 17. Information appearing on the EU Ecolabel

Criterion 18. Social accountability

The specific assessment and verification requirements are indicated within each criterion.

All imaging equipment applying for EU Ecolabel must fulfil the criteria. Where the applicant is required to provide declarations, documentation, analyses, test reports, or other evidence to show compliance with the criteria, it is understood that these may originate from the applicant and/or his supplier(s) and/or their supplier(s), as appropriate.

Where appropriate, test methods other than those indicated for each criterion may be used if their equivalence is accepted by the competent body assessing the application.

Where possible, the testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

Where appropriate, competent bodies may require supporting documentation and may carry out independent verifications.

PAPER MANAGEMENT

Criterion 1. Availability of N-up printing

Imaging equipment devices shall offer as a standard feature the capability to print and/or copy 2 or more pages of a document on one sheet of paper when the product is managed by original software provided by the manufacturer (printer driver).

Assessment and verification: the applicant shall provide to the awarding competent body a declaration of compliance with these requirements including explanation as to how users can access N-up printing facilities.

Criterion 2. Duplex printing requirement

Imaging equipment devices with a maximum operating speed for monochrome printing/copying of 19 ipm (images per minute) or more for A4 size paper shall be equipped with an automatic double-side print/copy unit (a duplex-unit).

The duplex printing and/or copying function shall be set as default in the original software provided by the manufacturer. For the devices receiving a printing order from a computer, a message should be formulated by the manufacturer and displayed on the computer screen of the user (e.g. in the print dialogue) when the default setting is changed into one-side printing. The content of this message should highlight the fact that: "This mode of printing will contribute to higher environmental impacts than double-side printing".

Assessment and verification: the applicant shall provide to the awarding competent body a declaration of compliance with these requirements including declaration of the speed for monochrome printing and an explanation as to which message and where and when such message for devices receiving a printing order from computer, is displayed to users.

Criterion 3. Use of recycled paper

Imaging equipment devices must be capable of processing recycled paper made of 100% post-consumer paper that meets the requirements of EN 12281:2002. The applicant shall be free to recommend certain types of recycled paper.

Assessment and verification: the applicant shall provide to the awarding competent body a declaration of compliance with these requirements.

Criterion 4. Energy efficiency

- a) The energy consumption of the product shall fulfil the energy efficiency requirements of Energy Star v.2.0 criteria for imaging equipment.

Deleted:

Remanufactured products shall meet the energy efficiency requirements of the ENERGY STAR specifications for imaging equipment at the time of sale of original products.

- b) Power consumption in a condition providing 'networked standby':

The power consumption of HiNA equipment or equipment with HiNA functionality, in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 3,00 W.

The power consumption of other networked equipment in a condition providing networked standby into which the equipment is switched by the power management function, or a similar function, shall not exceed 1,50 W.

The power consumption limits as stipulated above shall not apply to large format printing equipment.

Networked equipment that has one or more standby mode(s) shall comply with the requirements for these standby mode(s) when all network ports are disconnected or, for wireless network ports, the network ports are deactivated.

The power consumption limits as stipulated above shall not apply to printing equipment with a power supply of a rated power larger than 750 W.

Assessment and verification:

Part a) The applicant shall provide to the competent bodies a declaration of compliance with the energy efficiency requirements as set in Energy Star v2.0 and a test report with the results of the energy efficiency test according to the methods specified in Energy Star. Energy Star v.2.0 labelled products are deemed to comply with the requirements of this criterion and the applicant shall submit a copy of the energy label award.

Part b) The applicant shall provide to the competent bodies a declaration that it meets the criteria including a test report (according to the relevant ISO standard when available) stating the consumption in the network standby mode.

