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## Capacity building of regional suppliers' network

### Market research of imaging equipment

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## **Introduction**

The objective of this market research is to collect and analyse the information from the particular target market with a view to green public procurement.

For the purposes of these criteria, the product group of “Imaging equipment” comprise products which are marketed as printers, copiers and multifunctional devices (MFD) - products which are marketed for office or domestic use, or both, and whose function is one or both of the following: a) to produce a printed image in the form of paper document or photo through a marking process either from a digital image, provided by a network/card interface or from a hardcopy through a scanning/copying process; b) to produce a digital image from a hard copy through a scanning/copying process.

This do not cover the following product types: fax machines, digital duplicators, mailing machines and scanners, large products which are not typically used in offices if they meet one of the following technical specifications: standard black and white format products with maximum speed over 66 A4 images per minute; standard colour format products with maximum speed over 51 A4 images per minute products designed for A2 media and larger; or products marketed as plotters (speed to be rounded to the nearest integer).

Green Public Procurement (GPP) is a voluntary instrument. There are however some EU Directives that define the mandatory requirements for the public procurement in general and specifically of the energy-related products and services. Mandatory requirements are also set by the national policy targets addressing energy efficiency, climate change, and promotion of the GPP. Energy and climate policy targets always include a CO<sub>2</sub> emissions reduction to a certain level. Some procurement areas, for example, imaging equipment, are on the high priority list to reduce CO<sub>2</sub> emissions.

This market research consists of several parts, which together forms a specific product market report. Market research consists of analyses of the legal and political framework, as well as formulating requirements for improvement. This study provides answers to questions that lead to conclusions, based on market research results.

EU GPP criteria are used in this market research because in such a way it's possible to compare the results of market research among other participating countries. However, the national regulation framework is significant, as it may be different in EU member states.

### **Regulatory framework of the imaging equipment**

This section provides information on EU legislation that is relevant for imaging equipment. It is important that contracting authorities are aware of it, as some of the responsibilities which the Member States have agreed upon by voting through this legislation may have some consequences for contracting authorities. This is the case for example, if, according to this legislation, a product has to be disposed of in a certain way or if the manufacturer or supplier has to implement a take-back scheme for a certain product. Some of the legislation also requires products to be labelled or indicate, for example, if they contain a certain amount of a hazardous substance. This is useful information for the contracting authority and can ease verification of compliance with certain requirements.

The EU Energy Star Regulation was adopted on 17 December 2007 which makes the purchase of energy efficient Imaging Equipment compulsory by central government authorities as well as the European Commission and other community institutions. This will only apply to contracts above the threshold values outlined in the Public Procurement Directives (2004/18/EC and 2004/17/EC) – still to be fully transposed by the new Public procurement law in Latvia. The Regulation defines “energy efficient” to mean “not less demanding” than the ENERGY STAR requirements. As such it represents a significant step forward in driving the market towards the development of more energy efficient Imaging Equipment. The latest version of Energy Star Program Requirements for Imaging Equipment IS Version 2.0.

This section gives an overview of the European legislation and policies of the main relevance to the product group "Imaging Equipment":

- **Ecodesign Directive** (2009/125/EC): aims at reducing the environmental impact of products, including the energy consumption throughout their entire life cycle. The directive establishes a framework for the setting of ecodesign requirements for energy-related products.
- **The WEEE Directive** 2012/19/EU replaces Directive 2002/96/EC of 27 January 2003, which entered into force on 1st of July 2006. The Directive classifies Electrical and electronic equipment in various categories. In this system, Imaging equipment forms part of category 3 “IT and telecommunications equipment”. Amongst others, Directive 2012/19/EU requires Member States to achieve quantitative recovery targets for different product categories and to ensure that producers provide for the financing of the collection, treatment, recovery and environmentally sound disposal of WEEE. WEEE regulation In Latvia is implemented through the Waste Management Law<sup>1</sup>.
- **REACH** (registration, evaluation, authorisation and restrictions of chemicals) Regulation (1907/2006) was adopted in December 2006 and entered into force on 1 June 2007. It provides a new regulatory framework for the collection of information on the properties of chemicals on the European market, and also for future restrictions on their use. This directive in Latvia is implemented through the Chemical Substance Law.
- Directive 2009/125/EC on the **Eco-design** Requirements for Energyusing products (EuP). The EuP directive establishes a framework for the setting of eco-design requirements for energy-using products with the aim of ensuring free movement of those products within the internal market. The Directive aims to encourage manufacturers to produce products which are designed to minimise their overall environmental impact, including the resources consumed in their production and disposal. The European Union’s Framework Directive on Eco-Design of Energy-Using Products (Directive 2009/125/EC) establishes a framework to set mandatory ecological requirements for energy-using and energy-related products sold in all 27 Member States. Its scope currently covers more than 40 product groups (such as boilers, lightbulbs, TVs and fridges), which are responsible for around 40% of all EU greenhouse gas emissions. The 2009 revision of the Directive extended its scope to energy-related products such as windows, insulation materials, and certain water-using products. This directive has been introduced in Latvian legislation by Cabinet

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<sup>1</sup> [http://www.vvc.gov.lv/advantagecms/docs/LRTA/Likumi/Waste\\_Management\\_Law.docx](http://www.vvc.gov.lv/advantagecms/docs/LRTA/Likumi/Waste_Management_Law.docx)

Regulation No. 941 (6 December 2011) Regulations Regarding Ecodesign Requirements for Energy-related Goods (Products).

