COMMENTS

REGULATION ON ECODESIGN OF IMAGING EQUIPMENT AND CARTRIDGES (DRAFT WORKING DOCUMENT)

06 September 2024

CONTENT

Civil society organisations including ECOS, DUH, NABU, HOP and iFixIt, supported by the Coolproducts and Right to Repair campaigns, welcome the publication of the draft Ecodesign working document on imaging equipment. We support most of the draft requirements but maintain that some of the requirements need refinement to allow effective reduction of environmental impacts associated with imaging equipment and cartridges and effective market surveillance checks. The following sections explain where we observe there is potential for improvement in the draft working document.

GENERAL COMMENTS

Our feedback highlights general support for the draft requirements on imaging equipment but calls for clarification in some areas. Key recommendations include revising definitions for "printer" and "cartridge" for accuracy, ensuring rollback functionality for software updates, and proposing a shorter review period of 4.5 years due to expected market changes. Our report advocates for extending spare parts and updates availability to 10 years for all printers and providing free access to repair information. It also emphasizes the need for improved power management, including networked standby modes, and stresses the importance of supporting remanufactured consumables without bias.

REGULATION

ARTICLE 2 - DEFINITIONS

ARTICLE 2.1 - PRINTERS

The draft working document includes the following definition for “printer”. The definition seems to suggest that the printer manufactures paper.

‘printer’ means equipment that generates paper or other physical output media at least on A4 size (210 mm x 297 mm) format from electronic input. Printing equipment may have additional functions and may be marketed as a multifunctional device or multifunctional product;

Action point:

The printer definition should be changed to:

‘printer’ means equipment that generates ***output to*** *paper or other physical media* ***of*** *at least A4 size (210 mm x 297 mm) format from electronic input. Printing equipment may have additional functions and may be marketed as a multifunctional device or multifunctional product;*

Note: For this previous amendment proposal, and all the others following, added text will be presented in **bold** and deleted text will be ~~strikethrough~~.

ARTICLE 2.2 - CARTRIDGE

The draft working document includes the following definition for “cartridge”. The definition seems to suggest that cartridges need to be installed into printers during the printing process.

> *‘cartridge’ means a replaceable unit that contains materials intended for deposition onto paper or other physical output media, which must be inserted into or connected to a printer during printing.*

It also has to be noted that certain cartridges may contain essential parts for the functioning of the printer. Printheads, for example, have been moved to the cartridges in certain printer models.

Action point:

The cartridge definition should be changed to:

> *'cartridge' means a complex and replaceable unit that contains materials intended for deposition onto paper or other physical output media, which must be inserted into or connected to a printer* ~~*during printing*~~ *to function. Some may contain essential parts for the functioning of the printer, such as the printhead.*

ARTICLE 2.3 – PROFESSIONAL PRINTING EQUIPMENT

The draft working document includes the following definition for "professional printing equipment".

> *'professional printing equipment' means a device designed and marketed specifically for producing deliverables for sale within the scope of Directive 2006/42/EC*

The definition of "professional printing equipment" is potentially problematic as Directive 2006/42/EC explicitly states that "Information Technology Equipment" is removed from the scope of the Directive.

Action point:

Remove definition of professional printing equipment.

ARTICLE 6 - CIRCUMVENTION, SOFTWARE AND FIRMWARE UPDATES

We support the requirements outlined in the circumvention, software, and firmware updates section, and emphasize the importance of allowing users to roll back updates after installation. This rollback functionality is crucial, as manufacturers may not always be immediately aware of issues in updates that could affect product functionality, particularly in relation to conflicts with remanufactured consumables. Manufacturers need time to address problems caused by updates, and during this period, products could become unusable.

In any case, updates should generally not lead to the incompatibility of printers with printer cartridges. We are not aware of any cases of application for an exemption, suggesting this is a loophole that could mislead consumers.

On the other hand, software updates are not the only instances when some manufacturers make certain cartridges incompatible with the printer. Initial configurations and interface software downloads are sometimes used to integrate, by default, features that render some cartridges incompatible.

Action point:

Keep the inclusion of a software and firmware update rollback function.

