

**INDUSTRY VOLUNTARY AGREEMENT TO IMPROVE THE
ENVIRONMENTAL PERFORMANCE**

OF

IMAGING EQUIPMENT PLACED ON THE EUROPEAN MARKET

Draft FY19 v.2

FOR DISCUSSION

November 2018
Amended March 2019

TABLE OF CONTENTS

1. Introduction: background note	4
2. Objectives	7
3. Scope	7
3.1 Product scope	8
3.2 Scope	8
3.3 Signatories.....	8
4. Commitments Part I – Primary Design Requirements	9
4.1 Primary requirements.....	9
5. Commitments Part II – Resource Efficiency Requirements	9
5.1 Availability of N-up printing.....	10
5.2 Design for recycling	10
5.2.1 Design for recycling for hardware	10
5.2.2 Design for dismantling for recycling and recovery for hardware:	10
5.3 Availability of Spare Parts and service information and critical software updates..	11
5.4 Polymer composition for hardware	12
5.5 Indoor Air Quality.....	12
5.6 Recycled plastic content.....	12
5.7 REACH Safety Data Sheets.....	12
5.8 Design & Innovation	13
6. Commitments Part III – Information Requirements for End-Users	13
6.1 Resource efficiency and energy efficiency.....	13
6.2 Cartridge reuse, disposal and treatment.....	14
6.3 Information on Paper recyclability	14
6.4 Improvement on Paper recyclability.....	15
6.5 Information on Product environmental characteristics to be provided by Signatories.....	15
7. Independent Inspector and verification of compliance	15
7.1 Verification of Compliance	15
7.2 Inspections.....	16
7.3 Selection of the Independent Inspector	17
8. Reporting	17
8.1 Reporting frequency.....	17
8.2 Energy consumption report.....	19
9. Third party allegation	19
10. Verification by Market Surveillance Authorities	20
11. Access to data & Background data	21
12. Nature and Organization of the Voluntary Agreement	21
12.1 Nature of the Voluntary Agreement	21
12.2 Organisation of the Voluntary Agreement	21
12.3 Market coverage	22
12.4 Transparency of the Voluntary Agreement	23
13. Voting rules	24

14. Non-Compliance	24
15. Revision of the Voluntary Agreement	25
16. Withdrawal from the Voluntary Agreement	25
17. Termination of the Voluntary Agreement	25
Appendix 1	26
Annex A: Definitions	32
Annex B: Calculating the compliance rate	36
Annex C: Reporting form to be used to report to Independent Inspector	38
Annex D: Membership Form	40
Annex E: Flow Chart - Third Party Allegation Process	41
Annex F: Example of Product Environmental Information	42
Annex G: Non-commercially sensitive technical data that the Independent Inspector is at liberty to disclose	49

1. Introduction: background note

In 2009, the European Union (EU) adopted Directive 2009/125/EC on energy-related products (ErP) (formerly EuP) to create a framework for the development of EU-wide rules for improving the environmental performance of energy-related products through eco-design minimum requirements. At the same time, the Commission recognised the possibility of having a Voluntary Agreement (VA), provided the industry sector in question fulfilled the conditions included in the mentioned Directive.

Imaging equipment, an innovative industry with long-standing environmental commitments and a track record of improved energy efficiency performance, concluded in 2011 the first VA on Imaging Equipment, which was recognised by the European Commission as a valid alternative to an implementing measure under the Ecodesign Directive 2009/125/EC¹. This new VA is aligned to the latest European Commission guidelines for self-regulation measures [concluded by industry under the Ecodesign Directive](#)².

Since the adoption of the first VA, the imaging equipment industry, represented by EuroVAprint³, has succeeded in delivering considerable energy savings. Its Signatories achieved energy consumption reductions of 46.2% for Operational Mode (OM) products and 26.5% for Typical Electricity Consumption (TEC) products⁴. Taking into consideration the transition to a more circular economy, the imaging equipment VA not only supports energy efficiency measures, it also supports a number of other resource efficiency requirements (such as design for dismantling, reuse and recycling, polymer composition and recycled plastics content) as well as information requirements for End-Users. The VA enables customers to make more sustainable purchasing decisions by providing them with accurate information on the environmental performance of products.

The imaging equipment industry is an innovative ~~one~~ with a long track record of environmental improvements. The imaging equipment industry ~~wishes to prolong its~~ commitment to continuous improvement on energy and efficiency resources via this VA, which is now aligned to the [European Commission's](#) guidelines for self-regulation measures [concluded by industry under the Ecodesign Directive](#). Moreover, it will help to contribute to the achievement of the EU target on Energy Efficiency. It has been estimated⁵ that the proposed Commitments as defined herein will enable direct electricity savings of 7.9 TWh per year in the EU through 2020 and 9 TWh per year in 2030 excluding the additional savings that will be made through increased resource efficiency.

¹ [Ecodesign Directive 2009/125/EC](#).

² 2016 European Commission [recommendation](#) on guidelines for self-regulation measures concluded by industry under Directive 2009/125/EC of the European Parliament and of the Council; and [Annex](#).

³ EuroVAprint is a not-for-profit association bringing together manufacturers of imaging equipment that operate in Europe and have signed the Voluntary Agreement. The association provides the legal and administrative means to supervise the implementation and monitoring of the present set of binding commitments made by its members.

⁴ Baseline report issued by the independent inspector in January 2012, covering the period from January to June 2011.

⁵ Source: [Commission Staff Working Document](#) - Executive Summary of the Impact Assessment Accompanying the document Report from the Commission to the European Parliament and the Council on the Voluntary Ecodesign Scheme for Imaging Equipment - COM(2013) 23 final.

Deleted: industry

Deleted: on

Deleted: , represented by EuroVAprint,

Deleted: present

The market coverage of the companies involved in the revision of the VA remains in excess of 80%⁶ of hardware units sold in the EU that are within scope of this VA.

The scope of the VA is based on the ErP Preparatory Study on “Imaging Equipment” (Lot 4) and on widely accepted international standards. It aims to target the highest sales volume products and technologies on the household and office market. It became clear from that ErP Preparatory Study, that this product category contains a wide variety of product types, designed and marketed for a wide variety of markets and applications. Products range from a very affordable personal Printer that is used occasionally by a private household user, up to Multifunctional Devices used in offices to accommodate the daily needs for copying, printing, scanning and faxing of documents for groups of office workers.

Deleted: linked with ENERGY STAR®.

When setting out to develop the underlying VA, the imaging industry was faced with the challenge to formulate requirements that are not only relevant and significant for achieving environmental efficiency, but also applicable to the wide range of different imaging products present in the market. Despite the fact that the imaging industry focused on the products that are sold in the highest numbers, by limiting the product scope to household and office equipment, the problem of diversity still remained, which is mainly driven by the wide variety of customer requirements in the imaging market.

For the reasons outlined above, Signatories will commit to the requirements in this VA for the vast majority of the products.

The primary Commitments in this agreement are based on the latest international standards for imaging equipment. Given that those international standard limits are designed to reward the top quartile (energy performance) of products, this VA is based on “tiers” approach as it is not possible for all products to meet these limits immediately.

Deleted: ENERGY STAR requirements

Deleted: ENERGY STAR

Signatories also commit to share expertise, experience, information and best practices with Signatories to other eco-design self-regulation measures.

Version 4.0 of the Voluntary Agreement was acknowledged by the European Commission through a Report to the European Parliament and the Council published on 29 January 2013⁷.

Version 5.2, published in April 2015, was in place until the adoption of this version (v. 2) and was updated to align with the latest specifications of international standards, to align it with the European Commission guidelines for self-regulation measures concluded by industry under the Ecodesign Directive, and to better contribute to the objectives of Circular Economy. The Signatories started working on the new version in October 2017 and sent two versions for comments to the European Commission, in December 2017 and June 2018; there ensued an extensive consultation with stakeholders with a meeting in November 2018 and a second round of comments in March 2019; followed by a stakeholder meeting in April 2019 and a Consultation Forum in June 2019 with a final version sent to the European Commission for recognition in September 2019.

Deleted: which

Deleted: of the Voluntary Agreement

Deleted: 6

Deleted: as a result of the publication of a new set of ENERGY STAR®

Deleted: v.3.0 on (date),

Deleted: February

Deleted: April/March

Deleted: and

Deleted: final

Deleted: June

Deleted: Independent

Deleted: members s

⁶ Latest market share data (2016) provided by the independent inspector (in 2017) sourced from Infosource. It covers the number of units sold in 2016 under the brand of the Signatories of the VA, the number of units sold in 2016 across all manufacturers and covers the EU-28 (not broken down by country).

⁷ COM (2013) 23 final.

The Signatories of this Voluntary Agreement are:

1. Brother International Europe
2. Canon Europe Ltd.
3. Epson Europe BV
4. HP Inc
5. Konica Minolta Business Solutions Europe GmbH
6. Kyocera Document Solutions Europe BV
7. Lexmark International nv/sa
8. OKI (UK) Ltd.
9. Sharp Electronics GmbH
10. Toshiba TEC Germany Imaging Systems GmbH
11. Xerox

2. Objectives

The objectives of this Voluntary Agreement are to:

- 2.1. Contribute to the objectives of Directive 2009/125/EC establishing a framework for the setting of eco-design requirements for energy-related products, in line with Recitals 18-21 Article 17 and Annex VIII on self-regulation measures.
- 2.2. Continuously improve the environmental performance of the types of imaging equipment in scope of this agreement.
- 2.3. Promote business models, products and services towards the following objectives: achieving a circular economy, use of resources in a more sustainable way; reducing overall lifecycle environmental impact. Signatories are encouraged to innovate towards these objectives.
- 2.4. Educate users, in particular End-Users, on best practices for environmental printing.
- 2.5. Promote and secure better energy efficiency for household and office imaging equipment.
- 2.6. Ensure the involvement of all stakeholders represented in the Consultation Forum in monitoring of the results and updating the requirements of the VA.

This VA is intended not to inhibit progress by Signatories in technology or business models that will also ultimately benefit End-Users in the form of enhanced security, safety, reduced environmental impact, choice, welfare or otherwise. The provisions of this VA will be applied in accordance with this objective.

Nothing in this VA will be construed or applied as to limit or restrict the Signatories to take otherwise legitimate actions to protect any rights that may correspond to them directly or indirectly under the provisions of the Treaty (including in particular internal market and competition rules) or the international engagements of the Union (including in particular those related to IP rights), or national laws⁸.

Deleted: may

Deleted: Signatories' ability

Deleted: foster

Deleted: such progress.

3. Scope

Signatories commit to ensuring products in scope of the previous Voluntary Agreement (v5.2) will continue to meet the requirements described in that version.

Considering article 15 (5)(f) of the Ecodesign Directive and in view of the administrative burden placed on Signatories by the different enforcement dates resulting from previous

⁸ For instance, under the Charter of Fundamental Rights of the European Union, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), the Paris Convention of the Industrial Property, the Anti-Counterfeiting Trade Agreement (ACTA) and any other international legal instruments protecting IP or other fundamental rights.

versions of this VA, all obligations set out in this VA are effective from 1st January 2020 and cover imaging equipment as described and defined below and in Annex A.

Deleted: 2019

This Voluntary Agreement does not have retroactive effect: it applies only to imaging equipment Placed on the Market or put into service on or after the effective date.