INDOOR AIR EMISSIONS

Criterion 5. Restriction on indoor emissions

In the use phase the product shall not emit the below listed pollutants in amounts higher than the maximum emission rates given below:

Emission rate in mg/h,			
		Monochrome printing	Colour Printing
Ready mode	TVOC**	1 (Desktop products)	1 (Desktop products)
		2 (Floor-mounted equipment (Volume >250 l))	2 (Floor-mounted equipment, Volume > 250 l)
Printing mode (Sum of Ready + Printing mode)	TVOC**	10	18
	Benzene	< 0,05	< 0,05
	Styrene	1,0	1,8
	Not identified single VOC substances**	0,9	0,9
	Ozone *	1,5	3,0
	Dust*	4,0	4,0

*only for EP-printing

** the list of the "identified VOCs" in the measuring method is provided in draft of 15.05.2012 of Blue Angel Ral UZ 171 Annex S-M chapter 4.5

All the above emission rates must be measured in accordance with the requirements described in draft of 15.05.2012 of Blue Angel RAL UZ 171.

Assessment and verification: the applicant shall submit to the competent body a test report containing the results of the emission test according to the methods specified in Blue Angel RAL UZ 171. The testing laboratory performing the test must be accredited according to EN ISO/IEC 1702. The applicant shall attach a copy of the valid accreditation certificate of the test laboratory.

NOISE EMISSIONS

Criterion 6. Noise emissions

The noise emission is rated by the declared A-weighted sound power level depending on printing speed per minute given in dB with one decimal place accuracy (or in B with two decimal places accuracy).

The declared A-weighted sound power level L_{WAd} of the product shall not exceed the following limits while operating:

- a) For monochrome printing– the A-weighted sound power level limit value $L_{WAd,lim,bw}$ shall be determined depending on the operating speed S_{bw} given with one decimal place accuracy according to the following formula:

$$L_{WAd,lim,bw} = 37 + 20 \cdot \log(S_{bw} + 8) \text{ dB}$$

$L_{WAd,lim,bw}$ = A-weighted sound power level limit for monochrome printouts given in dB

- b) For colour printing – the A-weighted sound power level limit value $L_{WAd,lim,co}$ shall be determined depending on the operating speed S_{co} given with one decimal place accuracy according to the following formula:

$$L_{WAd,lim,co} = 38 + 20 \cdot \log(S_{co} + 8) \text{ dB}$$

$L_{WAd,lim,co}$ = A-weighted sound power level limit in dB for colour printouts

- c) In addition, for both monochrome and colour printing – the A-weighted sound power level limit value $L_{WAd,lim,co}$ and $L_{WAd,lim,bw}$ shall not exceed an upper limit of 75.0 dB:

$$L_{WAd,lim,bw} < 75.0 \text{ dB}$$

$$L_{WAd,lim,co} < 75.0 \text{ dB}$$

For serial electrophotographic colour devices with $S_{co} \leq 0,5 S_{bw}$ the sound power level shall be determined and indicated. For assessment purposes compliance with $L_{WAd,lim,bw}$ for monochrome printouts with printing speed S_{bw} shall be considered exclusively.

Assessment and verification: the applicant shall demonstrate compliance with the criteria requirements and submit a test report containing the results of the A-weighted sound power according to the methods specified in ISO 7779 3rd edition (2010) (corresponds to ECMA-74:2010). The testing laboratory performing the test must be accredited according to EN ISO/IEC 17025 as well as according to ISO 7779 for acoustic measurements. The applicant shall attach a copy of the valid accreditation certificate of the test laboratory.

SUBSTANCES AND MIXTURES IN IMAGING EQUIPMENT

Criterion 7. Excluded or limited substances and mixtures

(a) Hazardous substances and mixtures

According to the Article 6(6) of Regulation (EC) No 66/2010 on the EU Ecolabel, the product or any article² of it shall not contain substances meeting criteria for classification with the hazard statements or risk phrases specified below in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EC nor shall it contain substances referred to in Article 57 of Regulation (EC) No 1907/2006. The risk phrases below generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures apply.

