INTERNATIONAL STANDARD

ISO/IEC 9041-2

Second edition
1997-06-15

Information technology — Open Systems Interconnection — Virtual Terminal Basic Class Protocol —

Part 2:
Protocol Implementation Conformance Statement (PICS) proforma

Technologies de l'information — Interconnexion de systèmes ouverts (OSI) — Protocole de classe de base de terminal virtuel —

Partie 2: Déclaration de conformité de mise en œuvre du protocole (PICS)

Reference number
ISO/IEC 9041-2:1997(E)

--`,,```,,,,````-`-`,,`,,`,`,,`---

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS

Not for Resale

Contents

	Page
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Definitions	1
5 Abbreviations	1
Annexes	
A PICS Proforma .	2
A.1 Identification .	2
A.2 VT service options	5
A.3 VT environment parameters .	6
A.4 Supported VT PDUs .	24
A.5 VTPDU Parameters .	26
A.6 Lower Level Negotiation Elements	46
B Conditional expressions	62

© ISO/IEC 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO and IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC 9041-2 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology,* Subcommittee SC21, *Open systems interconnection, data management and open distributed processing.*

This second edition cancels and replaces the first edition (ISO/IEC 9041-2:1993), which has been technically revised.

ISO/IEC 9041 consists of the following parts, under the general title *Information technology - Open Systems Interconnection - Virtual Terminal Basic Class Protocol:*

- *Part 1: Specification*
- *Part 2: Protocol Implementation Conformance Statement (PICS)* proforma

Annexes A and B form an integral part of this part of ISO/IEC 9041.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

© ISO/IEC

Introduction

ISO/IEC 9041 is one of a set of International Standards produced to facilitate the interconnection of information processing systems. It is related to other International Standards in the set as defined by the Reference Model for Open Systems Interconnection (ISO/IEC 7498-1). The Reference Model subdivides the area of standardization for interconnection into a series of layers of specification, each of manageable size.

The goal of Open Systems Interconnection is to allow, with a minimum of technical agreement outside the interconnection standards, the interconnection of information processing systems:

- from different manufacturers;
- under different managements;
- of different levels of complexity; and
- of different technologies.

ISO/IEC 9041-1 specifies the protocol for the application-service element for the Basic Class Virtual Terminal.

To evaluate the conformance of a particular implementation, it is necessary to have a description of the capabilities and options which have been implemented. Such a description is called a Protocol Implementation Conformance Statement (PICS).

This part of ISO/IEC 9041 includes the PICS proforma for the Basic Class Virtual Terminal protocol as defined in ISO/IEC 9041-1.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Information technology - Open Systems Interconnection - Virtual Terminal Basic Class Protocol -

Part 2: Protocol Implementation Conformance Statement (PICS) proforma

1 Scope

This part of ISO/IEC 9041 provides the PICS proforma for the Basic Class Virtual Terminal protocol as specified in ISO/IEC 9041-1 in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-2.

This part of ISO/IEC 9041 defines a guideline to be used when appraising the conformance of Virtual Terminal implementations. It does not specify either the Virtual Terminal Protocol or the Virtual Terminal Service description.

2 Conformance

The supplier of a protocol implementation which is claimed to conform to ISO/IEC 9041-1 is required to complete a copy of the PICS proforma provided in annex A and is required to provide the information necessary to identify both the supplier and the implementation.

When an implementation is claimed to support more than one Application Profile, the PICS proforma may be completed either in respect of one Application Profile or, by the use of conditional support answers, in respect of the implementation as a whole. In the latter case the predicates referenced by the conditional answers shall be defined in the System Conformance Statement (SCS) that accompanies the completed PICS.

3 Normative references

ISO/IEC 9040 : 1997, *Information technology - Open Systems Interconnection - Virtual Terminal Basic Class Service.*

ISO/IEC 9041-1 : 1997, *Information technology - Open Systems Interconnection - Virtual Terminal Basic Class Protocol - Part 1: Specification.*

ISO/IEC 9646-1 : 1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts.*

ISO/IEC 9646-2 : 1994, *Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification.*

ISO/IEC TR 10000-2: 1995, *Information technology - Framework and taxonomy of International Standardized Profiles -Part 2: Principles and Taxonomy for OSI profiles.*

NOTE – Throughout the tables in this part of ISO/IEC 9041, references to the base text of ISO/IEC 9040 and ISO/IEC 9041-1 are made in the base reference columns using the abbreviations S or P with a clause number. This should be interpreted to mean a reference to the Service standard or to the Protocol standard respectively. Where the letter T appears with S or P, the reference is to a table number in the service or the protocol. To obtain a reference for a particular entry, the reader should either take the reference as specified or take the previous (higher) reference in that column of the table.

4 Definitions

This part of ISO/IEC 9041 uses the following terms defined in ISO/IEC 9646-1:

a) PICS proforma;

b) protocol implementation conformance statement (PICS);

5 Abbreviations

This part of ISO/IEC 9041 uses the following abbreviation defined in ISO/IEC 9646-1:

PICS: Protocol Implementation Conformance Statement

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Annex A[1]

(normative)

Protocol Implementation Conformance Statement (PICS) Proforma for the Virtual Terminal Basic Class Protocol

A.1 Identification

A.1.1 Guidance for completion

This clause is used to record the date of completion of the PICS, and to describe the supplier of the implementation, the implementation itself and the standards to which the implementation is claimed to conform.

A.1.2 Date

Table A.1 - Date

Ref.	Question	Response
1	Date of statement (yy-mm-dd)	

A.1.3 Supplier details

Table A.2 - Supplier details

Ref.	Question	Response
1	Organisation	
2	Contact name (s)	
3	Address	
4	Telephone	
5	Telex	
6	Fax	
7	E-mail	
8	Other information	

1) **Copyright release for PICS proformas**
Users of this International Standard may freely reproduce the PICS proforma in this annex so that it can be used for its intended purpose and may further publish the completed PICS.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.1.4 Implementation details

Table A.3 - Implementation details

Ref.	Question	Response
1	Implementation name	
2	Version	
3	Hardware name	
4	Hardware version	
5	Operating system name	
6	Operating system version	
7	Special configuration requirements	
8	Other Information	

A.1.5 Claimed compliance to standards

A.1.5.1 ISO/IEC 9041

Table A.4 - Protocol details

Ref.	Question	Response
1	Are all the mandatory features of ISO/IEC 9041-1 implemented? See note.	
2		

A.1.5.2

Note – Answering "no" to this question indicates non-conformance to ISO/IEC 9041-1. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming.

A.1.5.3 Corrigenda implemented

Table A.5 shall be used to list Corrigenda to ISO/IEC 9041-1 and its amendments which have been implemented. Only those corrigenda should be listed which affect conformance.

