

**Draft Meeting Minutes  
PDF-Archive Meeting  
October 11 and 12, 2005  
Adobe Offices  
8201 Greensboro Drive Suite 1000  
McLean, VA 22102**

**1. Welcome and Introductions**

Mr. Stephen Levenson called the meeting to order at 9:30 a.m.

The following participated in the meeting:

Steve Abrams	Harvard
Robert Buckley	Xerox
John Capuso	Visioneer
Jane Cohen	DTIC
Richard Cohn	Adobe
Scott Foshee	Adobe
Ken Grant	NARA
Macduff Hughes	Adobe
Noah Katz	Aspen
John Iobst	NAA
Butch Lazorchak	Library of Congress
Steve Levenson	US District Courts
David Luce	Schering Plough
David McDowell	NPES
Leonard Rosenthal	PDF Sages
Paul Showalter	IRS
Susan Sullivan	NARA
Melonie Warfel	Adobe
Frank Walker	National Library of Medicine

**2. Approval of Draft Agenda, October 11-12, 2005 (PDF-A 2005-010)**

The draft agenda for the October 11-12, 2005 meeting (PDF/A 2005-010) was approved with the following modifications:

- Added a discussion of the PDF/X meeting in Brazil after the Hamburg report:
- Leonard Rosenthal would present Item 5, on application notes instead of Melonie Warfel
- Added a discussion of Frequently Asked Questions (FAQs) to section 7
- Also in section 7, the goal is to determine a n official US NB decision about what's in part 2

Unanimous approval.

**3. Approval of Draft Meeting Minutes, January 6, 2005 (PDF/A 2005-002)**

The draft meeting minutes for the April 7, 2005 meeting (PDF/A 2005-009) were approved with one correction in section 5 on "Fonts" (p. 3): The XMP "copyright" field is recommended, not required ("should", not "shall").

#### 4. Hamburg Meeting Report

Scott Foshee noted that Part 1 of PDF/A is complete. The PDF/A ISO Standard was published on September 28. The group discussed access rights and copyright considerations of PDF/A, and Melonie Warfel purchased a copy on-line during the meeting. She noted that the standard costs 112 UR. It is understood that active PDF/A committee members are entitled to an individually licensed copy at no charge. David McDowell noted that as a reseller, NPES must sell for at least the royalty price which is 45-50% of the ISO price. He noted that AIIM may also be an authorized reseller. Regarding access and use, the PDF/A standard is licensed as copyrighted material and all legal controls apply.

Scott continued discussing the Hamburg meeting by noting that topics discussed included:

- Content of Part 2
- Content and structure of Application Notes. (Melonie Warfel and Scott Foshee are leading this work as an international action being done in U.S. and taken to the international committee.)
- New Frequently Asked Questions (FAQs) (FAQs on PDF/X from Martin Bailey should be helpful)

Dennis Newman will act as the PDF/E liaison to PDF/A. The next Joint Working Group (JWG) meeting will be held in Berlin on January 25 and 26 with a US caucus on the 24<sup>th</sup>. Hosted at DIN. **Action:** The group questioned about hotels and David McDowell took the action to research hotels. It was noted that Intercontinental hotel is close (around the corner).

#### 5. Status on Application Notes

Leonard Rosenthal presented the draft Application Notes that he developed. The draft application notes are an edited version of the PDF/X application notes, tailored to suit PDF/A. Edits included slashing out inappropriate/irrelevant text and adding new text where appropriate. The discussion focused on technical content, as Leonard will organize the Application Notes in the same sequence as the standard and will wordsmith later.

The following notes provide a overview of the discussion and they identify actions taken as Leonard presented each topic.

- **Forward:** was verbatim from PDF/X and needs tweaking. General comment AIIM/NPES must be shown as peers with equal billing. AIIM first, alphabetical. No CGATS references. Avoid references to the U.S. TAG.  
**Action:** David McDowell will clean-up participant references.
- **Introduction:** Things outside of the PDF/X application are known as PDF/X+. The group discussed whether there is a need to address additional restrictions on PDF/A (e.g., usage

profiles) for different market verticals. The group decided to leave profiles up to individual implementers. However, we need to tell developers, up front, that they will need to build “hooks” in the program for various uses.

