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# SCIT meeting report

Geneva, 23-24th June 2009

Prepared by Kate Grant, Laura Moore, Thomas Schmelzer JTC1 Liaison representatives to SCIT

### Representatives reporting from:

- ISO TC130
- ISO TC171
- ISO/IEC JTC1 relevant plenary resolutions
- ISO/IEC JTC1 SWG-ARM
- ISO/IEC JTC1 SC24
- ISO/IEC JTC1 SC28
- ISO/IEC JTC1 SC29 (WG1)
- ISO/IEC JTC1 SC37
- Adobe

#### Training on ISO document system

- Time spent on familiarisation with ISO system for document distribution
- Various issues identified at this time (for example ISO and JTC1 have different definitions of "open" documents and JTC1 committees providing web site through ISO need to ensure correct access enabled for their documents.

## Colour management discussion- 1

- Many groups have colour management relevant to their specific applications, there are potentially issues where there are workflows crossing domains where there may be incompatibilities
- In some applications eg in graphic arts have defined colour in a very restricted sense; have revised densometry and viewing standards to ensure the specifications are consistent
- Only limited case of defined viewing conditions ie D50 (perhaps with no UV to eliminate OBA effects)
- When crossmatching on a monitor define D65 viewing condition, but with better monitors D50 may be possible
- Many offices do not have a typical "office illumination" as per definition

## Colour management discussion- 2

- In photography view transparencies under defined illumination, and trying to provide specifications in digital photography for graphical publication with limited viewing condition
- Restricting options to a narrow set for proof to print comparison
- ICC investigating spectral conditions so can view in many conditions. If cannot define what you have then cannot use ICC because it depends on definition of "viewing conditions"
- In general RGB workflow is better defined than CMYK, cheaper calibration devices are available

#### ID50 and ID65

- CIE 184:2009 (ISBN 9783901906749) report defines indoor daylight ID50 and ID65.
- "The CIE recommended daylight illuminants in 1967. These daylight illuminants contained ultraviolet radiation in proportions as found in natural outdoor daylight. Indoors this daylight is filtered by the transmission of the window glass; therefore it became necessary to define spectral power distributions also for the indoor daylight phases. The TC recommends adoption of two indoor daylight illuminants ID50 and ID65, that correspond to the phases of daylight of about 5000 K and 6500 K correlated colour temperature. Tables of the spectra are provided at 5 nm intervals from 300 nm to 780 nm, along with the rationale for their development and detailed comparison with existing daylight illuminants."
- Conclusion: there is a clear need to consider viewing conditions in respect of illumination when doing experimental evaluations eg of compression quality, biometric technology comparisons

## ISO TC171 Activity report - 1

- SC1
- DIS 11506 Document management application archiving of electronic data going to FDIS
  - Scope is storage for very long term (100 years)
- TR15801 information management systems which stores information electrically and where the issues of authenticity, integrity, legal admissibility, and evidential weight are important
  - Important for JTC1 SWG-ARM and potentially SC37 biometrics
- CD 29861 Document management application: Quality Control for scanning office documents in colour progressing to DIS

# ISO TC171 Activity report -2

#### • SC2

- TR 10255 optical disc storage technology
- 11864 Guidelines for the creation of a metadata cross walk is not yet out for CD ballot
- 12029 EIM forms; design optimization for electronic imaging
- TR 12033: selection of document image compression methods (references JPEG, JPEG2000, JBIG, TIFF/IT)

# ISO TC 171 Activity report - 3

#### • SC3

- TR 15801 Electronic Imaging Information stored electronically - Recommendations for trustworthiness and reliability (final version at ISO ready for publication)
- NP 12651-1 Electronic Document Management –
   Vocabulary Part 1 Electronic document imaging
- NWIP Electronic archiving specifications concerning the design and the operation of an information system for electronic records preservation; new WG to be established,

# JTC1 Activity reports

 JTC1 relevant Nara plenary resolutions and activities briefly reviewed (inc SG Sensor Networks, SWG-ARM, Green IT, environmental scanning)

Potentially JTC1 should consider producing TR explaining some of the colour issues for both "naïve" and "technically-aware" users, see also resolution 6

- JTC1 SC29 WG1 activity report based on results of April 2009 meeting
- JTC1 SC37 items being progressed at July meeting in Russia highlighted

## JTC1 SC24 Activity report

- WG6 Computer Graphics
  - ISO/IEC 19775 series parts 1 to 3 relating to X3D work and development of X3D earth model
- WG7 Image Processing
  - Implement JPEG2000 in BIIF
  - Require compression of new spectral types
- WG8 Environmental representation
  - TR 24788 templates for SEDRIS data reference model
- SC24 works with
  - Web3D consortium who develop X3D; and want open standards,
  - DGIWG Defence geospatial information WG, expand ISO/IEC spatial reference model
  - NATO Joint Capability Group on Intelligence Surveillance and Reconnaissance/Imagery WG
  - Open CGM consortium
  - SEDRIS organisation

## JTC1 SC28 Activity report

- Documents SCIT N183 to N188 Office machines Method for the specification of the relative colour reproduction with YES/NO criteria – Part 1 Classification, terms and principles and Parts 2 – 6 specific test charts
- WG2 conclude that for cartridge test charts, thumbnails not sufficient, need to be at least A6
- New WG5 will be "colour in offices"; first work item is TR 29186 which addresses gamut for office printers
- In AWG have investigated potential NWI, including "RGB color space based on human visual RGB definition"
- Note: IEC TC59 requested CIE to look at elementary colours and define hue angles and have "elementary colours RGB and yellow", activity likely to be in CIE-8 see http://www.colour.org/

