



















No.	Sec.	Line	Comment
1.	3.1.1	376	Change FAX to G4 to make the node names consistent
2.	3.1.3	415	Add the <MASK> Image Profile to the <JPEG> and <FLATE> profiles; the color profiles also apply to it, or more specifically to the image being masked.
3.	3.1.4	432	According to the text in Table 3.4, the bands progress in increasing X (or Y) axis values. Does "progress" refer to the order in which they occur in the file? In the case of Y bands, the scan and consequently the bands might start at the top of the page and then progress downward with decreasing Y values, since PDF places the origin of the page at the lower left-hand corner in the default coordinate system.
4.	3.1.4	429	While we support the use of banded images, it is not clear what the <X_AXIS_BANDS> element is for and how the renderer will make use of it. The ability of the renderer to handle banded images, and we feel it should be able to in general, was established with the <i>pdfis-banding-direction-supported</i> attribute in the IPPFAX 1.0 Protocol Draft.
5.	3.1.4		If there are going to be vertical as well as horizontal bands, then we should consider supporting tiles as well--it provides additional capability at little added cost and can be comprehended in the IPPFAX 1.0 Protocol attributes without any requirement that all renderers support it.
6.	3.2	447	If the DCTDecodeFilter is implemented, then the Document may not implement the <JPEG> Image Profile, contrary to what it says in Table 3-5 and on Lines 442-3--the document could be implementing the <MASK> Image Profile instead. In other words, the <JPEG> Image Profile is not the only one that uses the DCTDecodeFilter. Note this with changes in some table entries. Also suggest adding informative text in 3.1.1, giving a description of the Image Profiles.
7.	3.2	447	<LAF> is also a dependency for the DCTDecodeFilter in Table 3-5
8.	3.3.1.1.4	509	Unit cache memory not specified; make them Megabytes (MB).
9.	3.3.4	553	Imple negative is hard to follow: suggest changing to "Creator MUST implement JBIG2 features specified in Profile 4 ..." But see next comment
10.	3.3.4	553	Recommend that T.89 Profile 1 'BASE' be allowed as well so that implementations are not required to license arithmetic coding.
11.	3.3.5	560	No reference found to Extended Sequential DCT in Sec. 3.3.7 of [pdf].
12.	3.3.10	589	Table 3-19 contains Fis_NextPage as a required entry. This means the number of objects on the page are known in advance, or the page is written in memory and the writer goes back and fills in the value. Unclear what value it adds (what's the difference between searching for an object number or a page object), unless it has to do with differences between page ordering in the document vs. the file. Clarify the use and rationale of this entry.
13.	3.3.11	599	Table 3-20: column heading should be "Operators" rather than "Fields"
14.	3.3.11	599	We believe a mechanism is needed to limit or crop the area on the page that is imaged, rather than relying on the image width to do so. Two possibilities are using the Crop Box in the page object, or using a clipping rectangle in the page's content stream. If the latter is used, other operators would need to be added to this table. Either way, we believe an explicit mechanism is needed.
15.	3.3.11.2	630	Not all images in a conforming document will have resolutions greater than or equal to 200 dpi. For example, in the case of the <MASK> Image Profile, the mask may have a resolution of 300 dpi while the image it is masking has a resolution of 150 dpi.

No.	Sec.	Line	Comment
16.	3.3.11.3	643 	Right now it says that all previous images are not overlaid, and any following image does not overlay. Include "masked images," since the text as written does not strictly apply to the <MASK> Image Profile, where the mask and image it masks overlay perfectly. In this case, a band can be represented by more than one ImageXObject.
17.	3.3.11.3	647 	See also Comment 3. In the example starting on Line 665, what's increasing is the offset in the user space defined by this file. So make it clear what Y-axis value is increasing--it's not necessarily the one in the PDF default user space.
18.	3.3.11.3	658 	Insert "immediately" after "occurring" since the band operator has to occur before a Do operator, not just right before.
19.	3.3.11.3	669 	Change "126" to "125". The transform shown here gives a thin white line between bands. It's not so much about not overlapping as it is about abutting.
20.	3.3.13	686 	Table 3-22 prohibits DeviceGray and DeviceRGB. A case can be made for supporting both and we recommend support for them be added here and in the IPPFAX 1.0 Protocol. As a CIE-based color space, CalGray is really a representation of neutrals for a color-capable device. A black-and-white output device will pay no attention to WhitePoint for example and may not implement the component transformations shown in [pdf] Fig. 4.15. As for DeviceRGB, it should be available as an alternate color space for ICCBased color.
21.	3.3.14	691 	Table 3-23 requires Interpolate be 'true.' There is a problem with how Acrobat handles pixels in the masked image that are outside the mask in the <MASK> Image Profile. Until Acrobat addresses this problem, setting Interpolate 'false' is a work around that should be available.
22.	3.3.19	718 	Document Information Dictionary is not shown in the File Layout Table 4-1. Does this mean it is optional? Can it be at the front of the file? Both we believe. Clarification needed.
23.	3.3.19	720 	Table 3-28 requires several fields that are optional according to [pdf]. Requiring them here implies they are used for something and also suggests they follow some standard format (some do, most don't--they're just text strings). Clarify the requirement for these fields.
24.	3.3.19		General comment about DID and Annotation fields, and the possibility of using one or the other as a mechanism for including a "fax transmit header" or <i>sender-uri</i> value, per Sec. 9.5 in IPPFAX 1.0 Protocol Draft. Right now the recommendation is to burn it into the image data, but the DID or Annotation field could be used for this attribute value--consider text to this effect in 3.3.19 or 3.3.17.
25.	3.4	722 	Either a nit or a fundamental point about approach: this section prescribes behavior, when what is desired is for the format to say "this object will be referenced across page boundaries (unlike all the other objects) and then it will no longer be referenced from here on in the file." Probably because the name 'cache' implies the implementation.
26.	3.4		Should be "6 and 7" instead of "7 and 8"
27.	3.4		Expect /Fis_cache to be a dictionary object, in which case it needs a value associated with it.
28.	3.5		This section is very informative. It makes some assumptions about how the Renderer processes the document. Some renderers may convert a PDF/is file to Postscript and then process the resulting Postscript. In this case, it is useful to say something about how the Postscript file employs reusable streams. They are often used now for the image mask. Besides the problems this can sometimes cause, a better use of reusable streams, when they are used, is for cached data.

Line numbers are in <http://ftp.pwg.org/pub/pwg/QUALDOCS/pwg-ix-pdfis-P04-021122.pdf>

No.	Sec.	Line	Comment
29.	4.1	 100	Change "effect" to "affect"
30.	4.1	 306	Sentence was hard to parse and a word appears to be missing; reword to something like "there must be at least one Forward-Reference to each non-ignored object"
31.	4.2	 821	Couldn't find a list of the REQUIRED PDF/is objects.
32.	4.3	 335 	Likely a limitation of the table format than the PDF/is format, but it is expected that image masks and the image objects they mask occur one after another in the file, i.e. they come in pairs. The table suggests all the masks are followed by all the masked image objects.