



COVERING NOTE

GENERAL SECRETARIAT INTERNATIONAL TELECOMMUNICATION UNION

Geneva, 16 December 2004

ITU – TELECOMMUNICATION
STANDARDIZATION SECTOR

Subject: Erratum 1 (12/2004) to

ITU-T Recommendation T.88 (02/2000), Amendment 1 (06/2003), *Information technology – Lossy/lossless coding of bi-level images, Encoder*

1) Clause 10

In the last sentence, replace "7.4" with "7.4.1".

2) Clause 11

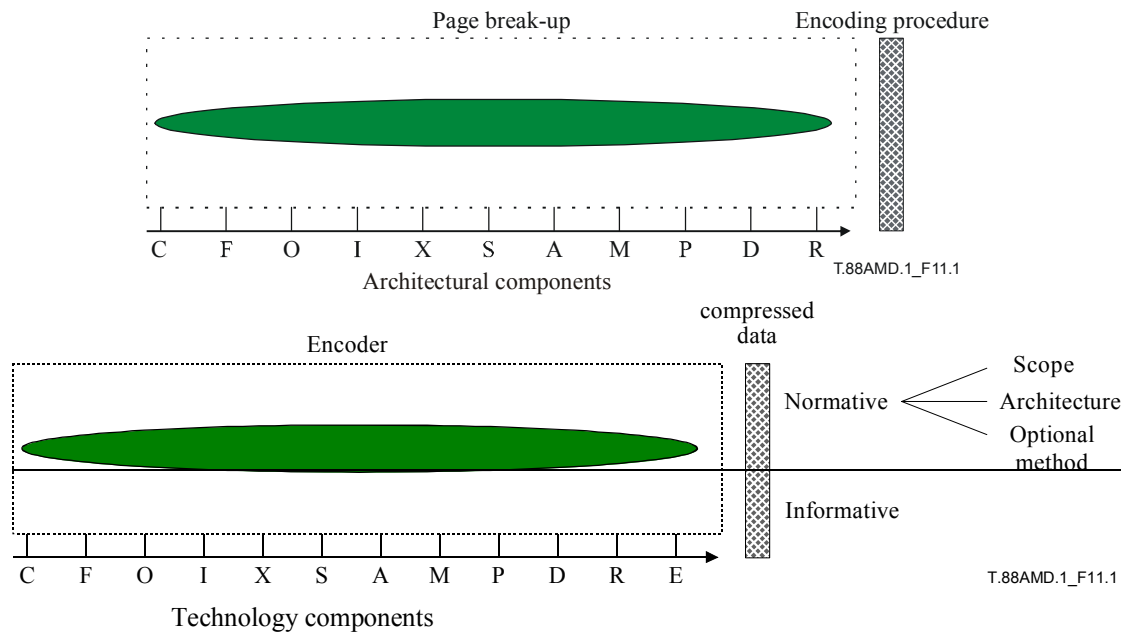
a) *Modify clauses 11 and 11.1 as follows:*

11 Page break-up

The page break-up ("Front end") procedures in this clause 9 are conceptually the inverse of the page make-up ("Back end") procedures already described in clause 8. However, page ~~Page~~ break-up also requires additional page and document decomposition steps prior to encoding.

11.1 Page break-up architecture ~~Encoder model~~

This clause describes the JBIG2 ~~encoding architecture~~ encoder break-up defined by compliant, but optional, technical 'components' (with a range of 'algorithms' possible to implement each of these components). These JBIG2 ~~page break-up~~ encoding components are a set of processing steps labelled: Capture, Filter, Orient (de-skew), Identify, eXtract, Screen, Align (register), Match, Post-match, Dictionary (optimize), and Refine and Encode (bitstream generation). An example sequence of this component set is illustrated in the ~~Encoder Architectural Components~~ figure below as the horizontal axis with abbreviated labels C F O I X S A M P D R E (leading from input on the left to a compressed data stream on the right). The vertical dimension above each label represents the range of possible algorithms that may be used to implement each component. The horizontal band illustrates an example JBIG2 compliant encoding page break-up method, using some algorithm for each architectural component of this JBIG2 ~~encoding~~ and spanning overall these components.



A compliant JBIG2 encoder need not include all architectural components, nor use them in exactly the above sequence.

- b) In 11.2, replace "11.2.12" with "11.2.11".
- c) In 11.2.1, add a bracket as follows:
... (e.g., a bitmap rasterized from a document created using a typical word processor), ...
- d) In 11.2.4, replace "line-arts" with "line-art".
- e) In 11.2.10, replace "any other symbols" with "more than one mark".
- f) Delete clause 11.2.12.

3) Annex J

- a) Modify the second bullet as follows:
 - minimum resolution of 300 dpi (to reduce matching error and accommodate a number of encoder system simplifications, which would otherwise be required for 200-dpi images);
- b) In the second paragraph, modify last sentence as follows:

Selecting one of each method ~~will~~ should result in reasonable encoder performance.