Minutes from ECI-Member-Meeting 4./5.5.2006
Hosted by Lasersoft Imaging in Kiel

Attendees:

1. Ackmann, Karsten (Onnen & Klein, Hamburg)
2. Adloff, Michael (Unternehmensgruppe Vignold, Ratingen)
3. Bestmann, Dr. Günter (Heidelberger Druckmaschinen, Kiel)
4. Drümmer, Olaf (Callas Software, Berlin)
5. Hoffstadt, Dr. Johannes (Color Solutions Software, Ulm) – until 13.45
6. Meinecke, Karl Michael (bvdm)
7. Rossée, Jan-Willem (Laser Soft Imaging, Kiel)
8. Schmidt, Maren (repro 68, Hamburg)
9. Schmitt, Ulrich (fogra, München) – as of 10.00
10. Schober, Jörg (redblue Marketing, München)
11. Süßl, Florian (MetaDesign, Berlin)
12. Wüller, Dietmar (Image Engineering, Frechen)
13. Young, Darrian (Color & Image Consulting, Villarreal, Spain)
14. Schmidt, Bernhard (Prinovis, Nürnberg) – until 15.40
15. Battrick, George (European Rotogravure Association, München)
16. Koch, Karl (Color Solution Software, Penzberg) – until 13.45
17. Schmidt, Henrik (MSP, Hamburg)
18. Otto, Klaus-Hermann (Albert Bauer KG, Hamburg)
19. Bugai, Sascha (Jung von Matt, Hamburg) – until 16.55
20. Dolezal, Dieter (Hirte Medien-Service GmbH, Hamburg)
21. Rieckmann, Wolfgang (Bauer Verlagsgruppe)
    Guests:
22. Heil, Peter (Lasersoft Imaging, Kiel)
23. Balestrini, Carlo (TAGA Italia)
24. Boccarolo, Attilio (TAGA Italia)

Start: 9.10 am

Minutes: Jörg Schober

Evening Meeting on May, 4th

At 7pm at Lasersoft, a working dinner took place, topic was upcoming displays (cellular, large-format displays) in relationship with colormanagement-capabilities and -needs.

1 Organisational issues

1) Former minutes
The minutes of the last ECI-Meeting on 14th/ 15th October 2005 have raised no objections.

2) Action Item List
See attachment

3) Date and location of next meeting
Next meeting will be held on 27th October 2006 in Berlin, hosted by Callas Software.

4) Elections
Since the last elections took place October 2004 in Berlin, the next elections will be held during next meeting (autumn 2006).

5) Exclusion of the ECI-member Henrik Holmegaard
Henrik Holmegaard has been a member for a long time and has conducted many good CM-projects. In the recent past he has not agreed with the work of ECI and sent (very) impolite postings to the member list and to the chairman. In addition he has opposed the goals of ECI in public.
A vote is held about the membership-state of Henrik Holmegaard. Shall he be excluded because he does not support the aims of ECI and choose to oppose the instead?
Pro: 20 Con: 0 Abstention: 1

6) Presentation TAGA Italia (attached)

2 ISO TC 130 (results of San Diego meeting April 21 – 28, 2006)

1) PDF/X-4, PDF X-5 (ISO 15930-7, 15930-8)
Both standards support PDF-Version 1.6, transparencies, layers and JPEG 2000. The main idea is adding another options to X-3 and X-1.
PDF/X-4 will be published in the 2nd half of 2007.

PDF/X-5 allows external references (images, fonts) and N-color-profiles as output-intent. The problem is that N-color-profiles are not allowed in the current PDF-specifiaction. Olaf Drümmer made the proposal to extend the specification or define N-color-profiles as external reference at the ISO-meeting.
PDF/X-4: The output-intent must not neccessarily be included but can also be linked. Olaf Drümmer made the proposal to include this in PDF/X-5 as well.

2) 12647 Process Control Standards
There are minor changes in ISO12647-2: LAB-values of Yellow and CMY-overprint are changed slightly. The new aim values will be published in autumn 2006. Based on this new characterization data and ICC-profiles will be published.
The NPDC (Neutral Printing Density Curve) promoted by Gracol is regarded as a "Marketing-Activity", it shows no advantages to and is not compatible to current ISO specifications (TVI, LAB-values of solids).
It seems that the current available Beta of Gracol7 is derivated from fogra39 i. e. these values are not taken from a real print. The TVIs are modified because of the aim of a fixed density at 50% TV on different paper types. So Gracol7 is not compatible to fogra39.
ECI will comment the Gracol-"Standard" and point out that it does not support this methotology. ECI recommends the current ISO 12647 which is a standard that works. Manuals for practical work are already available, namely MediaStandardPrint and PSO (2007 in Englisch as well).
ECI will publish two documents:
One paper with general information about ISO 12647 – a standard that works. This paper will also contain detailed information how it works (coordiantion: M. Adloff, co-authors: K-M. Meinecke, F. Süßl, U. Schmitt, D. Young)
Another document is focused on urgent issues: optical brighteners, paper type classification, measurement conditions (wb/bb, UV-cut). This paper will not contain a disussion Gracol vs. ISO. Coordination: Dr. Bestmann, co-authors: F. Süßl, O. Drümmer. fogra, ifra und Ugra will be asked if they wnat to participate.
3) ISO TC 130 – Berlin Meeting Sept. 25th – 29th, 2006

Olaf Drümmer invites the plenum to attend this meeting as a guest.

