

EXPLANATORY NOTE

ON THE INDUSTRY VOLUNTARY AGREEMENT TO IMPROVE THE ENVIRONMENTAL PERFORMANCE OF IMAGING EQUIPMENT IN THE EUROPEAN MARKET

9 April 2021

Introduction

This Explanatory Note sets out the background and key features of the latest revision of the Industry Voluntary Agreement to Improve Environmental Performance of Imaging Equipment Placed on the European Market (“Voluntary Agreement” Version 5). This Explanatory Note has been produced and agreed by the Signatories to the Voluntary Agreement¹ based on the latest draft agreed by Signatories and team “Remans”².

Since the launch of the Voluntary Agreement in 2011, the Signatories remain committed to achieving ever-higher standards of environmental performance in Europe and believe that the Voluntary Agreement is central to this objective. The energy efficiency, resource efficiency, design and information requirements of the Voluntary Agreement contribute significantly to the **EU Energy efficiency agenda**, promote the **Circular Economy**, address **climate change**, and meet **better regulation goals**.

Based on the outcome of the ErP “*Lot 4 – Imaging equipment, copiers, faxes, printers, scanners, MFD*” preparatory studies (2007-2008), the number of companies involved that reached over 80% of the hardware market share and the European Commission’s “*impact assessment on the voluntary ecodesign scheme for imaging equipment*” (2013)³, the European Commission (DG Energy) asked industry to propose a Voluntary Agreement on Imaging Equipment. Indeed, a Voluntary Agreement (self-regulation measure) was considered the best way forward for the imaging equipment industry, given the already low energy consumption of its products and the broad diversity of products in scope. The first version of the Voluntary Agreement was endorsed by the European Commission in 2013, with a first revision completed in 2015 and a second in 2019.

During the Consultation Forum on 12 December 2019, Signatories were given a mandate to work with Remanufacturers to come up with an ambitious proposal for a joint Voluntary Agreement including both Hardware and Cartridges. Since then, Signatories and Remanufacturers have been working together via meetings with a neutral third-party facilitator, Mr. Dirk Jepsen from Oekopol (held on 3 April⁴ and 20 May 2020⁵), as well as via weekly bilateral calls to advance negotiations on core issues related to Cartridges.

¹ 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, Sharp Electronics GmbH, Toshiba TEC Germany Imaging Systems GmbH, Xerox.

² Armor Group, Clover Imaging Group, KMP AG, 3T Supplies AG (Peach).

³ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013SC0014&from=EN>

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https://www.eurovaprint.eu/fileadmin/eurovaprint_files/Member_Only/VA_Revision/Joint_VA_2020/Lot_4_VA_-_Facilitated_consensus_finding_process_OEM-remans_Meeting_minutes_3_April_2020.pdf

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https://www.eurovaprint.eu/fileadmin/eurovaprint_files/Member_Only/VA_Revision/Joint_VA_2020/Lot_4_VA_-_Facilitated_consensus_finding_process_OEM-remans_Meeting_minutes_20_May_2020.pdf

During these calls Signatories were represented by EuroVAprint's Board members (Brother, Canon, Epson, HP and Lexmark), while Remanufacturers were first represented by Armor, Clover, Delacamp⁶, KMP, and Peach. A total of 14 bilateral meetings were held between 23 May 2020 and 9 September 2020 (and an additional three meetings between 18 September and 2 October 2020).

The Draft VA on Imaging Equipment, Cartridges and Containers was sent to the European Commission on 11 September 2020, in compliance with the timeframe specified after the publication of the Circular Economy Action Plan (the draft was later updated in October 2020)⁷. Signatories and Remanufacturers organised information meetings with the Commission and seven Member States (BE, DE, IT, FR, NL, SE, UK) between October-November 2020 and the Draft VA was discussed at the 9 December 2020 Consultation Forum, where Signatories were asked to set up a **Subgroup on Targets** with Remanufacturers, representatives from the Commission, Member States and civil society to work towards setting reuse targets within the VA. The Subgroup met seven times between 15 January and 1 April 2021 (Subgroup minutes available on the EuroVAprint website⁸) and in parallel, Signatories and Remanufacturers also held 11 bilateral weekly calls.