Update article as follows:

> *Software and firmware updates,* ***initial configuration and downloading of interface software,*** *shall not result in non-compatibility of the printer with cartridges,* ~~*except where the end user explicitly*~~

~~consents prior to the update to such non-compatibility. Where software and firmware updates do result in noncompatibility, a warning message about this effect shall appear and confirmation of the action shall be explicitly requested.~~"

ARTICLE 8 - REVIEW

We think a review of 8 years after entry into force is too long. Significant changes in the market are likely to result from this first Ecodesign Regulation on imaging equipment and consumables, and these changes should be evaluated earlier than eight years later to assess their effectiveness. We propose a review period of 4 years, allowing for 2,5 years of the requirements being in force before a review is conducted.

We also support the inclusion of two further items, energy-in-use requirements and emissions from printing, in the review clause.

Action points:

- Shorten the review period to 4.5 years.
- Add the following issues to the review clause:
  - Tackling the continued omission of energy-in-use requirements
  - Introduction of requirements on the emissions from printing

ANNEX I - DEFINITIONS APPLICABLE FOR THE ANNEXES

We support most of the definitions included in this section of the draft working document but do suggest some changes.

The proposed changes include:

- *'inkjet printer' means a printer with* ~~*an operating part*~~ ***mechanical parts****, such as a print head, to apply ink on a substrate;*
- *'laser printer' means a printer principally using optoelectronic* ~~*phenomena*~~ ***technologies*** *and electrostatic attraction to* ~~***move***~~ ***deposit*** *toner* ***on****to a substrate;*
- *'commercially available tool' means a tool that is available for purchase by the general public and is neither* ***a*** *basic tool*~~*s*~~ *nor a proprietary tool;*
- *'remanufactured cartridge' means a cartridge that, after having been used at least once and collected at its end-of-life, is restored* ~~***to its original as new condition and***~~ ***so that it functions with comparable, or better,*** *performance* ~~***or better,***~~ ***to a new cartridge,*** *by* ~~***for example***~~ *replacing worn parts and* ***re****filled with toner or ink.*

  N.B. The term "original new condition" would eliminate any remanufactured cartridge with visible markings from the remanufacturing process or any remanufacturer marking/labels. The "replacing of worn parts" is optional in the draft working document definition and this has been corrected above. The term "new" for toner/ink has been replaced to avoid banning the reuse of toner which does occur in the industry.
- *'ink collection unit' means a unit used to collect* ~~***the***~~ *waste ink* ~~***during the printing process***~~*;*
- *'print head' means a unit that contains a series of nozzles used to* ~~***spray***~~ *deposit drops of ink onto the paper.* ***This part may be on the printer or the cartridge****.*

- *'drum unit' means a cylindrical component coated with photosensitive material that transfers toner to paper* ~~*by creating and developing an electrostatic image*~~ *via an electrostatic image generated on its surface by a laser unit;*
- *'original cartridge chip' means a cartridge chip designed or provided by a printer manufacturer* ~~*that is unmodified or that has been reset or replaced with the authorisation of the printer original equipment manufacturer*~~*.*

  N.B. the original definition meant that a chip would cease to be an OEM chip if it was reset or replaced without permission of the OEM.
- *'primary charge roller' means a component that* ~~*applies signals to the drum surface, either to allow the laser writing on it, or to erase any residual charges after printing*~~ *prepares the drum unit for the next print job by removing the remaining static of the previously printed image and applying a positive electrostatic charge to the drum surface.*

ANNEX II – ECODESIGN REQUIREMENTS

A. INKJET PRINTERS

1. RESOURCE EFFICIENCY REQUIREMENTS

1.1 DESIGN FOR REPAIR AND REUSE

(1) AVAILABILITY OF SPARE PARTS

We support the draft measures on the availability of spare parts but would like to see some further ambition in the requirements.

We are unclear why there is a difference in spare parts availability between "low-speed" and "high-speed" inkjet printers. Our analysis suggests that over 40% of ENERGY STAR qualified inkjet printer models fall into the category of "low-speed" inkjet printers, and they are likely to account for an even higher share of overall sales. As such, extending the availability of spare parts to 10 years for these product types would result in significant savings.

