

# Voluntary Agreement on Imaging Equipment

## Explanatory Note

7 October 2020

### Hardware

#### **Introduction**

The hardware provisions of the Voluntary Agreement (VA) were presented to the Consultation Forum in December 2019. The stakeholders were asked to submit comments by the end of January 2020. The OEM Signatories have considered the comments made and have made further amendments taking into account those comments.

The commitments relating to hardware form Sections 5 - 8 of the VA.

#### **Maintaining Commitments on Energy efficiency**

The current proposal maintains the commitments proposed at the Consultation Forum for alignment with the latest Energy Star specifications on energy efficiency, with an ambitious tiered compliance rate logic. EVAP believes this will work towards achieving the continuous energy savings objective of the VA.

#### **Commitments for Resource Efficiency and Information**

Based on the input received from stakeholders at the Consultation Forum, Signatories decided to remove the indicative 90% commitment for the Sections 6 and 7. We feel this aligns the VA with the Circular Economy objectives set by the European Commission and the latest approved Ecodesign Implementing Measures. Additionally, the transitional periods for implementation of these commitments have also been aligned with those of the recent Implementing Measures (i.e. 18 months after the entry into effect of the VA).

#### **Maintaining Alignment with the Regulatory Framework on Design for Recycling and Recovery**

For the commitments under 7.2 and 7.3 the draft tries to maintain alignment with wording of both the WEEE Directive and recent Ecodesign Implementing Measures, while at the same time facilitating compliance verification through alignment with ecolabels, where the same criteria apply, and established industry platforms.

#### **Enabling Repair**

The imaging equipment sector has an inherent interest in assuring long life of products in order to sustain a continuity of its supplies business. This is clearly illustrated by the long availability of such supplies in the market and by business models that support serviceability and repair.

Therefore, Signatories have put forward commitments that are based on the requirements set in the recent Ecodesign Implementing Measures, with some adjustments to account for the specifics of this sector.

The VA sets a minimum period for the provision of spare parts of 5 years (increasing it from 3 years for consumer equipment). This is believed to be ambitious enough to meet the objectives while maintaining

a distinction between the level of ambition in the VA and Ecolabel criteria (where more ambitious timelines are being considered).

The list of spare parts is based on the most common spare parts that might require service during the lifetime of the product. The method of sharing repair information has been adjusted to more practical methods for the sector (without generating unnecessary complexity of new systems and registration procedures).

The commitments also maintain the option for Signatories to continue with existing whole unit exchange solutions. However, this has been adjusted based on stakeholders' concerns and a price-point threshold has been added to the text (at < EUR 350 as of 2020), to ensure that this solution is clearly only applicable to a limited scope of lower priced products. Below this price-point the prevailing service model is whole unit exchange, as opposed to the provision of spare parts. The exchange model 'replace by refurbished', which constitutes a reuse case that aligns with the Circular Economy logic. Returned products are refurbished and used as replacements for future returned products. The objective is to refurbish and re-use as many printers as possible. This simply makes good business sense and is an important element of a Circular Economy. Note that high product quality combined with low print volumes in these product categories result in exceptionally low failure rates. Replacing returned units with refurbished units makes the most sense financially and environmentally. Forcing industry to move from a refurbished unit replacement model to a parts supply chain model would nearly double the cost of servicing products in these categories. Also, the refurbishment reverse supply chain exists and operates within the European Union (creating employment).

Nevertheless, in order to allow simple user reparability for products under whole unit replacement, the VA introduces a list of spare parts to be made available for such products. This is similar to the approach under the Display Ecodesign measure.

## Cartridge Related Provisions

### **Introduction**

As agreed at the Consultation Forum on December 2019 and confirmed with the adoption of the EU Circular Economy Action Plan in March 2020, the 11 OEMs represented by EuroVAprint<sup>1</sup> and leading Remanufacturers<sup>2</sup> have worked intensively this year to agree on commitments relating to cartridges and containers that find solutions to the key issues that have prevented agreement on the Voluntary Agreement (VA) cartridges provisions of the last two years.

This is a significant achievement. It involves cooperation in the interests of Eco-Design and the Circular Economy between OEMs and remanufacturers in a complex and highly competitive market.

