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# Spindrift

...Savouring The Graphic Arts Industry Since April 2003

News Focus • Opinion  
Reviews • Techno-Babble  
Attitude

Volume 3, Number 5  
6th September, 2005

**Scoop** • v. 1 pick or gather up in a swift, fluid movement. 2 informal publish a scoop. 3 win.

– From the Compact Oxford English Dictionary

## Dear Reader,

Kodak is nothing if not ambitious – in the best sense of the word. Having scooped up Encad, Scitex Versamark, Nexpress and Creo in rapid succession, the company is now faced with the mammoth task of integrating it all. With the most recent acquisition – Creo – Kodak’s graphic arts interests add up to more than the sum of their parts, putting the graphic arts and associated industries closer to Kodak’s core interests. The first step towards cohesion was taken in the spring, when the company set up its Graphics Communications Group, which includes all the operations listed above, plus Kodak Document Imaging and Kodak Polychrome Graphics. The creation of the GCG was a fairly self-evident step; much less obvious is how to move things forward. We spoke to one of the people making it all happen, Mr Israel Sandler, MD of sales and operations of the GCG for Europe, Africa and the Middle East. In this issue, Sandler, alumnus of INSEAD (Europe’s answer to Harvard Business School), and previously CEO of Creo EMEA, talks to Laurel Brunner about how Kodak wants to create synergies to support its customers and business model.

No doubt partly in response to Kodak’s swift leap to pole position, HP has gobbled up Scitex Vision, thus adding wide and super-wide format printers to its output portfolio, which now is pretty comprehensive. The battle of the giants has only just begun.

This issue marks our own little first step. We’re going live with a new graphic arts website at the end of the month. Todd is beavering away to turn the Digital Dots website into a community site for the graphic arts. It’s got forums, directories, long versions of Spindrift articles, plus recipes (the ultimate in direct to plate output) and all sorts of other stuff we hope readers and visitors will find interesting.

The new look for Spindrift is part of it, and we’d very much appreciate your feedback and comments. Enjoy the read!

Cheers from the Spindrift crew,

**Laurel, Cecilia, Paul and Todd**

## In This Issue

### *Sandler speaks*

As Kodak is integrating all its recently acquired graphic arts gems – Creo, of course being the most recent one – we talk to Israel Sandler, MD for Kodak’s Graphic Communications Group in Europe, Africa and the Middle East. “My major task, my #1, is to keep a focus on the market. This is the major issue for us”, he says. Laurel Brunner has more...

**see page 9**

### *Waterless offset may yet win the day*

With KBA’s introduction of a newspaper press which prints without water, there is now scope for the market for waterless offset to grow. The market has, until now, been confined to sheet-fed presses and stifled by high plate prices. Cecilia Campbell visited Rodi Rotatiedruk in the Netherlands, the first newspaper printer to buy the Cortina, to hear about their experiences with the technology...

**see page 12**

### *Back to basics*

For many print media creators, buyers and producers colour is still too much of a mystery, just too much of a hassle. It seems a lot of these people are Spindrift readers, so we’ve put together a quick primer on the basics of colour. A more comprehensive version of this article will appear in the 2006 Buyer’s Guide to Colour Management and Proofing, due for publication at IpeX.

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# News Focus

## Kodak Axe Falls On Mirus & Fortis Plates

Eastman Kodak Company is closing its plate manufacturing plant in West Virginia, with completion expected by next March. The plant employs 108 people and came as part of Kodak's Creo acquisition. It is one of many casualties expected as Kodak's rationalisation and restructuring activities proceed.

As a result of the closure the Mirus and Fortis thermal plates, plus the Eternus conventional plates and all associated chemistry will be discontinued, as soon as present stocks are gone. Kodak says it will honour all existing customer contracts and does not anticipate any interruption in supply, and that it "will work with customers to transition to a comparable Kodak thermal plate".

In a separate announcement Kodak is consolidating colour photographic paper manufacturing for North America at plants in Windsor, Colorado and Harrow, England. The operation in Rochester will close by the end of October and Kodak is reducing manufacturing capacity for consumer film products at its plant in Xiamen, China. These actions will result in a headcount reduction of about 900 positions, more than half in Rochester. Charges totalling

about \$153 million, primarily related to asset write-offs and separation benefits, will be taken related to the actions.

Kodak is running a conference for prepress and digital printing users in October in Barcelona, Spain. The event replaces the former Creo Users Association, bringing together for the first time, selected members of Kodak's now massive worldwide community of users. This conference will focus on Creo and Nexpress systems and access will be restricted to registered users of these systems only.

## HP Shells Out the Shekels for Scitex

Scitex has sold its Scitex Vision subsidiary, in which it had a 77.1% stake, to HP for \$230 million in cash. The company's revenues for the quarter ended 30th June were \$37.7 million, and a substantial contribution to Scitex's earnings for the period of \$2.8 million. What HP will do with it's new toy is as yet unclear, but this deal places HP in a unique position as a supplier of output devices for every possible purpose. The deal includes a license to the Scitex name – and Scitex has agreed to change its corporate name. So is this the end or a new beginning for Scitex?

According to Scitex, once the deal is completed "it is probable that Scitex will be classified as a passive foreign investment company for U.S. federal income tax purposes in 2005 and/or in subsequent years". "A passive investment company"? Oh how the mighty are fallen.

As far as HP goes, over the next six quarters it will shed around 14,500 staff worldwide, mostly from IT, human resources and finance. HP employs around 151,000 people and according to the CEO Mark Hurd, HP's focus is "on driving further performance improvements." This has to mean restructuring, and the company will apparently book a \$1.1bn charge over the next six quarters to cover the costs. HP's net revenue for the quarter ended 31st July was \$20.8 billion, up 10% year-over-year, with an operating profit of \$1.2 billion and cash flow from operations of \$2.2 billion.

HP has also recently set the Guinness World Record for the largest photo exhibition ever. HP captured, printed 34,401 photographs of the UK's smiles on an HP Designjet 130nr. The images were collected over a six month period and uploaded to a dedicated site. Pages were laid out in

### Spindrift

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**Contributors:** Naresh Khanna, Anais Rossinrollyin

▼ Quark Xpress with Quark Exclusive used to transfer the image data to the printer. The results were displayed at the Royal College of Art in London.

### Agfa Seeing Improvements

Agfa's second quarter results show some signs of improvements, with Graphic Systems enjoying revenue growth and reduced price erosion. Graphic Systems sales increased 8 percent to €446 million (€413 million for the same period last year) and gross earnings were €37 million. This is down by some 18 percent, largely because of increased raw materials costs.

