

GPN-GL14 Ordering Guidelines for

Printing Services

Green Purchasing Network (GPN)

1. Scope

These guidelines cover important environmental issues that should be considered when ordering an offset printing¹ service or digital printing² service for printed materials. Orderers should use these guidelines as “a checklist” to facilitate communication with printing service suppliers. Printed materials include reports, newspapers, leaflets, catalogues, brochures, paper-made boxes, and sales promotion materials.

2. How to Use the Guidelines and Checklists

Environmental impacts of printed materials will vary depending on the combination of paper, ink, the number of copies, printing methods, and distribution plans. Orderers should use these guidelines and checklists for ordering printed materials to determine the specification and to select suppliers.

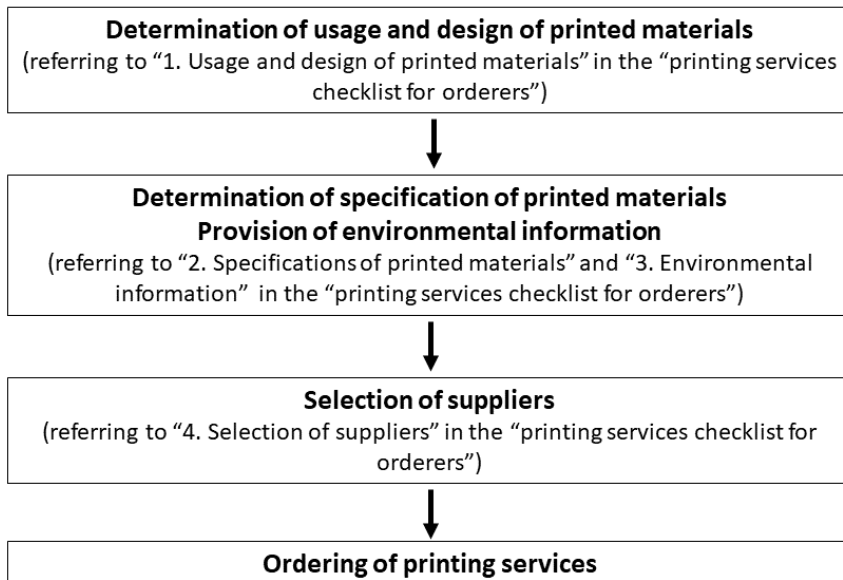


Figure 1. Ordering processes of printing services

¹ Offset printing is a printing method in which the inked image is transferred (or “offset”) from a plate to a blanket, then to the printing surface.

² Digital printing refers to a plateless printing method using an electrographic system or inkjet method.

3. Selection of suppliers from “Eco-products Net” database and usage of “GPN Printing Services Logo”

The Green Purchasing Network (GPN) provides information of printing service suppliers through “Eco-products Net (<https://www.gpn.jp/econet/>)” which is an on-line database that discloses sustainability information of products and services along the Green Purchasing Guidelines. Besides “Eco-products Net”, the list of certified factories of “Green Printing Factory Certification” by the Japan Federation of Printing Industries should also be referred to for selection of suppliers.

Printed materials that have been ordered in accordance with the GPN-GL 14 (Ordering Guidelines for Printing Services) may have a “GPN Printing Service Logo”. Any printed material with the logo means that the environmental information of the material is disclosed on the GPN website. Should a printing service supplier use the logo, the supplier needs to send an application to the Secretariat of the GPN beforehand.

For further information about the logo, please visit the following GPN website.

https://www.gpn.jp/logos/symbol/#logos_symbol_index2

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By Green Purchasing Network (GPN)

Printing Services Checklist for Orderers

1. Usage and design of printed materials

| Guidelines | Checklist |
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| (1) Electronic media should be considered in place of printed media before ordering printed materials. | <input type="checkbox"/> Electronic media have adequately been considered as substitute for printed media. |
| (2) Size and the number of pages and copies should be considered before printing. | <input type="checkbox"/> Distribution of printed materials has been planned. <input type="checkbox"/> The number of copies has been fixed based on the distribution plan. <input type="checkbox"/> Standard sized paper is used for the printed materials. |
| (3) A completed draft should be sent to the press to reduce the times of the revision. | <input type="checkbox"/> Sending a completed draft to the press is minded and the first proof is adequately been done to reduce the times of the revision. <input type="checkbox"/> Reprinting for more quality than necessary is avoided. |

2. Specifications of printed materials

| Guidelines | Checklist |
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| Paper | |
| (1) Paper should be selected in accordance with the Purchasing Guidelines for “Printing and Copying Papers” (GPN-GL1). | <input type="checkbox"/> Paper is selected in accordance with the Purchasing Guidelines for “Printing and Copying Papers” (GPN-GL1). |
| (2) Easily recyclable paper should be used. | <input type="checkbox"/> Paper meets the rank A in the “recyclability ranking test for used paper” ³ . |
| Inks and toners | |
| (3) Easily recyclable inks and toners should be used. | <input type="checkbox"/> Inks and toners meet the rank A in the “recyclability ranking test for used paper”. |
| (4) Inks and toners that emit less volatile organic compounds (VOCs) should be used. | Any of the following inks and toners are used. [Offset Printing] <input type="checkbox"/> Inks that contain more than standard amount of biomass and using only a solvent with an aromatic component of less than 1% <input type="checkbox"/> Recyclable UV inks with less than 3% VOCs component <input type="checkbox"/> Non-VOC inks |