Table A.5 - Corrigenda details

Ref.	Number	Description
1		
2		
3		

A.1.5.4 Defect report solutions implemented

There is not necessarily a one to one correspondence between defect reports solutions and Corrigenda. Only those defect report solutions which affect conformance should be listed.

Table A.6 - Defect report details

Ref.	Number	Description
1		
2		
3		

--`,,```,,,,````-`-`,,`,,`,`,,`---
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

© ISO/IEC

A.1.5.5 Application profiles

Support for specified Application Profiles shall be indicated by the following categorization for the "Support" column.

y : supported

This Application Profile is supported by the implementation.

- : not supported

This Application Profile is not supported by the implementation.

Table A.7 – Application profile support

Ref.	Feature	Status	Reference	Support
	Profiles in the TR10000-2 Taxonomy			
	AVT1n A-mode Application Profiles			
1	AVT11 A-mode Default Profile	c1	S A.4	
2	AVT12 Telnet			
3	AVT13 Scroll			
4	AVT14 CCITT X.3 PAD Interworking			
5	AVT15 Transparent			
6	AVT16 Generalized Telnet			
	AVT2n S-mode Application Profiles			
7	AVT21 S-mode Default	c1	S A.3	
8	AVT22 Forms			
9	AVT23 Paged			
10	AVT24 Enhanced Forms			
11	AVT25 Enhanced Paged			
	List of other registered Application Profiles supported			

A.1.5.6 Other information

Table A.8 - Other details

Ref.	Response
1	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.2 VT service options

A.2.1 Functional units

Table A.9 summarizes the VT functional units available to the VT service user. The following classification is used in the "status" column:

o : optional

This functional unit is defined as optional in ISO/IEC 9040 and may be supported by implementations claiming to conform with ISO/IEC 9041.

c : conditional

This functional unit is defined as optional but it is also defined as conditional on the selection of other functional units defined as optional in ISO/IEC 9040 and shall be supported wherever those conditions are met by implementations claiming to conform with ISO/IEC 9041.

To specify the level of support for each Functional Unit, the following classification shall be used to fill in the "support" column:

y : supported

This functional unit is supported.

- : not supported

This functional unit is not supported.

Table A.9 - Functional units

Ref.	Functional Units	Status	Base Ref.	Support
1	Switch Profile Negotiation	c2	S 10.1.1	
2	Multiple Interaction Negotiation	o	S 10.1.2	
3	Negotiated Release	o	S 10.2	
4	Urgent Data	o	S 10.3	
5	Break	o	S 10.4	
6	Enhanced Access-rules	o	S 10.5	
7	Structured Control Objects	c3	S 10.6	
8	Blocks	o	S 10.7	
9	Fields	o	S 10.8	
10	Reference	o	S 10.9	
11	Ripple	o	S 10.10	
12	Exceptions	o	S 10.11	
13	Context	o	S 10.12	

A.2.2 Mode

Table A.10 below summarises the VT mode of operation facilities available to the VT service user.

The following classification is used in the "status" column:

o : optional

This mode is defined as optional in ISO/IEC 9040 and may be supported by implementations claiming to conform with ISO/IEC 9041.

c : conditional

This mode is defined as conditional in ISO/IEC 9040. Either S-mode or A-mode shall be supported by implementations claiming to conform with ISO/IEC 9041.

To specify the level of support for each mode, the following classification shall be used to fill in the "support" column:

y : supported

This mode is supported.

- : not supported

This mode is not supported.

Table A.10 - VT mode

Ref.	Feature	Status	Base Ref.	Support
1	S-mode	o	S 8.1	
2	A-mode	o	S 8.2	
3	Mode switching	o	S 8	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3 VT environment parameters

This clause lists the VTE-parameters that are required by ISO/IEC 9040 for the single Dispay Object defined for S-mode or the screen Display Object for A-mode and specifies the values that each may carry. The following classification is used in the "status" column:

m : mandatory

This VTE-parameter or value is mandatory in ISO/IEC 9040 and shall be supported by implementations claiming to conform with ISO/IEC 9041.

o : optional

This VTE-parameter or value is optional in ISO/IEC 9040 may be supported by implementations claiming to conform with ISO/IEC 9041.

c : conditional

This VTE-parameter or value is conditional and support is conditional on the value(s) of other VTE-parameter(s) in ISO/IEC 9040 and shall be supported wherever those conditions are met by implementations claiming to conform with ISO/IEC 9041.

To specify the level of support for each VTE-parameter, the following classification shall be used to fill in the "support" column:

y : supported

This VTE-parameter or parameter value is supported by this implementation.

- : not supported

This VTE-parameter or parameter value is not supported by this implementation.

The "allowed values" column identifies for each item the values that it is permitted to take a defined in ISO/IEC 9040.

The "default" column identifies for each item which of the "allowed values" is defined to be the default value in ISO/IEC 9040.

The "supported values" column shall be filled in to identify which of the "allowed values" is supported by this implementation. If all "allowed values" are supported, then "all" shall be used to fill in this column.

If it is not possible to fit in sufficient information in the table for a specific entry, then a reference may be inserted in the "Extra Info Ref" column. Additional sheets may then be filled in to satisfy the reference.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.1 Display object parameters (S-mode)

Table A.11 - Miscellaneous display object VTE parameters (S-mode)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	display-object-name	S 18.1	m			Any PrintableString			
2	erasure-capability	S 18.1	o		"no"	"yes", "no"			
3	DO-access	S 18.1	m			"WAVAR"			
4	block-definition-capability	S 18.1	c4		"no"	"yes", "no"			
5	b-bound	S 18.2.1	c4		1	1....N, "unbounded"			
6	field-definition-capability	S 18.1	c5		"no"	"yes", "no"			
7	max-fields	S 18.2.2	c5		1	1....N, "unbounded"			
8	max-field-elements	S 18.2.2	c5		1	1....N, "unbounded"			
9	access-outside-fields	S 18.2.2	c5		"allowed"	"allowed", "not allowed"			
10	ripple-capability	S 18.1	c89		"no"	"yes", "no"			

A.3.2 Display object parameters (A-mode DO A)

Table A.12 - Miscellaneous display object VTE parameters (A-mode DO A)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	display-object-name	S 18.1	m			Any PrintableString			
2	erasure-capability	S 18.1	o		"no"	"yes", "no"			
3	DO-access	S 18.1	m		see note	"WACI" & "WACA"			
4	block-definition-capability	S 18.1	c4		"no"	"yes", "no"			
5	b-bound	S 18.2.1	c4		1	1....N, "unbounded"			
6	field-definition-capability	S 18.1	c5		"no"	"yes", "no"			
7	max-fields	S 18.2.2	c5		1	1....N, "unbounded"			
8	max-field-elements	S 18.2.2	c5		1	1....N, "unbounded"			
9	access-outside-fields	S 18.2.2	c5		"allowed"	"allowed", "not allowed"			
10	ripple-capability	S 18.1	c89		"no"	"yes", "no"			

NOTE – In A-mode, one display object takes the value "WACI" whilst the other takes the value "WACA".