We believe it is necessary to consider certain cartridges, particularly those containing print heads and toners, as spare parts since they include essential components required for the printer to function. These cartridges should not be viewed solely as consumables because they contain critical parts necessary for the printer's operation. Therefore, cartridges should be subject to the same regulations as spare parts to extend the life of the printer as much as possible.

Also, we believe that "cartridge chips" should be added to the list of spare parts.

Finally, we consider that there is no safety justification for printer spare parts only being made available to professional repairers. If users can replace all parts easily, there should be no barrier set to prevent it from happening and all spare parts must be made available to users, too.

Action points:

- Extending the availability of spare parts to 10 years for low-speed inkjet printers.
- Add "cartridge chips" to the list of spare parts.
- Add "cartridges which contain print heads".
- Make all parts available to end-users.

(2) ACCESS TO REPAIR AND MAINTENANCE INFORMATION

We are concerned about the level of detail surrounding the requirements for access to repair and maintenance information. We would prefer that free access is given to the information to simplify the regulation and ensure that all those who require the information can obtain it easily. We are especially concerned with the following requirements:

- It is unclear how a professional repairer could prove their technical competence to repair inkjet printers if no "official registration system" exists in a particular member state.
- The requirement for professional repairers to be covered by insurance covering liabilities of their activities appears vague as there are no insurance limits or activity types listed. We propose that this requirement be removed as it is more relevant for national recycling legislation than for a specific Ecodesign regulation.
- There are no clear rules about the conditions for a manufacturer, importer or authorised representative to refuse the registration of a professional repairer. For example, a manufacturer, importer or authorised representative could demand very high insurance coverage which is out of reach for some professional repairers. We would encourage the deletion of this requirement unless very clear rules for the refusal of professional repairers can be listed.
- We are unclear why a manufacturer, importer or authorised representative may charge for access to the repair and maintenance information. The term "reasonable and proportionate fees" is not defined and could be interpreted differently by different actors. This is especially important for market surveillance authorities which will need to decide whether any fees involved are "reasonable and proportionate". This information should be provided free of charge to everyone asking for it. As an alternative, any manufacturer, importer or authorised representative that charges for access to repair and maintenance information should be made to publish the fees on a free access website. This would give market surveillance authorities the ability to collect cost data and determine if any fees are reasonable and proportionate.

Action point:

Require providing access to repair and maintenance information on a free access website and at no cost.

(4) INFORMATION ON THE PRICE OF SPARE PARTS

Whilst we support the intention of the text in Annex II.4, specifying that the maximum price of spare parts should be indicated on free access websites, the effectiveness of this requirement is greatly reduced by the word 'indicative' which allows for manufacturers to exceed the maximum published expected maximum pre-tax spare part price. Nothing prevents manufacturers from stating a misrepresentative price on the website and then overshooting it once spare parts need to be purchased.

Consumers should be informed of the cost of cartridges, which can represent up to half the price of the printer. To address this, we propose that manufacturers publish cartridge prices on their websites as a standard practice. Additionally, manufacturers should calculate the ratio between the price of a new printer and the cost of cartridges over two years of normal use. If this ratio exceeds 60%, manufacturers should display the cost of cartridges for two years of normal use on their websites alongside spare parts. Manufacturers often offer printers at very low prices, relying on cartridge sales as the foundation of their

business model[1]. For some brands, cartridge prices continue to rise while the quantity offered decreases[2]. Consumers need to be aware of the total cost of using the printer if it exceeds 60% of the printer's price over two years.

Action point:

Update article as follows:

> *During the period referred to in points 1(a) and (b), manufacturers, importers or authorised representatives shall provide, on the free access website referred to in point 1(c), ~~indicative~~ pre-tax prices at least in Euro, for spare parts* ***and cartridges*** *listed in points 1(a) and (b) as well as the pre-tax price of fasteners and tools, if supplied with the spare parts*.

(5) DISASSEMBLY REQUIREMENTS

It is not ambitious enough for printer fasteners to be merely removable; they should also be at least reusable.

Action point:

Require that fasteners are reusable.

