



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**T.563**

**Amendment 1**

(07/97)

SERIES T: TERMINALS FOR TELEMATIC SERVICES

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Terminal characteristics for Group 4 facsimile  
apparatus

**Amendment 1**

ITU-T Recommendation T.563 – Amendment 1

(Previously CCITT Recommendation)

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ITU-T T-SERIES RECOMMENDATIONS  
**TERMINALS FOR TELEMATIC SERVICES**

*For further details, please refer to ITU-T List of Recommendations.*

# **ITU-T RECOMMENDATION T.563**

## **TERMINAL CHARACTERISTICS FOR GROUP 4 FACSIMILE APPARATUS**

### **AMENDMENT 1**

#### **Summary**

Recommendation T.563 defines the terminal characteristics for G4 facsimile apparatus. This Amendment is to enable colour and gray-scale extension using lossless coding scheme defined in Recommendation T.43.

#### **Source**

Amendment 1 to ITU-T Recommendation T.563 was prepared by ITU-T Study Group 8 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 2nd of July 1997.

## FOREWORD

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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.

## NOTE

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

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## TERMINAL CHARACTERISTICS FOR GROUP 4 FACSIMILE APPARATUS

### AMENDMENT 1

(Geneva, 1997)

**1) Amend 1.4 to read:**

**1.4** The basic image type of the Group 4 facsimile apparatus is black and white. Colour and gray-scale image type is optional.

Other image types are for further study.

**2) Amend 2.3 to read:**

**2.3** The Group 4 facsimile coding scheme and facsimile control functions are defined in Recommendations T.6, T.81, T.82 and T.43.

**3) Add new subclause 2.6:**

**2.6** For the colour and gray-scale image using lossless coding scheme, its representation and coding scheme for G4 facsimile is defined in Recommendation T.43. This mode is an optional colour and gray-scale mode which may only be implemented if the associated base colour and gray-scale mode specified in 2.5 of this Recommendation is implemented.

**4) Amend 3.2.8.4 to read:**

**3.2.8.4** For colour facsimile of continuous tone image as described in 3.8.5 with more than one colour component, the coding scheme defined in Recommendation T.81 shall be used. For colour facsimile of colour and gray-scale image using lossless coding scheme as described in 3.3.6, the coding scheme defined in Recommendation T.43 shall be used.

**5) Amend 3.3.6 to read:**

**3.3.6** Optional functions for colour and gray-scale images using Recommendation T.81 coding scheme:

- a) colour image data are expressed by direct colour expression using colour space "CIELAB";
- b) the basic image mode for this option is gray-scale and the optional mode is continuous tone colour;
- c) the basic value of bit per colour component is 8 bit/colour component. The optional value is 12 bit/colour component;
- d) the basic coding scheme for continuous-tone image in this extension is the baseline coding scheme of Recommendation T.81;
- e) continuous tone image may be coded losslessly by the coding scheme defined in Recommendation T.81;
- f) colour tolerance is for further study.

## **6 Add new subclause 3.3.7 as follows:**

### **3.3.7 Optional functions for colour and gray-scale images using bit-plane image representation and lossless coding scheme defined in Recommendation T.43**

- a) This mode is an optional colour and gray-scale mode which may only be implemented if the associated base colour and gray-scale mode specified in 3.3.6 of this Recommendation is implemented. Implementation of the gray-scale mode of this subclause requires implementation of the associated gray-scale mode of 3.3.6 of this Recommendation. Similarly, implementation of the colour mode of this subclause requires implementation of the associated colour mode of 3.3.6 of this Recommendation.
- b) Three image types are referred to in this option; namely, one bit per colour image, palettized-colour image and continuous-tone colour/gray-scale image.
- c) Colour image data for one bit per colour image are expressed by colour primaries such as "C, M, Y, (K)" or "R, G, B".
- d) Colour image data for palettized colour image are expressed by colour indices of the colour palette table in which each colour is specified in "CIELAB" space.
- e) Colour image data for continuous-tone image are expressed by direct colour expression using colour space "CIELAB"; gray-scale data for continuous-tone image are expressed by direct colour expression using L\* component of colour space "CIELAB".
- f) The basic value is 8 bits gray-scale and the optional values are 8 bits colour, 12 bits gray-scale and 12 bits colour.
- g) 8 bits colour mode consists of one bit per colour image, basic palettized colour image, 8 bits gray-scale image and 8 bits/comp. continuous-tone colour image and 12 bits colour mode consists of colour images contained in the 8-bit colour mode, extended palette colour image, 12 bits gray-scale image and 12 bits/comp. continuous-tone colour image.
- h) Basic palettized colour image is palettized image using 12 bits or less entries and 8 bit/comp. precision table.
- i) Extended palettized colour image is palettized image using 13 to 16 bits entries and 8 bits/comp. precision table or up to 16 bits entries and 12 bits/comp. precision table.
- j) These image types are specified in Annex C/T.503.
- k) Colour tolerance is for further study.



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