As a result of intense negotiations, this new draft of the Voluntary Agreement contains revised provisions on Cartridges and Containers, as well as Reuse Targets. This is a significant development in the industry and a testament to the commitment of both Signatories and Remanufacturers to the importance of moving towards a Circular Economy.

Finally, according to the European Commission Impact Assessment, the VA is set to achieve twice the energy savings and three times the CO₂ emission savings by 2020 (when compared with a regulation scenario). Since 2011, the energy consumption of imaging equipment has dropped by 46,2% for OM products and 26,5% for TEC products.

The VA delivers the policy objective of the Eco-design Directive faster than through the normal regulatory process and in a less costly manner⁹. There is less cost and less administrative burden on Member States and Market Surveillance Authorities.

⁶ Delacamp withdrew during the process.

⁷ October 2020 Draft VA:

https://www.eurovaprint.eu/fileadmin/eurovaprint_files/Member_Only/VA_Revision/Joint_VA_2020/VA_on_Imaging_Equipment_Consolidated_FINAL_Clean_07.10.2020.pdf

October 2020 Explanatory Note:

https://www.eurovaprint.eu/fileadmin/eurovaprint_files/Member_Only/VA_Revision/Joint_VA_2020/SC_VA_Explanatory_Note_Hardware_and_Cartridges_7.10.20_updated_.pdf

⁸ <https://www.eurovaprint.eu/pages/voluntary-agreement/>

⁹ 200k operational cost borne by signatories vs. 2,5 Mio/year (cost incl. testing of 50-100 models by MSAs)

Hardware Related Provisions

Introduction

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

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. Signatories believes this will work towards achieving the continuous energy savings objective of the VA.

In response to the extended timeframe of VA revision discussions, and to stakeholder feedback, energy efficiency commitments will begin with tier 2 of the original proposal.

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 Sections 6 and 7. 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.

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. Some adjustments to the wording have been made in order to accommodate the proposals from the Consultation Forum members.

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 7 years for 'commercial' products and 5 years for 'consumer' products (increasing it from 5 years and 3 years respectively).

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, to ensure that this solution is clearly only applicable to a limited scope of lower priced products. This value was adjusted from EUR 350 in the October 2020 proposal to EUR 300 as of 2021 in order to address comments from the Consultation Forum members. Below this price-point the prevailing service model is whole unit exchange, as opposed to the provision of spare parts. The exchange model is '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 repairability 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 in December 2019 and confirmed with the adoption of the EU Circular Economy Action Plan in March 2020, the OEMs represented by EuroVAprint¹⁰ and leading Remanufacturers¹¹ worked intensively during 2020 and early 2021 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.

Following the Consultation Forum on 9 December 2020 and the Consultation Forum Update on 29 January 2021 the OEMs and Remanufacturers have made additional changes to the draft VA in response to stakeholder feedback.

Those changes include a re-written section of the VA setting out targets to increase reuse of cartridges and containers. The targets were developed by a Subgroup that has worked intensively since January 2021 and that included representatives from EuroVAprint, Remanufacturers, Member States, the European Commission and other stakeholders as observers¹².

This VA represents a significant achievement. It involves cooperation in the interests of Ecodesign and the Circular Economy between companies in different parts of the industry in a complex and highly competitive market and establishes ambitious targets to increase reuse. Inevitably a process involving different parts of the industry as well as diverse stakeholder comments required diverse perspectives to be combined. The OEMs and Remanufacturers consider that this represents significant progress and that the VA will achieve the desired policy objectives both more quickly and at lesser expense than mandatory regulation.

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. Stakeholders, and in particular, Member States have also required that the VA includes actual targets to increase reuse rather than a process to develop those targets.

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. In response to stakeholder comments, the concept of Supporting Signatories has been expanded to represent the broad spectrum of companies involved in producing and supplying remanufactured and new build compatible cartridges and containers in the EU. The revised wording also recognises the possibility that a Signatory might carry out both OEM Signatory and

¹⁰ 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, Sharp Electronics GmbH, Toshiba TEC Germany Imaging Systems GmbH and Xerox.

¹¹ Armor Group, Clover Imaging Group, KMP AG and 3T Supplies AG (Peach).

¹² European Commission's Directorate-General for Energy and Directorate-General for the Environment, Belgium, Italy, Netherlands and Portugal. Observers: ECOS, ETIRA and Static Control.