NEW (8) REPLACEMENT OF SERIALISED PARTS

In the ecodesign requirements developed for smartphones (Annex II.B.1.1.7), as well as in the Commission's working documents on ecodesign requirements for computers, it is established that tackling the serialisation of spare parts is an essential feature of improving the repairability of ICT products. Article 5.6 of the directive on common rules promoting the repair of goods also provides a barrier to the establishment of software techniques that prevent the repair of goods. However, the draft ecodesign requirements proposed by the Commission on imaging equipment do not contain any section on this issue. Even though this issue is tackled later in the proposal for cartridges, it is a very concerning omission as regards the repairability and reusability requirements for imaging equipment. As repeated in many comments that we shared on other draft ecodesign requirements developed for electronic products (smartphones, computers and screens), we are of the opinion that the practice of setting up barriers to repair through software practices should simply be banned. The steps required to unlock a product in which a serialised part has been replaced add to the complexity of the repair operation, add costs, and have no demonstrated benefits. Manufacturers justify part pairing for security reasons, claiming that consumers need to be protected from substandard repairs, that potential privacy risks could happen and that repairs can be dangerous. Yet, laptops from various manufacturers have had fingerprint readers for authentication without part pairing for years.

Action point:

[1] CNBC Television (2024), HP CEO Enrique Lores on PC market trends: 'Significant tailwinds' will continue to drive demand - available here

[2] Comment Economiser (2021), Cartouches d'Encre : comment les fabricants vous arnaquent - available here

Ban any part serialisation practice that prevents spare parts from being swapped or requires reaching out to the OEM.

If the approach taken for smartphones and computers is to take the place of a definitive ban, we strongly support the following elements:

- The requirement for non-discriminatory access to software, firmware, etc., to ensure full functionality of those parts.
- The proposed text stating that "On a free access website of the manufacturer… a description of the procedure for the notification and authorization of the intended replacement of serialised parts by the owner of the device has to be provided." Only user authorization should be necessary for new parts to be accepted (authorization of the OEM should not be necessary).
- The statement that the manufacturer "may only require to have received a notification and authorization of the intended part by the owner of the device." (or by a professional repairer with the written consent of the owner).

1.2 DESIGN FOR LONGEVITY

(1) AVAILABILITY OF SOFTWARE AND FIRMWARE UPDATES

We are unclear why the software and firmware updates are only required for seven years for low-speed inkjet printers, whilst they are required for ten years in the case of high-speed inkjet printers. Many lower-speed inkjet printers may be used very infrequently by end users and, as a result, have a long functional life, beyond 7 years[3], if software and firmware updates remain available. Given that stock volumes of low-speed inkjet printers are high, there could be considerable savings from extending the period to 10 years for these products. Providing software and firmware updates for an extra 3 years is unlikely to cause significant issues for OEMs.

Action point:

Raise the availability of software and firmware updates to 10 years for low-speed inkjet printers.

(2) PAGE COUNT FUNCTIONALITY

The page count functionality is useful for monitoring the ageing of the printer. However, we need to ensure through this ecodesign regulation that it does not become a means of making the printer or cartridge obsolete after a certain number of pages, as has been the case for certain inkjet printers in the past[4].

Action point :

[3] Open Repair Alliance (2024), Insights: Printers – available here

[4] Some Epson inkjet printers, for instance, stop printing at a specific page count, at which the manufacturer considers that the appliance has reached "a condition where either satisfactory print quality cannot be maintained or components have reached the end of their usable life". The calculation of the cut-off point is based on a number of variables such as the "frequency of use, number of head cleans, number of cartridges used, type of prints being printed (e.g. images, documents, with borders or borderless), number of times the product is switched on and off". See https://www.epson.eu/en_EU/faq/KA-01491/contents?loc=en-us.

Add “The page counter shall not be used by the manufacturer to disable the printer or cartridge after a certain number of pages have been printed”.

1.4 RECYCLABILITY OF OTHER COMPONENTS

We are concerned that ink cartridges are included in the list of components that can be extracted with basic tools. Ink cartridges, as well as other consumables such as waste ink containers, can typically be extracted by hand and without the use of basic tools.

Action point:

An alternative point is added for ink cartridges, and other consumables, to require that they can be extracted by hand and without the need for any tools.