4) Use of "ISO" in ECI profile names

In general, ISO prohibited use of its name, ohter bodies of standardisation are unhappy with the current naming convention of the ECI. They ask themselves how they should name their profiles that are based on ISO as well.

A vote is held about the naming of ICC-Profiles in the future: Shall new profiles begin with "ECI"?

Pro: 16 Con: 2 Abstention: 2

Existing profiles will not be renamed.

3 eciRGB (new version, LStar)

Next October, an ISO-meeting will be held at Image Engineering. It was discussed within the WG digital photography if it makes sense to standardize a RGB working space with linear lightness-curve (aka LStar-RGB). The technical improvement would be minor, hardly no image shows issues with a Gamma of 1.8. For political reasons (standardisation, inclusion as a color space in digital cameras) the adoption of an ISO standard seems to make sense. The implementation of this spezification would be eciRGB v2 which is identical with the current version of LStar-RGB. For compatibility issues there will be two ICC-profiles; accordingly ICC V2 and ICC V4. The copyright of eciRGB v2 will lie with BasICColor. The documentation, shipped with eciRGB v2 empazes that data tagged with eciRGB V1 should not be converted.

A vote is held on the above:

Pro: 21 Con: 0 Abstention: 0

4 Further developements of ugra/fogra Media Wedge

1) Changes of the layout:

Many wishes of changing the wedge came up, there are two possibilities: extend the current version to 2 patches per row (i. e. 4 patches altogether) or adding new row(s). Suggestion for 4 new patches: 20% C, M, Y and overprint of CMY. If new rows are added the measuring with handheld devices would become impractial and the area needed by the wedge would become very large (up to 1/3 of an A4 sheet).

2) new method:

The evaluation method suggested by Mr. Bestmann shows good results.

DE2000 shows excellent results, the used parameters and tolerances must be discussed. One advantage of DE2000 would be that one common value is sufficient for the different criteria (paperwhite, mean, maximum, primary colors).

One issue is that DE2000 is not an ISO-standard, it is only informative. Furthermore, some measurement-devices do not support DE2000. One solutions could be to give DE2000 informative values, the normative tolerances are given in $\Delta E(ab)$ as before.

ECI recommends to place GrayCon beside the media wedge.

U. Schmitt asks the plenum to send proofs to him that show good media wedge values but a poor visual match.

8 PSR (Process Standard Gravure)

1) Report of GWG meeting on May 2

See attachment

2) One standard for exchange of ads

In the past, PSR_LWC was common standard for exchanging advertisements for magazines. In the recent past some publishers changed the technical specifications, so now for repro houses it is not clear which data they shall deliver. Some publishers recommend one profile for all paper types, some recommend different profiles depending on the paper used for the magazine. B. Schmidt, as representative of printers, says, it is obvious that different paper types show different behaviour so the choice of profile depends on the requirement of the client.

The plenum come to the result, that ECI is not the appropriate place to discuss this. Repro houses and publishers should discuss further action.

3) ICCbased vs non ICCbased

K-H. Otto complains that PSR is a closed, not an open standard and so contradicts the aims of ECI. Printers do not accept ICC-proofs, only proofs made with GMG. In the world of offset printing, ICC-proofs are accepted, so why does it not work for rotogravure?

B. Schmidt explained, that the problem is that the characterization data taken from the prin-

trun does not correspond to current visual reference, which is a proof, produced with Iris and GMG. The purpose for this mismatch is that big corrections were made in the MX4-file which is currently used for proofing. In addition, ECI2002 was not availabe at this testprintrun, the characterization data were computed from IT8 and TC4 afterwards. B. Schmidt stressed that the corrections made must not be tranferred to characterization data because they are proofing system dependent and reflects only its specific behaviour.

