

Appendix E - Specification of conversion of scans to PNG files

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This appendix specifies how scans should be converted to PNG-files and is subject to change.
The requirements and examples are numbered.

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1 General requirements

There are three types of images:

- Regular images
 - Inline images
 - Covers
1. The rules for the conversion of scans to PNG files described in this document may be overruled by instructions written in the instruction document, the precoded scan or a separate instruction file.
 2. Images are illustrations or irregular text in the clean scan, for example pictures, photos, graphics. Images in the clean scan should be captured as PNG file according to the specifications in this appendix.
 3. When other parts of a title must be captured as PNG file, this will be stated in the precoded scan or instruction file.
 4. The name of the first cover PNG file consists of the titlecode of the clean scan followed by _01_tpg: [titlecode]_01_tpg.png.
 5. The name of a subsequent cover PNG file for periodicals is the titlecode of the clean scan followed by _01_tpg and the number of the issue: [titlecode]_01_tpg[n].png, see also chapter 5 Cover, rule 2.
 6. The name of the first regular PNG file consists of the titlecode of the clean scan followed by 'ill' and four digits: [titlecode]ill0001.png. Consecutive images, including inlines images, are numbered in ascending order.

2 Dimensions

The KB uses the following definitions:

1. The 'line width' of a page is the space between the left and the right margins on the page. The margins on either side of the page should not be considered as part of the line width.
2. The 'width percentage' of an image is the percentage of the line width occupied by the image.

Please use below guideline for approximate sizes:

0-20% of the width of the trim area	90 pixels wide
21-40%	180 pixels
41-60%	270 pixels
61-80%	360 pixels
81-100%	450 pixels

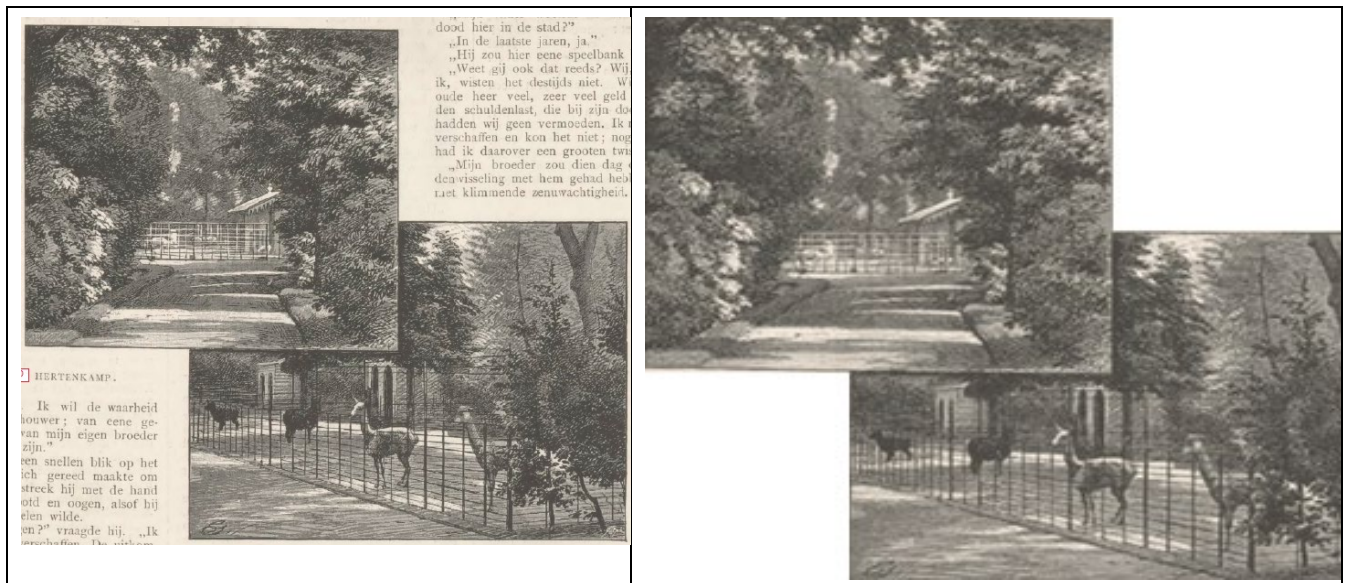
These are the requirements for the conversion of an image into a PNG file:

- a) The maximum width of a PNG file is 450 pixels.
- b) The maximum height of a PNG file is 450 pixels.
- c) The height/width ratio of the original image must be maintained.