Deleted: ,

Deleted: , in the Internal Market

3.1 Product scope

In this Voluntary Agreement, “Products” means imaging equipment meeting the conditions in section 3.3. The terms “Imaging Equipment” and “Product” do not include consumables.

Deleted: ¶

In conformity with article 17 of the Eco Design Directive, nothing in this Voluntary Agreement will be construed as to limit or restrict the Signatories to take legitimate actions to protect any rights that may correspond to them directly or indirectly under the provisions of the Treaty (in particular internal market and competition rules) or the international engagements of the Union (in particular those related to IP rights), or national laws⁹.

3.2 Scope

3.2.1 Product categories: The Voluntary Agreement covers imaging equipment belonging to one of the following product categories that have been reviewed in the ErP Lot 4 preparatory study:

- Multifunction Devices (MFDs)
- Printers

3.2.2 Marking technologies: **this Agreement is limited to** the following marking technologies:

- Electrophotography (EP)
- Inkjet (IJ), including High Performance IJ
- Solid Ink (SI)

3.2.3 Household and office equipment: this Voluntary Agreement is limited to household and office equipment, meaning:

- Standard black & white (BW) format products with maximum speed < 86 A4 images per minute
- Standard Colour format products with maximum speed < 50 A4 images per minute

Deleted: 1

Speed to be rounded to the nearest integer.

Deleted: as prescribed in the ENERGY STAR[®] specification)

Other format products can be included in their reporting by individual Signatories on a voluntary basis but will not count for the target specified in 4.1.a).

3.3 Signatories

Companies active in the imaging equipment industry sector can become Signatory to the self-regulation measure, at any time, provided that they are in the scope of this VA, fulfil all the requirements, and participate in all its operational costs. The membership form to be completed and signed by a company wishing to become a Signatory should be attached to

the self-regulation measure. The Signatories should send to the Commission, without undue delay, the original completed and signed membership form.

4. Commitments Part I – Primary Design Requirements

A Product is considered Part I qualified when it meets all the applicable requirements as detailed in section 4 and Appendix 1.

The Signatories shall publish on the EuroVApriint website information identifying which Products meet the requirements of Section 4 from when those Products are first Placed on the Market after the commencement date of this Voluntary Agreement. The information shall be regularly updated.

4.1 Primary requirements

- a) Products as defined in section 3.2 and Placed on the Market by Signatories after 1 January 2020 shall comply with the energy efficiency and duplex requirements set out in Appendix 1 in accordance with the following targets:

	Period	OM Products Placed on the Market	TEC Products Placed on the Market
Tier I	Jan-Dec <u>2020</u>	<u>85%</u>	<u>60%</u>
Tier II	Jan-Dec <u>2021</u>	<u>90%</u>	<u>70%</u>
Tier III	Jan-Dec <u>2022</u>	<u>95%</u>	<u>80%</u>
Tier IV	Jan-Dec <u>2023</u>	<u>95%</u>	<u>90%</u>

Deleted: specifications of ENERGYof ENERGY STAR ® v2.0 and default

Deleted: settings

Deleted: sections b) and c) below

For the purposes of measuring compliance with this section, the rate of compliance shall be calculated following the methodology described in Annex B.

5. Commitments Part II – Resource Efficiency Requirements

A Product is considered Part II qualified when it meets all the applicable requirements as detailed in section 5.

Products as defined in section 3.2 and Placed on the Market by Signatories after 1 January 2020 shall meet the requirements of Section 5 in accordance with the following targets:

<u>OM products Placed on the Market</u>	<u>TEC products Placed on the Market</u>
<u>90%</u>	<u>90%</u>

Deleted: <#>The specifications in ENERGY STAR ® v2.0¹⁰ with which the Signatories shall comply are those concerning:
 <#>
 <#>Energy consumption requirements (TEC and OM products);
 <#>Default delay times (OM products); and
 <#>Duplex availability (TEC products);
 <#>
 <#>For new TEC products first placed on the EU market after 1 January 2015, duplex-printing for TEC products in the relevant speed category specified in the table below is to be set as default when printing from the computer, meaning that the relevant software (driver or firmware) shall be configured so that the first print-job will be in duplex unless the print settings have been modified at the stage when the product is first installed to function as intended.
 <#>**Automatic Duplexing Requirements for all Color TEC Copiers, MFDs, and Printers Monochrome Product Speed, s, as Calculated in the Test Method (ipm; BW)** ... [1]

The Signatories shall publish on the EuroVAprint website information identifying which products meet the requirements of Section 5 from when those products are first placed on the market after the commencement date of this VA. The information shall be regularly updated.

5.1 Availability of N-up printing

All products shall offer as a standard feature the capability to print several pages of a document on one sheet of paper, when the Product is managed by original software provided by the manufacturer (printer driver).

5.2 Design for recycling

5.2.1 Design for recycling for hardware

For all Products:

- Plastic parts >100 g shall be manually separable into recyclable plastic streams with Commonly Available Tools
- Product shall utilize Commonly Used Fasteners for joining components, subassemblies, chassis and enclosures
- Non-separable connections (e.g. glued, welded) between different materials shall be avoided unless they are technically or legally required
- Product plastics shall be marked by material type (ISO 11469 referring ISO 1043, resin identification code, SPI, DIN, or country specific). Marking requirement does not apply to plastic parts weighing less than 25 g or with surface area less than 50 cm²; tape; plastic protective and stretch wraps and labels; or plastic pieces when marking is not possible due to shape. Plastic parts contained in reused complex modules are exempted.

5.2.2 Design for dismantling for recycling and recovery for hardware:

Signatories shall ensure that joining, fastening or sealing techniques do not prevent access to the following components (when present) in a non-destructive extraction method without requiring proprietary or not Commonly Available Tools:

- Batteries
- Printed circuit boards greater than 10 cm²,
- Jnk and toner Cartridges
- Plastic containing brominated flame retardants
- Liquid crystal displays greater than 100 cm²,
- External electric cables
- Electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume)

Accessing such components shall be facilitated by Signatories documenting the sequence of dismantling operations needed to access the targeted components, i.e. each of these operations, the type and the number of joining, fastening and sealing

Commented [A2]: The Voluntary Agreement does not function in the same way as a regulation and so it is not possible to simply classify individual products as "compliant" or "non-compliant". Section 4 of the VA applies to all products but Signatories are required to ensure that the relevant percentage of units shipped fulfil the requirements of Section 4. Therefore a Signatory can comply with the VA without 100% of the products it ships meeting the requirements of Section 4. Signatories do agree to publish information on which products meet/do not meet the requirements of Section 4 but do not agree to designate those products as "compliant/non-compliant" with the VA. If those products that do not meet the requirements of Section 4 of the VA are deemed "non-compliant" then there is no incentive for Signatories to make sure that they comply with the requirements in Section 5 and 6 which would be contrary to the objectives of the VA.

Sections 5 and 6 set out requirements that depend on when the products were first [Placed on the Market]. Signatories agree to publish information showing which products comply with the requirements in 5 and 6.

This approach meets the objective of providing clear information to the public about the status of imaging equipment products under the VA, is consistent with the structure of the VA and avoids creating adverse incentives for Signatories. This structure has been a fundamental part of the VA since it was first agreed and throughout the revision process.

See alternative wording.

Deleted: repair, reuse,

Deleted: square centimetres

Deleted: Toner

Deleted: square centimetres

techniques(s) to be unlocked, and tool(s) required. Dismantling instructions will be made available to third parties upon request. Manufacturers may use the <http://www.i4r-platform.eu> to meet their information sharing requirements.

These requirements shall not apply:

- to the extent that non-removable joining, fastening or sealing techniques are necessary to ensure the safety of the product concerned or its relevant components; or
- to the extent that such requirements are exempted by specific provisions of other Community law applicable to the products or components concerned.

5.3 Availability of Spare Parts and service information and critical software updates

Moved (insertion) [1]

Signatories shall make available Spare Parts and service information, and maintain the firmware/software for the minimum time periods after the end of product manufacturing:

- For Electrophotography, Solid Ink and High Performance Inkjet products - 5 years.
- For Inkjet products - 3 years

Service information (in service manuals, user manuals, videos, or on webpages) for service or maintenance procedures which can be safely performed by End-Users should be available via freely accessible websites or provided with Spare Parts.

Making Spare Parts available shall only involve offering Spare Parts for sale through their usual Spare Part distribution channels and shall not require Signatories to trade directly with Customers or Users.

The manufacturer can declare its compliance with this requirement through declarations made on the ECMA-370 Form or other corporate statements.

Failure by a Signatory to comply with any provision of this clause shall not be a non-compliance (for the purposes of section 14 or otherwise) if and to the extent that it is caused by a Force Majeure event.

Spare Parts are accessible and exchangeable by professionals in repair centres. Spare Parts that can be exchanged by end users are available for customers for purchase.

For Spare Parts that are offered to end users, replacement instructions are to be made available either online or on the product manual or provided with Spare Parts.

Provision of service information referenced in this section is not applicable to products or Spare Parts intended to be serviced by trained service personnel.

5.4 Polymer composition for hardware

For all TEC products:

In order to limit the variety of materials used, plastic casing parts with a mass greater than 100 g have to consist of one single polymer or a polymer blend.

All plastic casing parts may only consist of up to four separable polymers or polymer blends.

Large-sized casing parts must be designed in a way that the contained plastics can be used for the production of high-quality durable products by applying available recycling techniques.

The use of coatings for special parts is to be reduced to a minimum, unless it can be demonstrated that it does not alter recyclability. Galvanic coatings on plastic parts are not permissible.

5.5 Indoor Air Quality

For products Placed on the Market for the first time after 1 January 2020, when toner Cartridges are tested with a Blue Angel eco-labelled compatible Printer, that product [and Cartridge combination] must meet the emission limit values regarding the release of chemical substances (TVOCs, undefined VOCs, Styrene and Benzene), as well as ozone, dust and ultrafine particles as defined by the Blue Angel RAL-UZ 205 standard (as applicable to the relevant Printer). Compliance verification shall accept testing from Equivalent Design products as documented in RAL UZ 205.

Compliance verification audits for this Voluntary Agreement shall not require IAQ testing.

5.6 Recycled plastic content

For all products Signatories shall make information available to customers on the minimum percentage¹¹ of postconsumer recycled plastic content, calculated as a percentage of total plastic (by weight) in each product.

The following may be excluded from the calculation of the total plastic weight: printed circuit boards, labels, cables, connectors, electronic components, optical components, electrostatic discharge (ESD) components, electromagnetic interference (EMI) components, and biobased plastic material. Products that do not contain plastics can declare "Not applicable" for this criterion.

5.7 REACH Safety Data Sheets

All Signatories shall prepare Safety Data Sheets ("SDS") for all offered printer Cartridges containing toner or ink. SDS shall be made available on a freely accessible website or in

¹¹ In increments of 0%, 0-5%, 5-10%, 10-15%, etc. A possible definition of postconsumer recycled plastic content can be found for example in EPEAT: A material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item, part of the broader category of "recovered" items.

another readily accessible form for customers. If toner or ink contains hazardous substances, REACH compliant SDS shall be made available in the official language of each Member State where the such products are marketed by the Signatory, based on CLP rules.

5.8 Design & Innovation

For all product:

- 5.8.1 Any Cartridge produced by or recommended by the OEM for use in the product shall not be designed to prevent its reuse and recycling.
- 5.8.2 The machine shall not be designed to prevent the use of a Non-OEM Cartridge¹².