During the Stakeholder Meeting in April 2019 and the Consultation Forum in December 2019, speakers from the remanufacturing industry identified the key issues to be: (i) a solution to the problems experienced by remanufacturers from OEM firmware updates; (ii) a solution to functionality issues, specifically, ink/toner level gauge when remanufacturing cartridges with the OEM original circuitry; and (iii) better access to empty cartridges.

The commitments relating to cartridges and containers form Section 9 of the VA.

### **OEM Signatories and Supporting Signatories**

The VA and this Explanatory Note use the terms OEM Signatories and Supporting Signatories. The term Signatories refers to both together. As noted above, this VA breaks new ground in cooperation between the OEM Signatories and Supporting Signatories in the interests of the Circular Economy. It is important to all Signatories that the benefits of being Supporting Signatories are available to companies that are truly focused on contributing to the EU Circular Economy. In order to reflect this, the VA specifies certain criteria for becoming a Supporting Signatory. These criteria are that the entity must have a substantive operational establishment in the EU and produce and make available remanufactured/refilled cartridges or containers on the EU market that include empties collected from EU end users. It is also a requirement at least 80% of the cartridges or containers produced by a Supporting Signatory are remanufactured or refilled cartridges or containers. The Signatories acknowledge that there are other players in the cartridge/container market in the EU in particular manufacturers of new-build compatible cartridges. If companies representing those other parts of the industry wish to join the VA in future then a set of commitments appropriate for those companies will need to be developed in a future revision.

### **Firmware updates and ability to print with remanufactured/refilled cartridges**

When remanufacturers remanufacture an OEM cartridge and reuse the original OEM circuitry, in some cases, the remanufactured cartridge will not have certain functionalities. In particular, the ink/toner level gauge may not fully function. This is a reason why many remanufacturers use after-market chips. OEM Signatories design their cartridges including the electronic circuitry to work with their printers and cannot be responsible for the design and coding of after-market chips. In some cases, a printer firmware update may impact the after-market chips. This can result in the after-market chip not working with the printer.

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<sup>1</sup> Members of EuroVAprint: Brother International Europe, Canon Europe Ltd., Epson Europe BV, HP Inc., Konica Minolta Business Solutions Europe GmbH, Kyocera Document Solutions Europe BV, Lexmark International nv/sa, OKI (UK) Ltd., Sharp Electronics GmbH, Toshiba TEC Germany Imaging Systems GmbH and Xerox.

<sup>2</sup> Armor Group, Clover Imaging Group, KMP AG and 3T Supplies AG (Peach).

The proposed VA seeks to address this issue. OEM Signatories commit to Supporting Signatories not to design cartridges or containers to prevent printing when using a remanufactured or refilled cartridge or container produced by a Supporting Signatory.

The proposed VA also provides that OEM Signatories shall not design printers or software/firmware updates to prevent printing using a remanufactured or refilled cartridge or container produced by a Supporting Signatory that uses the OEM's original electronic circuitry. The wording is an evolution of the existing VA and includes reference to certain specific cartridge functions requested by remanufacturers in the negotiations.

The obligations relating to cartridge/container, printer and printer firmware design are written to recognise the fact that OEM Signatories can only be responsible for what they design. In particular, they cannot be responsible for the functioning of cartridges that use after-market chips or for ensuring that the printer will accept after-market chips.

#### **Exceptions from the two design obligations**

Throughout the discussions on revising the existing VA, the OEMs have stated that they must be allowed to continue with existing business models and develop new business models to drive innovation, competition, customer choice and reduce environmental impact. In some cases, those business models involve using technology in the design of the cartridge or the design of the printer to avoid circumvention and therefore make the business models viable. However, this can have an impact on the ability of the printer to accept a remanufactured or refilled cartridge or on the ability to remanufacture or refill the cartridge. An example is a subscription model where a customer pays a monthly fee to print. One advantage of this type of business model is that very large cartridges can be provided since the customer doesn't have to pay for the cartridge up front and this reduces the absolute number of cartridges supplied and consequently the environmental impact. The cartridge may have to be associated to the customer's specific printer in order to avoid misuse of the cartridge. While the printer might accept other cartridges including remanufactured cartridges there would not normally be a reason for the customer to do so while paying for the subscription.

If remanufacturer collection systems receive cartridges from those business models that cannot be remanufactured, the exception sets out a mechanism under which the OEM Signatory must either take the cartridge back for remanufacturing or recycling or develop ways for the remanufacturer to remanufacture the cartridge, which may be through bilateral arrangements. Data on the number of cartridges collected or enabled for remanufacturing will form part of the data analysis and target setting explained below so that the proportion of those cartridges remanufactured increases.

