Report of TC 130 Working Group Meetings and Plenary
Beijing China
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David McDowell
Chair, USTAG TC 130

TC 130 held its 23rd Plenary meeting in Beijing, China on September 26, 2009. During the week of September 21-25 many of its Working Groups also held their semi-annual meetings. The following is a summary of key accomplishments and items associated with those meetings. (The reference documents noted are available at http://www.npes.org/standardsworkroom.html.)

WG1 (Terminology) (Minutes are TC130 N 1564, TC130/WG 1 N 406)

WG1 work revolves around two documents: the ISO 12637 series which are the basic vocabulary documents of TC 130, and ISO 5776 which is the standard on text proof correction marks.

ISO has recently introduced a Concept Data Base (CDB) which will be a way in which vocabulary documents can be maintained in an interactive rather than static form. The intent was that ISO 12637 (all parts) would be moved to the CDB as part of the current review and revision. Unfortunately that database is not available yet and an interim system has been established.

A Plenary resolution was introduced and approved to enable the move of ISO 12637 to the CDB.

The comments on the second CD of ISO 5776 were discussed and resolved, resulting in the need to correct format, typographical and illustrative errors. It was agreed that following the implementation of the corrections required by the resolution of the comments and the work on Table 2 and its annexes, the WG would ask for a short circulation of the revised CD to TC 130 WG 1, and, if agreed, then proceed to DIS.

WG2 (Prepress Data Exchange) (Minutes are TC130 N 1570, TC130/WG2 N 1363)

WG2 Task Force 2 (PDF) met in Beijing and will be reported on later in this summary. WG2 Task Force 3 (PDF/VT) did not meet in Beijing as ISO 16612-2 is currently in DIS ballot and no action is possible until the comments from that ballot are available.

The periodic review of ISO 12642-1:1996**,** *Graphic technology – Prepress digital data exchange – Input data for characterization of 4-colour process printing,* resulted in a decision to "administratively revise this standard in order to replace sub-clause 4.4, and the pointers to it, with a pointer to ISO 28178".

The bulk of the meeting was devoted to a review of the progress on ISO 17972 - *Graphic technology — Prepress data exchange — Colour data exchange format (cdxf),* and related issues.

The CxF3 file format itself contains many Core Resources which identify various elements and their definition. In addition CxF makes provision for Custom Resources which the standards

community will use to define use of the CxF format for specific graphic arts applications. Because most Core Resources are intended for use in a variety of application environments they are considered to be optional. However, a Custom Resources can point to Core Resources and identify them as required for a specific application.

The standards effort will focus on building a series of Custom Resources to define the use of CxF for specific applications in the graphic arts. A key decision was that:

- ISO 17972 will be a multi-part document where Part 1 is a description of the use of both CxF3 and Graphic Arts Specific Custom Resources.
- Parts 2 and onward will each be a description of a Custom Resource container applicable to a specific task or application area.
- The initial proposal will be Parts 2 and 3 addressing the Custom Resources requirements of scanner targets and printer targets.

It was reported that the CxF3 schema is now complete and published. The basic software development kit (sdk) will be available for download at www.colorexchangeformat.com.

There was considerable discussion of the data required for spot colour identification (within a CxF element). Document WG2 N 1351 summarizes many of the issues and gives examples of schema definitions.

In reviewing the requirements for Proofing Approval Metadata it was reported that feedback from industry experts concerning the proposal to add proof approval metadata to PDF/X indicates that this is too difficult to implement and is not needed. However, one part of the proposal that was considered important was providing a clear connection between a hard copy proof and the digital file from which it was produced. In
discussing the use of the filename to identify the reference PDF file it was pointed out that using the ID from the trailer of the file was more reliable because it identifies the original file and any variants.

It was questioned whether this is an issue for PDF/X or for ISO 12647-7, or both. It was felt it is definitely an issue for ISO 12647-7, but a PDF/X conforming reader should be encouraged to present document identification metadata.

Hitoshi Urabe reported on research being done concerning RGB workflow in Japan. The report is available as document WG2 N 1359. He notes that RGB data submission to the printing workflow is very important. Using the reversal film as an example he pointed out that reversal film was generally a perfect input because it could be easily viewed by everyone in the process and was not subject to interpretation. The goal is to find a way to allow digital camera RGB data to also be such an input.

It was noted that looking at the characteristic curves of several digital still cameras (DSC) shows that in the middle density range they all have nearly the same tone characteristics. Further, when these are compared to the tone characteristics of a typical reversal film and the RIMM/ROMM tone conversion curve in the middle density range, they are all very similar. This leads to the possibility that there might be some standard viewing transform that could be applied to allow these data to be evaluated in a consistent way.