2. ENERGY EFFICIENCY REQUIREMENTS

We support the inclusion of low-power mode requirements for inkjet-based products.

On the one side, the printer is woken up for actual printing tasks. On the other side, there are potentially unnecessary network prompts that wake up the printer. These network prompts may ask for things, like the paper status or the ink level. If this happens regularly and the duration that the printer takes to “fall back to sleep” is 10 minutes, it can be hours each day that it spends in a high-power consumption state without performing any meaningful task.

Action point:

If the decision when to wake the printer is part of a printer’s internal network settings, then a printer should be equipped by the manufacturer with the option to limit the rate of unnecessary wakeups. In the other case where this programming is independent from the printer itself, and solely relies on the skills of the network administrator, then this topic would probably not be for the Ecodesign Regulation.

2.3 TIME BETWEEN ACTIVE AND AUTOMATIC NON-ACTIVE MODE

The draft requirements suggest that printers must power down into standby mode or off mode (or another condition not exceeding the power demand of standby mode) but no mention is made of networked standby. This means that the products will not be able to power down into a networked standby mode. We are concerned that this could lead users to disable to power management functionality on products to allow them to power down to networked standby but after longer periods of inactivity than the 10 minutes proposed in the working document. We would suggest adding “networked standby” to the list of allowed power modes.

We also support the inclusion of power management requirements, but we would like to see a requirement that limits the amount of time printers wake due to network prompts. That is, if printers wake for paper or ink/toner level checks, then either these wake events should be limited or the power-down time after completion of these activities should be minimised by additional requirements.

Action point:

Update article as follows:

> *Printers shall be equipped with a default power management function which, when the printer is not providing its main function, and another energy-related product is not dependent on its*

functions, automatically switches the printer, after a maximum of ten minutes, into one of the following conditions:

- Networked standby

- standby mode;

- off mode; or

- another condition which does not exceed the applicable power consumption requirements for standby mode when the equipment is connected to the mains power source.

Printers should include functionality to allow users to limit the number of times a printer wakes due to non-user-initiated wake events. Where a printer wakes due to a non-user-initiated wake event it shall automatically switch into one of the following conditions within 1 minute:

- Networked standby

- standby mode;

- off mode; or

- another condition which does not exceed the applicable power consumption requirements for standby mode when the equipment is connected to the mains power source

3. REQUIREMENTS ON THE USE OF REMANUFACTURED CARTRIDGES

3.1 PRINTER NOTIFICATIONS ON REMANUFACTURED CARTRIDGES

We support the notion that manufacturers, importers or authorised representatives shall ensure that printers do not display notifications concerning the quality or reliability of remanufactured cartridges. However, we do not support limiting this requirement to cartridges that contain an original cartridge chip that has been reset or replaced. Remanufactured cartridges that contain a non-OEM chip may provide the same levels of quality and reliability as an OEM cartridge. As such, these products should not be disadvantaged by notifications questioning the quality and reliability of the products.

Action point:

Update article as follows:

Manufacturers, importers or authorised representatives shall ensure that printers do not display notifications concerning the quality or reliability of remanufactured cartridges ~~with an original cartridge chip that has been reset or replaced in accordance with paragraph 1.2. of part B of this Annex~~.

4. INFORMATION REQUIREMENTS

We support the information requirements listed in this article, but are puzzled by the inclusion of functions that should simply be banned. When a printer has empty colour cartridges, it should not prevent the user to print in black and white if black ink is still available. Also, a lack of connection to the internet should not prevent a printer from printing. An alternative connectivity system, such as via USB keys/cables or Bluetooth, should be made available to allow usage when connection to the internet breaks.

In addition, we think there should be a mandatory requirement to ensure that functions other than printing in multifunctional devices (MFDs) can be used even if cartridges are empty or not installed.