So, the current procedure for approval of a proofing system is that it has a proof that visually matches the reference (IRIS, GMG). This leads to device-dependent media wedges with different aim values compared to PSR_LWC and much tighter tolerances. According Mr. Bestmann it is very difficult to restore the "real" characterization data. The proofs of PSR_HWC, made by different proofing systems show a much better visual match. The causes are:
– smoothed char. data
– improved software
– improved proofing devices
– papershade less critical
– experiences made with former test print runs, e. g. LWC, SC

Vote: ECI asks the Gravure Working Group to come up with better characterisation data for LWC (whether by invention, calculation or a new press run). ECI asks Gravure Working Group to inform the plenary about their strategy and timescale.
Pro: 11 Con: 0 Abstention: 7

9 Web Offset Working Group

F. Süßl reported from WOWG, see attached report.

10 Other ECI Working Groups

WG Digital Photography
English translation and layout work of Digipix will be finished in 2 weeks.
Openraw.org which is supported by D. Wüller/Image Engineering conducted a survey regarding RAW image technology. The results can be found on the homepage.

ISO-standard TIFF-EP which is the technical base of most RAW file-formats is in revision cycle at the moment. The aims are:
– modernization
– reviewing
– including of watermarks (strong and fragile)
– including behaviour of CCD

6 Meetings and events 2006

1) Int. Standards in Print Production bvdm/ECI, scheduled for June 27th will be postponed to 2007.
2) Digital Proof Forum Sept. 21st – 22nd
Planning group meeting will be held on May 29th – 30th. The participants of DPF will receive more precise information to prevent misunderstandings that occured at the last forum.
3) Conference on Digital Proofing and Print Production Standards bvdm/ECI November 22nd, 2006 London, London College of Media: London College of Media hosts the conference, bvdm organizes and serves the content. The businessmodel is still vague.
4) Printing across borders (pab)
Meeting in January 19th in Copenhagen/DK was attended by 25 persons. Meeting in April 6th in Birmingham/UK was attended by 45 persons. Further details are available at the homepage www.printingacrossborders.org.

7 Publications

1) Color Management in DTP applications
Common prepress software was tested regarding its colormanagemet-capabilities:
– Adobe Illustrator CS1, CS2
– Adobe Photoshop CS1, CS2
– Adobe InDesign CS1, CS2
– Adobe Acrobat
– Quark XPress 6.5
A publication will be published within the next 4 –6 weeks.
2) ProzessStandard Offsetdruck interactive CD-ROM
This CD is inteded for trainings, school, apprentices, agencies and clients.

bvdm also published a brochure named „Wir produzieren nach ProzessStandard Offset" („We produce according ProcessStandard Offset")

End of session on Friday: 17.10.

Attachment to the minutes of ECI-Member-Meeting 4/5.5.2006 in Kiel

– Action Items
– Report from Web Offset Working Group related to point 9
– Report from Workflow Working Group
– Example of basic workflow schema (Workflow WG)
– Report from Working Group Proof
– Report from Working Group Coating
– Report from Gravure Working Group related to point 8.1
– Presentation TAGA Italia related to point 1.6

Action Items

Date	Topic	Responsible	Status
14/15.10.2005	Provide templates (InDesign, Word, Powerpoint...) in yet to be approved corporate design	J. Schober + K. Ackmann, K.-M. Meinecke, M. Schmidt, R. Bühler, A. Schützenhofer, Prof. R. Schaul, J. Rossée	Portrait version finished (InDesign), Landscape version (InDesign) and adaptions to other apps must be created
14/15.10.2005	Generate and test new ISOcoated ICC profile	F. Süßl + A. Kraushaar, Dr. H. Hoffstadt, M. Hilmer, K. Ackmann, E. Khoury, A. Schützenhofer, R. Bühler, Dr. G. Bestmann	Paper type 1/2 (fogra39) in progress, still testing, planned to collect testprints on fogra CTP-Forum, new profiles can be published after ballot of ISO 12647-2 Draft Amendment is closed (autumn 2006)
14/15.10.2005	Generate and test new ISOnewspaper ICC profile	U. Cremer + M. Adloff, A. Kraushaar, M. Hilmer, K. Ackmann, A. Schützenhofer, M. Schmidt, R. Bühler, J. Schober	2 profiles with different separation settings were mailed and tested; no further information (member of ifra absent)
14/15.10.2005	Formation of working group "Media Wedge" (organized by bvdm) with the goal of improved evaluation and modification	U. Schmitt + Prof. R. Schaul, Dr. G. Bestmann, A. Schützenhofer, E. Widmer, F. Süßl, A. Kraushaar	visual comparison (testimages) is under construction first meeting at bvdm January 16th, 2006
14/15.10.2005	Provide ECI-RGB images from ATS	Florian Süßl + S. Bugai, Dr. J. Hoffstadt, K. M. Meinecke, K.-H. Otto	images are prepared, readme and copyright text missing
14/15.10.2005	Provide ICC profile for SC printing conditions (web offset) MFC and INP will follow	Florian Süßl (WG Web offset)	in work
14/15.10.2005	Complete Proof-Guideline	Dr. Johannes Hoffstadt (WG Proof)	no progress
14/15.10.2005	Develop methods for better predictability of varnishing	Dr. Johannes Hoffstadt (WG Coating)	in work, new testprints were produced at Classen u. Bosse (ECI2002 with varnishing)
14/15.10.2005	English translation of Digipix	Dietmar Wüller (WG Digital Photography)	first draft published, layout must be corrected
14/15.10.2005	Provide modified monitor test image	Dietmar Wüller (WG Digital Photography)	image is ready, documentation must be written