- It was noted that Conformance levels A and B might be inconsistent in final version.  
**Action:** Steve Abrams will ask Betsy Fanning to request the MS Word file from ISO that was used for publication as a basis for future work.
- In discussing reader requirements, Melonie Warfel pointed out that FAQs and Application Notes need to take a “non-Adobe” perspective. The group decided that a section would be added to the Application Notes regarding reader requirements.
- **Relationship between PDF/A and PDF/X:** PDF/A is not based on PDF/X, but it was modeled after PDF/X. From a technical standpoint PDF/X 3 is a PDF/A compliant file. PDF/A adopted the PDF/X graphics requirements. The group determined to change to address individually, the relationship of PDF/A with each of the other PDF based standards, and to explain how PDF/X applies and how those under development apply.
- **Versions of PDF allowed in PDF/A:** Version number not used to verify conformance. Application Notes address PDF version numbers 1.1, 1.2, 1.3 and 1.4 and go beyond the spec to help developers.  
**Action:** Leonard Rosenthal will clarify version requirements. As written, seems to exclude later versions and this is not the intent.  
Susan Sullivan pointed out that draft language in the Application Notes that warns against migrating or transforming PDF/A file to other formats should be dropped. The PDF/A file format was designed to support future migration. The group agreed. **Action:** Melonie Warfel will provide file format comparison matrix for potential use on Application Notes.
- **Compression mechanisms:** JPEG 2000 was added to allowed lossy compression.
- **Color:** Used verbatim out of PDF/X 4.11.1 – Specific print or viewing condition.
- **Fonts:** The group made corrections to the Application Notes where PDF/A recommendations were interpreted as requirements. For example: SHOULD include a metadata entry in Fonts section.

The group discussed how to auto-populate XMP metadata on fonts. For example: The “Owner” is the legal owner of the font, as predefined in XMP (i.e., the IP holder of the font itself).

The group discovered a change in the XMP specification that affects the PDF/A standard. There is no longer a *copyright* field in XMP and *copyright* is required in the standard. The group recommended using the copyright holder for fonts in the XMP “owner” field, if it is not otherwise determined. Dave McDowell suggested that the disappearance of “copyright” be identified in the Application Notes.

**Action:** Steve Abrams will check with Betsy Fanning to see how to correct such changes in the standard via errata. Dave McDowell suggested that the group wait to determine additional changes that might need to be made.

- **Usage terms:** Intent is to summarize the terms of the licensing arrangement. **Action:** Application Notes committee will determine standard guidance for how to program this entry.
- **Embedded fonts:** Add note saying Open Type Fonts are not permitted. Tool that is trying to convert to PDF/A-1 should fail under certain conditions..... (e.g., to Unicode) or fall back to conformance level PDF/A 1b.

Explain that OCR'd text does not require embedding for scanned images.

David McDowell pointed out that Application Notes can reference a fact several times or repeat the fact because Application Notes are typically read one section at a time.

Steve Levenson suggested that PDF writers warn users when they attempt to embed illegal fonts. For some fonts, there is a way to do that programmatically (creator are warned). Flags must be respected.

Software should allow identification of contractual arrangements that allow fonts to be embedded.

When referencing PDF/A requirements, the Application Notes should indicate “as noted in....” and cite the clause.

- **Receiver requirements:** additional restrictions. Metadata must be expanded upon. **Action:** Susan Sullivan will provide Leonard with NARA transfer guidance for scanned text, and copies of other applicable NARA guidance.
- **Missing Sections:** Annotations, Forms, Digital Signature will be developed later.
- **Digital Signatures:** PDF/A does not address invisible signatures. The Application Notes will clarify that a digital signature must have an appearance.

The group discussed that there is a general misunderstanding that PDF/A does not support digital signatures when it does support digital signatures. We must be clear in the Application Notes. Current state of tools does not support PDF/A compliant digital signatures. For example, in Acrobat the default signature does not embed fonts, but it can be made to.