### Adobe Competitor?

Scansoft developers of speech and imaging solutions have introduced a new version of Scansoft PDF Converter Professional. This software writes and edits PDFs and can, according to its developers, do so "at speeds up to three times faster than the leading PDF creation solution." PDF Converter Professional uniquely includes a tool for turning static PDFs into dynamic forms with a single click, with no change to the original, and there are even document authentication tools and password protection. The latest version supports comments and mark-up, for single users or group document reviewing, and it is possible to add watermarks and stamps to documents.

We haven't had a chance to look closely at this software, but the developers claim it includes font embedding, support for transparency, graphics and page size controls, and scaling. And it costs less than \$100!

### Heidelberg Twinning with Ghent?

Heidelberg has announced it has joined the Ghent PDF Workgroup (GWG), headquartered in Belgium. This is great news for both the GWG and Heidelberg. The GWG is clearly recognised as an important group not only for prepress and workflow companies, but equally for press manufacturers. Heidelberg customers will benefit from the company's greater involvement in the development of digital workflow standards.

### Fogra Certification for GMG Colorproof

Fogra has certified GMG's Colorproof with the EPSON Stylus Pro 4800 and EPSON Stylus Pro 4000 printers. The developers of high-end colour management and proofing technologies are the first to receive certification for a device from the new Epson printer line using Ultra Chrome K3 inks. These inks reduce metamerism (when a colour

looks fine under one light but different under another), have a wider colour gamut and better adhesion. With new GMG papers and its screening technology, the Epson output devices are claimed to be capable of printing contract proofs.

### Version 2.0 of OneVision's Asura Enterprise

Asura is a web-based solution for online data reception and quality control for data files. The latest version improves the user interface, making it easier for printers to configure for their customers, according to the developer. There is support for any number of queues for automated control and correction and it is possible to assign specific queues to defined customers or customer groups so that they have access only to what's relevant for them.

### Hasselblad's New Digital Camera Technology

Hasselblad has introduced two new digital cameras based on its Ixpress technology. The medium format H2 cross platform camera and the H2D fully integrated camera both include new image capture and approval tools, with portable Compact Flash (CF) memory cards and Firewire support.

### Xitron & Enfocus

Xitron and Enfocus are partnering to provide Enfocus PDF quality control software in the Xitron RIP management and workflow system, Xiflow 2.5. This server now includes the Enfocus PDF library and supports Certified PDF workflows.

### Crackers

Arts PDF Crackerjack 5.1 is a cheap, cheerful and highly effective Acrobat plugin that now includes imposition, image editing within Acrobat, RGB and CMYK to spot colour conversions and verification of Certified PDF file status. And all for a mere \$399.

### News from Print '05 in Chigaco

Print '05 is nearly underway as we write and over the last month there has been an absolute deluge of press announcements. Strangely, most of the press releases don't include real news, but tell us instead that a given vendor will be demonstrating their products at the show. Well, what else would they do there? Practise Tai Chi? Learn a foreign language? Arrange flowers? Amidst the dross there were some proper items of news and although most of them aren't desperately mind blowing, here are a few snippets (in no particular order) to ponder:

▼ This will be the first public show for the industry's largest supplier. **Kodak** is introducing its Enterprise Management Solution, an ERP (Enterprise Resource Planning) system tailored for printers and designed to improve their business management. There will be productivity improvements for Nexpress as well as expanded capabilities for a wider range of applications. Kodak's processless plate, Thermal Direct will be commercially available from the start of the show.

**Adobe** is launching a new strategy and technology upgrade for Postscript (see Expandocs in this issue).

Gradually, step-by-step we are getting the **Gradual Software** picture into focus. The company is announcing the new version 5.5 of Caslonflow, and on Sep 9 is presenting a new development partnership, which unfortunately we cannot tell you about yet.

Caslonflow 5.5 has built in configurators for not only the Adobe CS Suite and Pitstop Server, but for the Callas suite of PDF tools as well. Callas Pdfinspector, Pdfcorrect and Pdfcolorconvert can be configured through the Caslonflow workflow management software, without the need to open those applications separately.

**Enfocus** is running a series of How To PDF seminars on its stand.

**Artwork Systems** is introducing a new release of its Odystar PDF based workflow system. Version 2.5 is based on JDF and Enfocus Certified PDF technologies plus enhanced colour management, an updated trapping engine, automated versioning, colour mapping and automated imposition. It is available as either an independent system, or with a RIP to support screened output to film or plate, as well as to a digital press or remote site.

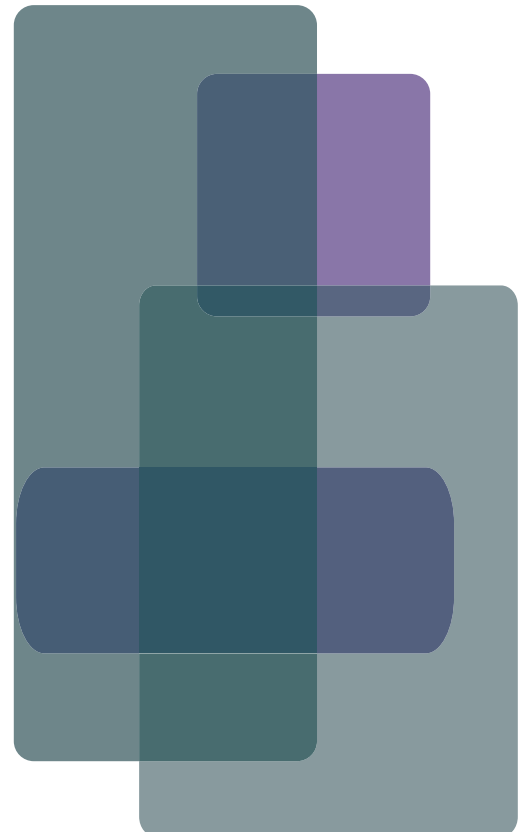
There is also a new dedicated version of Odystar configured specifically for the packaging sector. Operators can work with Adobe Illustrator for simple packaging work and use Odystar for automating the more ticklish stuff, as well as labour intensive tasks such as trapping, colour mapping and step and repeat, using plugins.

Compared to Odystar, Artwork's established workflow system, Nexus is looking a trifle well worn, however version 8.1 is getting launched at Print '05 with support for exporting native PDFs to Illustrator and JDF based step and repeat. Both of these sound like Nexus versions of

what has been developed for Odystar. There are also some new screening sets for Nexus, and Artwork is launching its new Concentric screening technology. This divides AM dots into concentric rings so that ink can gain within a dot as well as outside it. We haven't yet seen this in action, but it certainly sounds intriguing.