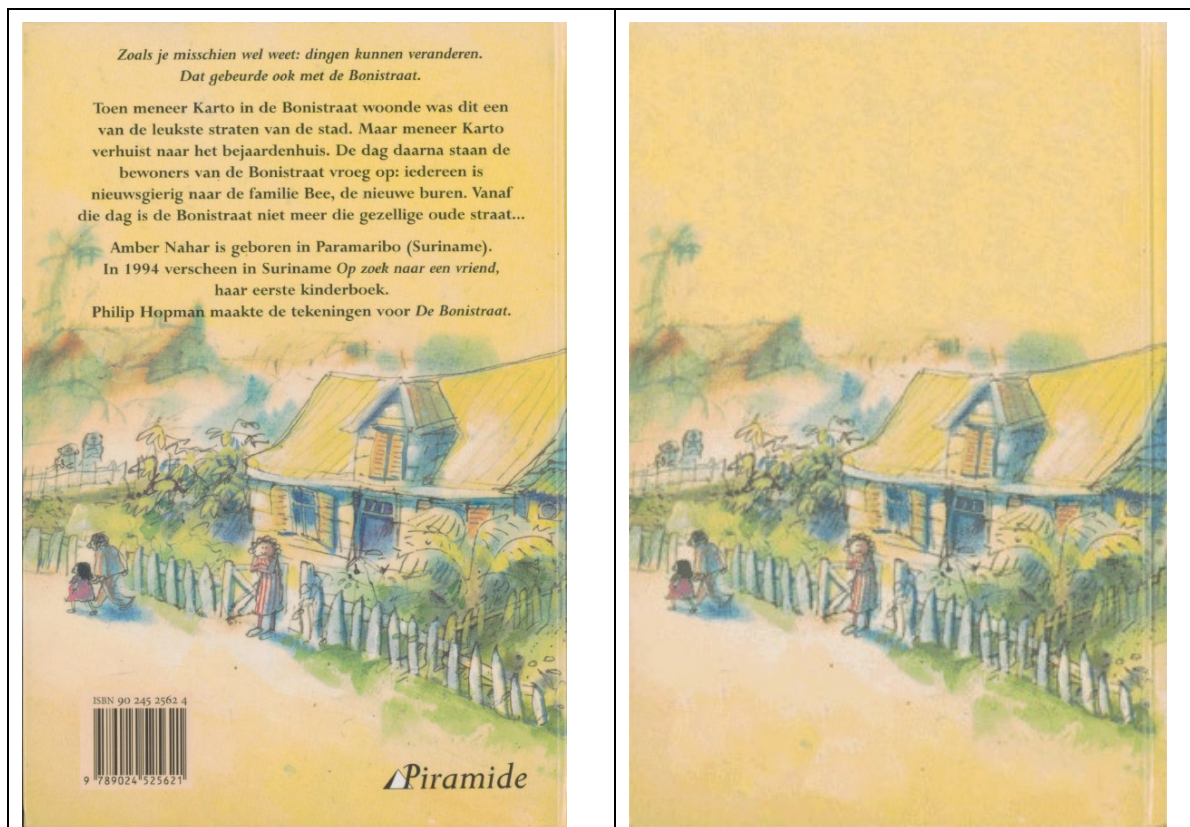
- d) Images that are tilted in the original should always be captured in landscape orientation, unless indicated otherwise.
- e) The dimensions of the PNG file must be proportionate to the dimensions of the image on the original page. Full page images should be 450 pixels wide or high, see guideline for approximate sizes above and the examples below.
- f) The minimum height and width of the image is 50px. See the examples below.
 - If an image is so elongated that the width or height exceeds the requirements, images with no text may be smaller than 50 pixels in one dimension.
 - For images containing *only* text, the maximum width or height of one dimension may be extended up to 470 pixels. Note that this is only allowed if necessary for the legibility of the text.
- g) Text must be legible. This means the image may be made proportionally larger than it is in the original, except when it is a tpg. If the text is still not legible, please contact us.
- h) If specified with precoding, the image will be produced to different dimensions.
- i) Different dimensions apply to the cover, see chapter 5 Cover, rule 1.
- j) If an image is rectangular, the PNG file contains only the image, i.e. without borders and without transparent parts. See for exceptions rule n).
- k) If an image does not have a clear border, the PNG file may be captured with an imaginary rectangular border.
- l) If an image has very fine details, the PNG file may be captured without transparency if details will be lost otherwise.
- m) If an image is not rectangular, the part of the PNG file that does not belong to the image is transparent.
- n) If an image contains text that is also captured in TEI-XML code, it can be removed from the image, unless the text is an integral part of the image or unless indicated otherwise. See Example 1.
- o) If a background image contains another image that is also captured in TEI-XML code, like a logo, 2 images should be made. The foreground image should be removed from the background image. See Example 2.