Under the exception that applies to the period for which the customer has made a decision to use only OEM cartridges or containers the OEM Signatory is required to provide a solution through bilateral arrangements or otherwise to the Supporting Signatories so that the printer accepts cartridges or containers to which the printer design obligation applies after the contract period is finished.

#### **Solution to Functionality Issues**

The OEM Signatories and Supporting Signatories have agreed on a process aimed at addressing the functionality issues experienced by Supporting Signatories when remanufacturing cartridges using the original electronic circuitry. The challenge is that the OEM technologies and businesses differ as do the businesses of the different Supporting Signatories. In addition, enabling the functionalities in cartridges that are being remanufactured requires some sort of technical solutions such as resetting of the chips on

cartridges. The solution must prevent misuse by parties outside the VA or it would encourage counterfeits or as noted above circumvention of the business model. The solutions must also be confidential to prevent loss of trade secrets.

To solve this challenge the VA requires OEM Signatories to offer solutions that have key functionality. This may involve entering into bilateral arrangements to provide that functionality. The VA specifically notes that OEM Signatories and Supporting Signatories may agree to address additional functions or issues beyond the key issues noted in the VA. The VA contains wording acknowledging that some OEM Signatories have invested in remanufacturing and notes that, while this does not put limits on the scope of the negotiation, this will be recognised in discussions.

A key value of addressing these issues through bilateral arrangements is that the solutions can be targeted and specific to each OEM Signatory and Supporting Signatory relationship to reflect the different Supporting Signatory businesses. This also allows OEM Signatories to maintain confidentiality and protect trade secrets.

The provision for bilateral arrangements between the OEM Signatories and Supporting Signatories requires them to negotiate fairly and find solutions to provide the required functionalities and additional functionalities that may be reasonably needed by the Supporting Signatory. To achieve this balance the VA conformity rules require an OEM Signatory to achieve a minimum percentage of agreements but do not require OEM Signatories to agree bilateral arrangements with every Supporting Signatory. This creates an incentive for both OEM Signatories and Supporting Signatories to negotiate reasonably and find balanced solutions.

The conformity requirements are that each OEM Signatory must either: agree bilateral arrangements; secure letters of no interest in bilateral arrangements; or provide solutions that do not require bilateral arrangements with at least 50% of Supporting Signatories. A process has been included to enable review of the 50% threshold to determine if it should be revised in order to maintain the correct balance.

#### **Obligations for Supporting Signatories and OEM Signatories**

The OEM Signatories and Supporting Signatories have also agreed on a set of commitments for environmental standards. These are important to drive up standards in the industry and distinguish the Signatories that commit to these standards from players in the market that do not. In particular, while some of these commitments refer to existing legislation, the Signatories wish to highlight that compliance with applicable legal requirements is a fundamental requirement to take part in the VA. In addition, the commitments include: offering a take back program for cartridges; publishing safety data sheets; and, publishing cartridge yield information measured according to relevant ISO/IEC Standards.

#### **Empty Cartridges: Data and Target Setting**

Increasing remanufacturing and refilling of cartridges is an important part of developing a circular economy. This requires solutions for the separate collection of cartridges. Access to empty cartridges is central to the business of Supporting Signatories. OEM Signatories have also invested significantly in solutions to take back their cartridges. Some have developed remanufacturing processes while other recycle cartridges into secondary raw materials to meet recycled content goals. While the WEEE Directive now applies to most cartridges the Signatories recognize that a significant number of cartridges are not collected by Signatory Systems.

The Signatories have committed to aim for continuous improvement for the management of empty cartridges in accordance with the policy set out in Article 4 of Directive 2008/98/EC (“Waste Hierarchy”) and to work together to develop targets. In order for this to be meaningful it was agreed that Signatories require data on what happens to empty cartridges processed through their own systems and in the wider market. The Signatories have agreed to a process to gather data by appointing a consultant to produce a report based on data provided by each Signatory and data available in the wider market. The Signatories agree to work to develop targets once they have two years of data. Without data, targets would be of little value.

The bilateral arrangement also provides a mechanism under which OEM Signatories and Supporting Signatories can explore mutually acceptable solutions for empties that are targeted to their individual business.