Date	Topic	Responsible	Status
14/15.10.2005	Develop RGB test images	Dietmar Wüller (WG Digital Photography)	images available, project pending, aims: comparison print – calibrated monitor, reference images for different output-intents New DIN „RGB Media Wedge" arises, no draft until now, planned in 2 - 3 months
14/15.10.2005	Document unresolved areas in ICC, PDF and PS specifications	Olaf Drümmer + Dr. G. Bestmann, Dr H. Hoffstadt, E. Khoury	no progress
14/15.10.2005	Formation of WG Soft-Proof	Andreas Kraushaar	no progress

Report from Working Group Web Offset (WOWG)

The last meeting took place at Roularta in Roeslare, Belgium on March 14th/15h
Report based on meeting minutes provided by Kristoff Decroix

(1)   Approval of the characterization data for web offset on SC paper
At the previous meeting a first proof to print comparison showed distinct deviation and therefore it was not clear whether the characterization data is ok.
Additional proofs were provided by GMG, EFI, CGS and Colorgate in order to clarify the issue. Proofs and print samples of selected test pages were prepared (cut and glued on white backing) for visual assessment. Colorimetric evaluations of proofs and prints were available at the Roularta meeting.
- Result:
very good Proof to print simulation (EFI, GMG) except for one issue: paper white simulation (excellent in the case of unprinted stock - needs to be slightly desaturated and little darker to better simulate day to day results with backside printing).
- Remaining issue:
Editing the media white point of the profile to better reflect backside printing and verification by another proofing round.

(2)   SC Profile specification
The wowg recommendation are the following settings (PrintOpen)
–   270% TAC
–   100% max Black
–   length 9
–   width 5

(3)   Offset profiles - recommendation for naming convention
In order to reflect the different paper types and the printing machine types (sheetfed, web offset) the wowg recommends to use the following names:
–   ISO_Web_WFC (Wood Free Coated and Medium Weight Coated)
–   ISO_Web_LWC (Light Weight Coated)
–   ISO_Web_SC (Super Calendered)
–   ISO_Web_MFC (Machine Finished Coating)
–   ISO_Web_NP (NewsPaper)
–   ISO_Web_WFU (Wood Free Uncoated)

In addition the wowg recommends to add a version id even for the first profile (‚_v1').

(4)   TAC recommendations (total area coverage)
–   ISO_Web_WFC (using fogra27) with lower TAC: 320%
–   ISO_Web_LWC (renamed ‚ISO Web Coated') with TAC as is: 300%
–   ISO_Web_SC with TAC 270%
TAC of further printing conditions to be developed

(5)   Experiences with ‚ISO Web Coated' and ‚ISO Coated'
- Differences:
PT1 WFC :
Mohn:
proofs with ISO Coated simulation: blue more reddish in print, skin tones in the proof more colorful as in print, red cast in grays (print).

PT3 LWC:
Mohn:
  problems to match saturated red in ISO Webcoated proofs.
RotoSmeets:
  no problems matching reds.
Maury:
  major issue is paper white simulation.
Mohn:
  paper white simulation too yellowish (real stock more blueish/grayish),
differences among papers of PT 3 (TVI difference, trapping behaviour significantly different).
RotoSmeets:
  not clear whether differences caused only by paper quality _ overall good experiences.
Roularta:
  mainly paper shade differences (dot gain in the same range).
M-Real:
  common paper clay (yellow) used, newer kinds of paper qualities with calcium carbonate in coating -> less yellowish.
Affects trapping (faster ink setting).

Recommendations of WOWG:
– Change TAC in ISO_coated from 350% -> 320%
– Change paper white in characterisation data of ISO Webcoated profile to reflect tendency to less yellowish paper tone.
Jouni:
  still paper produced with yellowish b* not lower than 0 (now: 1,5)
Mohn, Elie:
  at least 0 or -≠b – to be developed.
Action item: Determine color coordinates of typical LWC paper
All the attendees will measure the paper whites of the different kinds of LWC-paper they use and send samples and measurements to Jouni. The latter will make a comparison of the different results and define an average paper white for LWC. These measurements are necessary because they enable us to verify if the different measurement instruments all measure identical values. Florian will provide the backing paper (GMG 250) to all the attendants. Conditions: no filter, spectral data, two sheets of backing paper, one sheet of print paper.