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.3 Display object parameters (A-mode DO B)

Table A.13 - Miscellaneous display object VTE parameters (A-mode DO B)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	display-object-name	S 18.1	m			Any PrintableString			
2	erasure-capability	S 18.1	o		"no"	"yes", "no"			
3	DO-access	S 18.1	m		see note	"WACI" & "WACA"			
4	block-definition-capability	S 18.1	c4		"no"	"yes", "no"			
5	b-bound	S 18.2.1	c4		1	1....N, "unbounded"			
6	field-definition-capability	S 18.1	c5		"no"	"yes", "no"			
7	max-fields	S 18.2.2	c5		1	1....N, "unbounded"			
8	max-field-elements	S 18.2.2	c5		1	1....N, "unbounded"			
9	access-outside-fields	S 18.2.2	c5		"allowed"	"allowed", "not allowed"			
10	ripple-capability	S 18.1	c89		"no"	"yes", "no"			

Note – In A-mode, one display object takes the value "WACI" whilst the other takes the value "WACA".

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.4 Display addressing parameters (S-mode)

Table A.14 - Addressing VTE parameters (S-mode)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	dimensions	S 18.1	m		"two"	"one", "two", "three"			
	x-dimension								
2	x-bound	S 18.2.3	m		"unbounded"	1....N, "unbounded"			
3	x-addressing		m		"higher"	"no constraint", "higher only", "not permitted"			
4	x-absolute		m		"no"	"yes", "no"			
5	x-window		m		S18.2.3	1....N, "unbounded"			
	y-Dimension								
6	y-bound		c6		"unbounded"	1....N, "unbounded"			
7	y-addressing		c6		"higher"	"no constraint", "higher only", "not permitted"			
8	y-absolute		c6		"no"	"yes", "no"			
9	y-window		c6		S18.2.3	1....N, "unbounded"			
	z-Dimension								
10	z-bound		c9		"unbounded"	1....N, "unbounded"			
11	z-addressing		c9		"higher"	"no constraint", "higher only", "not permitted"			
12	z-absolute		c9		"no"	"yes", "no"			
13	z-window		c9		S18.2.3	1....N, "unbounded"			

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.5 Display addressing parameters (A-mode DO A)

Table A.15 - Addressing VTE parameters (A-mode DO A)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	dimensions	S 18.1	m		"two"	"one", "two", "three"			
	x-dimension								
2	x-bound	S 18.2.3	m		"unbounded"	1....N, "unbounded"			
3	x-addressing		m		"higher"	"no constraint", "higher only", "not permitted"			
4	x-absolute		m		"no"	"yes", "no"			
5	x-window		m		S18.2.3	1....N, "unbounded"			
	y-Dimension								
6	y-bound		c7		"unbounded"	1....N, "unbounded"			
7	y-addressing		c7		"higher"	"no constraint", "higher only", "not permitted"			
8	y-absolute		c7		"no"	"yes", "no"			
9	y-window		c7		S18.2.3	1....N, "unbounded"			
	z-Dimension								
10	z-bound		c10		"unbounded"	1....N, "unbounded"			
11	z-addressing		c10		"higher"	"no constraint", "higher only", "not permitted"			
12	z-absolute		c10		"no"	"yes", "no"			
13	z-window		c10		S18.2.3	1....N, "unbounded"			

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.6 Display addressing parameters (A-mode DO B)

Table A.16 - Addressing VTE parameters (A-mode DO B)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	dimensions	S 18.1	m		"two"	"one", "two", "three"			
	x-dimension								
2	x-bound	S 18.2.3	m		"unbounded"	1....N, "unbounded"			
3	x-addressing		m		"higher"	"no constraint", "higher only", "not permitted"			
4	x-absolute		m		"no"	"yes", "no"			
5	x-window		m		S18.2.3	1....N, "unbounded"			
	y-Dimension								
6	y-bound		c8		"unbounded"	1....N, "unbounded"			
7	y-addressing		c8		"higher"	"no constraint", "higher only", "not permitted"			
8	y-absolute		c8		"no"	"yes", "no"			
9	y-window		c8		S18.2.3	1....N, "unbounded"			
	z-Dimension								
10	z-bound		c11		"unbounded"	1....N, "unbounded"			
11	z-addressing		c11		"higher"	"no constraint", "higher only", "not permitted"			
12	z-absolute		c11		"no"	"yes", "no"			
13	z-window		c11		S18.2.3	1....N, "unbounded"			

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.7 Character attributes VTE parameters

A.3.7.1 Basic parameters (S-mode)

Table A.17 - Character attribute parameters (S-mode)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	repertoire-capability	S 18.1	m		1	1....N			
2	repertoire-assignment	S 18.2.4	m		IRV 646	Any standardised repertoire	See table A.20		
3	font-capability	S 18.2.4	m		1	1....N			
4	font-assignment	S 18.3	m		dev-dep	See S 18.3	See table A.20		
5	emphasis	S 18.2.6	m		S18.2.6	See S 18.3.6	See table A.23		
6	foreground-colour-capability	S 18.1	m		1	1....N			
7	foreground-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.26		
8	background-colour-capability	S 18.1	m		1	1....N			
9	background-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.26		

A.3.7.2 Basic parameters (A-mode DO A)

Table A.18 - Character attribute parameters (A-mode DO A)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	repertoire-capability	S 18.1	m		1	1....N			
2	repertoire-assignment	S 18.2.4	m		IRV 646	Any standardised repertoire	See table A.21		
3	font-capability	S 18.2.4	m		1	1....N			
4	font-assignment	S 18.3	m		dev-dep	See S 18.3	See table A.21		
5	emphasis	S 18.2.6	m		S18.2.6	See S 18.3.6	See table A.27		
6	foreground-colour-capability	S 18.1	m		1	1....N			
7	foreground-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.27		
8	background-colour-capability	S 18.1	m		1	1....N			
9	background-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.27		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.3 Basic parameters (A-mode DO B)

Table A.19 - Character attribute parameters (A-mode DO B)

Ref.	Name of Item	Reference	Status	Support	Default	Type/Length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	repertoire-capability	S 18.1	m		1	1....N			
2	repertoire-assignment	S 18.2.4	m		IRV 646	Any standardized repertoire	See table A.22		
3	font-capability	S 18.2.4	m		1	1....N			
4	font-assignment	S 18.3	m		dev-dep	See S 18.3	See table A.22		
5	emphasis	S 18.2.6	m		S18.2.6	See S 18.3.6	See table A.25		
6	foreground-colour-capability	S 18.1	m		1	1....N			
7	foreground-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.28		
8	background-colour-capability	S 18.1	m		1	1....N			
9	background-colour-assignment	S 18.2.5	m		dev-dep	See S 18.2.5	See table A.28		

A.3.7.4 Repertoire and font support (S-mode)

Entries in the following table shall be completed for each repertoire that is supported.

