

Date 04.2023

Guidelines on graphic and customised digital printing data delivery

# Information about data delivery guidelines

Information about data delivery guidelines	2
Overview of key points	3
Print production parameters	4
Document properties of delivered files	8
Contacts	10

Digital print enables you to produce all the typical print products that you are familiar with from other print applications. In addition to purely graphic digital printing, you can also personalise and customise your print products by dynamically generating print images in different ways. This can be actioned on both pre-printed and blank forms.

In order to ensure a reliable, seamless production process, we should like to inform you about a number of essential, mandatory digital printing production requirements on the following pages. These apply in addition to the relevant delivery and payment terms of each printing company.

You can obtain the current version of these guidelines from the *Service* section of our website.

You will also find preconfigurations for the export of PDF files from Adobe InDesign here, which you can use to produce your print data

# Overview of key points

Below is a brief summary of the key points detailed in the data delivery guidelines. A detailed explanation can be found on subsequent pages.

## **Print production parameters**

Production test	Necessary to ensure an error-free process
Data transfer	Via a printing company platform
Delivery of proofs	see: Delivery of proofs on page 5
Finishing	<ul> <li>One PDF per finishing operation</li> </ul>
	<ul> <li>All elements coloured in 100% black</li> </ul>
	<ul> <li>All elements are included in the form of vector graphics</li> </ul>
	<ul> <li>Minimum line width: 0.25 mm</li> </ul>
	For other requirements see: Page 6
Customisation	<ul> <li>Preprint PDF, imprint PDF and status PDF are produced separately</li> </ul>
	<ul> <li>All variable elements are removed from the preprint file</li> </ul>
	<ul> <li>Preprint, imprint and status PDFs produced</li> </ul>
	<ul> <li>Fonts are fully embedded. Subsets are not allowed.</li> </ul>
	<ul> <li>Continuous text as a separate text file</li> </ul>
	<ul> <li>Variable image material is clearly referenceable</li> </ul>
	<ul> <li>Clipped images as PSD/PNG, in vector terms as EPS/JPG</li> </ul>
Document prope	erties of delivered files
Data format	One-page PDF files conforming to the PDF/X1a:2001 standard. No open data. If this is not possible, the following criteria in particular must be met:
	<ul> <li>CMYK contents as well as special colours by agreement</li> </ul>
	<ul> <li>No transparencies</li> </ul>
	<ul> <li>Fonts are fully embedded. Subsets are not allowed.</li> </ul>
	<ul> <li>Trim box corresponds to net sheet size</li> </ul>
	<ul> <li>Elements in 100% black set to Overprint</li> </ul>
	<ul> <li>Elements in 100% black set to <i>Overprint</i></li> <li>White elements set to <i>knock out</i></li> </ul>
	<ul> <li>White elements set to knock out</li> </ul>
	<ul> <li>White elements set to <i>knock out</i></li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> </ul>
	<ul> <li>White elements set to <i>knock out</i></li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> <li>Line images: minimum resolution of 1200 dpi</li> <li>Remove non-required sections from images featuring clipping paths</li> </ul>
	<ul> <li>White elements set to <i>knock out</i></li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> <li>Line images: minimum resolution of 1200 dpi</li> <li>Remove non-required sections from images featuring clipping paths</li> <li>Image size corresponds to integrated image detail (image size in image frame</li> </ul>
Beschnitt	<ul> <li>White elements set to knock out</li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> <li>Line images: minimum resolution of 1200 dpi</li> <li>Remove non-required sections from images featuring clipping paths</li> <li>Image size corresponds to integrated image detail (image size in image frame = 100%)</li> <li>Blank document pages, unused tiers, invisible objects as well as objects outside</li> </ul>
Beschnitt Minimum font size	<ul> <li>White elements set to knock out</li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> <li>Line images: minimum resolution of 1200 dpi</li> <li>Remove non-required sections from images featuring clipping paths</li> <li>Image size corresponds to integrated image detail (image size in image frame = 100%)</li> <li>Blank document pages, unused tiers, invisible objects as well as objects outside page areas have been deleted</li> </ul>
	<ul> <li>White elements set to knock out</li> <li>CMYK and halftone images: minimum resolution of 300 dpi</li> <li>Line images: minimum resolution of 1200 dpi</li> <li>Remove non-required sections from images featuring clipping paths</li> <li>Image size corresponds to integrated image detail (image size in image frame = 100%)</li> <li>Blank document pages, unused tiers, invisible objects as well as objects outside page areas have been deleted</li> <li>3mm</li> </ul>