### Some last minute snippets you might want to know about:

- Xerox is launching a new Docucolor, rumoured to be the 8000 at Print '05.
- Fuji Open Workflow system has enhanced its Remote Approval module to include extended ICC support.
- Quickcut has joined the Ghent PDF Workgroup.



# Letter From... Barcelona

Dear Spindaylunias,

Hola! Me nombre essa Anaïs Rossinrollyin. I sorry my Angles no esta ben. I essa a bigona fan of Apple, but I essa very worriedada about Apple. Per que Apple essa abandoningassa the Macintosh we all knowolago and lovealo?

Instead of trendy nouvel Macs, Apple essa spendio all its eltemps i elsdiners on trendy nouvel Ipods and their little socks. Now I knowexia Ipods needada to keepexia warm, but Apple never madexia clothesado for the Mac. Does this meanexia Apple essa turning into a fashion house?

Or does it mean Apple essa turning into a developerado of media delivery devicealla, and the clotheslla for its Ipod is just a petit side line? Essa Apple building mobiledado devices to support media on demandalla? Does this meanexia print on demandalla as wellada as pop videos and movies?

Apple essan't focusing on printada media production any moreissim pero essa taking a much more clever next step. I thinkexia the Ipod essa Apple's first step to developingassa media delivery platforms.

Quin sayada you?

You essa alla benvingut to Barcelona anytime!

Anais Rossinrollyin  
Barcelona, Catalonia

# Say What?

*(Iffy Writing Award Presented in the Ether for Obfuscation, Confusion, Misinformation or All Out Pretentiousness)*

*We found this statement within an article on workflow for B3 format CTP output, published in Printing World. Either it's a joke or the person writing the article didn't have the time to ask people who actually do know what they are talking about.*

*"So far no mention has been made of JDF. Indeed, there is an argument for not mentioning it at all given that it is a technology that exists largely in theory at B1 let alone B3. However as with most technologies, they are perfected at a larger scale and then handed down to the masses when the teething problems have been ironed out. JDF could be such an example and proponents say B3 printers could take more of a giant leap than a small step when making the investment in CTP if they also take JDF into consideration."*

*If there is any doubt about it, JDF is not a giant leap, no matter how small the business. The giant leap is in the need to automate in the first place. Get your head around that and the rest is just for the doing.*

# Driftwood

*(Useful stuff washin' in on our shores)*

## Hot Stuff

A Scottish developer we'd never heard of has announced a thermal imaging technology it considers "the next generation of digital printing technology". Intense has introduced Inslam, a modular multi-laser technology that could have a profound influence on the future of laser, and therefore toner, based imaging.

Inslam is based on the company's Quantum Well Inter-mixing invention, but let's face it – anything quantum is probably too complicated to worry about. What is important to understand is that quantum well technologies are proven: a CD player's laser is a quantum well laser,

▼ which is why it is so efficient and inexpensive. Intense could be on to something rather marvellous with their invention.

The rest of Inslam is a series of individually addressable single mode laser arrays, plus the necessary drive electronics and optics. Inslam is apparently energy efficient, easy to configure into multiple array based systems and relatively cheap. Intense believe that the professional printing industry is an ideal target market for Inslam, but it's obviously relevant for any digital printing application.

Intense by name and intense by nature?

## Correction

In our article in issue 3-4 about digitally printed bus tickets in Kazakhstan we unfortunately published a couple of mistakes.

For the record:

Mr Vassilyev's first name is Valeriy, nothing else

VIP Systems is Xeikon's distributor in Russia and all of CIS, not just Kazakhstan

We apologise for the mistakes!  
-Ed.

## Spindocs

*(Where the spinner gets spun!)*

*We were (fairly) recently made aware that FESPA (Federation of European Screen Printers Associations) is launching a digital version of its trade show, to be held in Amsterdam in May next year. Even more recently another press release reached us with news of The DPE (Digital Printing Exhibition), to be held in Frankfurt in March, hence preceding the FESPA show. It is apparently organised by ESMA. On its website ESMA describes itself as "an Association of European Manufacturers of machinery and consumables for the specialist printing industry, including screen, digital and pad printing processes." Furthermore it claims to have "close links to FESPA". We wonder how close those links will be after this launch of what appears to be a trade show in direct competition with FESPA Dig-*

*ital? You decide – below is how each show sells itself. It seems to us they are going for pretty much the same exhibitors and the same visitors...*

### "FESPA DIGITAL

- The digital print industry is developing rapidly and its relevance to the screen market is dramatic.
- The digital manufacturers want a "world stage" to showcase their products and services.
- The printers want one place where they know they can view this new technology as it becomes available.

These are the reasons why FESPA has decided to launch a brand new Pan European event focused on emerging digital technologies in the areas of sign and graphics, textiles, white goods, glass, ceramics, electronics and home furnishings:

**FESPA Digital Printing Europe, Rai, Amsterdam, 16th-18th May 2006."**

*And...*

**"THE DPE is the place to be in 2006**

THE DPE has originated from the desire of digital manufacturers to have an international trade fair of their own. It will address manufacturers and users of machines as well as consumables and services for digital printing and all related printing industries. Currently, the large number of standard printing fairs makes it difficult to efficiently address specialized target groups. The goal of THE DPE is to become the most important event of the European digital printing industry.

Unlike other leading printing shows, THE DPE will take place annually. This will make it the central marketplace, where all the latest developments of this trendsetting digital printing technology will be presented at one event. However, THE DPE is not solely focussed on digital printing, but on all related printing industries such as screen printing as well.

▼ **By particularly targeting industrial users to whom digital printing opens up many new areas of application, THE DPE is truly unique and will thus become the most important digital printing exhibition in 2006."**

More spinfo on [www.thedpe.com](http://www.thedpe.com) and [www.fespa.com](http://www.fespa.com)

## Expandocs

*(In this section, we aim to cast some extra light on a particular recent news story.)*

### Postscript Reinvented

One of the exciting new technologies Adobe is all set to overhype is Postscript. Come again? Yes that's right, despite the fact that PDF was supposed to supersede it, Adobe's new generation of wet behind the ears marketing pups has decided to drop the PDF line for a while. This may be because it's become a trifle dull and dreary, but it may also be that someone has remembered the ever-burgeoning market for Postscript language interpreters in office printers and multifunctional devices (MFDs).

