INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

T.504

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(03/93)

TELEMATIC SERVICES

TERMINAL EQUIPMENTS AND PROTOCOLS FOR TELEMATIC SERVICES

DOCUMENT APPLICATION PROFILE FOR VIDEOTEX INTERWORKING

ITU-T Recommendation T.504

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. 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, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation T.504 was revised by the ITU-T Study Group VIII (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

_____

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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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 operating agency.

CONTENTS

DOCUMENT APPLICATION PROFILE FOR VIDEOTEX INTERWORKING

(Melbourne, 1988; Helsinki, 1993)

1 Scope

1.1   This Recommendation defines a document application profile which conforms to the T.400-Series Recommendations.

Its purpose is to specify a document architecture level and a content architecture level, and to select an interchange format class suitable for videotex interworking as defined in configuration 1 of Recommendation F.300 and in Recommendation T.564.

2 Field of application

This Recommendation defines a document that is in conformance with the T.400-Series Recommendations and that allows interworking between two videotex services using configuration 1 defined in Recommendation F.300 and Recommendation T.564. The videotex documents are interchanged only in a formatted form, allowing the recipient to reproduce them as intended by the originator.

This document application profile defines the features of the document structure that can be interchanged.

3 References

– Rec. F.300 *Videotex service.*

– Rec. X.200 *Reference model of open systems interconnection for CCITT applications.*

– Rec. X.213 *Network service definition for open systems interconnection for CCITT applications.*

– Rec. X.214 *Transport service definition for open systems interconnection of CCITT applications.*

– Rec. X.224 *Transport protocol specification for open systems interconnection for CCITT applications.*

– Rec. X.215 *Session service definition for open systems interconnection of CCITT applications.*

– Rec. X.225 *Session protocol specification for open systems interconnection for CCITT applications.*

– Rec. X.216 *Presentation service definition for open systems interconnection for CCITT applications.*

– Rec. X.226 *Presentation protocol specification for open systems interconnection for CCITT applications.*

– Rec. X.217 *Association control service definition for open systems interconnection for CCITT applications.*

– Rec. X.227 *Association control service specification for open systems interconnection for CCITT applications.*

– Rec. T.101 *International interworking for videotex services.*

– Rec. T.400 *Introduction to document architecture, transfer and manipulation.*

- Rec. T.411 *Open document architecture (ODA) and interchange format – Introduction and general principles*.

- Rec. T.412 *Open document architecture (ODA) and interchange format – Document structures*.

- Rec. T.414 *Open document architecture (ODA) and interchange format – Document profile*.

- Rec. X.415 *Open document architecture (ODA) and interchange format – Open document interchange format (ODIF)*.

- Rec. T.431 *Document transfer and manipulation (DTAM) – Services and protocols – Introduction and general principles*.

- Rec. T.432 *Document transfer and manipulation (DTAM) – Services and protocols – Service definition*.

- Rec. T.433 *Document transfer and manipulation (DTAM) – Services and protocols – Protocol specification*.

- Rec. T.441 *Document transfer and manipulation (DTAM) – Operational structure*.

- Rec. T.523 *Communication application profile DM1 for videotex interworking*.

- Rec. T.541 *Operational application profile for videotex interworking*.

- Rec. T.564 *Gateway characteristics for videotex interworking*.

4   Definitions

The definitions of the T.400-Series Recommendations apply also to this Recommendation.

5   Characteristics supported by this document application profile

5.1   Overview

A videotex document is the information that is retrieved by a single user function and presented as a complete entity. Therefore the purpose of this document application profile is to allow the recipient to image the layout of the interchanged document as intended by the originator.

This subclause specifies the functional description of the features supported by this document application profile.

5.2   Logical characteristics

Not used.

5.3   Layout characteristics

5.3.1   Layout document structure

At a given time a document contains one single page which contains one or more blocks.

The content of the block is:

- "Videotex" content.

5.3.2   Document structure elements

5.3.2.1   Page format

The page format is expressed in accordance with the definition of the videotex service or videotex terminal, by using scaled measurement units. The relation between BMUs and SMUs is specified in the document profile.

5.3.2.2   Block size

The position and the dimension of the blocks are restricted to be equal to those of the page. Block size not equal to page is for further study.

6 Definition of the document application profile

6.1 Overview

6.1.1 Document architecture level

The document application profile makes use of document architecture class FDA as defined in Recommendation T.412.

The document architecture level includes the following structure:

– a specific layout structure.

The document architecture level is defined in Tables 1, 2 and 3.

6.1.2 Content architecture level

The content architecture level that may be used in documents conforming to this document application profile is as follows:

– "Videotex".

Details are specified in Recommendation T.101.

