INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

T.85

Amendment 1
(10/96)

SERIES T: TERMINALS FOR TELEMATIC SERVICES

Application profile for Recommendation T.82 – Progressive bi-level image compression (JBIG coding scheme) for facsimile apparatus

Amendment 1

ITU-T Recommendation T.85 – Amendment 1

(Previously CCITT Recommendation)

ITU-T T-SERIES RECOMMENDATIONS

TERMINALS FOR TELEMATIC SERVICES

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FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

Amendment 1 to ITU-T Recommendation T.85 was prepared by ITU-T Study Group 8 (1993-1996) and was approved by the WTSC (Geneva, 9-18 October 1996).

NOTE

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

CONTENTS

SUMMARY

Recommendation T.85 defines the application profile of Recommendation T.82 for facsimile.

This Amendment contains the following two parts:

- Part 1 – Editorial corrections to the main body of Recommendation T.85.
- Part 2 – A new appendix to Recommendation T.85.

Amendment 1 to Recommendation T.85

APPLICATION PROFILE FOR RECOMMENDATION T.82 – PROGRESSIVE BI-LEVEL IMAGE COMPRESSION (JBIG CODING SCHEME) FOR FACSIMILE APPARATUS

AMENDMENT 1

(Geneva, 1996)

PART 1 – EDITORIAL CORRECTIONS TO THE MAIN BODY OF RECOMMENDATION T.85

1) Subclause 4.3 the third line:

"facsimile document" should be replaced by "facsimile page".

2) Note 4 of Table 1/T.85:

"OPTIONS" should be corrected to "OPTION".

PART 2 – A NEW APPENDIX TO RECOMMENDATION T.85

Appendix I

Examples of the usage of NEWLEN marker segment

This Appendix describes examples of the usage of NEWLEN marker segment for the case when the facsimile terminal cannot identify the vertical size Y_D of the page to be transmitted when it starts coding. This appendix applies to the single-progression sequential coding described in clause 4.

The examples shown in this Appendix illustrate the application of 6.2.6.2/T.82.

I.1 Basic mode

The first two examples show the case when one page of 500 lines is transmitted in basic mode with $L_0 = 128$. One page is coded into multiple stripes with the condition that the vertical length of the page is unknown when the transmitting facsimile terminal starts coding. For the first example, Y_D is set to 0xffffffff. Then, at the line of 500, the image data exhausts.

Data stream for basic mode-1

BIH (Y_D = 0xffffffff, L_0 = 128, VLENGTH = 1 – Other parameters shall be set appropriately).

Encoded image data of the first stripe (line 1-128).

ESC, SDNORM.

Encoded image data of the second stripe (line 129-256).

ESC, SDNORM.

Encoded image data of the third stripe (line 257-384).

ESC, SDNORM.

ESC, NEWLEN, New Y_D (= 500).

Encoded image data of the fourth stripe (line 385-500).

ESC, SDNORM.

The following data stream is an example, where the length of the page is not known before coding the last stripe. Note that this case requires the use of a "null" stripe. This example will also illustrate an estimate of page length that is not the maximum possible (e.g. Y_D = 1024 = 0x00000400).

Data stream for basic mode-2

BIH (Y_D = 0x00000400, L_0 = 128, VLENGTH = 1 – Other parameters shall be set appropriately).

Encoded image data of the first stripe (line 1-128).

ESC, SDNORM.

Encoded image data of the second stripe (line 129-256).

ESC, SDNORM.

Encoded image data of the third stripe (line 257-384).

ESC, SDNORM.

Encoded image data of the fourth stripe (line 385-500).

ESC, SDNORM.

ESC, NEWLEN, New Y_D (= 500), ESC, SDNORM.

I.2 Option mode

This example shows the case of "one stripe per page" (also requires an "added" null stripe) transmission in OPTION mode. This optional mode can only be used following a successful negotiation. Note that a coder or decoder that cannot support the actual stripe size may have to terminate the call. At the beginning of encoding, as the vertical length of the page is undetermined, Y_D is set to the maximum value, Y_D = 0xffffffff (one possible choice). As the stripe size is also undetermined, L_0 is set to the same value as Y_D, L_0 = 0xffffffff. The actual number of the vertical lines is 500.

Data stream for OPTION mode

BIH (Y_D = 0xffffffff, L_0 = 0xffffffff, VLENGTH = 1 – Other parameters shall be set appropriately).

Encoded image data of the first stripe (line 1-500).

ESC, SDNORM.

ESC, NEWLEN, New Y_D (= 500).

ESC, SDNORM.

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