6. Commitments Part III – Information Requirements for End-Users

A product is considered Part III qualified when it meets all the applicable requirements as detailed in section 6.

Products as defined in section 3.2 and Placed on the Market by Signatories after 1 January 2020 shall meet the requirements of Section 6 in accordance with the following targets:

<u>OM products Placed on the Market</u>	<u>TEC products Placed on the Market</u>
<u>90%</u>	<u>90%</u>

The Signatories shall publish on the EuroVApriint website information identifying which products meet the requirements of Section 6 from when those products are first Placed on the Market after the commencement date of this Voluntary Agreement. The information shall be regularly updated.

6.1 Resource efficiency and energy efficiency

For all products, Signatories commit to providing End-Users with information regarding resource efficiency when using imaging equipment. The intent is to ensure the End-User is made aware of good efficiency practices when they first begin to use a new product.

Signatories shall achieve this through at least one of the following methods:

- A pop-up screen on the End-Users' computer during the initial installation of software (preferred)¹³
- A CD or publicly available website
- An insertion sheet provided in/on the box of the product as defined in Section 3 above
- An information sheet to be provided at the time of sale of the product as defined in Section 3 above

¹² See definition in Annex A below.

¹³ This can only be implemented when imaging equipment is managed through computers under mainstream Operating Systems (Microsoft Windows or Mac/OS).

Moved up [1]: Availability of spare parts and service information and critical software updates

Deleted: Customers or users.

Commented [A3]: The Voluntary Agreement does not function in the same way as a regulation and so it is not possible to simply classify individual products as "compliant" or "non-compliant". Section 4 of the VA applies to all products but Signatories are required to ensure that the relevant percentage of units shipped fulfil the requirements of Section 4. Therefore a Signatory can comply with the VA without 100% of the products it ships meeting the requirements of Section 4. Signatories do agree to publish information on which products meet/do not meet the requirements of Section 4 but do not agree to designate those products as "compliant/non-compliant" with the VA. If those products that do not meet the requirements of Section 4 of the VA are deemed "non-compliant" then there is no incentive for Signatories to make sure that they comply with the requirements in Section 5 and 6 which would be contrary to the objectives of the VA.

Sections 5 and 6 set out requirements that depend on when the products were first [placed on the market]. Signatories agree to publish information showing which products comply with the requirements in 5 and 6.

This approach meets the objective of providing clear information to the public about the status of imaging equipment products under the VA, is consistent with the structure of the VA and avoids creating adverse incentives for Signatories. This structure has been a fundamental part of the VA since it was first agreed and throughout the revision process.

See alternative wording.

Deleted: EVAP

The following information shall be provided as a minimum¹⁴ where applicable:

Information that recycled as well as virgin paper certified under environmental stewardship initiatives, or carrying recognised ecolabels, may be suitable providing that it meets appropriate quality standards as defined, for example, in EN 12281 on "Printing and business paper for dry toner imaging processes" for papers in the range 75-250 g/m². For specific applications, the lower boundary may be chosen at 64 g/m².

- 6.1.1 For Electro Photography Printers: indication that these can print on 64 g/m² paper and that this paper contains less raw material per print, thus saving significant resources.
- 6.1.2 Energy can be saved by purchasing ENERGY STAR[®] qualified products.
- 6.1.3 Description of the benefits of printing in duplex mode (for TEC products having a duplex function).
- 6.1.4 The environmental benefits of power management.
- 6.1.5 The environmental benefits of safe and appropriate collection for recycling.

The information as described in sections 6.1.1 through 6.1.4 shall be provided in the form of compact statements.

Paper weight mentioned in the pop-up window (or alternatives as described above) shall be consistent with the paper weight specifications of the Product.

6.2 Cartridge reuse, disposal and treatment

Signatories shall provide End-Users with information on suitable remanufacturing & reuse, or end-of-life management options for used Cartridges. This information shall be communicated via a freely accessible company website or on the Cartridge packaging or in the instructions for use.

Commented [A4]: Signatories do not agree to provide the information on the packaging. Requirements to include ever more information on packaging or paper inserts with products increase environmental impact. In addition accessing information on-line via freely accessible company websites is a widely recognised, modern and efficient solution.

Deleted: may

6.3 Information on Paper recyclability

Signatories shall make available and provide to users information regarding recycled paper via website or other means.

Example statements are listed below:

- Recycled paper promotes the circular economy with more recycling saving more natural resources.
- The use of waste paper to produce recycled paper significantly reduces the amount of energy and water consumed compared to virgin fibre paper. In addition, the forest

¹⁴ Not all 5 statements mentioned in section 5.1.1 may be applicable to the Product that is equipped with this information. Manufacturers are free to choose if they add a statement to this effect to the information, or leave out statements that are not applicable, such as the statement regarding Electrophotography and duplex printing.

resources are conserved - an important contribution to biodiversity. Existing environmental savings can be enhanced in a simple and efficient manner.

- Modern recycled paper meets the highest quality requirements for different printing processes - appropriate standards guarantee this. The imaging equipment supplied by the Voluntary Agreement Signatories is suitable for using with recycled paper meeting the EN 12281:2002 standard.
- Regarding archiving - recycled paper meets all requirements for long-term storage.
- The use of recycled paper is a visible and credible sign of ecological, resource-efficient behaviour.

6.4 Improvement on Paper recyclability

The Signatories recognise that it is important for the paper manufacturing, Printer, and paper recycling industries to work together in order to promote paper recycling. Recognising the importance of accurate/relevant lab scale characterization of deinkability and recyclability across a range of print technologies, geographies and mill processes, several signatories members of the Digital Print Deinking Alliance are actively participating in various ISO Workgroups focussed on creating guidelines for the graphic printing industry, for example the current development on the ISO 21331 standard.

6.5 Information on Product environmental characteristics to be provided by Signatories

- 6.5.1 Signatories shall make information on the environmental performance of their Products available to Customers via freely accessible web sites or user manuals. This should include as a minimum the mandatory information required in ECMA 370 (see Annex F).
- 6.5.2 Signatories shall measure page yield for Inkjet and toner Cartridges in accordance with the following Standards namely, ISO/IEC 24711 (for ink), ISO/IEC 19752 (for monochrome toner), ISO/IEC 19798 (for colour toner), or through other reliable, accurate and reproducible methods, which take into account the generally recognised state of the art. Signatories shall make Inkjet and toner Cartridge yield information calculated in accordance with the foregoing Standards available to Customers via freely accessible web sites or on Cartridge packaging or in user manuals.

7. Independent Inspector and verification of compliance

7.1 Verification of Compliance

The Independent Inspector is an independent third party who is tasked with monitoring the compliance of Signatories, and as such responsible for:

- verifying compliance with the requirements of the self-regulation measure through: checking the documentation provided by Signatories; testing Products; and inspecting

Commented [A5]: Signatories do not agree to provide the information on the packaging as space is limited. It also limits the use of packaging across multiple cartridge models. The word "or" is therefore critical for this commitment. The user manual cannot be checked when users are purchasing the product because use manual is bundled inside packaging. Accessing information online via freely accessible company websites is a widely recognised, modern and efficient solution.

Commented [A6]: This section is currently being revised with the input of the independent inspector.

the Signatories' premises. The Independent Inspector should decide on an appropriate combination of these methods.

- an adequate number of Products from different Signatories should be selected at random for testing. The detailed test reports for each separate Product tested should be provided to the Commission and to the Signatory concerned. The list of Products tested, and a summary of results, should be included in the annual report drafted by the inspector. Testing concerns verifying the characteristics of Products covered by the self-regulation measure by means of physical tests performed in a laboratory accredited for the relevant test method. If Signatories provide the Products directly, they should not be involved in selecting the samples.
- testing may only be used to verify compliance with the energy efficiency requirements of Appendix 1 using the ENERGY STAR® Imaging Equipment Test Method, Rev. Dec-2018 and the Cartridge page yield requirements in accordance with Paragraph 6.5.2.
- collecting and processing information supplied by Signatories pursuant to Section 7, Annex B and Annex C,
- determining a Signatory's compliance with the Agreement,
- preparing the Annual Compliance report,
- performing investigations, and
- performing an adequate number of Product tests per year,

Signatories agree to finance testing of a maximum of two product models per year per Signatory. Only products that do not have energy efficiency test reports conducted by an ENERGY STAR® approved laboratory and certified by an ENERGY STAR® approved certification body are to be tested. Products with the above test reports available will not be tested but these reports will be provided to the independent inspector upon request.

7.2 Inspections

The Independent Inspector may carry out an inspection of a specific signatory on the basis of specific information justifying such an inspection. The specific information should be disclosed to the signatory concerned.

During an inspection, the Independent Inspector should only carry out those activities that are strictly necessary for checking the compliance of the signatory with the Commitments made under the self-regulation measure.

The Independent Inspector should not give the signatory advance warning of the inspection or only at short notice. The Signatory should provide any support required.

The Independent Inspector should send a draft of the inspection report to the Signatory concerned for comment within one month of the inspection. The Signatory should submit its comments within two weeks of receiving the draft report. The Independent Inspector should, within two weeks, amend, if necessary, the draft report to take account of the comments received from the Signatory. The report, including the reason for the inspection, should be provided to the Commission and to the signatory concerned. A summary should be presented

Deleted: An

Deleted: signatory

Deleted: can only be conducted

Deleted: can only be conducted according to

Deleted: ,

Deleted: and

Deleted: (TBD)

at the first meeting of the Steering Committee held following the finalisation of the report. The summary should not disclose any commercially sensitive information, unless this is necessary to prove non-compliance.

7.3 Selection of the Independent Inspector

Signatories shall issue a tender to identify candidates to serve as the Independent Inspector. The appointment of the Independent Inspector selected by the Signatories is to be agreed with the European Commission. The final draft of the contract between the Signatories and the Independent Inspector shall be provided to the members of the Steering Committee for comment before the contract is finalised. The contract of the Independent Inspector shall require undertakings of confidentiality from the Independent Inspector, and shall also set out any requirements or applicable mechanisms for a process of appeal, should this be necessary.

The Independent Inspector shall:

- Be a natural or legal person
- Have the necessary capacity and skills for verifying the compliance of Signatories with the provisions of this Voluntary Agreement
- Be free of conflicts of interest and preferably not have any business or other relevant relationship with the Signatories or at least disclose such relationship at the earliest possible stage
- Be impartial in all its actions and base its opinions and reports only on the facts
- Observe confidentiality, where necessary, in order to protect commercial secrets or to preserve sensitive data of a Signatory. The Independent Inspector should sign '*Nondisclosure Agreements*' with all the Signatories to the self-regulation measure
- Interpret applicable rules and figures in a truthful and sincere manner
- Perform its tasks with due care and supervise adequately all performed tasks for which it will be responsible

Information about the Independent Inspector chosen for the self-regulation measure should be published on the website dedicated to the self-regulation measure within thirty days following its appointment.

The Independent Inspector shall have an observer seat at the Steering Committee.

8. Reporting

8.1 Reporting frequency

Signatories shall submit reports to the Independent Inspector reporting based on compliance with the Voluntary Agreement (the "Reports") according to the guidelines in this Section.

The Reports shall be provided according to the template in Annex C.