Table A.20 - Repertoire and font support (S-mode)

Repertoire name	
Standard name	
Register reference ISO/IEC 2022 only - up to 4 escape sequences	
List of fonts supported Name of font Standard name (if any) Identifier used in protocol . . .	
. . . . . .	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.5 Repertoire and font support (A-mode DO A)

Entries in the following table shall be completed for each repertoire that is supported.

Table A.21 - Repertoire and font support (A-mode DO A)

Repertoire name	
Standard name	
Register reference ISO/IEC 2022 only - up to 4 escape sequences	
List of fonts supported Name of font Standard name (if any) Identifier used in protocol . . .	
. . . . . .	

A.3.7.6 Repertoire and font support (A-mode DO B)

Entries in the following table shall be completed for each repertoire that is supported.

Table A.22 - Repertoire and font support (A-mode DO B)

Repertoire name	
Standard name	
Register reference ISO/IEC 2022 only - up to 4 escape sequences	
List of fonts supported Name of font Standard name (if any) Identifier used in protocol . . .	
. . . . . .	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.7.7 Emphasis support (S-mode)

The following table shall be filled in to identify the level of support for emphasis:

Table A.23 - Emphasis support (S-mode)

Is the scheme in S B.17.3 supported (answer: yes or no)	
If yes, list the sub-attribute values supported	
subattribute a values	
subattribute b values	
subattribute c values	
subattribute d values	
subattribute e values	
subattribute f values	
If other schemes are supported give a detailed description of each such scheme.	
. . . . .	

A.3.7.8 Emphasis support (A-mode DO A)

The following table shall be filled in to identify the level of support for emphasis:

Table A.24 - Emphasis support (A-mode DO A)

Is the scheme in S B.17.3 supported (answer: yes or no)	
If yes, list the sub-attribute values supported	
subattribute a values	
subattribute b values	
subattribute c values	
subattribute d values	
subattribute e values	
subattribute f values	
If other schemes are supported give a detailed description of each such scheme.	
. . . . .	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.9 Emphasis support (A-mode DO B)

The following table shall be filled in to identify the level of support for emphasis:

Table A.25 - Emphasis support (A-mode DO B)

Is the scheme in S B.17.3 supported (answer: yes or no)	
If yes, list the sub-attribute values supported	
subattribute a values	
subattribute b values	
subattribute c values	
subattribute d values	
subattribute e values	
subattribute f values	
If other schemes are supported give a detailed description of each such scheme.	
. . . . .	

A.3.7.10 Foreground and background colour support (S-mode)

The following table shall be completed to indicate the level of support for foreground and background colour:

Table A.26 - Colour support (S-mode)

Items	Foreground	Background colour
Colour scheme name		
Standard name		
Register reference(if any)		
List of colours		
. . . . .		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.11 Foreground and background colour support (A-mode DO A)

The following table shall be completed to indicate the level of support for foreground and background colour:

Table A.27 - Colour support (A-mode DO A)

Items	Foreground	Background colour
Colour scheme name		
Standard name		
Register reference(if any)		
List of colours		
. . . . . .		

A.3.7.12 Foreground and background colour support (A-mode DO B)

The following table shall be completed to indicate the level of support for foreground and background colour:

Table A.28 - Colour support (A-mode DO B)

Items	Foreground	Background colour
Colour scheme name		
Standard name		
Register reference(if any)		
List of colours		
. . . . . .		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.7.13 Device object parameters (S-mode)

An implementation may support several devices. This table shall be replicated and copies shall be completed for each supported device.

Table A.29 - Device object parameters (S-mode)

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
	Default CO parameters								
1	device-name	S 23.1	m			Any PrintableString			
2	default-CO-access	S 23.1	m		"nsac"	"NSAC", "WAVAR", "WACI", "WACA", "WAVAR-&-WACI", "WAVAR-&-WACA", "no-access"			
3	default-CO-priority	S 23.1	m		"normal"	"normal", "high", "urgent"			
4	default-CO-trigger	S 23.1	m		"not-selected"	"selected", "not selected"			
5	default-CO-initial-value	S 23.1	m		each false	up to 8 boolean values			
	Character attributes								
6	repertoire-assignment	S 23.3	m		S 23.3		Replicate table A.20		
7	font assignment	S 23.3	m		S 23.3		Replicate table A.20		
8	emphasis	S 23.3	m		S 23.3		Replicate table A.23		
9	foreground-colour-assignment	S 23.3	m		S 23.3		Replicate table A.26		
10	background-colour-assignment	S 23.3	m		S 23.3		Replicate table A.26		
	Miscellaneous								
11	minimum-X-array-length	S 23.2			any	a positive integer			
12	minimum-Y-array-length	S 23.2	m		any	a positive integer			
13	control-object	S T 12	m		-				
14	display-object	S T 12	m		-				
15	termination-event-list	S 23.4	o		-				
16	termination-length	S 23.4	o		-				
17	termination-timeout	S 23.4	o		-				

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.14 Device object parameters (A-mode DO A)

An implementation may support several devices. This table shall be replicated and copies shall be completed for each supported device.

Table A.30 - Device object parameters (A-mode DO A)

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref,
						Allowed Values	Supported Values		
	Default CO parameters								
1	device-name	S 23.1	m			Any PrintableString			
2	default-CO-access	S 23.1	m		"nsac"	"NSAC", "WAVAR", "WACI", "WACA", "WAVAR-&-WACI", "WAVAR-&-WACA", "no-access"			
3	default-CO-priority	S 23.1	m		"normal"	"normal", "high", "urgent"			
4	default-CO-trigger	S 23.1	m		"not-selected"	"selected", "not selected"			
5	default-CO-initial-value	S 23.1	m		each false	up to 8 boolean values			
	Character attributes								
6	repertoire-assignment	S 23.3	m		S 23.3		Replicate table A.21		
7	font assignment	S 23.3	m		S 23.3		Replicate table A.21		
8	emphasis	S 23.3	m		S 23.3		Replicate table A.24		
9	foreground-colour-assignment	S 23.3	m		S 23.3		Replicate table A.27		
10	background-colour-assignment	S 23.3	m		S 23.3		Replicate table A.27		
	Miscellaneous								
11	minimum-X-array-length	S 23.2			any	a positive integer			
12	minimum-Y-array-length	S 23.2	m		any	a positive integer			
13	control-object	S T 12	m		-				
14	display-object	S T 12	m		-				
15	termination-event-list	S 23.4	o		-				
16	termination-length	S 23.4	o		-				
17	termination-timeout	S 23.4	o		-				

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.7.15 Device object parameters (A-mode DO B)

An implementation may support several devices. This table shall be replicated and copies shall be completed for each supported device.