Action points:

The following requirements should be made mandatory rather than simply informative, and added to a new section called '5. Functionality requirements':

> ~~*(3) Where a printer has*~~ *(1) Manufacturers, importers or authorised representatives shall not set a function that stops the printer from printing in monochrome when a colour cartridge is registered as empty*, ~~*manufacturers, importers or authorised representatives shall provide information on this function on the sales packaging of the printer*~~.
>
> *(4)* ~~*Where a printer has*~~ *(2) Manufacturers, importers or authorised representatives shall not set a function that stops it from printing if the printer is not connected to the internet*~~*manufacturers, importers or authorised representatives shall provide information on this function on the sales packaging of the printer*~~.
>
> ***(3) Manufacturers, importers or authorised representatives shall not set a function that blocks functions other than printing in multifunctional devices (MFDs) to be used when cartridges are empty or not installed.***

We support the information requirements listed in this article, but are puzzled by the inclusion of functions that should simply be banned. When a printer has empty colour cartridges, it should not prevent the user from printing in black and white if black ink is still available. Also, a lack of connection to the internet should not prevent a printer from printing. An alternative connectivity system, such as via USB keys/cables or Bluetooth, should be made available to allow usage when connection to the internet breaks.

In addition, we think there should be:

- a mandatory requirement to ensure that functions other than printing in multifunctional devices (MFDs) can be used even if cartridges are empty or not installed.
- a mandatory requirement to ensure that printing is possible when scanning is not possible anymore, and vice versa.

Action points:

The following requirements should be made mandatory rather than simply informative, and added to a new section called '5. Functionality requirements':

> ~~*(3) Where a printer has*~~ *(1) Manufacturers, importers or authorised representatives shall not set a function that stops the printer from printing in monochrome when a colour cartridge is registered as empty,* ~~*manufacturers, importers or authorised representatives shall provide information on this function on the sales packaging of the printer.*~~
>
> *(4)* ~~*Where a printer has*~~ *(2) Manufacturers, importers or authorised representatives shall not set a function that stops it from printing if the printer is not connected to the internet*~~*manufacturers, importers or authorised representatives shall provide information on this function on the sales packaging of the printer.*~~
>
> ***(3) Manufacturers, importers or authorised representatives shall not set a function that blocks functions other than printing in multifunctional devices (MFDs) to be used when cartridges are empty or not installed.***

(4) Manufacturers, importers or authorised representatives shall not set a function that stops it from printing when the scanner is not functioning or stops it from scanning when the printer is not functioning.

B. INKJET CARTRIDGES

1. RESOURCE EFFICIENCY REQUIREMENTS

1.2. EASE OF REUSE AND REMANUFACTURING

(1) CARTRIDGE CHIP RESETTING AND REPLACEMENT

We generally support the requirement for making cartridge chips, or chip resetting, available for at least seven years after the date of placement on the market or putting into service but would like to see some improvements in the requirement.

Action points:

- Cartridge chips and chip resetting should be added to the list of spare parts.
- The time should be extended to 10 years to match the requirements for other spare parts.
- If cartridge chips or cartridge chip resetting are not added to the list of spare parts, then additional language about pricing should be added in line with that for spare parts:
    - Information on the price of cartridges or cartridge resetting - During the period referred to in points 1, manufacturers, importers or authorised representatives shall provide, on a free access website, pre-tax prices at least in euros for cartridge chips and cartridge chip resetting.

(3) ACCESS TO REMANUFACTURING INFORMATION

We have the same concerns with the access to remanufacturing information requirement as with the "access to repair and maintenance information" requirement. The major concerns are:

- Further detail around the acceptable conditions for refusal of registration is required.
- The phrase "reasonable and proportionate fees" is unclear. Market surveillance authorities will need to be able to compare costs across manufacturers to ascertain whether any fees are reasonable and proportionate. As such, this cost data needs to be communicated on free-access websites.

Action point:

Require providing access to repair and maintenance information on a free access website and at no cost.

(2) INFORMATION REQUIREMENTS

We support requiring manufacturers, importers or authorised representatives to provide information about the refilling, remanufacturing or treatment in line with the waste hierarchy established in Article 4(1) of Directive 2008/98/EC. However, the requirement does not seem to place any direct obligation on manufacturers, importers or authorised representatives to identify how any cartridges returned into their own cartridge return programme will be dealt with in line with the waste hierarchy. We have previously communicated, as shown in Table 1, how different manufacturers deal with cartridges in terms of their end-

of-life options. We think that the information reporting requirement should include information about the end-of-life options of cartridges so that users can make informed decisions about where to return their cartridges.