WG2/TF2 (PDF/X) (Minutes are TC130/WG2/TF2 N 322)

Although ISO 15930-7 (*Graphic technology — Prepress digital data exchange using PDF — Part 7: Complete exchange of printing data (PDF/X-4) and partial exchange of printing data with external profile reference (PDF/X-4p) using PDF 1.6*) and ISO 15930-8 (*Graphic technology — Prepress digital data exchange using PDF -- Part 8: Partial exchange of printing data using PDF 1.6 (PDF/X-5))* have been published, a question has been raised about their use for packaging data.

The Packaging Subcommittee of the Ghent PDF Workgroup (see WG2/TF2 N 310) had presented the issue that they are unable to use PDF/X-4 today specifically because of the way in which the optional content feature of PDF language (layers) is restricted. The ability to interactively control the display and output of individual portions of the optional content is more limited than it should be for their needs. In addition, there have been issues raised with respect to spot colour identification, overprint simulation, alignment with new features in ISO 32000-2, black point compensation, and page-level OutputIntents.

After much discussion it was decided to move forward with a minor revision of both ISO 15930-7 and ISO 15930-8 to provide a solution to the optional content issue and to add a series of minor editorial corrections. By selecting the minor revision route the documents can go directly to an FDIS ballot after a 30-day review by the member bodies of TC 130.

A longer term project will be started to consider the changes needed to incorporate the additional concerns raised. It was not clear whether these would be a revision of Part 7 and Part 8, or a new part.

WG3 (Process Control and Related Metrology) (Minutes are TC 130 N1566, TC130/WG3 N 867)

ISO 14981:2000, *Graphic technology — Process control — Optical, geometrical and metrological requirements for reflection densitometers for graphic arts use,* which was initially prepared by TC 130 as a result of disagreement with TC 42 over ISO 5, was withdrawn in light of the recent approval of a revision of ISO 5, done by a Joint Working Group (JWG) of TC 130 and TC 42.

In discussing ISO 12647-7, *Graphic technology – Process control for the manufacture of half-tone colour separation, proofs and production prints – Part 7: Proofing processes working directly from digital data,* it was noted that although the document was only recently published it needs to be reviewed for potential changes to help provide better differentiation from ISO 12647-8. One specific issue that was raised was the potential for tightening the colour measurement tolerances by including a method by which the uncertainty related to inter-instrument agreement could be removed.

A concern was raised concerning the light fastness of proofs. The suggestion was offered that possibly a requirement should be added for an expiration date on proofs.

The NWI ballot on ISO/NWIP 12647-8, Graphic technology – Process control for the manufacture of half-tone colour separation, proofs and production prints – Part 8: Validation print processes working directly from digital data, which closed shortly before the meeting, was approved. However, the ballot on the status of the accompanying draft was unclear because the required ballot options had not been offered. The WG agreed to prepare a Plenary resolution to indicate that the draft was accepted at the WD level. A review of the resolution of comments was started, but due to time pressures was not completed but assigned to an ad hoc taskforce to prepare recommended actions.

Based on the results of the systematic review it was decided to initiate a revision of ISO 12647-4, *Graphic technology – Process control for the production of half-tone colour separations, proofs and production prints – Part 4: Publication gravure printing,* with a 48-month timeline.

There was an extensive discussion of two action items relating to ISO 12647: the simultaneous revision of Parts 1, 2 and 3 proposed by Mr. Meinecke; and the replacement of ISO 12647 by a new document tentatively titled "Process agnostic creation of printed material originating as digital data". These discussions culminated in a decision to start work on a replacement of the ISO 12647 series with a new document (along the lines of the process agnostic document proposed by McDowell) for the long term and prepare a TR to supplement the existing ISO 12647 series. Based on the result of a Plenary resolution this new process-agnostic document is identified as ISO 15339 and is a Stage 0 work item. During this discussion the existence of a paper industry group called Paperdam was identified. This group is reportedly working on the interaction of paper and printing.

It was agreed to add a preliminary work item (Stage 0) for the development of an International Standard on "*Graphic Technology - Requirements for printed matter utilizing digital printing technologies for the commercial and industrial production*" (tentative title). There was discussion as to whether this should be a part of the ISO 12647 series or a separate document. As a result it was decided that the project number should be assigned at a later stage by ISO/TC 130.

