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Status of current ISO printing standards

[pab] meeting in København, DK
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Florian Suessl • fsuessl@metadesign.de

Agenda

[pab]

- History and status of international printing standards (ISO)
- Aids and appliances for the implementation of ISO printing standards (bvdn, FOGRA, ECI, ifra)
- Work in progress
- Unsolved issues

1 International ISO* [pab] Printing Standards

- **ISO 2846** (ink supplier)
Colour and transparency of ink sets for four-colour-printing - Part 1: Sheet-fed and heat-set web offset lithographic printing
- **ISO 12647** parts 1-7 (prepress and print)
Process control for the production of half-tone colour separations, proof and production prints

*ISO, International Organization for Standardization,
www.iso.org

History and status of [pab] ISO 12647 parts 1-7

- First release of ISO 12647 in 1996!
- Published ISO 12647 standards as of today:
 - ISO 12647-1:2004 - Parameters and methods
 - ISO 12647-2:2004 - Offset printing
 - ISO 12647-3:2005 - Newsprint
 - ISO 12647-4:2005 - Gravure printing
 - ISO 12647-5:2001 - Screen printing
 - ISO/FDIS* 12647-6 - Flexographic printing
 - ISO/CD** 12647-7 - Proofing

*FDIS: Final draft international standard

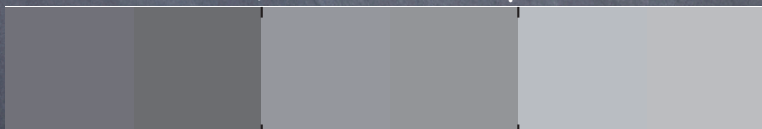
**CD: Committee draft

Implementation – [pab] Aids and appliances ...

- Reference prints according to ISO 12647 for commercial offset, newsprint and gravure (e.g. Altona Test Suite Application kit for commercial offset, released in 2004)
- Color characterization data based on real world printing (www.color.org, www.fogra.org, www.ifra.com, www.eci.org)
- ICC Profiles for color conversion and proofing (www.eci.org, www.ifra.com)

Implementation – [pab] Aids and appliances

- bvdM Media Standard Offset
Currently German version only. English soon (free download at www.bvdm.org)
- ECI/bvdm Gray Control Strip



ECI/bvdm Gray Control Strip (S) • FOGRA27

English documentation soon
(free download at www.eci.org, www.bvdm.org)

Work in progress – [pab] Web offset paper types

- Meet the client needs – additional printing conditions for web offset printing on SC (super calendered), MFC (machine finished coating) and enhanced newsprint paper
- Addressed by ECI* web offset working group
- Extensive test prints at five printing houses in Europe on web offset presses
- Extensive visual and colorimetric evaluation

*ECI, European Color Initiative, www.eci.org

Work ahead ... [pab]

- ISO 12647-2 Paper types
Adaptation of changing color properties (CIELAB color coordinates of paper tone) and additional paper types
- Complex problem of optical brighteners
Significant color difference caused by paper with optical brighteners and different UV portion of illuminant is not yet incorporated in ISO standardization (viewing conditions and color measurement)

Work ahead

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- Printing standards for spot color printing
 - Lack of aim values and tolerances for ink solids, TVI and overprints
 - No color predictability for designers (Spot color tints and overprints)
 - No production aims for printers