³ https://www.jfpi.or.jp/recycle/print_recycle/file/201409recycle_list.pdf

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| | <p>[Digital Printing]</p> <p><input type="checkbox"/>Toners or inks that contains no VOCs</p> <p><input type="checkbox"/>When toners or inks for inkjet printing contain VOCs, a digital printer with a mechanism to suppress VOC emission to the outside of the machine is used.</p> |
| <p>(5) Chemical safety of inks and toners should be confirmed.</p> | <p>[Offset printing]</p> <p><input type="checkbox"/>Inks conform the “Self-regulation (Negative List) for Printing Inks” by the Japan Printing Ink Makers Association.</p> <p><input type="checkbox"/>Safety Data Sheet (SDS) is provided for toners and inks.</p> <p>[Digital printing]</p> <p>For xerographic method with dry toners;</p> <p><input type="checkbox"/>Any restricted substances under RoHS Directive 2015/863, hazardous substances in the R-phrases defined in Annex III of European Union Directive 67/548/EEC: Nature of special risks attributed to dangerous substances and preparations, hazardous chemicals with GHS pictograms, and azo dyes have not intentionally been added.</p> <p><input type="checkbox"/>Toners have yielded a negative result to the Ames test.</p> <p><input type="checkbox"/>SDS is provided for toners.</p> <p>For xerographic method with wet toners;</p> <p><input type="checkbox"/>Toners conform the “Self-regulation (Negative List) for Printing Inks” or meet EU RoHS.</p> <p><input type="checkbox"/>SDS is provided for toners and inks.</p> |
| <p>Surface Processing</p> | |
| <p>(6) The necessity of surface processing (film application and varnishing) should be considered.</p> | <p><input type="checkbox"/>Surface processing is unnecessary.</p> <p><input type="checkbox"/>Surface processing is necessary. ⇒ Consider guidelines (7) and later.</p> |
| <p>(7) Easily recyclable surface processing should be selected.</p> | <p><input type="checkbox"/>Materials meet the rank A in the “recyclability ranking test for used paper”.</p> |
| <p>(8) Surface processing, when necessary, should emit less VOCs.</p> | <p><input type="checkbox"/>Vanish contains no petroleum solvents.</p> <p><input type="checkbox"/>Coating materials emit less VOCs.</p> <p><input type="checkbox"/>Polypropylene coating, when necessary, is used for long-term use and durability of the printed materials.</p> |

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| Binding and other processing | |
| (9) Easily recyclable binding and other processing should be considered. | <input type="checkbox"/> Materials meet the rank A in the “recyclability ranking test for used paper”. |
| (10) Non-paper materials should be used as little as possible for other attached materials of binding, binding tools for a calendar, bound-in supplement, promotional materials, and packaging. | <input type="checkbox"/> Non-paper parts and materials including binding, binding tools for a calendar, bund-in supplement are used. For the use of non-paper parts and materials, <input type="checkbox"/> Easily detachment and disposal have been considered. <input type="checkbox"/> Disposal methods are displayed and the materials are considered to be properly disposed. |

3. Environmental information

| Guidelines | Checklist |
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| (1) Recyclability rank based on the “recyclability ranking test for used paper” should be displayed for users of printed materials. | <input type="checkbox"/> Recyclability rank has been displayed on the printed materials. |
| (2) Environmental information should be displayed. | <input type="checkbox"/> The GPN Printing Services Logo has been applied. <input type="checkbox"/> Other logos including GP (Green Printing) logo by the Japan Federation of Printing Industries are displayed for environmental information. |
| (3) CO ₂ emission from the entire lifecycle of the printing process should be assessed and disclosed. | <input type="checkbox"/> CO ₂ emission from the entire lifecycle of the printing process is shown as carbon footprint (CFP). |
| (4) CO ₂ emission from the entire lifecycle should be compensated by using carbon offsets. | <input type="checkbox"/> CO ₂ emission from the entire lifecycle is compensated by using carbon offsets. |
| (5) Green electricity should be used for printing. | <input type="checkbox"/> Electricity for printing is covered by tradable green certificates, green electricity, and/or privately owned renewable electricity generation facilities. |

4. Selection of suppliers

| Guidelines | Checklist |
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| (1) Printed materials should be ordered to suppliers who consider the environment. | <input type="checkbox"/> The supplier has posted its services on “Eco-products Net” of the GPN. <input type="checkbox"/> The printing factory has been certified as a “Green Printing Factory” by the Japan Federation of Printing |

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| | <p>Industries.</p> <p><input type="checkbox"/> For suppliers other than those above, the “Checklist of Environmental Practices for Printing Service Suppliers” has been submitted.</p> |
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