The Independent Inspector shall be required to publish Annual Compliance Reports according to the following schedule:

- A Report by 30 April 2021 which shall cover Products Placed on the Market between 1 January 2020 and 31 December 2020.
- A Report by 30 April 2022 which shall cover Products Placed on the Market between 1 January 2021 and 31 December 2021.
- A Report by 30 April 2023 which shall cover Products Placed on the Market between 1 January 2022 and 31 December 2022.
- A Report by 30 April 2024 which shall cover Products Placed on the Market between 1 January 2023 and 31 December 2023.

Unless differently stated in forthcoming revisions of the current Voluntary Agreement, the subsequent Annual Compliance Reports shall be published by the 30 April of each year covering Products Placed on the Market during the previous full calendar year, e.g. by 30 April 2030 for Products Placed on the Market between 1 January 2029 and 31 December 2029.

Within two weeks following the end of a reporting period, the Independent Inspector shall be required to send a request to the Signatories to file their Reports. These shall be submitted no later than two months after the end of the reporting period.

Additional requests made by the Independent Inspector for Signatories to provide any missing information after the deadline should be honoured within 10 working days.

The Reports shall be compiled by the Independent Inspector into a draft annual progress report (the "Annual Progress Report") that will be submitted to the European Commission and the Signatories by 12 April of the calendar year following the end of the reporting period for the purpose of checking inconsistencies and quality. The members of the Steering Committee should be allowed two weeks to submit their comments on the report. The Independent Inspector will submit the Final Annual Compliance Report to the Steering Committee no later than 30 April of the calendar year following the end of the reporting period.

Deleted: the

The Annual Compliance report shall include:

- information about the data collection and processing methods used and any difficulties encountered in preparing the report
- the results of document checking
- the approach for selecting Products for testing and if specific Models or Signatories were targeted, the reasons for doing so
- a list of Products tested and a summary of the individual results
- summaries of any inspections carried out during the reporting period
- a list of non-compliant Signatories
- information about the reasons for any non-compliance; and
- recommendations for future reporting periods

This Annual Progress Report will only show anonymous results. Signatories will not be named although individual achievements shall be disclosed (company A, company B, etc.). If a company is found to be non-compliant, the Annual Progress Report shall provide the identity of the Signatory and detail the reasons for such non-compliance.

The Annual Progress Report shall also include a table of anonymised Products (per company A, B, etc.) showing how they qualify for the Voluntary Agreement but not including the number of Products Placed on the Market.

The Independent Inspector shall be responsible for ensuring that confidentiality of the Signatory's identity and any data or information provided to it under or in relation to this agreement is maintained. This shall include entering into a non-disclosure agreement with each Signatory if requested by the Signatory.

8.2 Energy consumption report

The Signatories are to ensure that EuroVAprint publishes once a year on its website an energy usage report that is prepared by the Independent Inspector.¹⁵

The report is to contain the following data:

- Total energy consumption of OM units per year
- Total energy consumption of TEC units per year

9. Third party allegation

Any third party (excluding Market Surveillance Authorities) may submit an appropriately substantiated allegation of a possible non-compliance with the Voluntary Agreement by a specific Signatory to the Independent Inspector.

- The Independent Inspector shall evaluate the evidence and, as necessary, follow-up by requesting further information from the third party or the Signatory concerned.
- The Independent Inspector at his own discretion may dismiss any allegation that is inadequately substantiated or outside the scope of the VA.
- As a general principle, the Independent Inspector shall be under no obligation to investigate the same matter more than once. Accordingly, third party allegations that are the same or substantially the same as allegations that have already been investigated or dismissed as unsubstantiated will automatically be dismissed, unless supported by significant new evidence that the Independent Inspector considers creates a realistic possibility of a different conclusion.
 - The Independent Inspector should at each Steering Committee meeting provide an overview of all allegations submitted since the last meeting and, if it has not investigated any of them, provide its reasons for this.
 - The Independent Inspector shall provide an overview of all allegations made in the Annual Compliance Report including their status and/or outcome.
- On the basis of the information received the Independent Inspector may undertake an investigation as per the methodology set out in this section.
- Each Signatory will cover the costs of investigating **2 allegations per reporting period** when a final report is submitted. **Should this maximum number be exceeded, the**

Commented [A7]: This section is currently being revised with the input of the independent inspector.

Commented [A8]: It is important there is a clear limit to investigations based on third-party allegations given the potential for baseless allegations from competitive interests. The Signatories are working with the independent inspector to fine-tune the third-party allegation process.

Deleted: whether the investigation is dismissed after the initial check by the Independent Inspector or whether a final report is submitted

¹⁵ <http://www.eurovaprint.eu/home>.

Inspector shall address the issue, within 30 days, to the Steering Committee members which should take a decision on how to fund the investigations, where appropriate.

- An investigation will be conducted as follows:
 - The Independent Inspector shall inform the Steering Committee and the third party that said investigation has started.
 - The investigation shall be limited only to those aspects set out in the allegation.
 - The Independent Inspector may use several methods of investigation, depending on the particular case, which may include documentation checks, interviews with the third party and/or Signatory concerned, and/or product testing.
 - The Independent Inspector shall draft and share a report, within 30 working days from the notification to the Steering Committee and the third party, with the Signatory concerned.
 - The Signatory must respond with its comments (if any) to the Independent Inspector within 10 working days.
 - Where applicable, the Independent Inspector shall respond to the Signatory's comments, confirming amendments it will make/will not make and update the draft report accordingly, within 10 working days of receiving comments from the Signatory.
 - The Independent Inspector shall issue a final written summary report to the Signatory concerned, the Steering Committee (via EuroVAprint), and the third party within 10 working days. The summary report shall set out the evidence provided, investigations conducted by the Independent Inspector, the conclusions and their rationale, and recommendations for further steps if considered necessary (e.g. site visits and third party testing).

The procedures set out in this section do not apply to Market Surveillance Authorities.

10. Verification by Market Surveillance Authorities

A national Market Surveillance Authority of a Member State that is responsible for overseeing the implementation and enforcement of ecodesign regulations, may request specific documentation and information from any individual Signatory to enable said Market Surveillance Authority to verify compliance by the Signatory with the requirements of this Voluntary Agreement, including through testing.

Market Surveillance Authorities shall send any communication directly to the individual Signatory, which shall reply within 10 working days. The Independent Inspector shall not be involved or conduct an investigation as regards any verification request undertaken by a Market Surveillance Authority.

The signatory will inform the market surveillance authority whether the product in question is a qualified product, according to the provisions of sections 4, 5 and 6.

11. Access to data & Background data

The Commission, Member States, Market Surveillance Authorities and non-governmental organizations may request, from the Independent Inspector, non-commercially sensitive technical data on the environmental performance of Products covered by this agreement. The inspector shall provide the information requested within 10 working days.

For the non-commercially sensitive data that the Independent Inspector is at liberty to disclose – refer to Annex G.

12. Nature and Organization of the Voluntary Agreement

12.1 Nature of the Voluntary Agreement

Each Signatory signs and enters into this Agreement only on its own behalf and makes its commitment under the Voluntary Agreement to the European Commission. The consequences of non-compliance are set out in section 14.

This Agreement is not a commercial agreement and shall not give rise to any commercial expectations or liabilities between the Signatories in respect of the fulfilment of their individual Commitments as listed in this Voluntary Agreement.

Each Signatory shall be treated equally and there shall be no special arrangements for individual Signatories.

12.2 Organisation of the Voluntary Agreement

The members of the Steering Committee are the Signatories and the European Commission. Each Signatory to the Voluntary Agreement as well as the European Commission shall have the right to nominate one person to represent it at the Steering Committee, who all have equal voting rights.

Members of the Consultation Forum, and the Independent Inspector have the status of observer to the Steering Committee, without voting rights.

Meetings of the Steering Committee shall be held in Brussels at least once per year. They shall be open to non-voting interested parties, such as:

- Any representatives of EU Member States, as well as Member States of the EEA or EFTA; and
- Organisations that have a permanent seat on the Eco-design Consultation Forum.
- Other interested parties, including companies with Products in scope of the self-regulation measure that are not Signatories to it.

The Steering Committee shall elect, from amongst its members, a Chair for a mandate of two years. The members of the Steering Committee can shorten or end the term of the Chair at any time. The Chair shall be responsible for convening the Steering Committee at least once

a year, in order inter alia to review progress and analyse and discuss reports presented by the Independent Inspector. The Chair shall, however, have no executive or representative function unless this is delegated to them by the Steering Committee.

The Chair, after consulting the Steering Committee, may invite one representative from an organisation as a (non-voting) observer. Provided such organisations clearly state the interests and organisations they represent, they may participate in Steering Committee meetings on a case-by-case basis.

All participants should have a right to take the floor at the Steering Committee meetings and to request that the Chair record their views in the minutes.

The Chair must convene a Steering Committee meeting whenever any of the conditions justifying the termination of the self-regulation measure mentioned hereafter occur. The meeting must be convened within thirty days of the receipt by the Chair of the information about the condition justifying the termination of the self-regulation measure.

Any member of the Steering Committee may request the Chair to convene a meeting of the Steering Committee.

Invitations to the Steering Committee meeting must be sent to all members and observers of the Steering Committee, and must be published, together with a draft agenda, on the website of the self-regulation measure no later than thirty days in advance of the meeting.

The Chair should include in the draft agenda for a Steering Committee meeting all points requested by the members and observers.

Documents to be presented and discussed at the Steering Committee meeting must be sent to all members and observers of the Steering Committee, and should be published on the website of the self-regulation measure no later than 7 working days in advance of the meeting.

The draft minutes should be sent to all members and observers of the Steering Committee and they should be given at least two weeks to submit comments on them. The final minutes should be published on the self-regulation measure's website within one month of the meeting.

The Signatories should bear all expenses related to the Independent Inspector and its activities, the website and the operation of the Steering Committee, except for the costs of participation of the representative of the Commission and the observers other than the Independent Inspector.

12.3 Market coverage

The Signatories will provide evidence, compiled by an independent party, to the European Commission in the following cases:

- when submitting a self-regulation measure or a revised version of an existing self-regulation measure, with the findings having been generated or updated within the previous six months;
- within three months of any change in the Signatories (e.g. after the withdrawal of a signatory or after a relevant division of a signatory has been sold off to a non-signatory), unless the most recent report shows that the market coverage will remain at least 80% following the change; and
- two years after sending the latest report, to update coverage following changes in the market.

The market share coverage will be assessed as follows

- Market share data will be sourced from an independent third party with an established capability to provide data in this sector.¹⁶
- Two figures for market share will be sourced for the reporting period concerned:
 - T – the total number of Products Placed on the Market in the EU in scope of the VA
 - V – the total number of Products Placed on the Market in the EU in scope of the VA by the Signatories to the VA alone.
- One figure will be published in the annual compliance report, $S = V/T$.
- S is the percentage market share represented by the VA.