Table A.31 - Device object parameters (A-mode DO B)

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
	Default CO parameters								
1	device-name	S 23.1	m			Any PrintableString			
2	default-CO-access	S 23.1	m		"nsac"	"NSAC", "WAVAR", "WACI", "WACA", "WAVAR-&-WACI", "WAVAR-&-WACA", "no-access"			
3	default-CO-priority	S 23.1	m		"normal"	"normal", "high", "urgent"			
4	default-CO-trigger	S 23.1	m		"not-selected"	"selected", "not selected"			
5	default-CO-initial-value	S 23.1	m		each false	up to 8 boolean values			
	Character attributes								
6	repertoire-assignment	S 23.3	m		S 23.3		Replicate table A.22		
7	font assignment	S 23.3	m		S 23.3		Replicate table A.22		
8	emphasis	S 23.3	m		S 23.3		Replicate table A.25		
9	foreground-colour-assignment	S 23.3	m		S 23.3		Replicate table A.28		
10	background-colour-assignment	S 23.3	m		S 23.3		Replicate table A.28		
	Miscellaneous								
11	minimum-X-array-length	S 23.2			any	a positive integer			
12	minimum-Y-array-length	S 23.2	m		any	a positive integer			
13	control-object	S T 12	m		-				
14	display-object	S T 12	m		-				
15	termination-event-list	S 23.4	o		-				
16	termination-length	S 23.4	o		-				
17	termination-timeout	S 23.4	o		-				

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.3.8 Control objects and their parameters

Table A.32 - Control object types

Ref.	Name of Item	Reference	Status	Support	Numbers supported	Negot-iable	Extra Info. Ref.
1	default device COs	S 16	m	See note 1			
2	Termination CO (TCO)	S 20.3.1	o				
3	Echo CO	S 20.3.2	c49				
4	Field Definition CO (FDCO)	S 20.3.3	c5				
5	Field Entry Instruction CO (FEICO)	S 20.3.4	c35				
6	Field Entry Pilot CO (FEPCO)	S 20.3.5	c35				
7	Context CO (CCO)	S 20.3.6	c35				
8	Transmission Policy CO (TPCO)	S 20.3.7	c35				
9	Reference Information Object (RIO)	S 21	c53				
10	Termination Conditions (TCCO)	S 20.3.8	c35				
11	Ripple Mode CO (RMCO)	S 20.3.9	c89				
11	Parametric COs	S 20	o				
12	Non-parametric COs	S 20	o				
List of registered control objects supported							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes

1 Support for the default control object associated with each device is mandatory.

2 References 1 to 12 relate to control object types. Remaining references are to registered CO types which may further qualify types listed in references 1 to 12.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.8.1 Conrtrol object parameters A

Table A.32a - Control object parameters A

This table shall be replicated for each CO supported.

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	CO-name	S 20	m			any			
2	CO-type-identifier		m			any			
3	CO-structure		m		1	"non-parametric" or a positive integer			
4	CO-access		m		"NSAC"	"NSAC", "WAVAR","WACI" "WACA", "WAVAR & WACI", "WAVAR & WACA", "no access",			
5	CO-priority		m		"normal"	"normal", "high", "urgent"			
6	CO-trigger		m		"not selected"	"not selected", "selected"			

A.3.8.2 Control object parameters B

Table A.32b - Control object parameters B

This table shall be replicated for each CO supported and within that for each element of a multi-element CO.

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	CO-element-id	S 20	c120			Any positive integer			
2	CO-category		m		"boolean"	"character", "boolean", "symbolic", "integer", "transparent",			
3	CO-repertoire-assignment		c121		IRV 646	Any standardised repertoire			
4	CO-size		m			Any positive integer			

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.3.9 Delivery control

Table A.33 - Delivery control

Ref.	Name of Item	Reference	Status	Support	Default	Type/length/Value		Negotiable	Extra Info. Ref.
						Allowed Values	Supported Values		
1	type-of-delivery-control	S 24	m		"no-delivery-control"	"no-delivery-control", "simple-delivery-control", "quarantined-delivery-control"			

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.4 Supported VT PDUs

This clause lists in tables the VT PDUs that are required by this International Standard. Throughout this clause to specify the level of support for each VT PDU, the following classification is used:

m: mandatory

This VT PDU shall be implemented by all implementations claiming conformance to this International Standard. The syntax and semantics of PDUs shall be implemented for sending implementations as defined in this International Standard. For receiving implementations, mandatory support implies support for the syntax but not necessarily for the semantics. However, it is not a requirement that the VT PDU shall be used in all instances of communication, unless stated otherwise in Part 1 of ISO/IEC 9041. Where negotiation is available, conformant implementations shall be able to interwork with other implementations not supporting this VT PDU by negotiating out the corresponding features.

o: optional

Implementations claiming conformance to this International Standard may or may not implement this VT PDU. Where negotiation is available, the support for VT PDUs with "o" level of support is determined by negotiation.

c: conditional

This VT PDU is conditional on a functional unit or feature that is supported.

To specify the level of support for each VT PDU, the following classification shall be used to fill in the "support" column:

y: supported

This VT PDU is supported by this implementation.

lg: syntax only supported

The full semantics for this PDU is not supported by this implementation but syntax checking is supported. This response is allowed only in the "support" column for "receiving".

-: not supported

This VT PDU is not supported by this implementation.

A.4.1 Initiator/Responder capabilities

This subclause is used to declare if the system is capable of initiating a VT-association (by sending a ASQ VT PDU) or responding to an ARQ VT PDU (by sending an ASR VT PDU) or both.

Table A.34 - Initiator/Responder

Ref.	Feature	Status	Reference	Support
1	Initiator	o	P 6.2	
2	Responder	o	P 6.3	

A.4.2 Kernel

When no functional units are selected, a kernel set of VT PDUs may be used as listed in table A.35.

Table A.35 - Kernel

Ref.	Name of Item	Reference	Sending		Receiving	
			Status	Support	Status	Support
1	APQ VT-P-ABORT	P 6.1	m		m	
2	ASQ VT-ASSOCIATE-REQ	P 6.2	c12		c13	
3	ASR VT-ASSOCIATE-RESP	P 6.3	c13		c12	
4	AUQ VT-U-ABORT	P 6.4	m		m	
5	DAQ VT-ACK-RECEIPT	P 6.7	c14		c14	
6	DLQ VT-DELIVER	P 6.8	c14		c14	
7	GTQ VT-GIVE-TOKEN see note	P 6.11	c15		c15	
8	HDQ VT-HIGH-PRI-DATA	P 6.12	c16		c16	
9	NDQ VT-DATA	P 6.14	m		m	
10	RLQ VT-RELEASE-REQ	P 6.18	m		m	
11	RLR VT-RELEASE-RESP	P 6.19	m		m	
12	RTQ VT-REQUEST-TOKEN see note	P 6.20	c15		c15	
13	UDQ VT-URGENT-DATA	P 6.25	c17		c17	

NOTE – GTQ and RTQ are mandatory for S-mode. They are also mandatory for A-mode when any of Switch Profile Negotiation, Multiple Interaction Negotiation, Break and Negotiated Release functional units are supported by an implementation. These functional units cause Session to use the Major Synchronise and/or the Release tokens. The issuer of SPQ, SNQ and RLQ must hold the required tokens when the associated functional unit is selected.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.4.3 Switch profile negotiation

Table A.36 shall be completed when the Switch Profile functional unit is supported. When the Switch Profile functional unit is selected, the VT PDUs listed in table A.36 may be used in addition to the kernel set and any others brought into use by the selection of other functional units.

