

The colour profile a picture brings with it

The same JPEG, embedded twice. The left one keeps the ICC profile out of its APP2 segment and reaches the file as /ICCBased; -icc 0 leaves the profile behind and the right one is /DeviceRGB. Same 420 x 540 pixels, same bytes of image data - the difference is in the file, not in the picture.



profile kept: /ICCBased



-icc 0: /DeviceRGB

Erika Mustermann is the German Jane Doe: the placeholder name on the specimen documents of the Bundesdruckerei since it first appeared in the Bundesgesetzblatt in March 1983. Every German identity card, passport and driving licence shown as a sample carries it.

This is the passport photograph of the identity card specimen of the Personalausweisverordnung - an official work, in the public domain under section 5 paragraph 1 of the German copyright act, and published for reuse.

image info	profile kept	-icc 0
type	jpeg	jpeg
width	420	420
height	540	540
components	3	3
bitDepth	8	8
icc	3144	0
colour space	/ICCBased	/DeviceRGB

The same profile as a drawing colour



{icc srgb 0.2 0.45 0.75} - sRGB, 2.3, 6922 bytes on disk and 2449 as the stream in the file

Under PDF/A, the difference decides

tclpdf: PDF/A with the GRAY output intent "ISOcoated_v2_grey1c_bas.ICC" cannot carry DeviceRGB (ISO 19005-2, 6.2.4.3) - used by image place on page 1; paint in grey, or give an RGB profile with pdfa -profile

That is the picture on the right, under a grey output intent. The one on the left goes into the very same document without a word: it is anchored to its own profile, not to the device. It is written beside this file as 03.06-image-icc-pdfa.pdf.

```
qpdf --qdf --object-streams=disable 03.06-image-icc.pdf - | grep -n ICCBased
verapdf -f 3b 03.06-image-icc-pdfa.pdf
```