We must tell people to create digital signatures in PDF/A today. Put a note that current tools and Preflight tools might not support it, but this is how you do it.

- Embedded fonts.
  - Get colorspaces right
  - Get appearance right
  - Conformance of the viewer.
- **Issue with how to Time Stamp PDF/A files:** Include direction in application notes how to do certain things if not prohibited in the standard.

#### **Application Notes Committee Members:**

MacDuff , Jane, Melonie, Steve, Noah, Susan, Scott F, Leonard

### **6. Appointment of Part 2 Project Lead/Editor**

Pending

#### **Report on PDF/X Meeting in Brazil**

David McDowell presented an overview of a recent meeting of TC-130 WG2 PDF/X 4 (for blind exchange) and 5 (addressing new features but not obsolescing prior versions). This work can be used to inform development of future parts of PDF/A. Following provide the high-level points of his presentation:

- Added use of transparency but restricted. Adobe provided definition of “blending” modes.
- Use of optional content. Being used for versioning and by packaging people.
- Allows references for external profiles and objects, no longer Fonts
- Certain end-colorant profiles can’t be embedded in a PDF file. Not sure how this will affect PDF/A. Planning on referencing externally. Some discussion.
- 5 conformance levels. External profiles and/or objects. External output intent.
- PDF/X 2006 reader will not be backwards compatible due to new features.
- Drafts should be out next week for review.
- Hoping 4 and 5 will be in CD ballot by November.

### **7. Work on ISO 19005-2, Part 2– Application of PDF 1.6**

Macduff Hughes reviewed the list changes between 1.5 and 1.6, provided by Leonard Rosenthal. For each, Macduff proposed how these might be addressed in future parts of PDF/A, and the group discussed each recommendation.

The group quickly recognized that adding some of these new functions would require a change in the scope and purpose of PDF/A. Susan Sullivan presented a case for leaving the scope as-is, pointing out that the JWG has received approval to go directly to DIS as long as the new features specified are “non-controversial.” She emphasized the need for Part 2 to address PDF 1.5 and 1.6. The group discussed domain specific needs and various alternatives for:

- Addressing PDF 1.5 and 1.6 under the current scope for Part 2,
- Conforming with PDF/E files (which will contain multi-media, 3D artwork, JavaScript, and possibly other features currently prohibited in PDF/A),

- Conforming with PDF/X-5 (including external content), and
- Addressing the needs of the pharmaceutical industry which requires robust digital signature authentication and support (e.g., dependant on content outside the file format for access, SAFE – Secure Access for Everyone – electronic medical record (HHS)).

The outcome of this alternatives discussion was consistent with the group’s decision in April 2005. See meeting minutes PDF/A 2005-009:

- “The existing scope will be retained but brought up to PDF Reference 1.6. ISO 19005-2 will focus on bringing ISO 19005-1 up to 1.6 on as many features as long as they do not change the focus of static documents.
- ISO 19005-3 will focus on other features.
- Both documents will be developed simultaneously.”

The group developed a table that characterized the list of changes between 1.5 and 1.6 and addressing questions as follows:

- Features that could be addressed within the current scope
  - Should they be introduced in the version to go directly to DIS?
  - Are they potentially controversial?
  - Do they need study before suggesting including as US position?
- Outside the current PDF/A scope
  - Who is requesting this and why?