12.4 Transparency of the Voluntary Agreement

EuroVAp rint has set up a website to ensure full transparency of the VA¹⁷. It shall provide the below information:

- An up-to-date list of Signatories (including contact details) and information on recent withdrawals and exclusions of Signatories
- The most recent and previous versions of the self-regulation measure
- Official Commission guidelines
- The Annual Compliance reports produced by the Independent Inspector
- Non-compliance Reports from the Independent Inspector
- Annual energy usage report
- Exclusion of a non-compliant Signatory
- For every Steering Committee meeting: invitations, draft agendas, meeting documents and meeting minutes
- Summary versions of reports on the market coverage (without disclosure of individual Signatories' commercial or confidential data)
- Information on the Independent Inspector, including its contact details
- An up-to-date list of non-compliant Signatories
- A contact form that allows visitors to submit questions in relation to the Voluntary Agreement. The enquiries should be replied to within one month

Commented [A9]: Commission suggests adding:

Up-to-date lists of products declared compliant by the signatories (products found to be non-compliant by the Inspector should not be included);

Further discussion with EC required on this point.

¹⁶ This party shall be subject to veto by the European Commission provided that an acceptable alternative source can be agreed.

¹⁷ <http://www.eurovaprint.eu/home>.

If some of all of the Signatories decide to conclude a separate agreement or association of any kind in relation to the objectives of this self-regulation measure, all relevant documents relating to the agreement or the associations shall be made publicly available on the website.

13. Voting rules

The Steering Committee will seek to achieve agreement by consensus at all times. If consensus cannot be achieved, the Steering Committee may reach a decision in accordance with the voting procedures described below. The Steering Committee may decide to develop and adopt further rules of procedure where it deems it necessary and may decide to delegate powers where it deems it to be necessary to specific individuals or to sub-committees.

All reasonable efforts shall be taken to ensure that the decisions of the Steering Committee are taken on the basis of a consensus.

However, where consensus on an issue cannot be achieved in the course of a meeting of the Steering Committee, a call for an indicative vote may be made by the Steering Committee Chair or by a Quorum.

During any voting procedure of the Steering Committee each Signatory shall be entitled to cast a single vote. Only VA Signatories (EuroVAprint members or otherwise) and the European Commission enjoy full voting rights.

If the indicative vote indicates a favourable outcome (two-thirds of those present/represented and voting or greater in favour) but a consensus is nonetheless not achieved, a call for a deciding vote may be made by a Quorum to be held at the following meeting of the Steering Committee. At such second meeting, the adoption of a decision shall be made in accordance with the Voting Rules. At such second meeting, the adoption of a decision shall require:

- A Quorum
- The agreement of a two-thirds (of those present and voting) majority of the Quorum.

14. Non-Compliance

If a Signatory fails to meet its Commitments under Sections 4, 5, or 6 of the present Voluntary Agreement, the Signatory shall be requested to take corrective actions. Non-compliance that continues for more than six months after that report of the independent inspector which identified the non-compliance, shall lead to immediate exclusion of the signatory from the VA.

Deleted: the

In case of non-compliance with the deadlines in Section 8, the Signatory will have 1 month to propose a compliance plan that would correct the situation. The Signatory will also be subject to an inspection in the year following the reporting period concerned. A repeated failure to report compliance documentation shall lead to immediate exclusion from the VA.

In cases where non-compliance determines withdrawal or exclusion of Signatories the market coverage of the remaining Signatories shall be re-assessed by an independent party. The findings shall be communicated in writing to the Commission within 3 months.

The defaulting company may reapply for membership of the VA. The application shall include detailed explanations regarding the remedial actions for compliance that were taken by the company. In such cases an inspection of the applicant shall be conducted by the Inspector before the application is submitted to the approval of the Steering Committee.

The Chair should inform the Steering Committee in writing of the exclusion of any noncompliant Signatory within one week of receiving information from the Independent Inspector that a condition for immediate exclusion has been met.

15. Revision of the Voluntary Agreement

Signatories will initiate the revision of the Voluntary Agreement and its Commitments following an agreement between the European Commission and EuroVAprint.

Deleted: Nothing in the Agreement may be construed as to limit or restrict any rights may correspond to the Signatories directly or indirectly under the Treaty or the international engagements of the Union, including in particular the protection of their IP and other fundamental rights. ¶

Deleted: at the latest three months after the publication by the U.S EPA of new ENERGY STAR® specifications for Imaging Equipment, or

16. Withdrawal from the Voluntary Agreement

Signatories can terminate their individual participation in the Voluntary Agreement by sending a registered letter to the Chair of the Steering Committee and the secretariat of EuroVAprint with one month notice. The Chair of the Steering Committee should inform the Steering Committee within a week of receipt of the written notice.

In such cases the market coverage of the remaining Signatories shall be re-assessed by an independent party. The findings shall be communicated in writing to the Commission within 3 months.

17. Termination of the Voluntary Agreement

The Signatories may decide to terminate the Voluntary Agreement at any time. Reasons for termination could be, but are not limited to:

- Signatories no longer meet the relevant market coverage threshold (80%) and this continues for a period over six months
- A majority of Signatories no longer meet the Commitments of the Voluntary Agreement
- Legislation is implemented that overrules or conflicts with the Voluntary Agreement
- Signatories have a considerable disadvantage over “free riders”

Appendix 1

Energy efficiency and duplex requirements

1. Requirements for Typical Electricity Consumption (TEC) Products, Excluding Professional Imaging Products

1.1. Automatic Duplexing Capability: For MFDs and Printers subject to the TEC test method and the target levels in section 4.1, automatic duplexing capability shall be integral to the base Product and duplex printing must be set as default for Products with speed greater than those specified in Table 5. Printers whose intended function is to print on special single-sided media for the purpose of single sided printing (e.g., release coated paper for labels, direct thermal media, etc.) are exempt from this requirement.

Table 5: Automatic Duplexing Requirements for all TEC MFDs and Printers

<u>Product Type</u>	<u>Product speed (ipm)</u>
<u>Color</u>	<u>S > 19</u>
<u>Monochrome</u>	<u>S > 24</u>

1.1.2. Special single-sided media: TEC products whose intended function is to print on special single-sided media for the purpose of single sided printing (e.g. release coated paper for labels, direct thermal media, etc.) are exempt from the duplex requirements.

1.2. Typical Electricity Consumption: Calculated Typical Electricity Consumption (TEC₂₀₁₈) per Equation 3 or Equation 4 shall be less than or equal to the Maximum TEC Requirement (TEC_{MAX}) specified in Equation 6.

For printers, digital duplicators with print capability, and MFDs with print capability, TEC shall be calculated per Equation 3.

Equation 3: TEC Calculation for Printers, Fax Machines, Digital Duplicators with Print Capability, and MFDs with Print Capability

$$TEC_{2018} = \left[5 \times \left(E_{JOB_DAILY} + (2 \times E_{FINAL}) + \left[24 - \frac{N_{JOBS}}{16} - (2 \times t_{FINAL}) \right] \times \frac{E_{SLEEP}}{t_{SLEEP}} \right) + 48 \times \frac{E_{SLEEP}}{t_{SLEEP}} \right]$$

Where:

- TEC₂₀₁₈ is the typical weekly energy consumption for Printers, digital duplicators with print capability, and MFDs with print capability, expressed in kilowatt-hours (kWh) and rounded to the nearest 0.01 kWh for reporting;
- E_{JOB_DAILY} is the daily job energy, as calculated per Equation 5, in kWh;
- E_{FINAL} is the final energy, as measured in the test procedure, converted to kWh;
- N_{JOBS} is the number of jobs per day, as calculated in the test procedure,

- t_{FINAL} is the final time to Sleep, as measured in the test procedure, converted to hours;
- E_{SLEEP} is the Sleep energy, as measured in the test procedure, converted to kWh; and
- t_{SLEEP} is the Sleep time, as measured in the test procedure, converted to hours.

For digital duplicators without print capability and MFDs without print capability, TEC shall be calculated per Equation 4.

Equation 4: TEC Calculation for Digital Duplicators without Print Capability and MFDs without Print Capability

$$TEC_{2018} = \left[5 \times \left(E_{JOB_DAILY} + (2 \times E_{FINAL}) + \left[24 - \frac{N_{JOBS}}{16} - (2 \times t_{FINAL}) \right] \times \frac{E_{AUTO}}{t_{AUTO}} \right) + 48 \times \frac{E_{AUTO}}{t_{AUTO}} \right],$$

Where:

- TEC_{2018} is the typical weekly energy consumption for digital duplicators without print capability and MFDs without print capability, expressed in kilowatt-hours (kWh) and rounded to the nearest 0.01 kWh for reporting;
- E_{JOB_DAILY} is the daily job energy, as calculated per Equation 5, in kWh;
- E_{FINAL} is the final energy, as measured in the test procedure, converted to kWh;
- N_{JOBS} is the number of jobs per day, as calculated in the test procedure;
- t_{FINAL} is the final time to Sleep, as measured in the test procedure, converted to hours;
- E_{AUTO} is the Auto-off energy, as measured in the test procedure, converted to kWh; and
- t_{AUTO} is the Auto-off time, as measured in the test procedure, converted to hours.

Daily Job Energy shall be calculated per Equation 5.

Equation 5: Daily Job Energy Calculation for TEC Products

$$E_{JOB_DAILY} = \frac{1}{4} \left[2 \times E_{JOB1} + (N_{JOBS} - 2) \times \frac{E_{JOB2} + E_{JOB3} + E_{JOB4}}{3} \right],$$

Where:

- E_{JOB_DAILY} is the daily job energy, expressed in kilowatt-hours (kWh);
- E_{JOBi} is the energy of the i th job, as measured in the test procedure, converted to kWh; and
- N_{JOBS} is the number of jobs per day, as calculated in the test procedure.

Equation 6: Maximum TEC Requirement Calculation

$$TEC_{MAX} = TEC_{REQ} + Adder_{A3} + Adder_{Wi-Fi},$$

Where:

- TEC_{MAX} is the maximum TEC requirement in kilowatt-hours per week (kWh/wk), rounded to the nearest 0.01 kWh/wk for reporting;
- TEC_{REQ} is the TEC requirement specified in Table 6, in kWh;
- $Adder_{A3}$ is a 0.05 kWh/wk allowance provided for A3-capable Products; and
- $Adder_{Wi-Fi}$ is a 0.1 kWh/wk allowance provided for Products with Wi-Fi enabled as shipped during the test.

Table 6: TEC Requirement

Color Capability	Monochrome Product Speed, s, as Calculated in the Test Method (ipm)	TECREQ (kWh/wk, rounded to the nearest 0.01 kWh/wk for reporting)
Monochrome Non-MFD	$s \leq 20$	0.226
	$20 < s \leq 40$	$0.018 \times s - 0.152$
	$40 < s \leq 60$	$0.025 \times s - 0.439$
	$60 < s \leq 135$	$0.049 \times s - 1.903$
	$s > 135$	$0.183 \times s - 20.127$
Monochrome MFD	$s \leq 20$	0.263
	$20 < s \leq 40$	$0.018 \times s - 0.115$
	$40 < s \leq 60$	$0.016 \times s - 0.033$
	$60 < s \leq 80$	$0.037 \times s - 1.314$
	$s > 80$	$0.086 \times s - 5.283$
Color Non-MFD	$s \leq 20$	0.275
	$20 < s \leq 40$	$0.032 \times s - 0.397$
	$40 < s \leq 60$	$0.002 \times s + 0.833$
	$s > 60$	$0.100 \times s - 5.145$
Color MFD	$s \leq 20$	0.254
	$20 < s \leq 40$	$0.024 \times s - 0.250$
	$40 < s \leq 60$	$0.011 \times s + 0.283$
	$60 < s \leq 80$	$0.055 \times s - 2.401$
	$s > 80$	$0.118 \times s - 7.504$

2. Requirements for Operational Mode (OM) Products (according to the target levels in section 4.1)

2.1. Sleep Mode Power Consumption: Measured Sleep Mode power consumption (P_{SLEEP}) shall be less than or equal to the maximum Sleep Mode power consumption requirement (P_{SLEEP_MAX}) determined per Equation 16, subject to the following conditions:

- i. Only those interfaces that are present and used during the test, including any fax interface, may be considered functional adders.
- ii. Product functionality offered through a DFE shall not be considered a functional adder.
- iii. A single interface that performs multiple functions may be counted only once.
- iv. Any interface that meets more than one interface type definition shall be classified according to the functionality used during the test.