So what do they say?

It seems that Postscript is getting a bit of a facelift. This isn't to say that interpreter developments have been standing still: since its introduction in 1997, Postscript 3 has undergone continuous improvements. The latest version, version 3017, is the one that Adobe is shouting about at Print '05 in Chicago.

The main reason for the renewed marketing focus is the fact that this is the first version of Postscript CPSI to be available in two versions. Adobe appears to be following Global Graphics strategy of offering different versions of their interpreter technology for different markets. In Global Graphics' case, it positions the Harlequin RIP for professional print media production and the Jaws interpreter for office applications and generic print. Adobe's equivalent is to offer a Host Edition for what it uniquely refers to as the Creative Pro market and the Embedded Edition for everyone else. Adobe's stated goal with its printing enhancements for the Creative Pro market is to

"deliver a better user experience, increase consistency and reliability for the creative pro and the print service provider" through improved colour and PDF processing and the new version of Postscript 3.

Version 3017 has several enhancements designed to take advantage of developments in Adobe's Creative Suite. The most significant of these is the use of a new common colour management module across all component application modules in the suite. The difficulty with this could be in the assumption very early in the workflow that Adobe technology will be the exclusive modus operandi. This may or not be the case, depending on the workflow. If the workflow is exclusively Adobe based, the good news is that it ensures synchronicity in colour settings across all suite components, streamlining colour settings and so colour management processing. The bad news is that unless the colour-managed workflow consists exclusively of Adobe technologies, colour management will be as tricky as it ever was although troublesome data files should be easier to hunt down.

Creative Suite 2 also has some PDF enhancements which the new Postscript version is designed to support. All modules have a common user interface with consistent PDF presets that work in similar ways as preflight profiles do. There is also a new JDF template feature in Acrobat 7, so that the PDF is written to comply with the job parameters as defined in the JDF job ticket. All of this Postscript 3017 supports, so that these new CS2 files will RIP with grace and ease, as long as you are using the correct version for your application.

Adobe's revitalised marketing interest in Postscript suggests that Postscript now provides the company with its technology basis for market differentiation. Postscript is being offered as a 37Mb Host Edition for the Creative Pro market and as a 10Mb Embedded Edition for enterprises. Both editions support PDF 1.6, but only the Host Edition supports what Adobe refers to as traditional PDF/Postscript workflows, JDF integration, PDF flattening, Open-type and large format file sizes. In contrast, the much smaller Enterprise Edition includes office printer drives and security features.

▼  
At first glance none of this looks particularly exciting. So what if Adobe is positioning its core technology for two different sectors, Global Graphics has been doing that for years? But look again and it appears that Postscript is high up on the corporate agenda, morphing to become an integration foundation for desktop and server applications. Postscript is Adobe's means of integrating workflow systems for different OEMs such as Xerox and Heidelberg. What this suggests is that Postscript as a computing language has come back into fashion, not just for page description, but with renewed currency not just as a page description language, but as a data description language as well. Ooh la la!

## Acrobites

*(Something to get your teeth into)*

### UWB

Ultrawide bandwidth is the likely successor to Bluetooth, providing high speed wireless communications for short range personal area networks. It is a short range radio technology, that works with long range equivalents such as Wi-Fi and cellular wide area communications, relaying data from host devices to receivers up to 10 meters away.

UWB transmitters send billions of pulses across a wide spectrum of frequencies. The frequency range has a bandwidth of several GHz. The corresponding receiver translates pulses into data to any radio technology with a spectrum whose bandwidth is more than 20 percent of the centre frequency, or a bandwidth of at least 500 MHz.

UWB is attractive because it is flexible, fast and has a low power requirement, with reduced interference. At short range it can provide huge channel capacity with minimal interference.

### Wi-Fi

Wireless Fidelity refers to any wireless networking technology, sometimes referred to as WLAN (Wireless Local Area Network) that conforms to the widely accepted standard 802.11. This specifies the over-the-air interface between a

wireless client and a base station, or between two wireless clients, and provides 1 or 2 Mbps transmission in the 2.4 GHz band. There are four specifications in the 802.11 family extending it to provide different transmission rates. All four use the Ethernet protocol.

The Wi-Fi Alliance, a group of vendor organisations, makes sure that different hardware and software that hopes to be branded Wi-Fi Certified really does interoperate.

## Boomerangs

*(Your feedback fed back)*

For those of you who have followed the interchange in recent issues between the Pauls (Messrs. Lindström and Sherfield) – here's further insight into the next steps for colour management from colour supremo Paul Sherfield of the Missing Horse Consultancy:

Hi Paul

Yes I do agree with you, the comment was a little ironic, and born out of a current situation with process inks not meeting the ISO Lab values and the suppliers seeming not to understand.

Inks that do not match the correct Lab values and presses that vary :-)

Proofing must be to tight and repeatable tolerances.

As this industry solves the colour management and pre-press issues, it brings into stark relief the outstanding areas that now need control. Tighter standards, better controls and tolerances are needed for printing inks and the presses' inking systems.

Regards,

Paul Sherfield  
The Missing Horse Consultancy Ltd





# Keeping an eye on the ball

**When Kodak took over Creo earlier this year it took on more than a financial responsibility. With the Creo acquisition, Kodak's graphic arts interests add up to more than the sum of their parts, putting the graphic arts and associated industries closer to the heart of Kodak's interests.**

We recently had a chance to talk to Israel Sandler, Kodak GCG's, Managing Director for Europe, Africa and the Middle East. Since his appointment in May, Kodak's avuncular head of this slice of the GCG, has obviously had much to occupy him. He's the man responsible for stitching together the division's numerous product lines, marketing efforts, sales and support cultures, plus the research and development supporting it all. Easy peasy this is not, nor will it happen overnight.

There are 12,000 people, estimated to be about 15% of the total Kodak workforce in this division. EMEA currently has some 1,800 of them under its wing, but this figure will likely change as part of Kodak's restructuring, which is set to complete in 2007. Although there will be job losses, there will inevitably be new positions created to meet evolving market needs. Kodak may choose to service customers and cover support and associated functions internally or through outsourcing. It could also enter into new arrangements with dealers and distributors. Either way, the headcount will inevitably change substantially in the next couple of years.

So, along with his counterparts in other regions, Mr Sandler has been aligning his organisation to prioritise customer-facing positions and create a structure capable of supporting people on both sides of the equation. This alignment depends substantially on the development of synergies based on some sense of cooperative community within the company. As Mr Sandler puts it: "It's important not to come with a confusing message to the market". Synergy and cohesion are indeed vital if the muddle of pieces that is Kodak GCG is to become the effective sales and support machine that Kodak expects.