- **Directive on Batteries and Accumulators and Waste Batteries** 2006/66/EC, officially repealing the 1991 Battery Directive, was approved July 4, 2006, and became official on September 26, 2006. It gives the European Member States until Sept. 26, 2008, to implement its national laws and rules on batteries. The Battery Directive has an objective of reducing the amount of hazardous substances used in the manufacture of batteries e.g., lead, lead-acid, mercury, cadmium, etc., and better waste management of these batteries. Requirements of this directive in Latvia has been implemented by Cabinet Regulation No. 139 “Regulations Regarding the Requirements for the Use and Labelling of Certain Equipment and Products Containing Hazardous Chemical Substances and Regarding the List of Goods Harmful to the Environment”.

### **Environmental impact of imaging equipment and the key GPP criteria**

The key environmental impacts from imaging equipment are mainly associated with the consumption of paper. Further significant environmental impacts are associated with energy consumption in the use phase, use of hazardous constituents and material selection in the product design, resource consumption in the product life cycle, including the use of toner and cartridges.

In procuring imaging equipment, contracting authorities may let separate contracts (covering, for example, equipment supply, and installation) to different contractors. In such cases, different contractors may, therefore, be responsible for ensuring that different criteria are met.

The GPP criteria for imaging equipment have been developed in parallel with the EU Ecolabel criteria development. The EU Ecolabel is an element of the European Commission’s action plan on Sustainable Consumption and Production and Sustainable Industrial Policy adopted on 16 July 2008. This is a voluntary scheme established to encourage manufacturers to produce goods and services with reduced environmental impact.

Key environmental areas are paper consumption (relevant for impacts to all environmental categories); energy consumption in the use phase of imaging equipment (relevant for impacts to all environmental categories); use of hazardous substances and their environmental consequences (relevant for impacts to human). IT equipment effects on environment and corresponding GPP criteria:

| <b>Key Environmental Impacts</b> | <b>GPP Approach</b>   |
|----------------------------------|---|
| Global warming                   | Purchase products with efficient paper management<br>Purchase energy efficient models<br>Purchase products which are designed to be resource efficient, to generate little waste and to |
| Acidification                    |   |
| Human toxicity                   |   |
| Eutrophication                   |   |
| Resource depletion               |   |
| Energy consumption               |   |

## Market analyses

In order to assess the situation in the Latvia's imaging equipment market and its compliance with the GPP criteria and willingness to offer such products in public procurement a meeting with market participants was arranged on September 22, 2016. Overall, 30 companies were invited to the meeting. Together 6 companies (IB Serviss; Tomega SIA; Latvijas Datoru centrs SIA; CRC SIA; Biroja Tehnika SIA; SIA ZTF RIKON) responded and attended the meeting.

There are no companies producing Imaging equipment in Latvia. All the products are imported. Globally biggest market players are Brother, Canon, HP, Seiko Epson, Xerox, Samsung, Lexmark, Konica Minolta and Ricoh. All of them are also present in Latvia's market. One of the main market trends is the rising preference for the inkjet and multifunction printers (MFPs). Another emerging global trend is moving away from the purchasing of the equipment to the Managed Print Services. However, the limiting factor for printing services is a lack of clear information management strategy that incorporates paper and digital processes.

Additionally to the traditional laser (also LED) and ink printers, some of the vendors in Latvia are also providing solid-ink printers, which melt blocks of coloured wax onto paper. These tend to be comparable to laser printers in black-and-white print quality, reliability and ongoing costs, but they are superior for colour printing. They're also smaller and more compact. However, solid-ink printers are prone to smudging. And because they're less common, there are far fewer models from which to choose. Some vendors are also providing manufacturer refurbished printers and copy machines, which are as new but for significantly lower price.

Data from Procurement monitoring bureau demonstrates that imaging equipment (printers - 30232100-5 & copy machines - 30121400-7) represents an only small part of the total public procurement – 0.6 M EUR or 0.03% (see Table 1). According to official information in 2015 none of the tenders has highlighted that they have included environmental criteria in their procurement. However, we believe in reality the situation is much better as most of the imaging equipment sold in Latvia are Energy Star certified. Additionally to open tenders imaging equipment is also being purchased via Electronic procurement system. Unfortunately, Electronic procurement system does not have green imaging equipment catalogue.