- v. For Products that meet the Sleep Mode power requirement in Ready State, no further automatic power reductions are required to meet Sleep Mode requirements.

Equation 16: Calculation of Maximum Sleep Mode Power Consumption Requirement for OM rProducts

$$P_{SLEEP_MAX} = P_{MAX_BASE} + \sum_1^n Adder_{INTERFACE} + \sum_1^m Adder_{OTHER}$$

Where:

- P_{SLEEP_MAX} is the maximum Sleep Mode power consumption requirement, expressed in watts (W), and rounded to the nearest 0.1 watt for reporting;
- P_{MAX_BASE} is the maximum Sleep Mode power allowance for the base marking engine, as determined per Table 10, in watts;
- $Adder_{INTERFACE}$ is the power allowance for the interface functional adders used during the test, including any fax capability, and as selected by the manufacturer from Table 11, in watts;
- n is the number of allowances claimed for interface functional adders used during the test, including any fax capability, and is less than or equal to 2;
- $Adder_{OTHER}$ is the power allowance for any non-interface functional adders in use during the test, as selected by the manufacturer from Table 11, in watts; and
- m is the number of allowances claimed for any non-interface functional adders in use during the test, and is unlimited.

Table 10: Sleep Mode Power Allowance for Base Marking Engine

Product Type	Media Format	Marking Technology				P _{MAX} BASE (watts)
		Impact	Inkjet	All Other*	Not Applicable	
Mailing Machine	N/A		X	X	.	5.0
MFD	Standard	X	X		.	1.1
	Large		X		.	5.4
				X		8.7
Printer	Small	X	X	X		4.0
	Standard	X	X		.	0.6
	Large	X		X		2.5
			X			4.9
Scanner	Any				X	2.5

* "All Other" category includes High Performance Ink Jet.

Table 11: Sleep Mode Power Allowances for Functional Adders

<u>Adder Type</u>	<u>Connection Type</u>	<u>Max. Data Rate, r (Mbit/second)</u>	<u>Details</u>	<u>Functional Adder Allowance (watts)</u>
<u>Interface</u>	<u>Wired</u>	<u>$r < 20$</u>	<u>Includes: USB 1.x, IEEE 488, IEEE 1284/Parallel/ Centronics, RS232</u>	<u>0.2</u>
		<u>$20 \leq r < 500$</u>	<u>Includes: USB 2.x, IEEE 1394/ FireWire/i.LINK, 100Mb Ethernet</u>	<u>0.4</u>
		<u>$r \geq 500$</u>	<u>Includes: USB 3.x, 1G Ethernet</u>	<u>0.5</u>
		<u>Any</u>	<u>Includes: Flash memory-card/smart-card readers, camera interfaces, PictBridge</u>	<u>0.2</u>
	<u>Fax Modem</u>	<u>Any</u>	<u>Applies to MFDs only.</u>	<u>0.2</u>
		<u>Wireless, Radio-frequency (RF)</u>	<u>Any</u>	<u>Includes: Bluetooth, 802.11</u>
	<u>Wireless, Infrared (IR)</u>	<u>Any</u>	<u>Includes: IrDA.</u>	<u>0.1</u>
<u>Cordless Handset</u>	<u>N/A</u>	<u>N/A</u>	<u>Capability of the imaging Product to communicate with a cordless handset. Applied only once, regardless of the number of cordless handsets the Product is designed to handle. Does not address the power requirements of the cordless handset itself.</u>	<u>0.8</u>
<u>Memory</u>	<u>N/A</u>	<u>N/A</u>	<u>Applies to the internal capacity available in the Imaging Equipment for storing data. Applies to all volumes of internal memory and should be scaled accordingly for RAM. This adder does not apply to hard disk or flash memory.</u>	
<u>Power Supply</u>	<u>N/A</u>	<u>N/A</u>	<u>Applies to both internal and external power supplies of Mailing Machines and Standard Format Products using Inkjet and Impact marking technologies with nameplate output power (P_{out}) greater than 10 watts.</u>	<u>$0.02 \times (P_{out} - 10.0)$</u>
<u>Touch Panel Display</u>	<u>N/A</u>	<u>N/A</u>	<u>Applies to both monochrome and color touch panel displays.</u>	<u>0.2</u>

2.2. Off Mode Power Consumption Off Mode power, as measured in the test procedure, shall be less than or equal to the Maximum Off Mode power specified in Table 12, subject to the following conditions.

- i. For Products that do not have an Off Mode, Sleep Mode power, as measured in the test procedure, shall be less than or equal to the Maximum Off Mode power.
- ii. For Products that do not have an Off Mode or Sleep Mode, Ready State power, as measured in the test procedure, shall be less than or equal to the Maximum Off Mode power.
- iii. The Imaging Equipment shall meet the Off Mode Power requirement independent of the state of any other devices (e.g., a host PC) connected to it.

Table 12: Maximum Off Mode Power Requirement

<u>Product Type</u>	<u>Maximum Off Mode Power (watts)</u>
All OM Products	0.3

Test Methods

Testing to demonstrate, or verify, compliance with the above energy efficiency requirements can only be conducted according to the test method below and must be conducted by an approved lab.

Table 13: Test Methods for ENERGY STAR Certification

<u>Product Type</u>	<u>Test Method</u>
All Imaging Products	ENERGY STAR Imaging Equipment Test Method, Rev. Dec-2018

Annex A: Definitions

1. **Cartridge:** A customer replaceable module that holds toner or ink and that must be inserted into or connected to an imaging equipment Product for the imaging equipment Product to print.
 - a) **Cartridge With Circuitry:** a Cartridge that contains electronic circuitry.
 - b) **Cartridge Without Circuitry:** a Cartridge that does not contain electronic circuitry.
 - c) **OEM Cartridge:** A Cartridge produced by or for the OEM¹⁹ for use in or with the Products that bear the respective OEM's brand name set out in section 3.2.1.
 - d) **Non-OEM Cartridge: means:**
 - i. a Cartridge With Circuitry that functions using only unmodified OEM original electronic circuitry;
 - ii. or a Cartridge Without Circuitry;
 in each case, not sold by the OEM, for use in or with Products that bear the respective OEM's brand name, and that is either a Remanufactured Cartridge or Refilled Cartridge.
 - e) **Remanufactured Cartridge:** Cartridge resulting from a commercial process where used OEM Cartridges are centrally collected for refilling, relabelling and repackaging and resold to a new user. Some worn components may be replaced in order to return the Cartridge to working condition.
 - f) **Refilled Cartridge:** refilling is the process where a Cartridge is simply refilled and involves no relabelling, repackaging or replacement of components or parts.
2. **Copier:** A commercially-available imaging product whose 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 (UDCs).
3. **Consultation Forum:** as defined by Article 18 of the 2009/125/EC Directive, and 2008/591/EC Commission Decision, the assembly ensuring a balanced participation of Member States' representatives and all interested parties concerned with the Product or Product group in question
4. **Commitments:** Means the Commitments described in Sections 4, 5 and 6 to this Agreement altogether.
5. **Commonly Available Tools:** Widely used, commercially available tools.
6. **Commonly Used Fasteners:** Widely used, commercially available fasteners.
7. **Compliance period:** The period over which companies measure their performance against the Commitments of the Voluntary Agreement.

Deleted: <#>Cartridge: A customer replaceable module with printing-related functionality that includes integrated components or moving parts integral to the imaging product's function beyond holding the holds toner/ or ink and fitting onto/that must be inserted into their connected to an imaging equipment product for the imaging equipment product to print. ¶

<#>OEM Cartridge: This refers to cartridges With Circuitry: a Cartridge that contains electronic circuitry. ¶

<#>Cartridge Without Circuitry: a Cartridge that does not contain electronic circuitry. ¶

<#>OEM Cartridge: A Cartridge produced by or for the OEM¹⁹ for use in or with the products that bear the respective OEM's brand name referred to set out in section 3.2.1. ¶

<#>Non-OEM Cartridge: A toner or ink cartridge means: ¶

<#>a Cartridge With Circuitry that functions using only unmodified OEM original electronic circuitry; ¶

<#>or a Cartridge Without Circuitry; ¶

<#>in each case, not sold by the OEM, for use in or with products that bear the respective OEM's OEM's brand name, and that is a remanufactured cartridge or refilled cartridge. ¶

<#>either a Remanufactured cartridge: cartridge Cartridge or Refilled Cartridge. ¶

<#>Remanufactured Cartridge: Cartridge resulting from a commercial process where used OEM cartridges Cartridges are centrally collected for refilling, relabelling and repackaging and resold to a new user. Some worn components may be replaced in order to return the cartridge Cartridge to working condition. ¶

<#>Refilled cartridge Cartridge: refilling is the process where a cartridge Cartridge is simply refilled and involves no relabelling, repackaging or replacement of components or parts. ¶

¹⁹ See OEM definition in Annex A below.

8. **Customer/purchaser:** A person or legal entity who takes purchasing decisions for the Products covered in this Voluntary Agreement.
9. **Defaulting Signatories:** Means all Signatories given the status of Defaulting Signatory by the Steering Committee in accordance with Section 14.
10. **Electrophotography (EP):** A marking technology characterized by illumination of a photoconductor in a pattern representing the desired hard copy image via a light source, development of the image with particles of toner using the latent image on the photoconductor to define the presence or absence of toner at a given location, transfer of the toner to the final hard copy medium, and fusing to cause the desired hard copy to become durable. Types of EP include Laser, LED, and LCD. Colour EP is distinguished from monochrome EP in that toners of at least three different colours are available in a given product at one time. Two types of colour EP technology are defined below:
 - a) Parallel Colour EP – A marking technology that uses multiple light sources and multiple photoconductors to increase the maximum colour printing speed.
 - b) Serial Colour EP – A marking technology that uses a single photoconductor in a serial fashion and one or multiple light sources to achieve the multi-colour hard copy output.
11. **End-User:** A person who uses the imaging equipment for one of its main functions (e.g. printing, scanning, copying). The End-User has control over the environmental impact of the Product by choosing the type and weight of paper and by using duplex and/or n-up printing. Further, the End-User can be expected to exchange consumables e.g. Cartridges.
12. **Fax Machine:** Commercially-available imaging product whose primary functions are scanning hard copy originals for electronic transmission to remote units and receiving similar electronic transmissions to produce hard copy output. Electronic transmission is primarily over a public telephone system, but also may be via computer network or the Internet. The product also may be capable of producing hard copy duplicates. 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 fax machines.
13. **High Performance IJ:** The use of an IJ marking technology in high-performance business applications usually occupied by Electrophotographic marking technology. This difference between the conventional IJ product and the High Performance IJ product is denoted by the presence of nozzle arrays that span the width of a page and/or the ability to dry the ink on the media through additional media heating mechanisms.
14. **Ink Jet (IJ):** A marking technology where images are formed by depositing colorant in small drops directly to the print media in a matrix manner. Colour IJ is distinguished from monochrome IJ in that more than one colorant is available in a product at any one time. Typical types of IJ include Piezo-electric (PE) IJ, IJ Sublimation, and Thermal IJ.
15. **Member States:** The Member States of the European Union

