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**ITU-T**

TELECOMMUNICATION  
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OF ITU

**Amendment 1**  
**T.432**  
(08/95)

**TERMINALS FOR TELEMATIC SERVICES**

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**DOCUMENT TRANSFER AND MANIPULATION  
(DTAM) – SERVICES AND PROTOCOLS –  
SERVICE DEFINITION**

**AMENDMENT 1: REVISIONS OF T.432 TO  
SUPPORT G4 COLOUR AND FILE TRANSFER**

**Amendment 1 to  
ITU-T Recommendation T.432**

(Previously “CCITT Recommendation”)

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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 T.432, was prepared by ITU-T Study Group 8 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 11th of August 1995.

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## 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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## **SUMMARY**

Recommendation T.432 currently defines the document bulk transfer of Group 4 Telefax documents as the DTAM transparent mode and of arbitrary documents and binary files in the DTAM normal mode. Amendment 1 provides for the transfer of binary files (based upon Recommendation T.434), and other formats, such as DTM, JPEG, EDIFACT and also Colour facsimile documents in the DTAM transparent mode. This amendment mainly concentrates on the amendments for the association establishment, where the relevant formats need to be recognized, and on the transfer phase, where segmenting must be extended to information that is not structured page by page.

## REVISIONS OF T.432 TO SUPPORT G4 COLOUR AND FILE TRANSFER

(Geneva, 1995)

### 1 Introduction

This amendment contains the revision of existing Recommendations T.432 in order to support colour and file transfer extension for G4 facsimile application.

### 2 Modifications of Recommendation T.432

#### 2.1 The following new subclause should be added after 9.1.1.3.1.5 in Recommendation T.432

##### 9.1.1.3.1.6 Additional document characteristics

This parameter specifies the additional document characteristics available to the sender of this parameter as receiving capabilities. In DTAM transparent mode, this parameter is specially used to indicate capability of G4 facsimile machine to handle colour. The attributes and values that may be specified by this parameter are restricted to those, permitted by the corresponding document application profile. The parameter may be present in both the normal and the Transparent Mode.

The values of this parameter are as described in Recommendation T.414.

#### 2.2 The following new subclause should replace 9.1.1.3.2 in Recommendation T.432

##### 9.1.1.3.2 File transfer capabilities

This parameter specifies file transfer capabilities which are available to the sender of this parameter as receiving capabilities. The parameter is present in both the normal and the Transparent Mode. This parameter may have one of the following values.

- *BFT (Binary File Transfer) capabilities*

This parameter indicates the capability to receive files encoded to the specification of Recommendation T.434.

- *Transparent data capabilities*

This parameter indicates that the sender is ready to accept (when acting as a receiver) data that are transferred completely transparently.

- *DTM (Document Transfer Mode) capabilities*

This parameter indicates the capability to receive BFT files (defined in Recommendation T.434) encoded to the DTM coding rules defined in Recommendation T.563.

- *EDIFACT capabilities*

This parameter indicates the capability to receive files encoded to the EDIFACT formats defined in ISO/IEC 9735.

#### 2.3 Insert new subclause 9.1.1.3.3 in Recommendation T.432

##### 9.1.1.3.3 Private capabilities

This parameter indicates capabilities for private values. DTAM-PM does not care about the contents of this parameter. This parameter is only present in the Transparent Mode.

**2.4 Table 5/T.432 should be replaced by the following new table**

TABLE 5/T.432

**D-CAPABILITY service parameters**

Parameter	D-CAPABILITY request	D-CAPABILITY indication	D-CAPABILITY response	D-CAPABILITY confirmation
Application Capabilities				
ODA Application Capabilities				
Document Application Profile	U	C(=)	U	C(=)
* Document Architecture Class	U	C(=)	U	C(=)
Non-Basic Document Characteristics	U	C(=)	U	C(=)
Non-Basic Structural Characteristics	U	C(=)	U	C(=)
• Operational application profile	U	C(=)	U	C(=)
Additional Document Characteristics	U	C(=)	U	C(=)
File Transfer Capabilities	U	C(=)	U	C(=)
* Private Capabilities	U	C(=)	U	C(=)
• Capability result			M	M(=)
• User information	U	C(=)	U	C(=)
<ul style="list-style-type: none"> <li>• This parameter is absent in the Transparent Mode</li> <li>* This parameter is only present in the Transparent Mode</li> </ul> NOTE – The meaning of the characters in the table is given in clause 4.				

**2.5 The following new subclause should be added after 9.5.1.1.1.5 in Recommendation T.432**

**9.5.1.1.1.6 Additional document characteristics**

This parameter specifies the additional document characteristics available to the sender of this parameter as receiving capabilities. The attributes and values that may be specified by this parameter are restricted to those that are permitted by the corresponding document application profile.

The values of this parameter are as described in Recommendation T.414.

**2.6 The following new subclause should replace 9.5.1.1.2 in Recommendation T.432**

**9.5.1.1.2 File transfer capabilities**

This parameter specifies file transfer capabilities which are available to the sender of this parameter as receiving capabilities. The parameter is present in both the Normal Mode and the Transparent Mode. The values of this parameter may be one of the following:

- *BFT (Binary File Transfer) capabilities*

This value indicates the capability to receive files encoded to the specification of Recommendation T.434.

- *Transparent data capabilities*

This value indicates that the sender is ready to accept (when acting as a receiver) data that are transferred completely transparently.

- *DTM (Document Transfer Mode) capabilities*

This value indicates the capability to receive BFT files (defined in Recommendation T.434) encoded to the DTM encoding rules defined in Recommendation T.563.

- *EDIFACT capabilities*

This value indicates the capability to receive files encoded to the EDIFACT formats defined in ISO/IEC 9735.

## **2.7 Insert new subclause 9.5.1.1.3**

### **9.5.1.1.3 Private capabilities**

This value indicates capabilities for private values. DTAM-PM does not care about the contents of this parameter. This value may be used in the Transparent Mode.

## **2.8 Subclause 9.6.1.7 in Recommendation T.432 should be replaced by the following new subclause**

### **9.6.1.7 Checkpoint value**

Under the DTAM Transparent Mode, the places to insert the checkpoints are related to a number of IDEs indicated by the DTAM user. A checkpoint should be set at the end of each segment and a segment should be composed of the number of integral IDEs which is indicated by the user. Only the number of IDEs of the last segment is equal or inferior to the indicated number.

In this case, this parameter specifies the number of IDEs that compose a segment.

NOTE 1 – Some applications may not count IDEs of Document Profile and Document Root.

If one of the different types of file transfer is carried out under DTAM Transparent Mode, the places to insert the checkpoints are related to a certain segment size indicated by the DTAM user. A checkpoint should be set at the end of each segment and a segment should be composed of a small amount of data which size is indicated by the user.

This parameter specifies the size of the segment. The value of this parameter is an integer superior to zero, and means a multiple of 1024 octets. A value of zero indicates that checkpoint will not be used. If this parameter is absent, Checkpoint Value zero is assumed.

NOTE 2 – Only the size of last segment may be equal or inferior to the indicated segment size.

NOTE 3 – As an example, value 2 means 2048 octets.