# Print production parameters

## **Print data test**

We conduct a print data test prior to the start of production. To enable us to do this, please send us **several representative pages** no later than ten days prior to the start of production. We use the test data as a reference for the production data supplied. We use this data solely for the purposes of testing technical feasibility. We will report our findings back to you. Should there be any divergences from the requirements defined in these guidelines, these need to be rectified for production data purposes.

#### **Data transfer**

We make a portal available to enable you to transmit your print data. Please contact us in good time when you are ready to do so. You are responsible for ensuring your print data is transmitted on time without errors.

#### **Delivery of proofs**

A colour-consistent proof provided by you must meet the following requirements:

The proof has been produced in accordance with the currently valid **DIN-ISO 12647-2** norm for standardised offset printing. **The correct ICC profile** corresponding to the type of paper used for the end product is utilised to produce the proof. The proof profile and the data profile match. The proof has been produced using the same data stock that will be provided to the printing company for print production purposes. The following information must also be noted on a delivered proof:

- File name of the proofed file
- Type of proof equipment used
- Proof profile used
- Date and time of proof production
- Date and time of most recent calibration of proof equipment
- Control strips in the form of the current original-sized Ugra/Fogra media wedge

The proof is tested using the **control strip verification** process. The result must be noted on the proof (for example, using an adhesive label or overprint). The tolerance specifications of the relevant DIN-ISO 12647-7 apply. Mixed usage of soft proofs (approval on a colour-consistent monitor) and delivered hard proofs is not permitted.

Paper type	ICC profile	Char file
Papierklasse 1	PSOcoated v3	Fogra 51
	ISO Coated v2 (old norm)	Fogra 39
Paper class 2	PSO LWC Improved	Fogra 45
Paper class 3	PSO LWC Standard	Fogra 46
Paper class 4	PSO MFC Paper	Fogra 41
Paper class 5	PSOuncoated v3	Fogra 52
	PSO Uncoated ISO12647 (old norm)	Fogra 47
	ISO Uncoated Yellowish (old norm, for yellowish offset papers without optical brighteners)	Fogra 30
Paper class 6	SC Paper (for SCA Paper)	Fogra 40
	PSO SCB Paper (for SCB Paper)	Fogra 54
Paper class 7	PSO INP Paper	Fogra 48
Paper class 8	PSO SNP Paper	Fogra 42

The classification corresponds to the valid DIN ISO 126472 standard. The ICC profiles of paper types can be downloaded from the following website: http://www.eci.org

## Finishing

Print data for finishing purposes must exhibit the following properties:

- A separate PDF with a unique ID must be supplied for each finishing operation.
- All elements must be included as solid-colour elements with 100% black. Print data must not contain greyscales.
- The elements should be created in vector-graphic form. If the elements have to be structured on a pixel basis, a minimum resolution of 1200 dpi is required.
- The minimum line width for lines and counters is 0.25 mm.
- Negative fonts and motifs are created solely in the finishing file. This also applies to all stamping foil elements.

#### Customisation

The following points ensure the quality of customised products and avoid interfering with the PDF file and therefore the risk of incorrect or faulty output:

- Only PDF files are approved.
- PDF files for customised digital printing purposes comply with the requirements of these data guidelines.
- Three files are required:
  - Status PDF: Preview file with clearly marked variable elements and sections
  - Preprint PDF: Preprint file with offset preprint or static elements
  - Imprint PDF: Layout file with all elements to be imprinted at maximum quality (e.g. alternatives)
- Continuous texts with variable content must always be delivered as separate texts in system fonts.
- Continuous text with variable content must not be included in the preprint PDF.
- Always remove variable elements on images and sequences from the preprint file.
- Image material must always be clearly referenceable.
- The applicable specifications of the chosen shipping service provider must be complied with.
- Clipping paths must be transmitted in a format that supports transparencies (PSD, PNG) and vector-based clipping paths (EPS, JPG).
- All used fonts are fully embedded. Subsets are not allowed.
- As far as purely B/W personalisation is concerned, we request that you bear the following in mind:
  - B/W personalisation may not be placed on areas with more than 15% coverage
  - Only genuine B/W (bitmap, 1 bit colour depth)
  - No greyscale/RGB/CMYK data
  - No tiers or alpha channels
  - Optimum image resolutions are system-dependent. Please enquire about these.

# Document properties of delivered files

## **Data format**

Our workflow is based on **single PDF pages**. We do not accept open data for data protection reasons.

To meet these requirements, we expect you to utilise the

#### PDF/X-1a:2001 standard as well as PDF Version 1.3.

If you are unable to deliver in the PDF/X-1a:2001 data format, then the following criteria in particular must be met

- The file only contains CMYK content as well as special colours by agreement
- All contents are included in the correct colour profile in accordance with the valid ISO 12647-2 norm. See Paper Classification in the Delivery of proofs section on page 5
- There are **no transparencies** included
- All used fonts are fully embedded. Subsets are not allowed.
- The pages include a trim box in the same position as and of an identical size to – the final trimmed format
- If not otherwise requested from a design point of view, elements that are coloured 100% black are set to Overprint
- White elements set to Knock out
- CMYK and halftone images have a resolution of at least 300 dpi
- Line artwork has a resolution of at least 1200 dpi dpi
- As far as images featuring clipping paths are concerned, the image should not be any larger than required for the clipping path (please remove areas not required, keep uniform)
- Image size corresponds to integrated image detail (image size in image frame = 100%)
- Blank document pages, unused tiers, invisible objects as well as objects outside page areas have been deleted
- Any trim marks must be included at a margin of at least 3 mm to the net sheet size.

#### Bleed

We require no less than **3 mm bleed** on all four sides. Relevant information must be placed at least 3 mm from the edge of the page on all four sides.

## **Minimum font size**

The minimum reproducible font size is 6 pt.

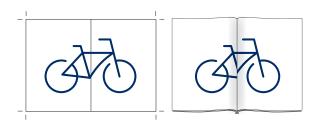
## **Minimum line width**

The minimum positive and negative line width is **0.05 mm for a non-rasterised line** and **0.25 mm for a halftone line**.

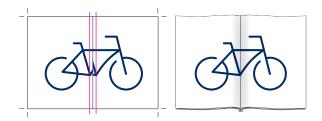
#### **Back-end margin**

In the case of a perfect-bound brochure, the cover is glued on both sides of the inner margin with a thin line of adhesive. That is why an area of approx. **5 mm** is not visible at the inner margin. To ensure seamless image transition of motifs that extend across the inside front cover and the first content page, the motifs must be shifted 5 mm out of the inner margin on both layout sides.

A double-page motif on inside pages must also be adjusted, as an inner margin area would be concealed by the binding on both pages of the perfect-bound end product. Here we recommend shifting the motifs roughly **3 mm** away from the inner margin on each page.



without back-end margin



#### with back-end margin

Visibility of graphics that extend across the inner margin of a perfect-bound product.

The left-hand images show the layout programme view in each case, with the finished product view on the right.

# Contacts

# Campaign

## **Data Delivery Contact**

#### Have any questions?

Please feel free to get in touch with your personal contact who will be more than happy to assist you.

#### You do not yet have a personal contact?

Please refer to the following person/people:

Phone: +49(5241) 80–40865 info@campaign-services.de https://www.campaign-services.de/en/contact/

# Mohn Media

## **Data Delivery Contact**

**Stefan Hille** Phone: +49(5241) 80-1571 Stefan.Hille@Bertelsmann.de

#### Adress

Mohn Media MDA-EDV Carl-Bertelsmann-Straße 161 M 33311 Gütersloh, Germany

#### **Hannes Meyndt**

Phone: +49(5241) 80-5822 Hannes.Meyndt@Bertelsmann.de