<b>DIS?</b>	<b>Feature Description</b>	<b>Short Name</b>	<b>Recommendation</b>
<b>PDF 1.4</b>			
DIS	Transparency - One item previously disallowed, re-evaluate Transparency – PDF/X and E needed	Transparency	Potentially controversial but within current scope. (Follow PDF/X-4)
<b>PDF 1.5</b>			
DIS	The ability to display images using JPEG2000 compression (Section 3.3.8, “JPXDecode Filter”)	JPEG2000	Fits current scope (follow PDF/X-4)
DIS	and to allow 16-bit images (Section 4.8.4, “Image Dictionaries”).	16 bit	Fits current scope (allow)
	Additional options for the encryption of documents (Section 3.5, “Encryption”). Major new features include crypt filters (Section 3.3.9, “Crypt Filter” and “Section 3.5.4, “Crypt Filters”) and syntax for public-key security handlers (Section 3.5.3, “Public-Key Security Handlers”, which contains information introduced in PDF 1.3 but not previously documented in the <i>PDF Reference</i> ).	New encryption features	Philosophical change (don’t do)
DIS	An extension to the use of streams to allow greater compression of PDF files (Section 3.4.6, “Object Streams” and Section 3.4.7, “Cross-Reference Streams”).	Object Streams	Fits current scope (allow)
DIS	The ability to selectively view or hide content	Optional Content	Potentially controversial

<b>DIS?</b>	<b>Feature Description</b>	<b>Short Name</b>	<b>Recommendation</b>
	in a PDF document (Section 4.10, "Optional Content" on page 629).		depending on how handled. Follow PDF/X-4 (no dynamic changes; allows for regional versioning).
	New predefined CMaps and character collections ("Predefined CMaps" on page 412).	CMaps	Not relevant (no need to mention)
	Enhancements to interactive presentations (Section 8.3.3, "Presentations"), including navigation between pages ("Sub-page Navigation" on page 566) and a new action type ("Transition Actions" on page 632). /PresSteps on /Page dictionary	Interactive Presentations	Potentially controversial depending on how handled. (Say no.)
DIS	• Additional annotation types (Section 8.4.5, "Annotation Types") and other enhancements to annotations (Section 8.4, "Annotations").	Additional annot types	Fits current scope
DIS	• Miscellaneous enhancements to interactive forms (Section 8.6, "Interactive Forms"), and the ability to use styled text in form fields	Interactive form enhancements and styled text	Fits current scope
	and markup annotations ("Rich Text Strings" on page 642). /XFA key in the /Catalog –	XFA	Would be big new scope. (Don't do this.)
DIS	• Enhancements related to digital signatures and signature fields, including the ability to compute object signatures ("Signature Fields" on page 658, Section 8.7, "Digital Signatures," and Appendix I	Digital Signature enhancements	Allowing them fits in current scope. Potentially controversial if we try to standardize signature use. Probably not for fast track.
DIS	"Computation of Object Digests"). Allow only /UR & /UR3 in the /Catalog/Perms.	Certified docs and Perms	Potentially controversial. Needs study.
	• Greatly enhanced support for embedding and playback of multimedia (Section 9.1, "Multimedia", "Screen Annotations" on page 602 and "Rendition Actions" on page 630).	Better multimedia support.	Outside current scope. (Just Say No.)
	• The ability to allow the display of a PDF file as a slideshow (Section 9.4, "Alternate Presentations"). (This feature is considered part of PDF 1.4, although it was not previously documented.)	PDF slideshows	Outside current scope. (Just Say No.)
DIS	• Enhancements to Tagged PDF (Section 10.7, "Tagged PDF") and accessibility features (Section 10.8, "Accessibility Support"). Related updated information is found in Section 5.7, "Font Descriptors" and Section 5.9, "Extraction of Text Content."	Tagged PDF enhancements	Fits current scope (Just allow)
DIS	Ubiquitization/Reader Extensions	Reader Extensions	Fits current scope (if simply allowed) But see issues with Perms.