List of hazard statements:

Hazard Statement ¹	Risk Phrase ²
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R23/26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49

² In Regulation (EC) No 1907/2006 (REACH) Article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition;

H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60/61/60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60/63
H360Df May damage the unborn child. Suspected of damaging fertility	R61/62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.	R62-63
H362 May cause harm to breast fed children	R64
H370 Causes damage to organs	R39/23/24/25/26/27/28
H371 May cause damage to organs	R68/20/21/22
H372 Causes damage to organs through prolonged or repeated exposure	R48/25/24/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20/21/22
H400 Very toxic to aquatic life	R50
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41

¹ Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

² Directive 67/548/EEC with adjustment to REACH according to Directive 2006/121/EC and Directive 1999/45/EC as amended

Substances or mixtures which change their properties through processing (e.g., become no longer bioavailable, or undergo chemical modification in a way that removes the previously identified hazard) are exempted) from the above requirement.

Concentration limits for substances or mixtures which may be or have been assigned the hazard statements or risk phrase listed above, meeting the criteria for classification in the

hazard classes or categories, and for substances meeting the criteria of Article 57 (a), (b) or (c) of Regulation (EC) No 1907/2006, shall not exceed the generic or specific concentration limits determined in accordance with the Article 10 of Regulation (EC) No 1272/2008. Where specific concentration limits are determined they shall prevail over the generic ones.

Concentration limits for substances meeting criteria of Article 57 (d), (e) or (f) of Regulation (EC) No 1907/2006 shall not exceed 0,1% weight by weight.

The final product must not be labelled according to the hazard statements above.

The following substances/components are specifically derogated from this requirement:

Articles with weight below 25g	All hazard statements and risk phrases
Homogeneous parts of complex articles with weight below 25 g	All hazard statements and risk phrases
Inks and toners and cartridges	All hazard statements and risk phrases
Ni in stainless steel of all types other than of high-sulphur grades (S > 0.1%)	
2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol CAS 3147-75-9	
Triphenylphosphine CAS 603-35-0	
(1-methylethylidene)di-4,1-phenylene tetraphenyl diphosphate CAS 5945-33-5 and CAS 181028-79-5 when it is used as pure and not with technical quality of equal or less than 90 % BDP	

In addition, materials with recycled and/or reused content are also derogated from the above requirements but shall comply with the following:

Plastic parts heavier than 25g do not contain substances or preparations that are:

- carcinogenic according to Category Carc.Cat.1 or Carc.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC³
- mutagenic according to Category Mut.Cat.1 or Mut.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC
- toxic to reproduction according to Category Repr.Cat.1 or Repr.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC
- persistent, bio-accumulative and toxic (PBTs) or very persistent or very bioaccumulative (vPvBs) according to the criteria in Appendix XIII of the REACH
- added to the “list of candidates” according to REACH Article 59, para. 1.

Exempted are process-related technically unavoidable impurities and admixtures below 0.1% by weight of the respective materials.

³ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, Annex VI harmonised classification and labelling – tables, table 3.2: the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC.

Assessment and verification: For each article or any homogenous part of the applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by their suppliers, on the non-classification of the substances or materials with any of the hazard classes associated to the hazard statements referred to in the above list in accordance with Regulation (EC) 1272/2008, as far as this can be determined, as a minimum, from the information meeting the requirements listed in Annex VII of Regulation (EC) 1907/2006. This declaration shall be supported by summarized information on the relevant characteristics associated to the hazard statements referred to in the above list, to the level of detail specified in section 10, 11 and 12 of Annex II of Regulation (EC) 1907/2006 (Requirements for the Compilation of Safety Data Sheets).

Information on intrinsic properties of substances may be generated by means other than tests, for instance through the use of alternative methods such as in vitro methods, by quantitative structure activity models or by the use of grouping or read-across in accordance with Annex XI of Regulation (EC) 1907/2006. The sharing of relevant data is strongly encouraged.

The information provided shall relate to the forms or physical states of the substance or mixtures as used in the final product.

For substances listed in Annexes IV and V of REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation 1907/2006 REACH, a declaration to this effect will suffice to comply with the requirements set out above.