GCG is separated into three strategic product groups: consumables, which is mainly the KPG stuff, workflow and prepress equipment which is Creo (but without the plate manufacturing), Nexpress and Versamark. Each of these is responsible for the consumables relating to its core business and for its own research and development. There are some inherent conflicts here, particularly between the violet and thermal dogmas. However according to Mr Sandler violet testing is continuing both with GCG technologies and with platesetters supplied by competitors. He says "we are exploring both avenues" and that the company is in dialogue with three or four players including Heidelberg, Screen, and ECRM. Violet imagers are available from Agfa, Fujifilm, Heidelberg, Highwater, IPA, Screen, et

**Synergy and cohesion are vital if the muddle of pieces that is Kodak GCG is to become the effective sales and support machine that Kodak expects.**

al so it would make no sense at all for Kodak to exclude itself from channels that help it shift consumables. Logic dictates offering violet imagers in some form or another.

Encouraging the confidence amongst employees and customers to create said synergy requires a sense of shared purpose and goal. This takes time and money to achieve; how much of both is available and in what quantities, will determine the effectiveness of the end result.

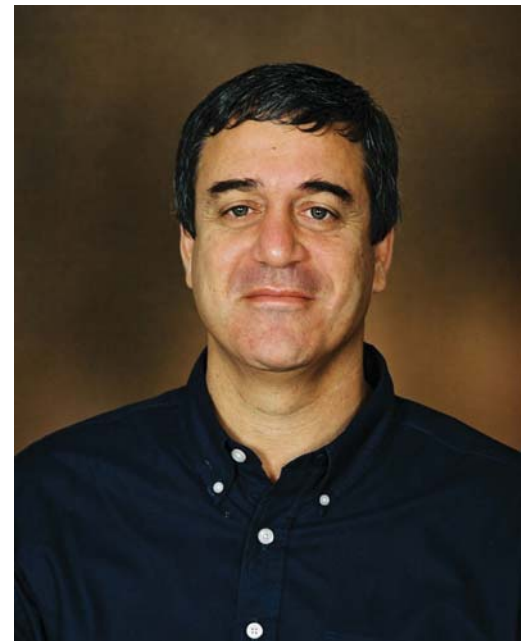
As with any organisation, the most slippery of Mr Sandler's tasks is to build a structure within which the logistics of customer support are well managed, balancing costs with revenue potentials. For a business the size of GCG, this structure will inevitably be complex. It needs to cut across the various subdivisions within the group, have the right administrative and resource management procedures and be able to keep customers at the top of the priority list. Many new Kodak customers will want to work with more than one of the company's various subdivisions and their product lines. Keeping the customers at the top of the priority list thus needs to be every employee's business.

The goals are similar for all divisions within GCG, of course with discussion amongst the head honchos, and correlation "but not so much", according to Mr Sandler. The various bosses therefore have the scope to support diverse customers according to local requirements and cultures. For example, the US is a much more homogenous market than Europe or the Middle East. Inevitably GCG itself has different strengths in different markets, according to the historic strengths of the component companies – in the US for example KPG is strong but Creo relatively weak. Mr Sandler says GCG is striving to support all of them effectively because "each market has its own variables, but common customer goals".

It's all going to come down to how much money Kodak is prepared to spend, and how quickly it expects a return. Given the current restructuring and cost cutting going on within Kodak, it isn't likely that the budgets will be particularly generous. At the moment KPG and Creo obviously dominate headcount and revenues because of plates, but with the ceasing of plate activities in West Virginia and the decision to stop the manufacturing developments in Germany, this will change. There are also specific revenue targets that Kodak expects its various divisions to achieve. We understand for example that inkjet printing is expected to contribute around \$770 million to Kodak's annual revenues of more than \$15 billion.

The company's overall research and development projects have not yet drastically changed, but there will likely have to be re-evaluations here. Kodak invests some 7% of turnover into research and a sizable chunk of that will have to go into areas where consumables returns are high, which means plates and digital printing. How much will go into violet versus thermal and toner based imaging versus inkjet isn't known outside of Kodak. According to Mr Sandler, for digital printing "we are going

**The company's overall research and development projects have not yet drastically changed, but there will likely have to be re-evaluations here.**



*Israel Sandler, Kodak GCG's, Managing Director for Europe, Africa and the Middle East.*

▼  
for both because I believe there will eventually be some hybrid in terms of applications”.

One of the most delicate areas of Kodak’s research involves Xerox and in the highest echelons of Kodak and Xerox the relationship continues. This work is in the strongest sense of the word protected, with a clear separation of the Spire research and development team from the rest of Kodak’s research and development efforts. Is this realistic? Is this sensible? Given the nature of high-level research and the very different ethics within academic and commercial organisations, it is indeed realistic and sensible. Defining routes to market, and ensuring that those routes don’t conflict with other interests, may not be so simple. But those conflicts aren’t likely to present themselves any time soon and for Mr Sandler there is something else more important: “my major task, my #1, is to keep a focus on the market. This is the major issue for us”.

Keeping an eye on the market is hard enough for a small business, but for one the size of Kodak it is far harder. It all comes down to people and providing an environment where day-to-day internal operations don’t overshadow meeting the day-to-day needs of customers. Creating that environment is Mr. Sandler’s primary task.

– **Laurel Brunner**



## Waterless boost by newspapers

Waterless offset printing, used on sheetfed machines, has never really taken off, despite the fact that, from both an environmental and print quality point of view, it is undoubtedly the bees knees. The main reason is that there just hasn't been enough volume to get beyond the one plate manufacturer who produces the silicon covered plates. Plate prices have been prohibitive, in other words. This is now possibly about to change, as the first waterless newspaper press on the market is being snapped up by half a dozen newspaper printers around Europe, which means volumes look set to increase significantly. In June, Rodi Rotatiedruk in the Netherlands opened their doors to let colleagues and the trade press have a look at the first working installation of the KBA Cortina.

Waterless offset printing makes complete sense. There is no water involved in the process, which means there is no headache inducing ink-water balance to contend with – start-up is quicker with less waste, and the printing quality is higher. Also, no water means no dampening solution, i.e. one less chemical in the process. Until recently, waterless printing was only done on sheetfed presses and, although everyone who uses the method swears by it, it has never really made it big. The main reason is that Japanese plate manufacturer Toray is alone in supplying the special plates needed – these have a top layer of silicon which acts as the water would in conventional offset. In 2000, however, press manufacturer KBA launched the first ever waterless weboffset press, the Cortina, a coldset press aimed at the newspaper market.