Table A.36 - Switch profile negotiation

Ref.	Name of Item	Reference	Sending		Receiving	
			Status	Support	Status	Support
1	SPQ VT-SWITCH-PROFILE-REQ	P 6.23	o		m	
2	SPR VT-SWITCH-PROFILE-RESP	P 6.24	m		c18	

A.4.4 Multiple interaction negotiation

Table A.37 shall be completed when the Multiple Interaction functional unit is supported. When the Multiple Interaction Negotiation functional unit is selected, the VT PDUs listed in table A.37 may be used in addition to those listed in tables A.35 and A.36 and any others brought into use by the selection of other functional units.

Table A.37 - Multiple interaction negotiation

Ref.	Name of Item	Reference	Sending		Receiving	
			Status	Support	Status	Support
1	ENQ VT-END-NEG-REQ	P 6.9	c20		m	
2	ENR VT-END-NEG-RESP	P 6.10	m		c19	
3	NAQ VT-NEG-ACCEPT	P 6.13	m		m	
4	NIQ VT-NEG-INVITE	P 6.15	o		m	
5	NJQ VT-NEG-REJECT	P 6.16	m		m	
6	NOQ VT-NEG-OFFER	P 6.17	m		m	
7	SNQ VT-START-NEG-REQ	P 6.21	o		m	
8	SNR VT-START-NEG-RESP	P 6.22	m		c21	

A.4.5 Negotiated Release

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.6 Urgent Data

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.7 Break

Table A.38 shall be completed when the Break functional unit is supported. When the Break functional unit is selected, the VT PDUs listed in table A.38 may be used in addition to the kernel set and any others brought into use by the selection of other functional units.

Table A.38 - Break

Ref.	Name of Item	Reference	Sending		Receiving	
			Status	Support	Status	Support
1	BKQ VT-BREAK-REQ	P 6.5	o		m	
2	BKR VT-BREAK-RESP	P 6.6	m		c22	

A.4.8 Enhanced access-rules

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.9 Structured control objects

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.10 Blocks

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.11 Fields

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.12 Reference information objects

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.4.13 Exceptions

Table A.39 shall be completed when the Exceptions functional unit is supported. When the Exceptions functional unit is selected, the VT PDUs listed in table A.39 may be used in addition to the kernel set and any others brought into use by the selection of other functional units.

Table A.39 - Exceptions

Ref.	Name of Item	Reference	Sending		Receiving	
			Status	Support	Status	Support
1	EXQ VT-EXCEPTION-REQ	P 6.26	o		m	
2	EXR VT-EXCEPTION-RESP	P 6.27	m		c23	

A.4.14 Context retention

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.4.15 Ripple

The selection of this functional unit does not imply the use of any VTPDU over and above those in the kernel set.

A.5 VTPDU parameters

Depending on the selections made in clause A.4, individual VT PDUs may or may not be supported. The sending and/or receiving parts of individual tables in clause A.5 shall be completed if the corresponding table entries in clause A.4 indicate that the VT PDU is supported for sending and/or receiving by the implementation in question.

If an implementation supports S-mode and A-mode and the support for VTPDU parameters is different, tables in clauses A.5 and A.6 may be replicated - one for each mode. Only those tables shall be replicated where the differences occur and replicated tables shall be appropriately labelled with the suffix "-A" for A-mode and the suffix "-S" for S-mode.

The tables are organised in a similar way to the structure of the ASN.1 text in Part 1 of ISO/IEC 9041. The ASN.1 text separates out certain lower level productions which may be referenced by different upper level ASN.1 text. This avoids the need to duplicate ASN.1 text. In a similar way, the tables in clauses A.5 and A.6 may be referenced by higher level tables more than once. The assumption is made that an implementation will provide the same level of support for a given piece of ASN.1 no matter how it is referenced. If this is not the case for a given implementation, the tables in question shall be replicated so that the differing levels of support may be specified. Only those tables shall be replicated where the differences occur and replicated tables shall be appropriately labelled with the suffix "-1", "-2" and so on.

If it is not possible to fit in sufficient information in the table for a specific entry, then a reference may be inserted in the "Extra Info Ref" column. Additional sheets may then be filled in to satisfy the reference.

The tables are organised in a tree structure. In traversing the tree, decisions are made at the nodes as to whether a parameter at that node is mandatory, optional or conditional. If the parameter at the node is supported by an implementation, then the classification below that node comes into force.

Example: It is possible, therefore, to indicate that a parameter is mandatory even though its parent parameter is optional. If the parent parameter is supported by the implementation, then the offspring mandatory parameters shall be supported also.

Any given table may contain requirements in relation to more than one level in the tree structure. In this case, indentation of the text is used to identify the various levels.

m: mandatory

This VTPDU-parameter is mandatory within the context of the table at this point and shall be supported by implementations claiming to conform with ISO/IEC 9041.

o: optional

This VTPDU-parameter is optional within the context of the table at this point and may be supported by implementations claiming to conform with ISO/IEC 9041.

c: conditional

This VTPDU-parameter is conditional within the context of the table at this point and support is conditional on the value(s) of other VTE-parameter(s) in ISO/IEC 9040 and shall be supported wherever those conditions are met by implementations claiming to conform with ISO/IEC 9041.

-: not selected

This VTPDU-parameter is not used because one or more functional units or other parameters that would require or allow its use is/are not supported. This occurs as the result of evaluation of conditional expressions associated with this parameter.

To specify the level of support for each VT PDU parameter, the following classification shall be used to fill in the "support" column:

y: supported

This VTPDU-parameter is supported by this implementation.

-: not supported

This VTPDU-parameter is not supported by this implementation.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

lg: syntax only supported

The full semantics for this VTPDU-parameter is not supported by this implementation but syntax checking is supported. This response is allowed only in the "support" column for "receiving".

The "allowed (values)" columns contain the values that may be used for the ASN.1 type referenced in the VT abstract syntax in clause 12 of ISO/IEC 9041. The use of the term "Any" implies that any legal value may be used for the referenced ASN.1 type.

The "supported (values)" column shall be filled in to identify which of the "allowed values" is supported by this implementation. If all "allowed (values)" are supported, then "all" shall be used to fill in this column.