(b) Substances listed in accordance with article 59(1) of Regulation (EC) No 1907/2006

No derogation from the exclusion in Article 6(6) of the Regulation (EC) No 66/2010 shall be given concerning substances identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006, present in mixtures, in an article or in any homogeneous part of a complex article in concentrations > 0.1%. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply in cases where the concentration is lower than 0.1%.

Assessment and verification: The list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found here:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

Reference to the list shall be made on the date of application. The applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by the material suppliers and copies of relevant Safety Data Sheets for substances or mixtures in accordance with Annex II to Regulation (EC) No 1907/2006 for substances or mixtures. Concentration limits shall be specified in the Safety Data Sheets in accordance with Article 31 of Regulation (EC) No 1907/2006 for substances and mixtures.

Criterion 8. Mercury in light sources

Mercury or its compounds shall not intentionally be added to light sources used in imaging equipment.

Assessment and verification: the applicant shall declare to the competent body that the light sources of the product do not contain more than 0.1 mg of mercury or its compounds per lamp. The applicant shall also provide a brief description of the lighting system used.

REUSE, RECYCLING AND END-OF-LIFE MANAGEMENT

Deleted:

Former: Criterion 9. Plastic parts

Plastic parts of the product shall not contain intentionally added brominated aromatic flame retardants in concentration over 0.1%.

This requirement refers to plastic parts used in imaging equipment covering external plastic casings and cables, and in the recommended for use OEM cartridges. Plastic components used in electronic parts, and/or located close to heating and fuser elements for which highest flame resistance (class 5V according to IEC 60950 3rd edition) is required as well plastic parts which are reused⁴ are exempted.

This restriction is not applicable for product articles of weight lower than 25 g and for homogeneous parts of complex articles of weight lower than 25 g.

Assessment and verification: the applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as declarations of compliance signed by the suppliers of substances and copies of relevant Safety Data Sheets. A declaration of compliance signed by the plastic suppliers and copies of relevant safety data sheets about materials and substances shall also be provided to the awarding competent body. The applicant shall provide confidentially information on the intentionally added substances used as flame retardants.

Criterion 9. Design for disassembly

The manufacturer shall demonstrate that the imaging device can be easily dismantled by professionally trained personnel using the tools usually available to them, for the purpose of repairs and replacements of worn-out parts, upgrading older or obsolete parts, and separating parts and materials, ultimately for recycling or reuse.

Assessment and verification: the applicant shall submit an exploded diagram of the product. The diagram and accompanying material shall: label the main components; provide

⁴ Reused articles (or parts of it) are defined the ones which have been used in the past as part of imaging equipment and are now used again in a new manufactured product.

dismantling instructions and associated time for dismantling; identifying any hazardous substances in components. It can be in written or in digital format.

Criterion 10. Recycled and reused content

The product plastic parts shall have in total a recycled and/or reused content of not less than 10 % by mass.

Deleted: Small plastic parts weighting less than 25 g are exempted

The total post-consumer recycled content and the reused content of the plastic parts shall be declared in the user information.

The following components are excluded from the calculation of the percentage: printed circuit boards, labels, connectors, electronic components, optical components, electrostatic discharge (ESD) components, and electromagnetic interference (EMI) components.

Assessment and verification: the applicant shall provide the competent body with a declaration and any associated documents, as necessary, stating the percentage of recycled content and/or reused content of the plastic parts of the product. The applicant shall provide a sample of the user information to the awarding competent body.

INK AND TONER CONSUMABLES

Criterion 11. Design for recycling and/or reuse of toner and/or ink cartridges

The products must accept remanufactured toner and/or ink cartridges.

The products must be designed by taking reuse of toner and/or ink cartridge into consideration.

The design of the cartridge recommended by the manufacturer (OEM) for use in the product should promote its durability. Devices and practices that would prevent its re-utilisation (i.e. anti re-utilisation devices/ practises) should not be present or applied. This requirement is not applicable for imaging equipment that is not using cartridges.