(6)   MFC Paper
In preparation of the next web offset profile Jouni Marttila has performed a number of measurements/tests with different kinds of MFC-paper (from Roularta/Mohn).
The main conclusions are the following:
– There are major differences in shades of MFC paper from blueish to yellowish.
– Ink demand is higher than with standard LWC paper (-> dot gain will be higher).
– Comparing Lab-values to PT3 were not as bad as diagnosed in the meeting with not all papers measured. When measuring more samples
I noticed that both Solarispress paper and UPM Satin from Roularta were able to reach below tolerance levels _ this might result from the fact that the paper shade of these paper qualities were very close to UPM Cote (PT3) whereas the others were in a* value and clearly more in the magenta direction.
– Measurements were made with Spectrolino in case of paper shade white backing and printed samples black backing.
– ISO_Web_LWC or ISO_Web_SC cannot be used for MFC.

Test prints will be performed on different kinds of MFC paper.

Prints will be made by Mohn, Roto Smeets, Mauri (?), Ringier (?) and Roularta.

8 test pages will be printed, only on the recto. Grey on the verso.

ECI 2002 R (or ISO 12642-2) / page from JO Brunenberg (Roto Smeets page converted with ISOWebcoated)/ Altona Visual (papertype 3)/ 4 pages (from SC test)

Targets must be fixed:

Jouni will run some more tests on the different kinds of MFC paper in order to determine the solid densities of all inks. It is agreed that we (the attendants who will print the MFC test) will send 50 sheets of every MFC paper quality to Jouni together with a certain number of ink samples.

Consequence:

+   Aim values based on thorough test (ink demand test on printability tester):

+   aim values take into account current ink series':

Goal of test:

−   Lab values for the solids.

−   Densities: the aim is to use the same as LWC.

−   dot gain: the aim is to use the same as LWC.

−   screen ruling 150 l/cm (recently questioned; may be changed to 133 lpi).

Paper qualities that can be used in the test (Karl Meinecke examines what kinds of paper he can obtain for the test):

−   Solarispress Stora Enso Kotka mill.

−   UPM Satin Jamsankoski (paper machine to be figured out).

−   UPM Cote M (information provided by Mr Böhm).

−   Norset Norske Skog Walsum.

MFC Print runs scheduled for July/August.

(7)   ISO Web NP

Work on web offset on newsprint planned after finishing the MFC characterization data and ECI profile

(8)   ISO Web WFU (wood free uncoated)

Work on this paper planned after finishing the MFC characterization data and respective ECI profile

Florian Süßl

Report from Workflow Working Group

Last Meeting: S&J Hamburg, April 23, 2006

Executing action item: assembling basic workflow schema, assessment of further modules

1. Example of basic workflow schema (see addendum / attachment)

Comment: A coherent basic workflow works fine as long as its modules are following simple rules - data formats, color spaces, interfaces. But: For example, by placing RGB-data in layout-applications, things can quickly become ambiguous and technically extremely difficult. Even applying transparency to an ISOcoated-CMYK-only-layout can easily cause problems. In some places, additional not yet invented or respectively implemented solutions would be necessary to ensure workflow integrity.

2. Issues

2.1. Device Independent data

Problems / ambiguities

– Practical term of „device independency" is not clear: Since editing and storing in LAB is not relevant (due mainly to the 8-bit issue), generally RGB-data is being perceived as „device independent". Therefore, delivery of RGB-data sometimes happens without appropriate profile being attached - assuming „default device independency" by using any RGB-data

– Due to superficial understanding of recommendations by ECI, sometimes people think that ECI-RGB is THE device independent data format

– Integrity of „device independent philosophy" is being questioned due to vendor-specific gamut mapping within perceptual rendering intent, leading to inconsistency

– Common technical „device independent" approaches are in fact pseudo-device dependent (image RGB-retouching with specific CMYK-softproof-settings applied) - images relate directly to one specific CMYK-output profile / rendering intent

– Within usage of the term „device independency", there are two major philosophies: Maximum or minimum visualization / reproduction / transformation - Means: Best possible output on all devices or minimum, but consistent output on all devices. Neither is optimal for all cases.

Proposal

Revision of definition „device independency" concerning workflow relevant aspects.

– To be considered:

Media neutrality is not to be defined by „only" color spaces, but by objects. Means: Every object which can be defined in terms of color by a colorimetric description is in fact media neutral. Any pixel / device value, (absolutely) related to a colorimetric equivalence, is in its nature device independent - because it then has the fundamental requirement for a reasonable color transform of any kind.