16. **Model:** An imaging equipment hardware Product that is sold or marketed under a unique model number or marketing name. A Product Model may be comprised of a base Product or a base Product plus accessories.
17. **Multifunction Device (MFD):** 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).
18. **OEM** (original equipment manufacturer): a company that manufactures and commercializes/imports products under its own brand name into the EU territory.
19. **OM - Operational Mode:** ENERGY STAR[®] Imaging Equipment (IE) specification. The procedure is to be used to quantify the power consumption of imaging Products that do not utilize the Typical Electricity Consumption (TEC) method. Examples of Products that will be tested with this OM method include those that use marking technologies such as Ink Jet, Dot Matrix or Impact, as well as scanners and all large-format and small-format devices. The key results of this test procedure are power values for Ready, Sleep, and Off modes.
20. **Potential Signatories:** Means OEM, which manufacture and commercialize/import at least one device of the Product categories listed in Section 3.2.
21. **Placing on the Market:** The act of making a Product available for the first time on the Union market when supplied for distribution or use within the Union whether for reward or free of charge and irrespective of the selling technique. The concept of making available refers to each individual Product. Guidance on this definition is available in the Guide to the Implementation of Directives Based on New Approach and Global Approach. <https://publications.europa.eu/en/publication-detail/-/publication/4f6721ee-8008-4fd7-acf7-9d03448d49e5/language-en>
22. **Product:** any Multifunction Device or Printer falling within the scope of the present agreement, as described in section 3.3.
23. **Printer:** 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 in the field.
24. **Quorum:** Two thirds of the Signatories who requested to be on the Steering Committee being present at a meeting.

Deleted: EU

Deleted: 2

25. **Reuse:** any operation by which Products, or Cartridges, or parts thereof are used again for the same purpose for which they were conceived.

26. **Reused Complex Modules:**

Commented [A10]: BA 3.1.1.2 (9) uses this term but does not provide a definition; still considering a definition.

27. **Signatories:** means all member companies that have signed this Voluntary Agreement. See in section 1 the name of Signatories of this Voluntary Agreement.

28. **Solid Ink (SI):** A marking technology where the ink is solid at room temperature and liquid when heated to the jetting temperature. Transfer to the media can be direct, but is most often made to an intermediate drum or belt and then offset printed to the media.

29. **Spare Part:** means a separate part that can replace a part with the same or similar function in an equipment. The part is considered necessary for use if the equipment cannot function as intended without that part. The functionality of the equipment is restored or is upgraded when the part is replaced by a spare part.

30. **Standard Size Format Product:** Products categorized as Standard include those designed for standard-sized media (e.g., Letter, Legal, Ledger, A3, A4, and B4), including those designed to accommodate continuous-form media at widths between 210 mm and 406 mm. Standard-size products may also be capable of printing on small-format media.

31. **Steering Committee:** The co-ordinating and governing body of this Voluntary Agreement, appointed in accordance with the principles set out in Section 12.

32. **TEC: Typical Electricity Consumption** method for the Version 2.0 ENERGY STAR[®] Imaging Equipment (IE) specification. The procedure is to be used to obtain and evaluate the TEC of Standard-size IE products such as Copiers, digital duplicators, Fax Machines, Multifunction Devices (MFDs), and Printers that use high-temperature technologies such as Electrophotography (EP) and Solid Ink (SI), and those that provide comparable functionality. It is not intended for low-temperature technologies such as conventional Ink Jet (IJ) or Impact, nor for Large-format or Small-format products. The key result of this test procedure is a value for typical weekly electricity consumption.

Annex B: Calculating the compliance rate

The compliance rate is the percentage of Part I qualified units in scope and Placed on the Market in relation to the total number of units in scope and Placed on the Market. A Product is considered Part I qualified when it meets all the requirements as detailed in section 4.1. relative to the moment of Placing on the Market as defined in Annex A. This means that if a Product doesn't meet a requirement it will not be counted towards the company compliance rate. The compliance rate will be calculated to 2 significant figures as a sales weighted number meaning that products with high sales will weigh heavier in calculating the compliance rate than low sales Products.

$$\text{Compliance} = \frac{\text{Part I qualified units in scope and Placed on the Market}}{\text{Total units in scope and Placed on the Market}}$$

Table 1 shows a simplified example of how a Signatory must calculate the compliance rate of shipments for a given period for OM Products

EU shipments from 1st January 2015 to 31st December 2015							
OM Products							
		Sleep power(W)	OM Max sleep power allowance(W)	OM default delay time (Y/N)	Product meets VA commitments Part I (Y/N)	Total units shipped	Total Part I qualified units
Model 1	IJ Printer	2	1.4	Y	N	50	0
Model 2	IJ MFD	4.5	4.9	Y	Y	70	70
Model 3	IJ MFD	4	4.9	Y	Y	120	120
Model 4	IJ Printer	2.5	2.9	Y	Y	90	90
Total						330	280
Compliance rate							85%

Table 2 shows a simplified example of how a Signatory must calculate the compliance rate of shipments of TEC products for a given period

EU shipments from 1st January 2015 to 31st December 2015											
TEC Products											
		Introduction date	Mono print speed (ipm)	TEC measured (kWh/week)	Max TEC (kWh/week)	standard automatic duplex capability (Y/N)	duplex set as default (Y/N)	Product meets VA commitments Part 1 (Y/N)	Total units shipped	Total Part qualified units	
Model 1	EP mono Printer	October 2013	15	2	1,2	NA	NA	N	20	0	
Model 2	EP mono MFD	October 2013	30	1,8	2,2	NA	NA	Y	20	20	
Model 3	EP color Printer	October 2013	38	5	5,2	Y	NA	Y	60	60	
Model 4	EP color MFD	February 2014	32	4,3	4,5	NA	NA	Y	100	100	
Model 5	EP mono Printer	February 2014	40	2,5	3	N	N	N	40	0	
Model 6	EP mono MFD	February 2014	45	3,5	3,8	Y	N	N	50	0	
Model 7	EP color MFD	February 2014	42	6	7,1	Y	Y	Y	70	70	
									Total	360	250
									Compliance rate	69%	

Annex D: Membership Form

The organisation/company/
.....

Signs Industry Voluntary Agreement version 2 to improve the environmental performance of imaging equipment Placed on the Market.

Deleted: 5.16

For the Signatory

Director or person authorised to sign:

Name:

Function:.....

Address:.....
.....
.....

Date:

Signature.....

Contact Person for the Organisation/Company:

Name:

Function:.....

Email:.....

Telephone:.....

Please send a duly signed and completed Signing Form to:

EuroVAprint

52 rue Defacqz

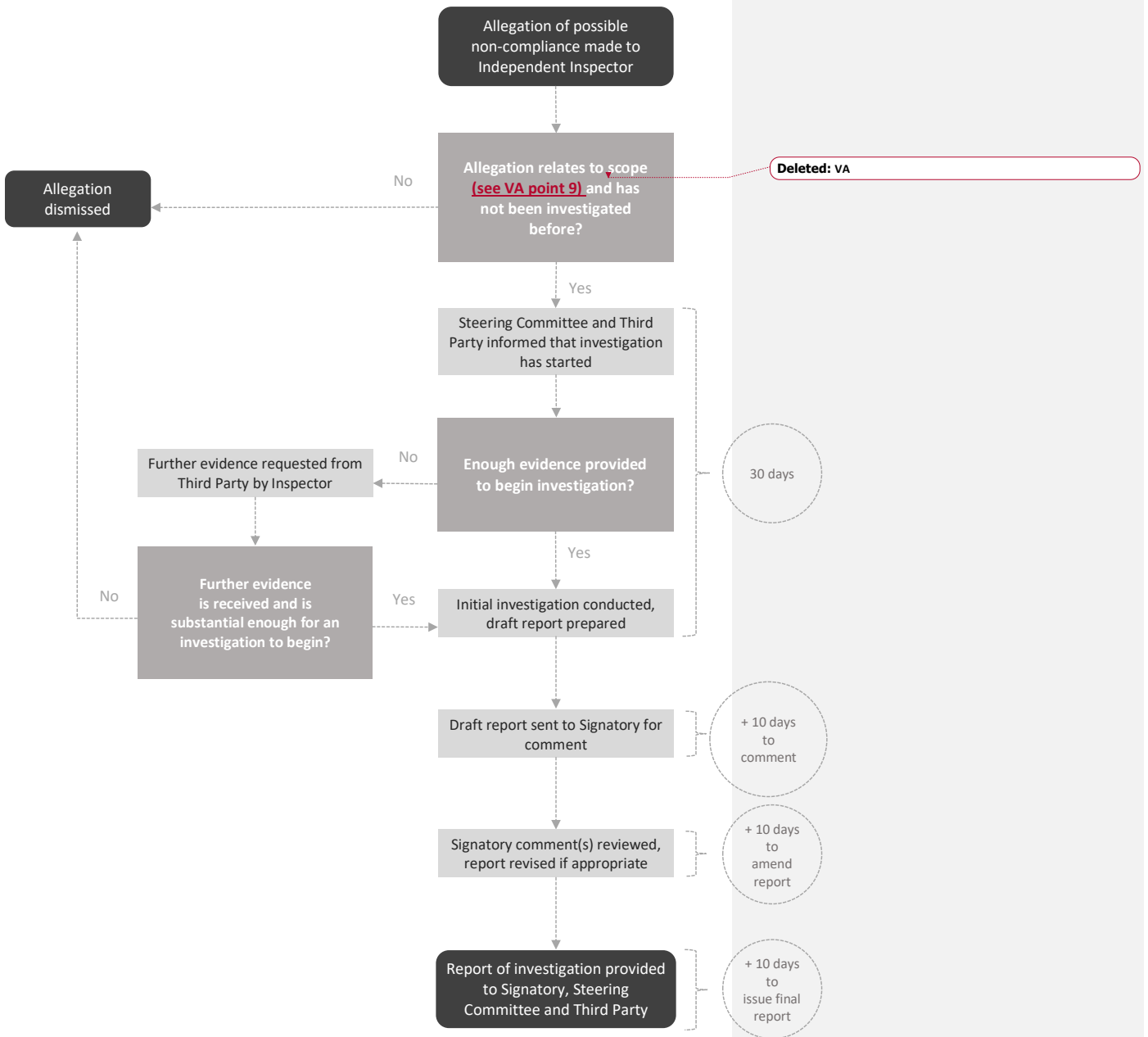
1050 Brussels

Belgium

secretariat@eurovaprint.eu

www.eurovaprint.eu

Annex E: Flow Chart - Third Party Allegation Process



Annex F: Example of Product Environmental Information

Following is an example of product environmental information provided by Signatories, based on the ECMA 370 standard. Other standard formats can be used by Signatories.