KBA began selling its waterless newspaper press in August 2003. To date, seven presses totalling 29 four-high towers, have been sold (see fact box). The Cortina at Rodi Rotatiedruk in Broek op Langedijk in the Netherlands is the second to be installed, after the initial one at Reiff Zeitungsdruck, who partnered with KBA in developing the Cortina. It is a 48-page press consisting of three towers and one folder (a second one has been ordered).

Rodi Rotatiedruk is the printing company of the Rodi group, which also consists of publisher Rodi Media and a distribution company. The group employs about 200 people and publishes 17 newspapers every week, plus special editions. The printing company produces about 1.8 million copies a week, about half of which is contract print, the rest being the group's own newspapers.

In 1995 the printer had bought a 48-page Global Web Press from The Chicago Tribune with capacity for full colour on four pages and spot colour ▶

**“I think additional plate suppliers will introduce waterless products; perhaps as soon as by the end of 2006, when the seven Cortina presses that have already been sold are up and running.”**

**– Tore Harms, Toray**



*The KBA Cortina is the first waterless web offset press. Seven presses have been sold so far, and the hope is that the increase in demand for waterless plates will mean more plate manufacturers launch products, the competition and increased volumes contributing to lowering the prices, which are currently at 50–60 percent over the prices for conventional offset plates.*

on 16. Since then the need for colour, and high quality colour at that, had increased tremendously, particularly as Rodi Rotatiedruk was aiming to significantly increase the amount of contract jobs taken on. During the open house, Rodi Rotatiedruk general manager Jan Hofsink said he had seen the Cortina at Drupa in 2000, but at the time thought it “too much like science fiction”. However, when he attended the open house at Reiff Zeitungsdruck in April 2003, he was impressed: “It was fast, produced good quality, and to top it off this was exactly the configuration we needed.” Rodi Rotatiedruk signed the contract for their new press at Ifra Expo in 2003. A little less than year later installation began, and the press was taken into full production in February of this year.

Mr Hofsink summed up the main advantages and disadvantages of the Cortina. On his plus-list is performance and print quality, cost reduction (less waste and fewer staff) and environmental benefits (e.g. no fount solution, less waste, fewer cleaning agents, no ink misting). He also pointed out that the press made selling contract jobs easy: the price Rodi Rotatiedruk charge is comparable to conventional coldset offset, but now they can deliver increased print quality. The number of requests for quotations has doubled since the press was installed. Hofsink mentioned two disadvantages, the first being that, due to the improved print quality, he can no longer move jobs to other contract printers if the press is full. He also said that long runs are expensive, due to the cost of plates. At the moment, the plates Rodi Rotatiedruk use only allow for runs of 100,000. However, this is something that will change. More on this later.

### Fewer operators

Martijn Boereboom, Rodi Rotatiedruk’s project manager, presented some key figures to illustrate the production advantages gained by installing the Cortina. The most significant cost saving comes from the reduced staffing level. In order to run the old press the company had six operators on each shift. This has been reduced to five, and once the operators have mastered the press completely it will be down to four. There are a number of reasons the Cortina can be run with fewer operators. Most notably maintenance levels are lower (e.g. there is no dampening unit to maintain and the compact press design makes it easier to maintain). Furthermore, there is a higher degree of automation (plate changing e.g. two of the towers on the Rodi press have semi automatic plate changing, one has fully automatic changing) and the lack of water on the press means start-up is much less complicated and time consuming.

The semi-automatic plate changing has also had a significant effect on job change times. On the old press, the average time it took to change from one job to another was 45 minutes. On the Cortina, Boereboom predicts this figure will be less than 15. So far, they have not been able to get any representative measurements, as a lot of cleaning is required, which in turn is due to the fact that inks are still being developed, according to Boereboom.

**Less paper waste constitutes an environmental advantage as well as a significant cost saving for Rodi Rotatiedruk. On the old press the average number of copies wasted was 3,500 per job. With the Cortina the goal is to get it down to less than a tenth of that, 300 copies, thanks to there being no ink-water balance to adjust.**

▼ With the Cortina, Rodi Rotatiedruk has increased the number of jobs per week from 30 to 90 (the weekly output has increased from 1,000,000 to 1,800,000 copies). At 90 jobs, with a reduction in job change time from 45 to 15 minutes, the company gains an extra theoretical production time of 45 hours a week to fill with new jobs.

Less paper waste constitutes an environmental advantage as well as a significant cost saving for Rodi Rotatiedruk. On the old press the average number of copies wasted was 3,500 per job. With the Cortina the goal is to get it down to less than a tenth of that, 300 copies, thanks to there being no ink water balance to adjust. According to Boereboom, due to human and machine issues, it is still too early to confirm that this goal has been reached, but he is confident it will be.

### Higher energy consumption

Both KBA and Rodi Rotatiedruk confirm that the Cortina consumes more energy than a conventional coldset press with a comparable configuration. However, how much more, neither party could say. The reason for the higher consumption is the heating and cooling system needed to control the temperature on the press. According to Martijn Boereboom, it is too early for the printer to confirm the electricity consumption.

The capital investment cost for a KBA Cortina is on par with conventional coldset presses, however due to the press being compact, in Rodi Rotatiedruk's case only 6.2 metres high, investment in buildings should generally be lower. KBA expects the Cortina to have the same average service life as a conventional press, i.e. 12–15 years.

### Consumables issues

At the moment the inks used on the Cortina are about 30% more expensive than conventional coldset inks, however this figure may well decrease as the remaining five presses, and potentially of course many more, are installed, thus driving up demand. The inks used at Rodi Rotatiedruk are still under development, and have proved to be fundamental to the running of the press. General manager Jan Hofsink explained why: "We actually control the density through the temperature. The keyless inking unit is a modern version of the anilox system. The higher the temperature, the thinner the ink, and the more ink is transferred to the plate cylinder. If the temperature is too high we get toning, if it is too low we don't get enough ink. It is important that this window is as big as possible, i.e. that you are able to adjust the temperature as much as possible in both directions without the ink changing viscosity. Of course, this is the challenge for the ink suppliers."