This definition of device independency would include complete documents such as - for example - PDF-X-files. Its output intent provides the essential basic requirement for further workflow relevant data handling in terms of color and process adjustments. Issues named above are in its nature mainly too much based on individual circumstances.

2.2. Definition image-output intent / meta data for workflow-relevant informations

If different people/companies are involved in one workflow, the problem often occurs that the recipient of data does not know for which intention the data was made. In case of PDF-X data, the output intent provides the required information. In many cases, it would be helpful to embed an output intent in image date (TIFF, EPS, JPG...) due to unambiguousness.

Example: In many cases, image data is being retouched in ECI-RGB, but the released proof was made in ISOcoated. If someone receives this data in ECI-RGB, he would not know that this data is suitable only for ISOCoated. Therefore, an embedded output intent and rendering intent would be useful.

This can be achieved by...

a) output intent and rendering intent are embedded in the TIFF, EPS, JPG files as private tags (or as extention of the current standards)

b) the files (TIFF, EPS, JPG) are tunneled in a PDF/X-3-file or similar construct with its source profile, output intent and defined rendering intent

Other meta information embedded in image files would be useful. For instance, information about status of the image (e.g. retouched / approved / ...).

2.3.1. Transparency within CMYK-only-layouts: Total Area Coverage

Applying transparency to images and objects within layout can cause heavily over-inking-problems. If two images are correctly separated, usage of transparency (e.g. „multiply") can produce too much total area coverage. Exceeding TAC is to be considered as major process inconsistency.

Currently, there is no common solution for this issue. There are proprietary approaches such as „intelligent" device link profiles, leaving separated data untouched until exceedance of predefined TAC occurs, then optimization (re-separation) applies. There are also other specific workflow solutions for this.

Of course, correct output in the first place would be desirable.

2.3.2. Total Area Coverage in conjunction with spot colors

Applying transparency in conjunction with spot colors, exceeding total ink limit (by usage over images for example), becomes a more complex issue. In order to calculate reasonable optimization in terms of predictable color, the lab-value of the spot color must be known. It then has to be calculated, which combination of C-M-Y-K-Spot-values have the smallest deltaE to the estimated LAB color resulting from the original CMYK+Spot including too much ink coverage. It becomes more difficult, so to speak impossible, if percentages of spot colors are used due to not yet enough research in the area of predicability of tone values of spot colors.
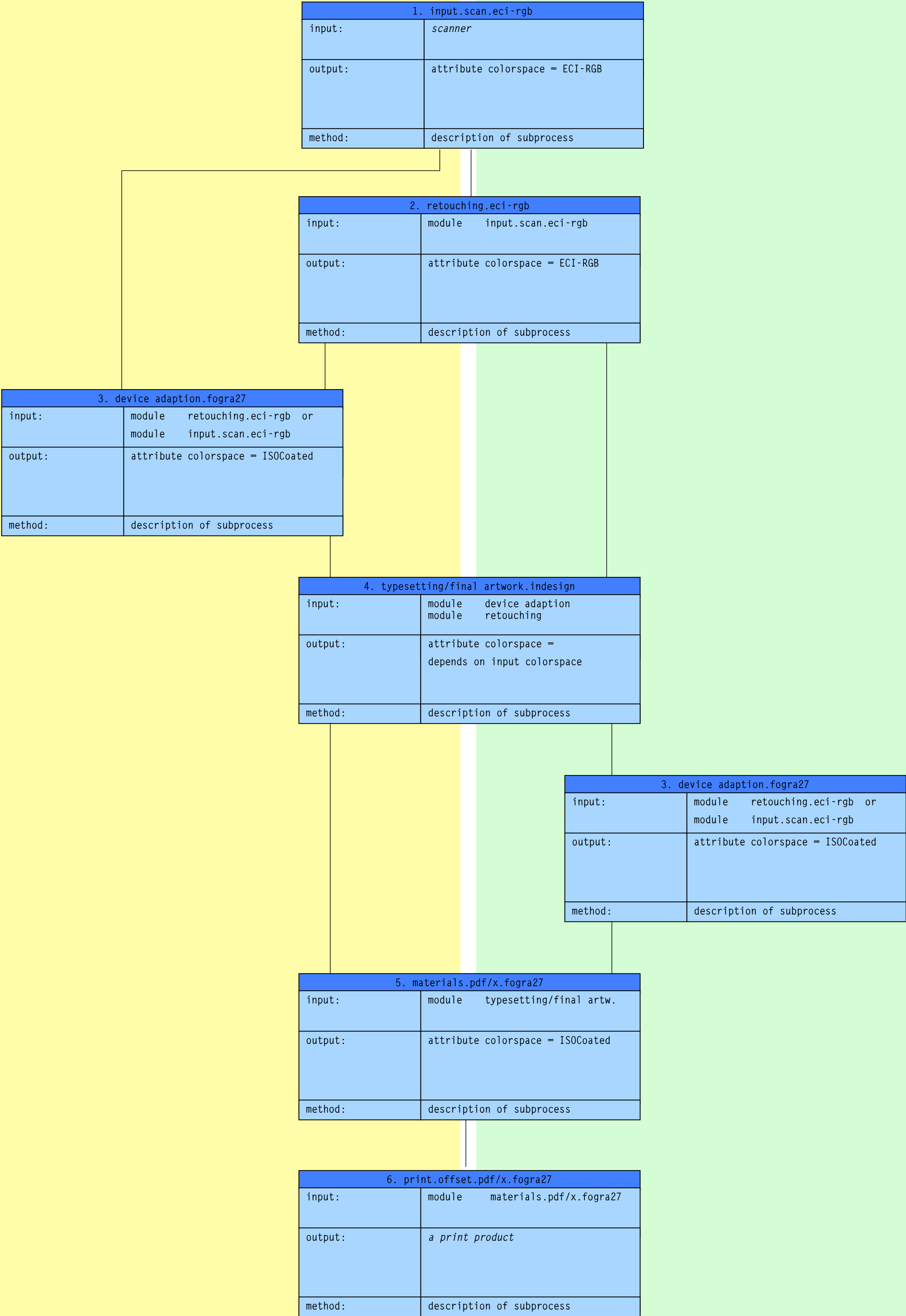
Further members are most welcome, since we did not received that much feedback from the current group. Advantageous would be resources from software-development and JDF-expertise too.