1. Annex B1 - Product environmental attributes Imaging equipment

Commented [A13]: To be updated (ref. to ESTAR)

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *		Logo
Company name *		
Contact information * e-mail address		
Internet site *		
Additional information		

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.	
Type of product *	
Commercial name *	
Model number *	
Issue date *	
Intended market *	<input type="checkbox"/> Global <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Asia, Pacific & Japan <input type="checkbox"/> Americas <input type="checkbox"/> Other
Additional information	

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

<p>About Annex B1</p> <p>Annex B1 reflects Product environmental attributes relevant for Imaging products. The following items from the ECMA-370 Main body are not shown in the template:</p> <p>P9.1 PTEC, ETEC and display resolution P12.1-P12.2 Ergonomic requirements.</p>

Model number *		Logo	
Issue date *			
1.1. Product environmental attributes - Legal requirements		Requirement met	
Item		Yes	No n.a.
P1 Hazardous substances and preparations			
P1.1*	Products do comply with the current European RoHS Directive. (See legal reference and ^{NOTE B1})	<input type="checkbox"/>	<input type="checkbox"/>
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	<input type="checkbox"/>	<input type="checkbox"/>
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>
P1.5*	Products do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 µg/cm ² /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:2011-5.	<input type="checkbox"/>	<input type="checkbox"/>
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):	<input type="checkbox"/>	<input type="checkbox"/>
P2 Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>
P2.3*	Batteries and accumulators are readily removable. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>
P3 Conformity verification & Eco design (ErP)			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at (add link or e-mail address):	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference). Required information is; <input type="checkbox"/> given in item P15 or added to this document, <input type="checkbox"/> available at (add URL):	<input type="checkbox"/>	<input type="checkbox"/>
P4 Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0,01% (see legal reference and NOTE ^{B1}).	<input type="checkbox"/>	<input type="checkbox"/>
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0,1% by weight (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>
P4.3*	If the ink/toner formulation/preparation is classified as hazardous or contains a substance for which there are Community workplace exposure limits, the product/packaging is adequately labeled according to applicable regulations and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>
P5 Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	<input type="checkbox"/>	<input type="checkbox"/>
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	<input type="checkbox"/>	<input type="checkbox"/>
P6 Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	<input type="checkbox"/>	<input type="checkbox"/>

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *		Logo		
Issue date *				
Product environmental attributes - Market requirements (See General NOTE ^{GN} below)				
- Environmental conscious design				Requirement met
Item	* = mandatory to fill in. Additional information regarding each item may be found under P14.			Yes No n.a.
P7	Design			
	Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.9.	Spare parts are available after end of production for: years			<input type="checkbox"/>
P7.10	Service is available after end of production for: years			<input type="checkbox"/>
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: Material type: Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.13	Insulation materials of internal electrical cables are PVC free.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing more than 25% post-consumer recycled content.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all <input type="checkbox"/> PCBs > 25 g <input type="checkbox"/> are low halogen as defined in IEC 61249-2-21. (See NOTE ^{B2})	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive) <input type="checkbox"/> , TBBPA (reactive) <input type="checkbox"/> (See NOTE ^{B3}), Other; chemical name: , CAS #: Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: , CAS #: (See NOTE ^{B4}) 2. Chemical name: , CAS #: " 3. Chemical name: , CAS #: " Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been assigned the following Risk phrases; and Hazard statements: The source(s) for these classifications is/are found at (add URL(s)): , (See NOTE ^{B5})	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

P7.20*	Postconsumer recycled plastic material content is used in the product (See NOTE ^{B6}):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	If YES; at least one of the two alternatives below shall be answered;			
a)	Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is			%.
	or			
b)	The weight of recycled material is			g.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *		Logo
Issue date *		

1.2. Product environmental attributes - Market requirements (continued) **Requirement met**

Item	Yes	No	n.a.		
Material and substance requirements (continued)					
P7.21* Biobased plastic material content is used in the product (See NOTE ^{B7}): If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %. or b) The weight of the biobased plastic material is g.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
P7.22* Light sources are free from mercury, i.e. less than 0,1 mg/lamp. If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
P8 Batteries					
P8.1* Battery chemical composition:			<input type="checkbox"/>		
P9 Energy consumption (See NOTE ^{B8})					
P9.1 For the product the following power levels or energy consumptions are reported:					
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *	<input type="checkbox"/>
Sleep mode for ENERGY STAR [®] Operational Mode (OM) products	W	W	W		<input type="checkbox"/>
Standby/off mode for ENERGY STAR Operational Mode (OM) products	W	W	W		<input type="checkbox"/>
TEC value for ENERGY STAR TEC products (TEC= Typical Energy Consumption)	kWh/week	kWh/week	kWh/week		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
	W	W	W		<input type="checkbox"/>
External Power Supply Efficiency Level (International Efficiency Marking Protocol) * :					<input type="checkbox"/>
Print/Scan Speed * : images per minute					<input type="checkbox"/>
Default time to enter energy save mode: minutes					<input type="checkbox"/>
P9.2* Information about the energy save function is provided with the product.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
P10 Emissions				1.:	
Noise emission – Declared according to ISO 9296 (See NOTE ^{B9})				1.:	
P10.1	Mode	Mode description	Statistical upper limit A-weighted sound power level, L _{WA,C} (B)		
	Idle *		*		<input type="checkbox"/>
	Operation *		*		<input type="checkbox"/>
	Other mode				
	Measured according to: <input type="checkbox"/> ISO 7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74)				

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic.

NOTE B8 A Guidance document on Energy Efficiency is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

NOTE B9 A Guidance document on Acoustic Noise is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

Model number *		Logo	
Issue date *			
1.3. Product environmental attributes - Market requirements (continued)		Requirement met	
Item		Yes	No n.a.
Chemical emissions from printing products (See NOTE B10)			
P10.2*	Test performed according to ECMA-328 Determination of Chemical Emission Rates from Electronic Equipment (ISO/IEC 28360) <input type="checkbox"/> , other specify:	<input type="checkbox"/>	<input type="checkbox"/>
P10.3	Typical emission rate (operation phase) is (mg/h): Electrophotographic devices: Ozone Dust Styrene Benzene TVOC Ink devices: Dust Styrene Benzene TVOC	<input type="checkbox"/>	<input type="checkbox"/>
Note: compliance with maximum emission rates in eco labels to be declared in P14.			
P11 Consumable materials for printing products			
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).	<input type="checkbox"/>	<input type="checkbox"/>
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN 12281.	<input type="checkbox"/>	<input type="checkbox"/>
P11.3*	2-sided (duplex) printing/copying is an integrated product function.	<input type="checkbox"/>	<input type="checkbox"/>
P11.4*	The product is delivered to end-user with default auto-duplex enabled.	<input type="checkbox"/>	<input type="checkbox"/>
P13 Packaging and documentation			
P13.1*	Product packaging material type(s): weight (kg): Product packaging material type(s): weight (kg): Product packaging material type(s): weight (kg):		
P13.2*	Product plastic primary packaging is free from PVC.	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: %		<input type="checkbox"/>
P13.4*	Specify media for user and product documentation (tick box): Electronic <input type="checkbox"/> , Paper <input type="checkbox"/> , Other <input type="checkbox"/>		<input type="checkbox"/>
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free: If Yes, please specify: Totally chlorine-free Elemental chlorine-free Processed chlorine-free	<input type="checkbox"/>	<input type="checkbox"/>
P14 Voluntary programs:			
P14.1	The product meets the requirements of the following voluntary program(s): ENERGY STAR® Criteria version: Date: Product category: Eco-label: Criteria version: Date: Product category: Eco-label: Criteria version: Date: Product category:		
P15 Additional information (See NOTE B11)			

NOTE B10 A Guidance document on Chemical Emissions is available;
see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

NOTE B11 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

Legal references Europe Annex B1

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1, P4.1
(EC) 1907/2006(REACH, Annex XVII)	P1.2, P1.4, P1.6, P1.7, P4.2
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000, (Marketing and use of Ozone layer depleting substances)	P1.3, 5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
"REACH" Regulation (1907/2006), annex VII	P1.10
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2.3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) 1907/2006 (REACH Regulation), Article 31, annex II)	P4.3
Regulation (EC) 1272/2008 (CLP Regulation)	P4.3, P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

Annex G: Non-commercially sensitive technical data that the Independent Inspector is at liberty to disclose

The following tables present data headings drawn from the Independent Inspector’s annual compliance reporting template. Each Signatory is required to complete the template. Data relates to individual products and how they are classified (e.g. monochrome MFD, colour MFD, etc.). The data will either be a numerical value or a yes/no/not applicable entry. There are two sets of tables, with the first pertaining to TEC products and the second OM products. This is because VA requirements differ between the two product technologies.

TEC Products

Product Name	Product Description	Product type introduced on/ before January 1, 2012? (Y*)	Product type introduced after January 1, 2012? (Y*)	Product type introduced after January 1, 2015? (Y*)	Product type introduced after April 1, 2015? (Y*)	Mono print speed (ipm)	Measured TEC (kWh/week)	ENERGY STAR @ 2.0 TEC limit (kWh/week)	Provides auto duplex capability** (Y/N/na)	Default Auto duplex enabled** (Y/N/na)	Percentage range of recycled plastic content	Product meets ALL VA Part II requirements (Y/N)	Product meets ALL VA Part III requirements (Y/N)
Actual product name 1													
Actual product name 2													
Actual product name 3													

Product Name	Product Description	Part II and III commitments											Product meets VA commitment (taking into account any exemptions claimed)		
		II Availability of N-up printing (N,E,blank)	II Design for recycling (N,E,blank)	II Polymer composition (N,blank)	II Cartridges (N,blank)	II Recycled content (N,blank)	III Resource and energy efficiency (N,E,blank)	III Availability of spare parts (N,blank)	III Cartridge disposal and treatment (N,E,blank)	III Paper recyclability information (N,blank)	III Paper recyclability improvement (N,blank)	III Environmental characteristics (N,E)	Part I	Part II	Part III
Actual product name 1															
Actual product name 2															
Actual product name 3															

OM Products

Commented [A15]: To be updated (reference to ESTAR).

Product Name	Product Description	Product type introduced on/ before January 1, 2012? (Y*)	Product type introduced after January 1, 2012? (Y*)	Product type introduced after January 1, 2015? (Y*)	Product type introduced after April 1, 2015? (Y*)	Use - Select option	Printing power (W)	Ready Power (W)	Off Mode Power (W)	Measured Product OM Sleep Power (W)	ENERGY STAR @2.0 OM Sleep Power Allowance (W)	Meets OM default delay time (Y/N)	Percentage range of recycled plastic content	Product meets ALL VA Part II requirements (Y/N)	Product meets ALL VA Part III requirements (Y/N)
Actual product name 1															
Actual product name 2															
Actual product name 3															

Product Name	Product Description	Part II and III commitments										Product meets VA commitment (taking into account any exemptions claimed)			
		II Availability of N-up printing (N,E,blank)	II Design for recycling (N,E,blank)	II Cartridges (N,blank)	II Recycled content (N,blank)	III Resource and energy efficiency (N,E,blank)	III Availability of spare parts (N,blank)	III Cartridge disposal and treatment (N,E,blank)	III Paper recyclability information (N,blank)	III Paper recyclability improvement (N,blank)	III Environmental characteristics (N,E)	Part I	Part II	Part III	
Actual product name 1															
Actual product name 2															
Actual product name 3															