Table 1

Cartridge Material End-of-Life Options Used in Industry Take-Back Programmes

Manufacturer	Reuse	Recycle	In Storage	Waste to Energy	Landfill
Canon [5]	**0.0%**	96.9%	0.0%	3.2%	0.0%
HP – Toner [6]	**?**	82.5%	?	**?**	0.0%
HP – Ink	**?**	79.9%	?	**?**	0.0%
Lexmark [7]	37.0%	56.0%	3.0%	4.0%	0.0%
Epson [8]	**0.0%**	0.0%	0.0%	**100.0%**	0.0%
Kyocera [9]	**0.0%**	89.3%	0.0%	10.7%	0.0%
Ricoh [10]	55.2%		**44.8%**	0.02%	0.0%
Sharp [11]	**0.0%**	57.1%	24.2%	18.7%	0.0%
Xerox [12]	24.9%	37.7%	25.1%	12.3%	0.0%

The Preparatory Study on Imaging Equipment showed that there are several other types of consumables used by printers beyond cartridges. These other consumables should also be considered to reduce overall environmental impacts.

Action point:

We suggest that the wording of the information reporting criterion is changed to:

> ***(1)*** *The manufacturer, importer or authorised representative shall provide information on the sales packaging of the cartridge,* ***and other consumables, excluding paper, on*** *where and how to return or dispose of empty cartridges,* ***or other used consumables,*** *to facilitate their refilling, remanufacturing or treatment in line with the waste hierarchy established in Article 4(1) of Directive 2008/98/EC.* ***The manufacturer, importer or authorised representative shall also***

[5] Canon, Canon offers products that are registered in accordance with EPEAT® for Imaging Equipment – available here

[6] HP (2022), Sustainable Impact Report – available here

[7] Lexmark sustainability, Return, Reuse & Recycle – available here

[8] EPSON, EPEAT® Registered Products – available here

[9] Kyocera Document Solutions, EPEAT® – available here

[10] Ricoh, Conservation Programs and Certifications – available here

[11] Sharp, Environmental programs EPEAT® - available here

[12] Xerox (2022), Xerox Consumables Recycling Report – available here

provide information, on a free access website, indicating the end-of-life options, as a percentage of total material received, used for cartridges entering their own waste cartridge scheme.

C. LASER PRINTERS

We have the same comments for Laser Printers as listed above for inkjet printers. In particular, we have the following concerns:

- Differences in availability duration for spare parts and updates for lower-speed products. Lower-speed products are likely to be used less frequently and could have a longer functional life than seven years if supported in this regulation.
- Clarity over pricing for spare parts, repair information and cartridge remanufacturing processes
- Adding criteria to ensure that products can be continued to be used when not connected to the internet, print in just monochrome when colour cartridges are empty, and other non-print functions are usable when printer cartridges are empty or not installed.
- Include toners as spare parts.

In addition to the common comments across inkjet and laser printers, we have some specific comments on the laser printer section.

1.2. EASE OF REUSE AND REMANUFACTURING

(1) CARTRIDGE CHIP RESETTING AND REPLACEMENT

We noticed that a reference is made to “printhead calibration” which is only relevant for inkjet printers.

Action point:

The reference to “printhead calibration” should be removed.

4. INFORMATION REQUIREMENTS

We noticed that the information requirements for laser printers include references to “print heads” which are only relevant for inkjet printers.

Action point:

Reference to print heads should be replaced by reference to other key parts of a laser printing system such as the drum kit, transfer kit, waste toner hopper, etc.

ANNEX VI - METHOD FOR THE CALCULATION OF THE REPARABILITY OF PRINTERS

In general, we do not support the approach of still awarding a point in each scoring parameter for simply respecting the minimum requirements developed in the regulation. It is possible, considering the aggregation methodology, that these 6 guaranteed points allow a product to jump from a lower scale to a higher one. This

approach can be counterproductive in driving consumers towards the most repairable products, and discourage manufacturers from designing more repairable products.