### TC130 report -- 1

- 3 standards revised to use common geometry, references, definitions
  - ISO 3664 Graphic technology and photography -- viewing conditions
  - ISO 5 Photography and graphic technology Density Measurements (4 parts)
  - ISO 13655 Graphic Technology spectral measurement and colorimetric computation for graphic arts images
- All similar conditions: standard white and standard black backing material specified and 4 different luminant conditions
  - MO,
  - M1 strict D50,
  - M2 D50 with UV blocked,
  - M2 with polarisation
- ISO 15076-1 and ICC:1:2009 (Image technology colour management -- Architecture, profile format and data structure --Part 1) revised and parallel balloting, modifications to ICC specification since 1st version incorporated. Identical technical content in 2 documents. ICC document is free, ISO sell it

### TC130 report -- 2

- ISO12640 Graphic technology –prepress digital data exchange
  - Part 1 CMYK standard colour image data (CMYK/SCID)
  - Part 2 XYZ/sRGB standard colour image data (XYZ/SCID)
  - Part 3 CIELAB standard colour image data (CIELAB/SCID)
  - Part 4 Wide Gamut display-referred standard colour image data (Adobe RGB (1988)/SCID)
  - Part 5 Scene-referred standard colour image data (RIMM/SCID)
     Note Part 4 because Adobe RGB defined better than opRGB
- Test images to allow evaluation of tools bringing in data from different colour spaces.
- NWI Graphic Technology Management of security printing processes
  - Security management system where an organisation needs to demonstrate ability to consistently provide security requirements set by law, and enhance customer satisfaction.
  - Aimed at printing companies (potentially a joint project with TC247) and potentially relevant to SC17 and SC27 also

### TC130 report -- 3

- Work on hard copy/soft copy comparison, will use ISO 12646
   Displays for colour proofing and standard will add evaluation criteria
   and test requirements. So text will focus on monitor set up and
   environment conditions and adjustments between reflective and self
   luminant display
- Hard copy proof always considered part of contract and work on Contract Proofs and Validation Prints from Digital Data (12647-7 IS Contract Proofs) new part of ISO 12647-8 Validation prints so specifies requirements for systems and individual prints, colorimetrically based. Only CMYK or spot colour data for printers.
- ISO 17972 Graphic technology prepress data exchange colour data exchange format (cdxf) XML based format

Note: XRite proposed ISO TC130 have standard based on CxF3 similar to use with PDF/X.

#### **TC42 WG5**

- JPEG 2000 an approved compression standard for EXIF
- TIFF/EP under revision
- EXIF/JFIF revising metadata component
- ADOBE RAW format can be used by committee and taken over by ISO so DNG will be incorporated in TIFF/EP

#### Resolutions -- 1

#### **Resolution 1-2009: Meeting reports**

 SCIT welcomes verbal reports giving details of activities of standards committees that are in a too early stage for a written report.

#### **Resolution 2-2009: Meeting schedule**

 The next meeting of SCIT is planned for Washington DC 15 – 16 April 2010, venue to be arranged.

#### Resolution 3-2009: ISO implementation of LiveLink

 SCIT welcomes the forthcoming features of the ISO implementation of Livelink to offer the possibilities to use the eMail-client and especially the function of newsgroups. SCIT notes issues with the current incompatibility of ISO's implementation of LiveLink with non-Microsoft applications such as Lotus Notes, Firefox

#### Resolution 4-2009: SCIT reflector

 SCIT resolves to accept the offer of AIIM to host the SCIT reflector and thanks Betsy Fanning for this offer

#### Resolutions -- 2

#### **Resolution 5-2009: Supporting materials**

- SCIT is aware that there are freely available supporting materials to ISO publications being distributed through webservers other than ISO or the national partners of ISO.
- For the reason of reliable and long-term availability, SCIT requests ISO to investigate the possibility to host all supporting materials on the ISO-servers with access through the ISO website.
- SCIT requests its members to provide a list of such publications and the location of the supporting materials (e.g. publication numbers and URLs).

#### **Resolution 6-2009: Colour issues**

- SCIT resolves to draft a document that identifies concerns that need to be addressed in developing standards dealing with colour, colour display and colour vision issues.
- J. Thomas Schmelzer will prepare a first draft to be enhanced by contributions from other SCIT-members.
- SCIT notes that it is the intention of this paper is to provide for checking existing and future standards for the inclusion of the asic descriptions necessary for colour.

### Key issues for JTC1

- JTC1 SC24
  - Image processing: compression of new spectral types (slide 11)
  - Use of JPEG2000 in BIIF
- JTC1 SC28
  - New WG5 "colour in offices" (slide 12)
- JTC1 SC29 WG1
  - Work on JFIF (see separate LO report on SC29 WG1 activity)
- TC130
  - Viewing conditions, illumination (slide 13)
  - Colour image data (slide 14)
- TC171
  - TR15801 (slide 7)
  - NP 12651-1 (slide 9)
  - NWIP on electronic archiving (and new WG)

These issues certainly have relevance to the work of SC24, SC29, SC37 SWG-ARM and potentially SWGA and may have implications for other SCs also.