Wherever the implementation places restrictions on the length of SEQUENCE OF or SET OF productions, this shall be stated.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.1 VT-P-ABORT (APQ)

Table A.40 - VT-P-ABORT

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Reason	P 12.1	m		"P", "L" or the empty string			m		Any		

A.5.2 VT-ASSOCIATE-REQ (ASQ)

Table A.41 - VT-ASSOCIATE-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	class	P 12.1	m		1			m		1		
2	ImplementationIdent		o					m				
3	implementation-Identifier	P 12.2	o		Any			m		Any		
4	implementationName		o		Any			m		Any		
5	implementationVersion		o		Any			m		Any		
6	FunctionalUnits	P 12.1	c24		Bits 0-13any			m		Bits 0-13any		
7	Profile		c25					m				
8	name	P 12.2	m		Any			m		Any		
9	ProfileArgumOfferList		c26		Table A.74 A			m		Table A.74 A		
10	ProtocolVersion	P 12.1	m		Bit 0 on			m		Bit 0 on		
11	either	P 11.1.1	c32		0,1			m		0,1		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.3 VT-ASSOCIATE-RESP (ASR)

Table A.42 - VT-ASSOCIATE-RESP

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	Result3											
1	success	P 12.2	m		Null			m		Null		
2	fail		m					m				
	Reason											
3	userA		o		Any			m		Any		
4	userB		o		1-5			m		1-5		
5	provider		m		1-6			m		1-6		
6	success-with-warning		c33					m				
	Reason											
7	userA		o		Any			m		Any		
8	userB		o		1-4			m		1-4		
9	ImplementationIdent	P 12.1	o					m				
10	implementation-Identifier	P 12.2	o		Any			m		Any		
11	implementationName		o		Any			m		Any		
12	implementationVersion		o		Any			m		Any		
13	ProtocolVersion	P 12.1	m		Bit 0 on			m		Bit 0 on		
14	ProfileArgumValueList		c27		Table A.75 A			c28		Table A.75 A		
15	FunctionalUnits		c24		Bits 0-13any			m		Bits 0-13any		

A.5.4 VT-U-ABORT (AUQ)

Table A.43 - VT-U-ABORT

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Reason	P 12.1	m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.5.5 VT-BREAK-REQ (BKQ)

Table A.44 - VT-BREAK-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	standard	P 12.1	o					m				
2	(Explicit)Pointer	P 12.2	o					m				
3	x		m		>=1			m		>=1		
4	y		c68		>=1			c69		>=1		
5	z		c70		>=1			c71		>=1		
6	b		c4		>=1			c4		>=1		
7	log(Exp)Pointer		c35					c5				
8	kValue		m		>=1			m		>=1		
9	fValue		m		>=1			m		>=1		
10	zValue		c70		>=1			c71		>=1		
11	profile	P 12.1	o					m				
12	ptag		m		>=1			m		>=1		
13	item value		m		Any			m		Any		
14	stuser		o					m				
15	utag		m		>=1			m		>=1		
16	item value		m		Any			m		Any		

A.5.6 VT-BREAK-RESP (BKR)

Table A.45 - VT-BREAK-RESP

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	standard	P 12.1	o					m				
2	(Explicit)Pointer	P 12.2	o					m				
3	x		m		>= 1			m		>= 1		
4	y		c69		>= 1			c68		>= 1		
5	z		c71		>= 1			c70		>= 1		
6	b		c4		>= 1			c4		>= 1		
7	log(Exp)Pointer		c35					c5				
8	kValue		m		>= 1			m		>= 1		
9	fValue		m		>= 1			m		>= 1		
10	zValue		c71		>= 1			c70		>= 1		
11	profile	P 12.1	o					m				
12	ptag		m		>= 1			m		>= 1		
13	item value		m		Any			m		Any		
14	stuser		o					m				
15	utag		m		>= 1			m		>= 1		
16	item value		m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.7 VT-ACK-RECEIPT (DAQ)

This VT PDU has no parameters

A.5.8 VT-DELIVER (DLQ)

Table A.46 - VT-DELIVER

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	ack request	P 12.1	m		true/false			m		true/false		

A.5.9 VT-END-NEG-REQ (ENQ)

Table A.47 - VT-END-NEG-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	vteChoice	P 12.1	m		0-2			m		0-2		
2	failAllowed		o		true/false			m		true/false		
3	retList		c103		Any			c103		Any		

A.5.10 VT-END-NEG-RESP (ENR)

Table A.48 - VT-END-NEG-RESP

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	Result3											
1	success	P 12.2	m		Null			m		Null		
2	fail		m					m				
	Reason											
3	userA		o		Any			m		Any		
4	userB		o		3			m		3		
5	provider		m		0-6			m		3		
6	success-with-warning		m					m				
	Reason											
7	userA		o		Any			m		Any		
8	userB		o		3			m		3		
9	provider		m		3			m		3		
10	vteChoice	P 12.1	c36		true/false			m		true/false		
11	retList		c103		Any			c103		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.11 VT-P-EXCEPTION-REQ (EXQ)

Table A.49 - VTP-EXCEPTION-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	exceptionType											
1	stdException	P 12.1	m		0-4			m		0-4		
2	proException		m		Any			m		Any		
3	standard		o					m				
4	(Explicit)Pointer	P 12.2	o					m				
5	x		m		>= 1			m		>= 1		
6	y		c68		>= 1			c69		>= 1		
7	z		c70		>= 1			c71		>= 1		
8	b		c4		>= 1			c4		>= 1		
9	log(Exp)Pointer		c35					c5				
10	kValue		m		>= 1			m		>= 1		
11	fValue		m		>= 1			m		>= 1		
12	zValue		c70		>= 1			c71		>= 1		
13	profile	P 12.1	o					m				
14	ptag		m		>= 1			m		>= 1		
15	item value		m		Any			m		Any		

A.5.12 VT-GIVE-TOKENS (GTQ)

This VT PDU has no parameters

A.5.13 VT-HIGH-PRI-DATA (HDQ)

See table A.60 for requirements. Tables A.60 to A.64 relate to support for CO updates for COs with update priority "normal". If the level of support for CO updates for COs with update priority "high" is different, then he differences shall be identified if necessary by the replication of tables A.60 to A.64.