6.2 Document profile level

The document profile level used in this document application profile is defined in Table 4. Every document interchanged in accordance with this document application profile must include a document profile.

6.2.1 Interchange format class

The interchange format class used in this document application profile is "B" as defined in Recommendation T.415.

6.2.2 Definition of document structure

The document structure contains a specific layout structure. The number of hierarchical levels is 3, namely:

– document layout root;

– page;

– block.

All these levels are mandatory.

At most one content portion can be associated with one block.

6.3 Specification of attributes

The attributes applicable to constituents of the layout structure are defined in Tables 1 and 2, using the following notation:

– Attribute not applicable

M Attribute is mandatory

Nm Attribute is non-mandatory

D Attribute is defaultable

* Exceptionally not used by this document application profile

TABLE 1/T.504

Attributes applicable to layout objects

Attribute	Layout root	Page	Block	
Shared attributes				
Object type	M	M	M	
Object identifier	M	M	M	(Note 1)
Subordinates	*	*	*	
Content architecture class	–	D	D	
Default value list	Nm	–	–	
Application comments	–	–	D	
Layout attributes				
Position	–	–	D	(Note 2)
Dimensions	–	D	D	(Note 2)
Page position	–	D	–	
Medium type	–	D	–	

NOTES

1 According to the specifications of Recommendation T.412 this attribute may be omitted if the value can be derived unambiguously from the transmission sequence of the relevant objects.

2 For the block, the value of the attributes position and dimensions is restricted to those of the page. Using other values is for further study.

TABLE 2/T.504

Attributes applicable to content portions

Attribut	Content portion	
Content identifier layout	M	(Note 1)
Type of coding	D	
Coding attributes	D	(Note 2)
Content information	D	(Note 2)

NOTES

1 According to the specifications of Recommendation T.412 this attribute may be omitted if the value can be derived unambiguously from the transmission sequence of the relevant objects and content portions.

2 The use of these attributes applicable to content portions is specified in Recommendation T.101.

TABLE 3/T.504

Attribute values for layout objects

Attribute	Basic value	Default value	Non-basic value
Shared attributes			
Object type	Document layout root Page Block	None	None None None
Object identifier	(Rec. T.412)	None	None
Content architecture class	Videotex content architecture		None
Default value lists	(Table 5)	None	None
Application comments	(Rec. T.564)	(Table 6)	None
Layout attributes			
Position	(Rec. T.412 and Notes 1 and 2)	(0,0)	None
Dimensions	(Rec. T.412 and Notes 1 and 2)	(40,24)	None
Page position	(Rec. T.412 and Note 1)	(0,0)	None
Medium type	(Rec. T.412)	(40,24) (Unspecified)	None

NOTES

1   Positions and dimensions are specified by using scaled measurement units. The unit scaling factor is defined by the attribute "unit scaling" within the document profile. The "nominal page size" within the attribute "medium type" defines the number of rows and columns to be imaged on the screen by the videotex application in terms of SMUs.

For the block, the position and dimensions are those of the page.

2   It has to be taken into account that within the national videotex systems the position is usually determined by (1,1).

TABLE 4/T.504

Document profile descriptor

Data element name	Classe	Value	Comments
Document profile descriptor	M		
Specific layout structure	M	1	Presence of specific layout structure
Document characteristics	M		
Document application profile	M	0 1 8 16 0	Object identifier
Document application profile default	M		(Note 1)
Document architecture class	M	1	FDA
Content architecture classes	M	0 1 8 16 3	Object identifier
Interchange format class	M	«B»	
ODA version	M		
Unit scaling	M		
Document management attributes	Nm		(Note 2)
Title	Nm		
Document date and time	Nm		
Owners	Nm		
Document reference	Nm		
Additional information	Nm		

NOTES

1   Default values differing from those defined in Recommendation T.412 are specified for the attributes (see Table 3):

–   content architecture class;

–   dimensions;

–   page position;

–   medium type.

2   The relation specified by this attribute is not taken into account within the videotex interworking application. It is used when printing on paper of a videotex page is intended.

TABLE 5/T.504

Defaultable attributes that may be specified in a default value list

Object type	Defaultable attributes
Page	Dimensions Page position Application comments
Block	Object identifier Presentation attributes Dimensions Position Application comments
Content portion	Type of coding Coding attributes Content information

TABLE 6/T.504

**Default values for application defined attributes defined in
Recommendation T.564 and mapped to the attribute application
comments defined in Recommendation T.412**

Liste of attributes	Default value
Block	
Display-indication	"Mandatory"

Annex A

Summary of ASN.1 object identifiers

(This annex forms an integral part of this Recommendation)

ASN.1 object identifier value	Description	Reference
0 1 8 16 0	Object identifier for this document application profile	Table 4, Subclause 6.3