process name	process owner	process members	document created	ISO stage & vote rule	CIE stage & vote rule
NWIP	CB	TCMs CIE:DD	NWI	10 / 2/3	1 / 2/3
assign of WG/TC	BA+TCC		WG/TC assigned	20 / 3	3 / –
development WD & Ballot	TCC	TCC+TCMs	WD of TCMs	30 / 2/3	5 / U
development CD & Ballot	TCC	ISO:+TCMs CIE:+DD+DE	CD	40 / 2/3	7 / 2/3,U?
development DIS/ED & B.	CB	TCC+TCMs +CB	ISO/DIS CIE/ED	50 / 2/3	9 / 2/3
development FDIS/AD &B.	CB	TCC+TCMs +CD	ISO/FDIS CIE/AD	60 / Y/N+C	11 / Y/N+C
publica-tion of TR	CB	TCC	ISO/TR CIE/TR	70 / 2/3	12 / –

Abreviations: TR Technical Report, TC(C, M) Technical Committee Convener (Chair) or Member, WD/CD Working or Committe Draft, DIS/ED and FDIS/AD Enquiry or Approval Draft, U Unanimous vote CB ISO or CIE Central Buero, BA CIE Board of Administration, DD/DE CIE Division Director/Editor.

- seen by public (to buy)   - seen by parent committee   - seen directly by committee

fem40−1A

Problem: For example the standard organisations ISO, CEN, DIN, and CIE use *anticopy software*. This software is *incompatible* with the EPS-vector graphic of the software *Adobe Illustrator*. However, this image software is used since 20 years in standard documents. How to revise these ISO documents?

Table 1: Development of the ISO standard ISO 9241-306:2018. Quality with vector or pixel graphic, and without or with anticopy software.

ISO	graphic software	file size Word PDF	anticopy software	possible magnification	remarks quality
ISO/DIS 9241 -306:2018	vector graphic	2MB 4MB	No	16x	very high quality
option used in secretariat	vector graphic	2MB 4MB	Yes	16x	colours disapear 1)
ISO IS 9241 -306:2018	pixel graphic	60MB 15MB	Yes	1x	very low quality 2)
DIN print 9241 -306:2018	pixel graphic	– –	Yes	1x	not ac-ceptable 3)

1) about 30% of the colours disapear; 2) the output is defined by the software, and not by the vision properties of users.
3) 4 of the 16 grey steps are not distinguishable. The minimum requirement is failed.

fem40−3A

fem40−3n

Problem: For example the standard organisations ISO, CEN, DIN, and CIE use *anticopy software*. This software is *incompatible* with the EPS vector graphic of the software *Adobe Illustrator*. However, this image software is used since 20 years in standard documents. How to revise these ISO documents?

Some existing problems for **visibility, readability, resolution,** and **colour** are listed. A solution shall maintain the former high quality of ISO standards. If the *anticopy software* is necessary then it shall be *compatible* with EPS vector graphic.

Many problems show the PDF document N1581 of ISO TC159/SC4/WG2 *Visual Display Requirements*. The subject of three 16 step colour scales between white and RGB disappear on page 36. The Word document with EPS graphic shows all colours as intended.

Solution 1: The vector graphic files are transferred to pixel graphic files and are included in the Word file.

Disadvantages:
1. The test results of ISO standards for *Visibility, readability and resolution* are determined by the pixel software and not by the colour vision properties of users.
2. For example the word file size of ISO 9241-306 increases from 3 to 60 MB. This is not accepted by the email servers of standard organisations.

Solution 2: ISO 9241-306:2018 is published in pixel graphic (low quality). ISO-test charts in vector graphic are for download from the *ISO Standard Maintenance Portal*. Therefore the test quality of ISO 9241-306:2009 remains, see
http://standards.iso.org/iso/9241/306/ed-2/index.html

fem40−2A

References and access to archive-web sites with navigation
Basic References
[1] CIE Toolkit for Technical Work, see
http://www.cie.co.at/technical-work/technical-resources
[2] ISO What delegates and experts need to know
https://www.iso.org/publication/PUB100037.pdf
[3] ISO How to write standards
https://www.iso.org/iso/how-to-write-standards.pdf
[4] *K. Richter, 2016,* how to find public Web Pages with broken links
http://farbe.tu-berlin.de/WBM_find_PFs_16.pdf

WBM access to public BAM documents until 2017
Navigate for Reports of CIE D1: Meeting (MR), Activity (AR)
http://web.archive.org/web/20170624033105/http://div1.cie.co.at/?i_ca_id=544
Navigate for Reports of Meeting (MR), Activity (AR), Reportership (RR)
http://web.archive.org/web/20160406200138/http://div1.cie.co.at/?i_ca_id=544
List of more than 300 CIE documents:
http://web.archive.org/web/*/http://files.cie.co.at/*

WBM and direct access to public BAM documents until 2010
http://web.archive.org/web/20061116034852/http://www.ps.bam.de/index.html
Most content of this BAM web site has been transfered in 2018 to:
http://farbe.li.tu-berlin.de/A/indexAE.html

WBM access to public ISO/IEC JTC1/SC28 documents until 2006
http://web.archive.org/web/*/http://www.jbmia.or.jp/sc28/sc28docs/j28n*
http://web.archive.org/web/*/http://www.actech.com.br/sc28/*

fem40−4A