Assessment and verification: the applicant shall declare compliance with the criterion. The applicant shall provide to the competent body a copy of the user information. If requested by the competent body the applicant shall submit instructions on how the cartridge shall be remanufactured and/or refilled. The competent body may ask the applicant to provide a proof (i.e. one sample) that cartridges can be remanufactured or refilled following the provided instructions.

Criterion 12. Toner and/or ink cartridge take-back requirement

The applicant shall offer a take-back system for the return of toner/ink modules and toner/ink containers supplied or recommended by the applicant for use in the product back to the

applicant, in order to channel such modules and containers to reuse and/or material recycling with preference given to reuse. This also applies to residual toner containers.

Third parties (dealers and service agencies or companies engaged in the module reuse and/or recycling business) may be subcontracted to perform this task. They shall be provided with instructions for proper handling of residual toner. Non-recyclable product parts shall be properly disposed. Modules and containers shall be taken back free of charge by the return facility named by the applicant to which products may be returned personally or by shipment. The product documents shall include detailed information explaining the return system.

Assessment and verification: the applicant shall declare compliance with the requirements and document instructions for the recycling contractor for dealing with residual toner (e.g. by means of the EC Material Safety Data Sheet) and by means of the note: "Prevent toner dust from being released into the air." A declaration that the toner/ink modules and toner/ink containers are channelled for reuse and/or recycling signed by the subcontracted third parties (dealers and service agencies or companies engaged in the module reuse and/or recycling business) shall also be provided to the awarding competent body.

Criterion 13. Substances in ink and toners

- a) No substances may be added to toners and inks (including solid inks) supplied or recommended by applicant for use in the product which contain mercury, cadmium, lead, nickel or chromium-VI-compounds as constituents. High molecular weight complex nickel compounds as colorants are exempted. Production-related contamination by heavy metals, such as cobalt and nickel oxides shall be kept as low as technically possible and economically reasonable.

Further, the recommended by applicant for use in the product (OEM) ink and toners shall not contain substances or preparations that are:

- carcinogenic according to Category Carc.Cat.1 or Carc.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC⁵
- mutagenic according to Category Mut.Cat.1 or Mut.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC
- toxic to reproduction according to Category Repr.Cat.1 or Repr.Cat.2 of table 3.2 in Appendix VI of Regulation 1272/2008/EC
- persistent, bio-accumulative and toxic (PBTs) or very persistent or very bioaccumulative (vPvBs) according to the criteria in Appendix XIII of the REACH
- added to the "list of candidates" according to REACH Article 59, para.1. Exempted are process-related technically unavoidable impurities and admixtures below 0.1% by weight of the respective materials.

⁵ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, Annex VI harmonised classification and labelling – tables, table 3.2: the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC.

- b) Azo colorants that might release carcinogenic aromatic amines appearing on the list of aromatic amines according to Regulation (EC) No 1907/2006 annex XVII, shall not be used in toners and inks supplied or recommended by the applicant for use in the product.
- c) Only those substances which are listed as so-called existing substances in Annex II to Commission Regulation EC 2032/2003 amended by Regulation EC 1048/2005 may be added as active biocides to inks supplied or recommended by the applicant for use in the product.

Assessment and verification: the applicant shall declare compliance with these requirements. A declaration of compliance signed by the ink and toner supplier(s) and copies of relevant Safety Data Sheets about materials and substances shall also be provided to the awarding competent body.

OTHER CRITERIA

Criterion 14. Requirements on packaging

Where cardboard boxes are used for the final packaging, they shall be made of at least 80 % recycled material.

Where plastic bags are used for the final packaging, they shall be made of at least 75 % of recycled material or they shall be biodegradable or compostable, in agreement with the definitions provided by the EN 13432 or equivalent.

Assessment and verification: the applicant shall declare compliance with these requirements and copies of material specifications from packaging material suppliers, shall also be provided to the awarding competent body. Only primary packaging, as defined in European Parliament and Council Directive 94/62/EC is subject to the criterion.