**Table 1. Total number and amount of procurements in 2015**

| Procurement system            | Nr. of procurements |               | Total costs in EUR (without VAT) |               |
|-------------------------------|---------------------|---------------|----------------------------------|---------------|
|                               | Total               | including GPP | Total                            | including GPP |
| Procurement monitoring bureau | 37                  | -             | 584 795                          | -             |
| Electronic procurement system | -                   | -             | 2 727 812                        | -             |

According to the data from Procurement monitoring bureau some of the biggest distributors in this sector over the last years are:

- Capital AS
- ATEA, Ltd
- OptiCom, Ltd
- Datakom, Ltd
- TelCom, Ltd
- 1 un 2, Ltd
- CRC, Ltd

From the September discussion with the vendors, we can conclude that energy efficient Energy Star certified printers and copy machines are freely available in Latvia and there is a high competition among the producers and distributors. However, all the participants at the meeting complained that they cannot provide 5-year warranty for the product, included in the EU GPP criteria. Besides that vendors also highlighted that warranty is automatically lost if non-original printer cartridges are used. This is also in the contradiction with EU GPP criteria which ask for the possibility to refill cartridges.

## EU legislation that is relevant to imaging equipment

| EU legislation act  | Requirements   | Affected products   |
|---|--|---|
| Directive 2012/19/EU<br>DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012<br><a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0019&amp;from=LV">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012L0019&amp;from=LV</a><br>LV: <a href="http://likumi.lv/doc.php?id=221378">http://likumi.lv/doc.php?id=221378</a>   | on waste electrical and electronic equipment (WEEE) (recast)   |   |
| Regulation (EC) No 106/2008<br><a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:039:0001:0007:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:039:0001:0007:EN:PDF</a><br>LV: <a href="http://likumi.lv/doc.php?id=284894">http://likumi.lv/doc.php?id=284894</a>   | on a Community energy-efficiency labelling programme for office equipment (recast version)           | Establishes the rules for the Community energy efficiency labelling programme for office equipment (hereinafter referred to as the Energy Star programme) as defined in the Agreement.  |
| Directive 2009/125/EC<br>DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 Octo<br><a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0125&amp;from=en">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0125&amp;from=en</a><br>LV: Cabinet Regulation No. 941<br>Adopted 6 December 2011<br><b>Regulations Regarding Ecodesign Requirements for Energy-related Goods (Products)</b><br><a href="http://likumi.lv/doc.php?id=241282">http://likumi.lv/doc.php?id=241282</a> | on the Eco-design Requirements for Energyusing products (EuP)  | Establishes a framework for the setting of eco-design requirements for energy-using products with the aim of ensuring free movement of those products within the internal market.   |
| Directive 2002/96/EC<br>DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003<br><a href="http://eur-lex.europa.eu/resource.html?uri=cellar:ac89e64f-a4a5-4c13-8d96-1fd1d6bcaa49.0004.02/DOC_1&amp;format=PDF">http://eur-lex.europa.eu/resource.html?uri=cellar:ac89e64f-a4a5-4c13-8d96-1fd1d6bcaa49.0004.02/DOC_1&amp;format=PDF</a>  | on Waste Electrical and Electronic Equipment (WEEE)  | Tackle the fast increasing waste stream of electrical and electronic equipment and complement European Union measures on landfill and incineration of waste.  |
| Directive 2002/95/EC<br>DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003<br><a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0095&amp;from=en">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0095&amp;from=en</a>  | on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment | Dictates that Member States shall ensure that, from 1 July 2006, new electrical and electronic equipment put on the market does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated |

|   |   |   |
|---|---|---|
|   |   | diphenyl ethers (PBDE).   |
| <p>REACH Regulation (1907/2006) and LSD 2008<br/>Green Public Procurement Office IT equipment<br/>Technical Background Report<br/><a href="http://ec.europa.eu/environment/gpp/pdf/tbr/office_it_equipment_tbr.pdf">http://ec.europa.eu/environment/gpp/pdf/tbr/office_it_equipment_tbr.pdf</a><br/>LV: Chemical Substances Law<br/><a href="http://likumi.lv/doc.php?id=47839">http://likumi.lv/doc.php?id=47839</a></p>   | <p>On new regulatory framework for the collection of information on the properties of chemicals on the European market, and also for future restrictions on their use</p> | <p>The restrictions provide a procedure to regulate that the manufacture, placing on the market or use of certain dangerous substances shall be either subject to conditions or prohibited.</p> |
| <p>Directive 2006/66/EC<br/><a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:266:0001:0014:en:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:266:0001:0014:en:PDF</a><br/>LV: Cabinet Regulation No. 139<br/>Regulations Regarding the Requirements for the Use and Labelling of Certain Equipment and Products Containing Hazardous Chemical Substances and Regarding the List of Goods Harmful to the Environment<br/><a href="http://likumi.lv/doc.php?id=128396">http://likumi.lv/doc.php?id=128396</a></p> | <p>on Batteries and Accumulators and Waste Batteries</p>  | <p>Aims to reduce the amount of hazardous substances used in the manufacture of batteries e.g., lead, lead-acid, mercury, cadmium, etc., and better waste management of these batteries.</p>    |
| <p>DIRECTIVE 2010/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL<br/><a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0030&amp;from=EN">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0030&amp;from=EN</a><br/>LV: Law On the Energy Performance of Buildings<br/><a href="http://likumi.lv/doc.php?id=253635">http://likumi.lv/doc.php?id=253635</a></p>  | <p>on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (recast)</p>               |   |