

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 printing<sup>1</sup> service or digital printing<sup>2</sup> 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.

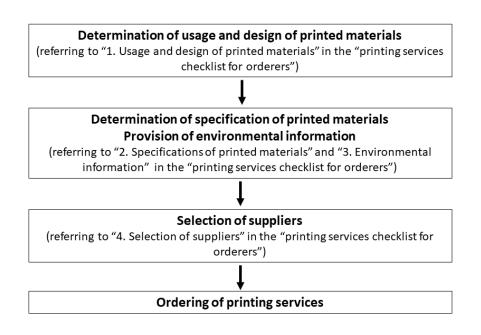


Figure 1. Ordering processes of printing services

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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 "Ecoproducts 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. <u>https://www.gpn.jp/logos/symbol/#logos\_symbol\_index2</u>

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### **Printing Services Checklist for Orderers**

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

#### 1. Usage and design of printed materials

### 2. Specifications of printed materials

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

<sup>&</sup>lt;sup>3</sup> https://www.jfpi.or.jp/recycle/print\_recycle/file/201409recycle\_list.pdf



|                                   | [Digital Printing]                                                        |
|-----------------------------------|---------------------------------------------------------------------------|
|                                   | □Toners or inks that contains no VOCs                                     |
|                                   | □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.                           |
| (5) Chemical safety of inks and   | [Offset printing]                                                         |
| toners should be confirmed.       | □Inks conform the "Self-regulation (Negative List) for                    |
|                                   | Printing Inks" by the Japan Printing Ink Makers                           |
|                                   | Association.                                                              |
|                                   | Safety Data Sheet (SDS) is provided for toners and inks.                  |
|                                   |                                                                           |
|                                   | [Digital printing]                                                        |
|                                   | For xerographic method with dry toners;                                   |
|                                   | □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.                                                 |
|                                   | □Toners have yielded a negative result to the Ames test.                  |
|                                   | $\Box$ SDS is provided for toners.                                        |
|                                   |                                                                           |
|                                   | For xerographic method with wet toners;                                   |
|                                   | □Toners conform the "Self-regulation (Negative List) for                  |
|                                   | Printing Inks" or meet EU RoHS.                                           |
|                                   | □SDS is provided for toners and inks.                                     |
| Surface Processing                | 1                                                                         |
| (6) The necessity of surface      | □Surface processing is unnecessary.                                       |
| processing (film application and  | $\Box$ Surface processing is necessary. $\Rightarrow$ Consider guidelines |
| varnishing) should be considered. | (7) and later.                                                            |
| (7) Easily recyclable surface     | □ Materials meet the rank A in the "recyclability ranking                 |
| processing should be selected.    | test for used paper".                                                     |
| (8) Surface processing, when      | □Vanish contains no petroleum solvents.                                   |
| necessary, should emit less VOCs. | □Coating materials emit less VOCs.                                        |
|                                   | □Polypropylene coating, when necessary, is used for long-                 |
|                                   | term use and durability of the printed materials.                         |



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

## 3. Environmental information

| Guidelines                                   | Checklist                                                                   |
|----------------------------------------------|-----------------------------------------------------------------------------|
| (1) Recyclability rank based on              | Recyclability rank has been displayed on the printed                        |
| the "recyclability ranking test for          | materials.                                                                  |
| used paper" should be displayed              |                                                                             |
| for users of printed materials.              |                                                                             |
| (2) Environmental information                | □The GPN Printing Services Logo has been applied.                           |
| should be displayed.                         | □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          | $\Box$ CO <sub>2</sub> emission from the entire lifecycle of the printing   |
| lifecycle of the printing process            | process is shown as carbon footprint (CFP).                                 |
| should be assessed and disclosed.            |                                                                             |
| (4) CO <sub>2</sub> emission from the entire | $\Box$ CO <sub>2</sub> emission from the entire lifecycle is compensated by |
| lifecycle should be compensated              | using carbon offsets.                                                       |
| by using carbon offsets.                     |                                                                             |
| (5) Green electricity should be              | □Electricity for printing is covered by tradable green                      |
| used for printing.                           | certificates, green electricity, and/or privately owned                     |
|                                              | renewable electricity generation facilities.                                |

## 4. Selection of suppliers

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



| Industries.                                              |
|----------------------------------------------------------|
| □For suppliers other than those above, the "Checklist of |
| Environmental Practices for Printing Service Suppliers"  |
| has been submitted.                                      |