Example 3: In a scan an image is 4000 pixels wide and 4500 pixels high. The text on the page (excluding text in the margins) extends horizontally to 8000 pixels. After application of the rules in chapter: 2 Dimensions, the PNG file would be 400×450pixels. As the width percentage is 50%, the image is further reduced to 200×225 pixels so that it is proportionate to the type area.

Example 4: In a scan an image is 1000 pixels wide and 500 pixels high. The text on the page (excluding text in the margins) extends horizontally to 8000 pixels. After application of the rules in chapter 2 Dimensions, the PNG file would be 450x225 pixels. As the width percentage is 12.5%, the image is further reduced to 56x28 pixels. The minimum height would then be too small, however. The final size of the image is therefore 100x50 pixels.



Example 1



Example 2

3 Color

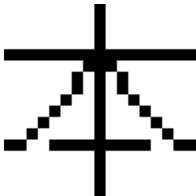
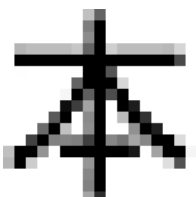
1. Colors are represented as 8 bits per component.
2. All PNG files that are *not included inline* in the TEI-XML must be in the same color as printed in the original. Black-and-white printing leads to a grayscale PNG image, even if the original has yellowed.
3. Color images are represented as RGB (with Alpha Channel) with a bit depth of 8 bits per color component.

4. Grayscale images are represented as grayscale (with Alpha Channel) with a bit depth of 8 bits per color component.
5. The use of palettes is not permitted.

4 Inline images

1. If the PNG file has been included *inline* in the TEI-XML, the background is transparent and the foreground is the color of the original. The color depth must be 8 bits per color component. Grayscale can be used to reinforce the illusion of flowing lines (see example below; both images are correct).

An *inline image* has a transparent border on the left and right with a thickness of precisely 1 pixel to prevent it touching the surrounding text.

Source text is blue	Inline image without grayscale (enlarged)
ABC 本	
Source text is blue	Inline image with grayscale but the main lines are black
ABC 本	

2. If the PNG file is included *inline* in the TEI-XML, 3.1 and 3.2 do not apply. In this case, the dimensions of the PNG file should be 12 pixels wide or high for a capital letter and 9 pixels wide or high for a lowercase letter. A variation of plus or minus 15% is acceptable.

Example: For the source text 'ABC 本 xyz', the middle character can be delivered as a character with a height of approximately 17 pixels, because it is slightly larger than an uppercase letter.

5 Cover

1. A PNG file of the cover is delivered with a height of precisely 600 pixels or a width of precisely 470 pixels, depending on which side is the longest. If there is no cover, the title page is used for this purpose. If there is a flap attached to the dust jacket, this flap should not be part of the PNG file.
2. For periodicals a PNG file should be made for the cover of each issue, which is usually precoded as 'voorplat' or 'I'. The name of the first cover should be [titlecode]_01_tpg.png. For subsequent covers the name of the PNG file should be [titlecode]_01_tpg[x]. The number

after 'tpg' is the number of the issue of that cover. This means there usually is no tpg1 and the name of the second tpg is always [titlecode]_01_tpg2.