Waterless plates currently come from one producer only, Japanese firm Toray. They are 50–60% more expensive than conventional offset plates, an issue which many of the otherwise very positive visitors to the open house expressed concern about. As with ink, the increase in demand for waterless plates may well cause other plate manufacturers to enter the market, thus driving down costs. Said Tore Harms, technical consultant, ►



*"The other plate suppliers' current dilemma is that they would be converting some of their existing conventional offset customers to waterless. Since Toray does not sell conventional plates, we have an immediate opportunity to gain market share", said Tore Harms from plate manufacturer Toray.*

▼  
dealer and partner relations at Toray in Germany: “The other plate suppliers’ current dilemma is that they would be converting some of their existing conventional offset customers to waterless. Since Toray does not sell conventional plates, we have an immediate opportunity to gain market share. I think additional plate suppliers will introduce waterless products; perhaps as soon as by the end of 2006, when the seven Cortina presses that have already been sold are up and running. All the leading manufacturers have either patents or plates that are more or less ready for production.”

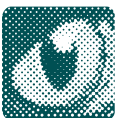
As mentioned earlier, Rodi Rotatiedruk currently change plates after 100,000 copies, which makes longer runs comparatively expensive. This situation will change in the autumn. Toray has developed a new waterless CTP plate which can print up to 250,000 impressions. It has been successfully tested on the Cortina at the KBA site in Offenburg, and is in commercial use at a heatset printer in Switzerland. It will be phased in at Rodi Rotatiedruk in the second half of this year according to Tore Harms: “It was a joint decision by Rodi, KBA and Toray to delay the introduction of the new plate at Rodi until the press commissioning phase was completed.”

As long as the ink and plate issues are dealt with, it seems waterless is finally set to gain serious ground, hopefully within both web and sheetfed offset. Considering the advantages the method offers, this can only be a good thing.

– **Cecilia Campbell**

#### **KBA Cortina sales:**

<b>Company</b>	<b>Place</b>	<b>No of towers</b>
Reiff Zeitungsdruck	Offenburg, Germany	4
Rodi Rotatiedruk	Broek op Langedijk, Netherlands	3
Heinrich Rüttergerodt	Einbeck, Germany	1
Dijkman Offset	Diemen, Netherlands	2
Nussbaum Medien	Weil der Stadt, Germany	1
Freiburger Druck	Freiburg, Germany	6
De Persgroep	Asse, Belgium	12



# Captain Fantastic or Brown Dirt Cowboy?

Elton John has given much to the world including a somewhat underrated song called Captain Fantastic and the Brown Dirt Cowboy. It's unlikely that Sir Elton planned it, but this song title rather aptly summarises where the graphics industry is with colour management. There is a rare elite of Captain Fantastic for whom digital colour management is a glittering triumph, and there's a mass of brown dirt cowboys doing their best, but struggling. They've got limited budgets and knowledge, inadequate system capacity and customers or content providers with no inclination at all to bother with colour management. Most of us are in the brown dirt cowboy category, which is why colour management is still a problem. As more and more people contribute content to print media production workflows, it will continue to be so.

The problems don't lie with the technology, but with understanding the inherent conflict in digital colour. Colour perception is highly subjective, but an electronic system uses binary logic to define objects and processes. Clever software works by reducing all parts of a process to a series of logical choices between true and false, but real world colours aren't at all binary, either conceptually or practically. Every colour in nature is a complex muddle of stimulation and response values. It's subjective, not objective, absolute or tangible. Even describing it is confusing!

In the real live analogue world glittering and shimmering all around us, colour is everywhere. It's a property of our environment rather than a real entity, so it can't easily be pinned down and fixed. Colour is an attribute, perceptible when light interacts with the objects and surfaces that make up our world. Everything absorbs and reflects light to some extent. Some things absorb so much light they appear black, some so little they appear white, but most do both. The combination of how the eye captures light and the brain processes the photometric signals, turns bouncing light into colours, even though it's only inside our heads.

## Real Colour Capture

Light enters the eye through the iris, which expands and contracts to control how much of it enters, much like the aperture on a camera. Information about the light gets sent to the brain, which differentiates it as colours. They range from no perceivable differentiations, where there is no light reflected, to where all wavelengths are reflected and there can be no differentiation. We perceive the former as black and the latter as white.

This article is produced as part of an international graphic arts industry collaboration between Digital Dots, its publishing partners and its clients.

It is part of a special project to address business and technology issues crucial to digital print media production. The series of educational articles explains print media technologies, business issues and market drivers for print media production, in both existing and new markets. These articles will be published as a series of individual Buyer's Guides due for print publication in April 2006.

- *The Buyer's Guide to JDF*
- *The Buyer's Guide to Colour Management & Proofing*
- *The Buyer's Guide to Digital Printing & Direct Imaging Presses*
- *The Buyer's Guide to CTP*
- *The Buyer's Guide to Preproduction Data Management & Quality Control*

Further information is available at the Digital Dots website: [www.digitaldots.org](http://www.digitaldots.org)

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▼ In many ways, a digital capture device works rather like the eye, but there is one very important difference. Digital capture with a digital camera or scanner samples a series of points in a scene or image. Software builds a digital equivalent of the image based on the red, green and blue light information captured in each sample, converted from analogue information to digital data. Although such mathematically constructed colour descriptions can never exactly match perception, they can be controlled to come extremely close. Colour management is entirely about control.

## Additive & Subtractive Colour

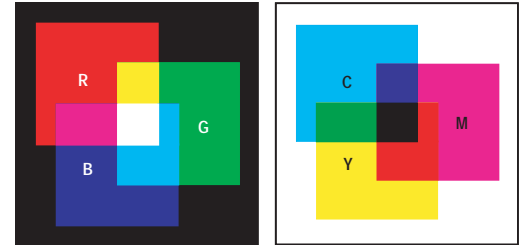
So light is made up of red, green and blue wavelengths and when it hits a surface some wavelengths get absorbed and some don't. Adding together all of the wavelengths of light makes white, and adding selected wavelengths together creates different colours, hence the term additive colour.

If there is no light source such as the sun or a computer screen to emit the red, green and blue light, there is only black. When emitted light hits a surface such as paper or board, the fixed texture of the surface absorbs or reflects it. Printers rely on how a surface absorbs and reflects light to create the illusion of colour, using subtractive rather than additive colour principals. They use cyan, magenta and yellow inks each of which absorbs and reflects different parts of the visible spectrum, working rather like a filter. Light passes through the ink filters both as it reaches the page and when it is reflected from the white paper. Ink that absorbs the red component transmits green and blue to appear cyan; ink that absorbs the green component transmits red and blue to appear magenta; ink that absorbs blue transmits red and green and so appears yellow. With this subtractive colour system cyan, magenta and yellow are the primary colours and together all three colours will absorb all of the light, to appear black.