Roland Bühler
Andre Schützenhofer
Axel Faber

on next page:
Example of basic workflow schema (Workflow WG)

color transformation based on image   color transformation based on document

1. input.scan.eci-rgb	
input:	*scanner*
output:	attribute colorspace = ECI-RGB
method:	description of subprocess

2. retouching.eci-rgb	
input:	module input.scan.eci-rgb
output:	attribute colorspace = ECI-RGB
method:	description of subprocess

3. device adaption.fogra27	
input:	module retouching.eci-rgb or
	module input.scan.eci-rgb
output:	attribute colorspace = ISOCoated
method:	description of subprocess

4. typesetting/final artwork.indesign	
input:	module device adaption
	module retouching
output:	attribute colorspace =
	depends on input colorspace
method:	description of subprocess

3. device adaption.fogra27	
input:	module retouching.eci-rgb or
	module input.scan.eci-rgb
output:	attribute colorspace = ISOCoated
method:	description of subprocess

5. materials.pdf/x.fogra27	
input:	module typesetting/final artw.
output:	attribute colorspace = ISOCoated
method:	description of subprocess

6. print.offset.pdf/x.fogra27	
input:	module materials.pdf/x.fogra27
output:	*a print product*
method:	description of subprocess

Report from Working Group Proof

1) Action Item „User Guide"

   No progress

2) ISO-Draft (CD 12647/7), closing date March 6, 2006

   Received no comments from the working group

3) Steps toward a more objective visual evaluation:

The idea was to create a sequence of images with decreasing quality and use this as a scale. The VSD „Visual Print reference" images were considered at first, but when Erwin Widmer asked the VSD for terms of usage, they didn't answer for a long time.

A similar effort was started by bvdm/fogra to investigate acceptable colour differences with the DE2000 formula. Thus I dropped the VSD option and joined forces. Work is still in progress.

Steps taken so far (in February and March 2006):
– images provided by Klaus-Hermann Otto, abc
– variations of +/- 1 or 2 or 4 or 8 DE2000 in L or C or H direction by Hanno Hoffstadt, Color Soluti-
   ons Software
– these variations printed by Andi Kraushaar, fogra

Steps to do:
– finalize/crop images, add strip with representative colour patches
– select range of variations
– print and perform visual evaluation with many observers (fogra)
– desired result: thresholds for DE2000 values, to be used e.g. for the Ugra/fogra media wedge

Johannes Hoffstadt

Report from Working Group Coating

1) Action Item „Predicting Effects of Coating"

This is a mid-term goal of the working group. First we need to perform and evaluate some test print runs.

2) Print run by Viktoria Hartwig, HdM and Achilles

As already reported, prints have been measured, coated in different ways, and measured again. Meanwhile, the diploma thesis has been completed. Its emphasis was on ways to compensate colour changes without CMYK-CMYK colour transformations (using only compensation curves).

The coating test form has been adjusted because this print run showed that the solid colours did not change enough for visual evaluation.

3) Print run by WG member Clausen & Bosse

Printed end of March 2006, 3 substrates, 150 lpi and FM screen, with and without dispersion varnish („Drucklack"). (Normally, their production uses varnish because coating of varnished prints works better.)