Supporting Signatory activities. These amendments make VA membership open to all those different players in the market and the obligations have been adjusted to recognise the potential involvement of those different players.

In recognition of this wider scope the VA has been amended to include wording designed to avoid that companies from the same group are able to be selective in how they participate in the VA by joining for just those parts where they perceive a benefit and staying out where they wish to avoid obligations.

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.

The proposed VA seeks to address this issue. Signatories commit 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 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 Signatory benefiting from the

exception 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 relating to the targets explained below.

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.

It is important to note that cartridges subject to the exceptions from the two design obligations are still included in the Signatory's reuse targets and therefore the Signatory in question will either have to increase reuse in other areas, enable others to reuse them, or reuse them themselves to achieve the reuse targets.

Solution to Functionality Issues

The OEMs and Remanufacturers 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 remanufacturers. 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 intellectual property.

To solve this challenge the VA requires OEM Signatories to offer solutions that have key functionality to Supporting Signatories that remanufacture OEM cartridges. 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 and does not in any way prevent or restrict any Signatory from entering into bilateral arrangements with any legal entity that is not a Signatory. 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 intellectual property.

The provisions relating to bilateral arrangements between the OEM Signatories and Supporting Signatories require them to negotiate fairly and in good faith and are designed to encourage them to find solutions to provide the required functionalities set out in the VA and additional functionalities agreed. 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 that remanufactures OEM cartridges. This creates an incentive for both OEM Signatories and relevant Supporting Signatories to negotiate reasonably and find balanced solutions.

The conformity requirements are that each OEM Signatory must either: (1) agree bilateral arrangements; (2) secure letters of no interest in bilateral arrangements; or (3) provide solutions that do not require bilateral arrangements. Each OEM Signatory is required to conclude bilateral arrangements with at least 50% of Supporting Signatories that produce remanufactured cartridges and to which cases 2 and 3 do not apply. 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.

As explained above, OEM Signatories and Remanufacturers have responded to stakeholders’ requests to expand the VA scope to include the broad spectrum of companies involved in producing and supplying remanufactured and new build compatible cartridges and containers in the EU. It was noted in the Consultation Forum update that some amendments to the VA would be necessary to reflect the wider scope. Amendments to the obligations in Section 9 have been made to reflect this change in scope.

Obligations for Supporting Signatories and OEM Signatories

The OEMs and Remanufacturers 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.

Reuse Targets

The VA contains a re-written set of commitments relating to reuse targets. The targets drafting for the commitments have been developed by a Subgroup that has worked intensively since January 2021 and that included representatives from EuroVAprint, Remanufacturers, Member States, the European Commission and other stakeholders as observers.

Each Signatory that supplies either OEM cartridges or containers or new build compatible cartridges or containers commits to achieving the following reuse rates by the year ending 31 December 2025:

	Reuse Rate in 2025
Toner Cartridges and Containers	40%
Ink Cartridges and Containers	14%

The VA sets out how the reuse rate will be calculated and provides for adjustment to take into account fluctuations in the proportion of the EU remanufacturing market represented and reporting data under the VA.

Signatories commit to report data to the Independent Inspector for the purposes of calculating and reporting on progress towards achievement of those targets. In addition the VA provides for the Signatories to gather wider data and determine how to use the data to support development of a wider understanding of factors influencing reuse of ink and toner cartridges and containers and progress against other aspects of the policy set out in Article 4 of Directive 2008/98/EC (“Waste Hierarchy”).

The targets set out in the VA represent the consensus of the OEMs and Remanufacturers on what is challenging and achievable by 2025. It is important to note that the targets are based on limited data for the factors influencing remanufacturing. In the absence of comprehensive data to support the target setting exercise, the participants of the Subgroup discussed the factors that would be relevant for the target setting, breaking it down into different elements (collection rate, viable percentage and remanufacturing rate) and estimating both the current status and expected evolution for a 4 year horizon. Important factors taken into account in this exercise include market factors and the fact that the installed base of printers will change relatively little in a four-year timeframe. Therefore, while the targets are necessarily an estimate they are the result of a careful assessment based on the experience of both OEMs and Remanufacturers. It is also important to note that the rate of progress towards achievement of the targets will vary for different Signatories based on their technologies, products and market factors. This underlines the importance of data gathering and assessing progress towards achievement of the targets.