DIS?	Feature Description	Short Name	Recommendation
<b>PDF 1.6</b>			
	<ul style="list-style-type: none"> <li>• Encryption enhancements to support using the AES (Advanced Encryption Standard) algorithm and to selectively encrypt embedded files (Section 3.5, “Encryption”).</li> </ul>	AES Encryption.	Philosophical change (No)
DIS	<ul style="list-style-type: none"> <li>• The ability to specify the size of the unit in default user space, enabling the maximum page size of a PDF document to be increased (“User Space” on page 170).</li> </ul>	UserUnits (large page size)	Fits current scope
DIS	<ul style="list-style-type: none"> <li>• An enhancement to the syntax of DeviceN color spaces to support NChannel color spaces, which give applications greater flexibility when representing colors that are not available on a target device (“DeviceN Color Spaces” on page 238).</li> </ul>	NChannel	Fits current scope (follow PDF/X-4)
	<ul style="list-style-type: none"> <li>• Greater flexibility in specifying the visibility of graphics based on the state of optional content groups (“Optional Content Membership Dictionaries” on page 335), and the ability to lock the states of groups (“Optional Content Configuration Dictionaries” on page 345).</li> </ul>	Optional Content extensions (OCMD, OCCD)	Potentially controversial depending on how handled. Probably not needed (check X-4)
DIS	<ul style="list-style-type: none"> <li>• New facilities for embedding OpenType fonts in PDF files (Section 5.8, “Embedded Font Programs”).</li> </ul>	OpenType fonts	Fits current scope (just allow)
DIS	<ul style="list-style-type: none"> <li>• Enhancements to markup annotations, including the ability to group them and specify their intent (“Markup Annotations” on page 581, “Free Text Annotations” on page 588, “Line Annotations” on page 590, and “Polygon and Polyline Annotations” on page 595).</li> </ul>	Enhancements to markup annots	Fits current scope
DIS	<ul style="list-style-type: none"> <li>• The ability to specify non-rectangular regions for link annotations (“Link Annotations” on page 587).</li> </ul>	Non-rectangular links	Fits current scope
	<ul style="list-style-type: none"> <li>• The ability to specify objects that should be printed at a specific size, regardless of the dimensions of the printed page (“Watermark Annotations” on page 606).</li> </ul>	Fixed Print watermarks	Potentially controversial
	<ul style="list-style-type: none"> <li>• Additional support for embedded file attachments,</li> </ul>	File Attachment enhancements	Outside current scope but possibly useful?
DIS	Enhancements and clarifications to digital signatures related to usage rights and MDP (modification detection and prevention) signatures (Section 8.7, “Digital Signatures”).	More DigSig enhancements	Potentially controversial if we try to standardize signature use. Review.
DIS	<ul style="list-style-type: none"> <li>• The ability to accurately specify relationships between the dimensions of</li> </ul>	Measurement Properties	Fits current scope

<b>DIS?</b>	<b>Feature Description</b>	<b>Short Name</b>	<b>Recommendation</b>
	objects on a page and their real-world counterparts (Section 8.8, “Measurement Properties”).		
	• The ability to incorporate models of three-dimensional graphical data, using the U3D format, in a PDF file (Section 9.5, “3D Artwork”).	3D	Controversial. Outside current scope? Wanted by PDF/E.
DIS	• The ability to define user properties that contain non-drawing-related information about objects on a page (“User Properties” on page 804).	User Properties	Fits current scope (just allow)
DIS	• The addition of Tagged PDF attributes relating to the layout of content in columns (“Column Attributes” on page 861), and the ability to specify content with in a Tagged PDF document whose page content order cannot be accurately determined (“Page Content Order” on page 817).	Tagged PDF enhancements	Fits current scope (just allow)

## **October 12**

Mr. Stephen Levenson called the meeting to order at 9:00 a.m.

The following participated in the meeting:

Steve Abrams Harvard  
 John Capuso Visioneer  
 Jane Cohen DTIC  
 Scott Foshee Adobe  
 Noah Katz Aspen  
 John Iobst NAA  
 Butch Lazorchak Library of Congress  
 Steve Levenson US District Courts  
 Melonie Warfel Adobe  
 Leonard Rosenthal

The balance of the meeting was spent in discussing in discussing the steps necessary to accommodate PDF/E requirements. Leonard Rosenthal also sits on the PDF/E committee. For purposes of the Berlin Meeting Leonard agreed to draft proposed changes necessary to add the features being used by PDF/E in version 1.5. These should be ready for review by the next PDF/A phone conference on November 17.

9. Adjournment

Adjournment was at 11:30 AM