Criterion 15. Warranty, guarantee of repairs and supply of spare parts

The applicant shall ensure extend warranty covering repair or replacement for a minimum of minimum five years.

The applicant shall ensure that a supply of spare parts (direct or via other nominated agents) and necessary infrastructure for equipment repair is available for a period of at least 5 years after the end of production and that users are informed about the availability of spare parts.

This clause will not apply to the unavoidable and temporary situation that is beyond manufacturer's control such as natural disaster.

Assessment and verification: the applicant shall declare to the competent body compliance with this criterion and provide samples of the product information sheet and warranty terms to the awarding competent body.

Criterion 16. User Information

The applicant shall inform the user as follows:

(a) Environmental relevance of paper consumption

A message should be formulated by the manufacturer in which it is explicitly highlighted the fact that:

"The main environmental impacts of this product along its life cycle are related to the consumption of paper. The less paper is used the lower the overall life cycle environmental impacts. It is recommended to apply double side printing and make use of the function of multiple page printing in one paper sheet."

Deleted:

Former (b) Printouts produced after cancellation The applicant shall declare the maximum number of pages which are printed or copied after the user has cancelled the printing or copying process. The measurement shall be conducted using the measurement procedure described in Annex 6.1.

(b) Noise

A message should be formulated by the manufacturer in which it is explicitly highlighted the fact that:

"This device has noise emissions $LWAd > 63.0$ dB(A) and is not suitable for use in rooms where people do primarily intellectual work. This device should be placed in a separate room because of its noise emission".

This information shall only be given when the measured A-weighted sound power level of the device exceeds the 63.0 dB(A) as measured for criterion.

(c) Ink and toner cartridges:

A message should be formulated by the manufacturer in which it is explicitly highlighted the fact that:

"The cartridges of this equipment are designed for reuse. It is recommended to reuse the cartridge as this is resource efficient."

The cartridge ink yield and the yield of number of printouts should be clearly written on the packaging of the recommended for use (OEM) cartridge. The aforementioned requirements related to cartridges are not applicable to cartridge free imaging devices.

(d) A guide shall be provided with instructions on how to maximise the environmental performance of the particular imaging equipment (covering paper management functions, energy efficiency functions, waste management of the product and of any consumables such as ink and/or toner cartridges) in written form as a specific part of the user manual and in digital form accessible via the manufacturers website.

Assessment and verification: a certificate signed by the manufacturer declaring compliance with these requirements and evidence of the required user information shall be provided by the applicant to the competent body. Printouts produced after cancellation shall be measured following the calculation method proposed in Annex 6.1 of the criteria technical background report. The applicant shall fill-in table 4 of annex 6.4 of criteria technical background report. A copy of the instruction manual shall be supplied to the authority. This manual shall be available for access on the manufacturer's website.

Criterion 17. Information appearing on the EU Ecolabel

Optional label with text box shall contain the following text:

- Designed for efficient paper management
- High energy efficiency
- Minimised use of hazardous substances

The guidelines for the use of the optional label with the text box can be found in the "Guidelines for the use of the EU Ecolabel logo" on the website:

<http://ec.europa.eu/environment/ecolabel/promo/pdf/logo%20guidelines.pdf>

Assessment and verification: the applicant shall provide a sample of the imaging equipment device showing the label, together with a declaration of compliance with this criterion.

Criterion 18. Social accountability

Fundamental principles and rights regarding working conditions must be fulfilled during the production of the Ecolabelled imaging equipment device. The licensee must ensure that the production of the product follows the ILO conventions⁶ regarding child labour, forced labour, health and safety, discrimination, discipline, hours of work, wages, freedom of association and collective bargaining.

⁶ <http://www.ilo.org/>

Assessment and verification: the applicant shall declare compliance with this requirement and provide a specification of contracts with inspection authorities and either a code of conduct regarding ILO conventions or a SA8000 certification.