In discussing the subject of "certification" there were four presentations: Mr. de Groot presented "Certification scheme in the Netherlands" (WG3 N 862); Mr. Takita gave a presentation "Progress report on Japan Color Certification" (WG3 N 845); Mr. Lindström gave a presentation on the Swedish certification schema (WG3 N 852); Ms. Brunner gave a presentation titled "Update of ISO 12647 certification in the UK" (WG3 N 864). Since all schemas more or less make use of ISO 9001 document management systems, Ms. Pelaprat (Technical Programme Manager, ISO Central Secretariat), commented that any management system standard effort must follow the requirements of the ISO Technical Management Board (TMB) and ISO/IEC Guide 72 must be followed. de Groot agreed to create and chair a task group to explore steps and procedures for setting up ISO-based international certification procedures.

WG4 (Media and Materials) (Minutes are TC130 N 1567, TC130/WG4 N 539)

In reviewing ISO/WD 12705, *Graphic technology – Laboratory method for chemical ghosting,* questions were raised concerning the frequency of the occurrence of chemical ghosting and the associated applicability of such a standard. The outcome of the discussion was a

recommendation to change the track of this project from an International Standard to a Technical Report.

Because of lack of interest and support, it was also decided to stop work on ISO/TR 20101, *Graphic technology – Cell volume measurement.*

Gustavo Barros reviewed the document that accompanied a Swedish proposal for a NWIP for "Method for high precision measurement critical dimensions of sleeves" (WG 4 N 532). In response to the discussion, Mr. Barros agreed to prepare a new document to incorporate the discussed changes.

During the WG 3 meeting in May 2009 it was decided to transfer the requirements for proofing papers presently noted in ISO 12647-7 to WG 4. In addition, France had prepared a NWIP for comparison of "Proof to print papers" (WG 4 N 533). Combining these, WG4 decided to start a new project at Stage 0 to prepare a document called “Communication of optical and surface properties of printing substrates (e.g. fluorescence, gloss and colour”.

In reviewing the results of the systematic review it was decided (because of the lack of adoption or use) to withdraw ISO 15994:2005, *Graphic technology – Testing of prints – Visual lustre.*

JWG 9 – ISO 12640-5 (Minutes are TC 130 N 1568, TC130/JWG9 N 030)

JWG 9 met immediately prior to the meeting of WG2. It was agreed that as soon as we have a proposed image set, a working draft of ISO 12640-5 (title) that incorporates the recommended image set would be prepared and distributed. In addition, a reduced resolution version of the images (with the appropriate profile embedded) would be placed on a website (ICC website proposed), in a password-protected area, so that anyone in the working group would be able to download and review them.

In discussion it was noted that the primary purpose of this standard is to provide a set of scene referred images for use in the development and evaluation of color rendering algorithms. One issue that must be considered is that the current encoding range available for RIMM data is fixed point and it is possible that TC42 will have a floating point encoding available in 2-3 years. When the floating point encoding is available a larger dynamic range can be encoded. The option for us will be to revise this part of ISO 12640 or to add another part to the series in the next year or two. This may have an impact on the number of images selected and the selections themselves.

Plenary Meeting (Secretariat’s report is TC 130 N 1527; Resolutions are TC 130 N 1562)

Minutes of the Plenary meeting are not available yet. Most of the key information is contained in the Secretariat’s report and the resolutions. Key actions not otherwise reported above are:

An internal liaison with ISO/TC 207/SC 7 was established and Laurel Brunner, United Kingdom, was appointed as liaison officer.

TC 130 accepted the request of CEPI/CTS to establish an A-Liaison and nominated Wilco de Groot, Netherlands, as the liaison representative.

The liaison officers for the liaison with ISO/TC 6 are Uwe Bertholdt and Luc Lanat.

The representative to ISO/SCIT will be Bryan Sunderland.

TC 130 established a new Working Group on "Management of Security Printing Processes", provided the NWIP on Management of Security Printing Processes – to be submitted by NEN in the near future - passes the NWIP ballot. TC 130 further resolved that the convenership for the new WG will be assigned to Mr. Rob Cornelissen, proposed by NEN. TC 130 noted that NEN is also willing to perform the secretariat function for the new Working Group.

TC 130 established a new Working Group on "Postpress requirements", provided a NWIP on this topic passes the NWIP ballot. The convenership and secretariat for the new WG will be assigned to China. And Brazil has offered to assist in the support of this working group.

TC130 established a Task Force led by Laurel Brunner of the United Kingdom
to investigate the appropriateness and extent of a possible new work item in the area of carbon footprint issues in printing.

The spring meetings of TC 130 will be held in St. Gallen, Switzerland, the week of April 20-24, and the fall Working Group and Plenary meetings will be held in Brazil.