## Basic Black

But impurities in inks mess up the physics here, so if one overprints cyan, magenta and yellow the result is a sort of murky brown, not black. Printers add black as the key colour (K) to pull the rest together, enhance contrast and achieve a really deep, dark black. Together cyan, magenta, yellow and black print (CMYK) can mimic many, but not all, of the red, green and blue combinations visible on televisions, computer screens and in the real world. A clever printer can even convince us that the cyan, magenta, yellow and black on the page replicates what we see in the natural world.

Black effectively increases the apparent density and richness of the print. It's cheaper and dries faster than coloured inks, so it can save money. Black can be used to enhance contrast and achieve a really deep dark black. It is also better for printing text and black line art, which look blurred if printed CMYK or only CMY.



*Additive (left) and Subtractive (right) colour mixing.*

**Conversions from RGB to CMYK are notoriously badly behaved, but not only because they are based on different principals of rendition. Colour data conversions have to include some means of mathematically defining the characteristics of the digital devices used to create and render it.**

## The Temperature of Light

Wherever it occurs, be that in the natural world on a monitor or in print, colour is about light. If colour management is about control, it's also about understanding how light affects colour perception. One way of classifying a light source is its colour temperature, which is measured in Kelvin units (Lord Kelvin, was a British physicist and inventor, who defined the light temperature scale). Candlelight is the gloomiest at around 2000°K and the brightest sunlight is at the top, at around 10,000°K. Within these extremes colour appearance will obviously vary, so graphic arts professionals use D50 with a colour temperature of 5000°K, as a standard light source. D50 is defined as an average daylight simulation. D65 or 6500° Kelvin is a compromise between indoor light (3-4000° K) and outdoor light (6500° K) and is often used for viewing on press.

## Colour Spaces

The only way to turn the RGB data captured with a digital camera or scanner into something that can be printed with CMYK inks, is to convert the source data into data defined for the target colour space: RGB to CMYK. It's a bit like transposing a piece of music from one instrument to another. The music should sound the same on both instruments, without compromising the characteristics and attractions of each.

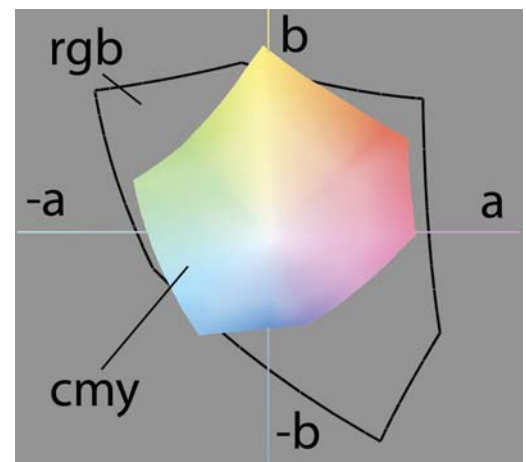
Conversions from RGB to CMYK are notoriously badly behaved, but not only because they are based on different principals of rendition. Colour data conversions have to include some means of mathematically defining the characteristics of the digital devices used to create and render it. And the maths has to kick in every time a colour file is opened or printed on a different device. This is what ICC standards are all about.

## International Color Consortium (ICC) & Device Profiles

ICC standards are developed by colour scientists, technology developers and users from all areas of printing and publishing. ICC standards optimise accuracy in data transfers, taking into account the colour spaces and the devices in the workflow. In a controlled workflow, where all devices are calibrated and accurately profiled, colours appear the same wherever they are rendered, on screen or in print.

Any device used for colour production has to be calibrated and profiled. A device profile is a small data file with information about the device's characteristics and how closely it matches the colour values it is supposed to have. The ICC's standard file format for these profiles is one of the great leaps forward for digital colour management.

ICC colour management works on the principal that all colour spaces can be defined within the CIE L\*a\*b\* colour space (CIE stands for Comité Internationale d'Éclairage). CIE L\*a\*b\* is a perceptual colour space that defines colours according to their luminance, from black to white and degrees of red or green-ness, and of yellow-ness or blue-ness. It can



The inner contour represents the colour gamut of sheetfed offset quality print. The outer contour (black line) represents the colour gamut of a standard CRT monitor.

▼  
define most colours that exist in nature and its vast gamut means that there are no colours in either RGB or CMYK colour spaces that cannot be defined. It's a sort of universal melting pot for colours, turning data defined in the source colour space to CIE L\*a\*b\* values, then converting them into those required for the destination colour space. It sounds simple but the maths involved also has to include the device profile data, so it's far from straightforward. This may be why for many people it's just easier to dismiss ICC colour management and rely instead on a closed system, even though closed systems belong to another age.

Colour use in print is rising and modern workflows are open, not closed. Converting red, green and blue data to cyan, magenta, yellow and black data isn't trivial, but it can be done and done reliably. There is no clear consensus on colour management best practices, so a basic understanding of colour principals can only help matters. Awareness of the nature of the problem, plus control in the workflow and good housekeeping for all devices and software used in production is what colour management is all about.

– **Laurel Brunner**



# China Print: Part 2

**Naresh Khanna went to the huge China Print exhibition in May. On 10 May 2005, the day before the exhibition opened, the international conference for printing development took place in the auditorium of the fabulous Diaoyutai state guesthouse in Beijing.**

One of the speakers was vice minister Yongzhan Yu, in charge of the General Administration of Press and Publication of the People's Republic of China. (Vice minister Yu led a 300 strong Chinese delegation at the Eighth World Print Congress in Cape Town this January.) In his speech on May 10 in Beijing, he outlined the specific steps that the Chinese government is taking to "build China into one of the important printing bases in the world by 2010." The stated steps are:

- “1. Guided by the scientific development concept, to facilitate industry development and realize the goal that the total production value of the printing industry accounts for 2.5% of GDP, with the average annual development speed slightly higher than the national economic development speed.
2. Build the Big Pearl River Delta Region into a foreign-oriented printing centre. Yangtze River Delta Region a printing centre with the strongest comprehensive strength in China, and around Bohai-Sea Economic Zone an advanced publishing and printing centre in China.
3. Facilitate digital printing and network printing processes, develop advanced printing technology equipment, and train a group of backbone enterprises with international competitiveness.
4. Facilitate the marketing process of the printing industry and gradually set up a unified, open, competitive, and orderly printing market system.”

To read Naresh's full write-up of the conference, where representatives of countries from Germany to the Philippines gave their view on the status and future development of the printing industry, visit...

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