Current status: measuring of sampled sheets to get a first impression if the print run is suitable for a detailed evaluation.

If so, we need to perform many measurements before coating, then do the coating, then measure again.

Johannes Hoffstadt

Overview ECI-Meeting Working Group Gravure from 2nd May in Nuremberg:

Overview about the paper-classifications
The print and paper industry agreed a common naming convention about the existing paper classes on the market. The result is a snap-shot about the different paper classes. The discussion is in process but the names for the different brands are fixed.

PSR_ECI_MF	➔	PSR_ECI_NP	"News Plus"
PSR_ECI_SC	➔	PSR_ECI_SC_ST	"SC-Standard"
PSR_ECI_LWC	➔	PSR_ECI_LWC_ST	"LWC-Standard"
PSR_ECI_HWC	➔	PSR_ECI_LWC_PLUS	"LWC-Plus"

Discussion about the PSR_ECI-standard.

Do we need an improvement? What could we improve, what would this mean for the market – advantages and disadvantages?

Status
- Most customers are happy with the PSR-Standards – The European gravure standard improved the quality of most gravure products.
  Ikea have started a discussion about future improvements of the PSR Standards.

"Future – Future"
- Offset – Gravure compatibility

"Near – Future" - Discussion points
- Improvement of current standards
- Grey balance
- Proofing standard based on proof machine/technology that no longer Exists
- SC-Standard with a gamut like LWC
- Technology development in colour-management and proofing over last 5 years
- A new starting point?
- Customer databases are very often CMYK
- ….

Next steps
- WG gravure will organize a workshop together with several Customers (publishers, mail order companies as well) and repro partners and ???
  This is necessary, because most of our customers are working very well with this standard.
- Goal of this workshop will be, to find out the needs of the market
- Discuss the advantage and disadvantage of new reprint the standards
- Time schedule: until autumn

Definition of the content for the ECI-homepage working-group gravure

We have to work out following action-Items
- Information about paper-classifications
- Changing the names of the standards
- Information for proof system vendors – How they can get visual reference proofs
- Recommendations for proof-systems that are based on visual references
- Checksums for profiles
- Membership Policy of working group gravure

Beta-versions of Epson X800 with GMG
We have in some areas deviations between Epson 4000/7600/9600 and x800 "Beta-Versions" – we need examples and feedback until mid of May.

Presentation TAGA Italia related to point 1.6

TAGA Italia at the ECI Meeting

Kiel, May 2006

Who we are?

TAGA Italia
(Thecnical Association of the Graphic Arts)
started the activity 23 years ago

The italian members of TAGA U.S.A. and a group of graphic arts professionals, specialized in prepress-press-postpress, decided to create an association focused on:

– improving the study of graphic arts
– spreading the knowledge
– training and documentation

TAGA
ITALIA associazione tecnici arti grafiche italia

Our mission

Spreading the graphic arts knowledge by:

- – Specialized TAGA trainings
- – Technical seminars and conferences
- – Partecipation to trade-fair
- – Technical Documentation, TAGA DOC (www.taga.it)

TAGA
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Taga Italia is also spreading the Taga Proceedings through the Italian Printing environment.

TAGA ITALIA associazione tecnici arti grafiche italia

Also...

We share the goals of TAGA USA and some of our members partecipate to the Taga Conference every year.

In 1985 Taga US gave to Emilio Gerboni, past president, the TAGA HONORS AWARD.

TAGA
ITALIA associazione tecnici arti grafiche italia

Other Activities

**Training activities:
course for offset printers in cooperation with Regional and National Printer's Associations**

**Thechnical contest:
Technical Contest for students of the leading Graphic Arts Schools**

TAGA
ITALIA associazione tecnici arti grafiche italia

Other Activities

ATIF, Italian Association for the promotion of Flexography

"Linee guida per la stampa flexo" (Guidelines for flexo printing)

Other Activities

We cooperate even with other organizations:

- GIPEA (Italian Group of Label Printers)

- Istituto Italiano Imballaggio (Italian Institute for Packaging)

- UNI-GRAFICA (italian official organization for standardization - Commission for the Graphic Arts) connected with the European TC130 Committee.

- Ghent PDF Workgroup

TAGA

ITALIA associazione tecnici arti grafiche italia

Technical Workgroups

-Paper & Inks

-Digital Printing

-Proofing

-Excellence of
 4C printig

-Post printing &
 binding

-Color workflow

-Label Printing

TAGA ITALIA associazione tecnici arti grafiche italia

TAGA Italia organization

sponsors & partners

We collaborate with the main Italian trade magazines, writing articles and publishing our **TAGA DOC.**

ITALIA associazione tecnici arti grafiche italia

THANK YOU

www.taga.it