



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**T.82/Cor.1**

(03/95)

**TERMINALS FOR TELEMATIC SERVICES**

---

**INFORMATION TECHNOLOGY –  
CODED REPRESENTATION OF PICTURE  
AND AUDIO INFORMATION –  
PROGRESSIVE BI-LEVEL IMAGE  
COMPRESSION**

**TECHNICAL CORRIGENDUM 1**

**ITU-T Recommendation T.82/Cor.1**

(Previously “CCITT Recommendation”)

---

## Foreword

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. Some 179 member countries, 84 telecom operating entities, 145 scientific and industrial organizations and 38 international organizations participate in ITU-T which is the body which sets world telecommunications standards (Recommendations).

The approval of Recommendations by the Members of ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, 1993). In addition, the World Telecommunication Standardization Conference (WTSC), which meets every four years, approves Recommendations submitted to it and establishes the study programme for the following period.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC. The text of ITU-T Recommendation T.82 was approved by the WTSC (Helsinki, March 1-12, 1993). Technical Corrigendum 1 was approved on 23 March 1995. The identical text is also published as ISO/IEC International Standard 11544.

---

## NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized private operating agency.

## INTERNATIONAL STANDARD

## ITU-T RECOMMENDATION

**INFORMATION TECHNOLOGY – CODED REPRESENTATION  
OF PICTURE AND AUDIO INFORMATION –  
PROGRESSIVE BI-LEVEL IMAGE COMPRESSION**

**TECHNICAL CORRIGENDUM 1  
(to Rec. T.82 | ISO/IEC 11544)**

**I Normative changes**

– *Delete the second to the last paragraph of page 26 starting with “It is permissible ...”.*

NOTE – This paragraph appeared by error. This paragraph does not exist either in its DIS version or DOCR for DIS version.

**II Informative changes**

1) *Delete the whole paragraph on NOTE 2 in 6.2.6.2. With respect to this deletion:*

- a) *Replace “NOTES” in 6.2.6.2 with “NOTE –”.*
- b) *Delete the “1” ahead of this remaining “NOTE”.*
- c) *Delete the parenthetical reference to NOTE 2, appeared in the last line of 6.2.6;*

2) *In 6.2.1, add the following sentence to the end of the first paragraph:*

“NOTE – Applications may wish to precede and follow a BIE with a unique two byte combination (marker segment) so that the BIEs can be detected within other data streams. It is suggested to use 0xFFA8 for the starting marker and 0xFFA9 for the ending marker. These markers are not considered to be the part of the BIE.”

**III Editorial changes**

1) *In Intro. 2, second to the last paragraph of page ii, third line –  
change: “encode the stripes in HITOLO order.”  
to: “encode the stripes in high to low order.”*

2) *In Figure Intro. 4, replace “typical” with “Typical”.*

3) *In Figure Intro. 6, two locations, replace “Diferential” with “Differential”.*

4) *Change the definition of 3.36 “typical prediction” as follows:*

“A method that looks ahead for success in predicting solid color blocks of pixels in an image. Such prediction is subsequently used, only where predictive success was achieved for entire lines (these lines are indicated with a flag).”

5) *Change the third sentence of 6.2.1 as follows:*

“The data describing a given image in all its available resolutions and bit-planes may be, but need not necessarily be, contained in more than one BIE.”

6) *In page 8, second to the last line –  
change: “than”  
to: “then”.*

7) *Change the four instances of “new length” or “new-length” to “NEWLEN” in 6.2.6.2.*

8) *Change the four instances of “comment” or “Comment” to “COMMENT” in 6.2.6.3.*

9) *Change the caption for Table 13 to:  
“Table 13 – ABORT marker segment”.*

10) *Change the caption for Table 14 to:  
“Table 14 – ATMOVE marker segment”.*

- 11) *Change the caption for Table 15 to:*  
“Table 15 – NEWLEN marker segment”.
- 12) *Change the  $Y_{AT}$  variable in Table 14 to be lower case (from  $Y_{AT}$  to  $y_{AT}$ ).*
- 13) *In page 30, in 6.8.2.3, second line of second paragraph,*  
“equation 9” *should be corrected to “equation 8”.*
- 14) *In page 39, Figure 30, right side block below first decision box (diamond shape) –*  
change: “BUFFER+1”  
to: “BUFFER”.
- 15) *In the title of Table 25, replace “Decor” with “Decoder”.*
- 16) *From page 47 to page 51, all rows expressed as “CS” in Table 26 should be corrected to “SC”.*
- 17) *In 7.2.2, the third line of the second paragraph, replace the reference to Table 28 with a reference to Table 27.*
- 18) *In 7.2.2, the fourth line of the second paragraph, replace the reference to Table 29 with a reference to Table 28.*
- 19) *In 7.2.2, the first line of the third paragraph, replace the reference to Table 30 with a reference to Table 29.*
- 20) *Move Table 29 to after the third paragraph of 7.2.2.*
- 21) *In the title of Table 29, replace “conding” with “coding”.*
- 22) *In the title of Table 30, replace “enconding” with “encoding”.*
- 23) *In 7.2.3, the first line of the second paragraph, replace the reference to Table 31 with a reference to Table 30.*
- 24) *Move Table 30 to between second and third paragraph of 7.2.3.*
- 25) *In page 62, Figure C.2, inside the first decision box (diamond shape), third line –*  
change: “ $c_{\max} - c_{\text{old}} < (c_{\text{all}} \gg 4)$ ”  
to: “ $c_{\max} - c_{\text{old}} > (c_{\text{all}} \gg 4)$ ”.
- 26) *In page 62, Figure C.2, outside the first decision box (diamond shape) –*  
add to right side output: “No”  
add to bottom output: “Yes”.
- 27) *In Annex F, update the ninth paper listed as follows:*  
“DUTTWEILER (D.) and CHAMZAS (C.): Probability estimation in arithmetic and adaptive-Huffman entropy coders, to be published in *IEEE Trans. on Image Processing*, March 1995.”
- 28) *In Annex F, update the tenth paper listed as follows:*  
“SHEINVALD (O.) and PASCO (R.): Deterministic prediction in progressive coding, *IEEE Trans. on Information Theory*, Vol. 39, No. 2, March 1993.”