Also, we insist that the price of spare parts and OEM cartridges is an essential parameter to the longevity and repairability of printers. The Commission should work on a model including the price of spare parts in this methodology.

Concerning the 'spare parts duration' parameter, and in line with our previous comment on 'Annex II.A.1.1.1 Availability of spare parts', we consider that no differentiation should be made between printers with different speeds.

Finally, the methodology refers to the 'ink collection mechanism' as a spare part, whilst Annex I(30) refers to the 'ink collection unit'. For clarity, we would suggest sticking to the later formulation.

Action points:

- Award 0 points to the scoring level that corresponds to the minimum requirements set in the regulation.
- Include the price of spare parts and OEM cartridges as a scoring parameter
- Harmonise the 'spare parts duration' parameter as follows:

  For inkjet and laser printers:
  Spare parts are available for more than 13 years = 5 pt.
  Spare parts are available for 13 years = 4 pt.
  Spare parts are available for 12 years = 3 pt.
  Spare parts are available for 11 years = 2 pt.
  Spare parts are available for 10 years = 0 pt.
- Replace 'ink collection mechanism' with 'ink collection unit'

ADDITIONAL COMMENTS

We would like to reiterate some additional comments that we made in previous feedback, as these issues have not been addressed in the draft working document.

ONLINE PLATFORMS AND FULFILMENT SERVICE PROVIDERS

A major concern regarding the effectiveness and compliance with the eco-design measures of imaging equipment and its cartridges in the European market lies in the critical role of online platforms and fulfilment service providers, who must actively ensure adherence to environmental and consumer protection regulations. However, both the Digital Services Act (DSA) and the Ecodesign for Sustainable Products Regulation (ESPR), are currently deficient to tackle this issue. The DSA lacks clear liability allocation for online platforms without an economic operator in the EU, leaving a legal loophole despite the active role these platforms often play. The ESPR allows third-country businesses to place non-compliant products on the market, as the introduced measure to designate a responsible person in the EU comes with limited obligations and fails to establish a liable economic operator for non-compliant online sales on the EU market.

We therefore suggest that online platforms must check whether there is a liable actor in the EU who guarantees compliance with the eco-design measures on imaging equipment. Furthermore, online platforms must check whether the obligations of manufacturers and distributors are being met (e.g. energy label availability, comprehensive information for consumers, provision of spare parts, etc.) before a product is put online for sale. Fulfilment service providers must be subject to similar obligations. If no such checking obligations are set, massive amounts of illegal products will keep on being imported into the EU market.

CONSUMER HEALTH

The Blue Angel ecolabel already includes requirements addressing substance emissions from printers, including volatile organic compounds (VOCs), ozone, and fine and ultrafine particles. The Commission must address this issue as it is likely to be a concern for some users, especially where imaging equipment is used in poorly ventilated areas.

STANDARDIZATION/ COMMON COMPONENTS

A better development of standardized parts for devices is required to allow a more efficient use of resources. The PROMPT project suggests that "Standardisation of parts and/or their interfaces might improve the access to spare parts and thus enhance reparability. Also, when a part is standardized, the costs per part are likely to decrease through economies of scale. In general, it is recommended to standardize parts which have the same function across all manufacturers, however, don't have a significant distinguishing performance and don't have an aesthetic need"[13].

A standardisation of parts such as cartridges, external power supplies and power cables, paper cassettes, and ink collection tanks and excess ink reservoirs (including sponges) could increase their robustness and ensure that they can be used in several devices. The use of standardised wear/spare parts in different devices

[13] PROMPT (2022), D.4.3: Design for physical durability, diagnosis, maintenance, and repair – available here

also supports the long-term availability of these parts, so that replacement is ensured in the event of a defect. In addition, the subsequent upgradeability of devices with newly developed wear parts would be supported. Standardisation should be developed as far as possible within manufacturers product lines, but also cross-manufacturers.

COMMON CHARGING CONNECTION

The USB Power Deliver (PD) Revision 3.1 specification enables up to 240W of power to be delivered over full featured USB Type-C cables and connectors. Most inkjet printers will not use more than 240W of power even during active printing. As such, the Commission could consider applying the common charger specification to inkjet printers. This could reduce the need for additional cables and power supplies.

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