A.5.14 VT-NEG-ACCEPT (NAQ)

Table A.50 - VT-NEG-ACCEPT

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	ParamValueList	P 12.2										
1	displayObjects		c37		Table A.80			c37		Table A.80		
2	controlObjects		c40		Table A.84			c40		Table A.84		
3	deviceObjects		c43		Table A.88			c43		Table A.88		
4	deliveryControl		c46		0-2			c46		0-2		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15 VT-DATA (NDQ)

A.5.15.1 First level components

Table A.51 - VT-DATA

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	updates	P 12.1	m		Table A.52			m		Table A.52		
2	echo-now		c49		Null			c50		Null		
3	start-entry		c51		Null			c52		Null		

A.5.15.2 Second level components (ObjectUpdate)

Table A.52 - VT-DATA second level components (ObjectUpdate)

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	display	P 12.1	m					m				
2	doName		o		Any			m		Any		
3	updates		m		Table A.54			m		Table A.54		
4	control		m		Table A.60			m		Table A.60		
5	rioref		c53					c53				
6	rioName		m		Any			m		Any		
7	recordId		m		Any			m		Any		
8	operation		m		0-1 see NOTE			m		0-1		

NOTE: This references one of two places in the ASN.1 text in ISO/IEC 9041 which are recursive.

An indication of the level of recursion supported by the implementation shall be given and whether the same level of support is provided for each level of recursion. Any differences in level of support at the recursive levels from the top level claimed in tables 52-63 shall be identified in table 53.

Table A.53 - VT DATA second level components (ObjectUpdate) - recursion limitations

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15.3 Third level components (DOupdate)

Table A.54 - VT-DATA third level components (DOupdate)

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	nextXarray	P 12.1	c54		Null			c55		Null		
2	nextYarray		c56		Null			c57		Null		
3	ptr-relative		c58		Table A.55A			c59		Table A.55A		
4	ptr-absolute		c60		Table A.55B			c61		Table A.55B		
5	text		m		Any			m		Any		
6	repeatText		m					m				
7	finishAddress		m		Table A.55B			m		Table A.55B		
8	OCTET STRING		m		Any			m		Any		
9	writeattr		m					m				
10	Attrid		m		Table A.57A			m		Table A.57A		
11	AttrExtent		m		Table A.57B			m		Table A.57B		
12	erase		c62					c63				
13	startErase		m		Table A.55B			m		Table A.55B		
14	endErase		m		Table A.55B			m		Table A.55B		
15	eraseAttr (BOOLEAN)		m		true/false			m		true/false		
16	previousXarray		c64		Null			c65		Null		
17	previousYarray		c66		Null			c67		Null		
18	nextBlock		c4		Null			c4		Null		
19	previousBlock		c4		Null			c4		Null		
20	nextField		c5		Null			c5		Null		
21	previousField		c5		Null			c5		Null		
22	log-relative		c5		Table A.56A			c5		Table A.56A		
23	log-absolute		c5		Table A.56B			c5		Table A.56B		
24	logText	P 12.1	c5					c5				
25	fdrAttr		m		true/false			m		true/false		
26	prAttrVal		m		Any			m		Any		
27	repeatLogText		c5					c5				
28	finishAddress		m		Table A.56B			m		Table A.56B		
29	fdrAttr		m		true/false			m		true/false		
30	prAttrValStr		m		Any			m		Any		
31	writeLogAttr		c5					c5				
32	Attrid		m		Table A.57A			m		Table A.57A		
33	LogAttrExtent		m		Table A.58			m		Table A.58		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Table A.54 concluded - VT-DATA third levelcomponents (DOupdate)

Ref.	Name of Item	Base Refer-ence	SENDING					RECEIVING				
			Status	Sup-port	Type/Length/Value		Extra Info. Ref.	Status	Sup-port	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
34	logErase		c5					c5				
35	logStartErase		m		Table A.56B			m		Table A.56B		
36	logEndErase		m		Table A.56B			m		Table A.56B		
37	EraseAttr (BOOLEAN)		m		true/false			m		true/false		
38	createBlock		c4					c4				
39	blockPosition-G.Block		m					m				
40	zValue		c70		>= 1			c71		>= 1		
41	bValue		m		>= 1			m		>= 1		
42	origin-G.MeasurePair		m					m				
43	xvalue	P 12.2	m		>= 1			m		>= 1		
44	yvalue		c68		>= 1			c69		>= 1		
45	dimen-G.MeasurePair	P 12.1	m					m				
46	xvalue	P 12.2	m		>= 1			m		>= 1		
47	yvalue		c68		>= 1			c69		>= 1		
48	deleteBlock-G.Block	P 12.1	c4					c4				
49	zValue		c70		>= 1			c71		>= 1		
50	bValue		m		>= 1			m		>= 1		
51	insertXarray		c89		>= 1			c89		>= 1		
52	deleteXarray		c89		>= 1			c89		>= 1		
53	insertYarray		c89		>= 1			c89		>= 1		
54	deleteYarray		c89		>= 1			c89		>= 1		
55	copyToBuffer		c89		Table A.59A			c89		Table A.59A		
56	copyFromBuffer		c89		Table A.59B			c89		Table A.59B		
57	copyLogToBuffer		c89		Table A.59C			c89		Table A.59C		
58	copyLogFromBuffer		c89		Table A.59D			c89		Table A.59D		

--`,,```,,,,````-`-`,,`,,`,`,,`---

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.5.15.3.1 Fourth level components (DOUpdate) - display pointer

Table A.55 - VT-DATA fourth level components - display pointer

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A												
1	G.ExplicitPointer	P 12.2	m					m				
2	x		m		>= 0			m		>= 0		
3	y		c68		>= 0			c69		>= 0		
4	z		c70		>= 0			c71		>= 0		
5	b		c4		>= 0			c4		>= 0		
B	Pointer											
6	current	P 12.1	m		Null			m		Null		
7	start		c72		Null			c73		Null		
8	startX		c64		Null			c65		Null		
9	startY		c66		Null			c67		Null		
10	end		c74		Null			c75		Null		
11	endX		c54		Null			c55		Null		
12	endY		c56		Null			c57		Null		
13	coords-G.ExplicitPointer	P 12.2	m					m				
14	x		m		>= 0			m		>= 0		
15	y		c68		>= 0			c69		>= 0		
16	z		c70		>= 0			c71		>= 0		
17	b		c4		>= 0			c4		>= 0		
18	startB	P 12.1	c4		Null			c4		Null		
19	endB		c4		Null			c4		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15.3.2 Fourth level components (DOUpdate) - logical pointer

Table A.56 - VT-DATA fourth level components - logical pointer

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A												
1	G.LogExpPointer	P 12.2	m					m				
2	kValue		m		>= 0			m		>= 0		
3	fValue		m		>= 0			m		>= 0		
4	zValue		c70		>= 0			c71		>= 0		
B	LogPointer											
5	logCurrent	P 12.1	m		Null			m		Null		
6	logStart		m		Null			m		Null		
7	logStartF		m		Null			m		Null		
8	logStartK		m		Null			m		Null		
9	logEnd		m		Null			m		Null		
10	logEndF		m		Null			m		Null		
11	logEndK		m		Null			m		Null		
12	logCoords-G.LogExpP'ter	P 12.2	m					m				
13	kValue		m		>= 0			m		>= 0		
14	fValue		m		>= 0			m		>= 0		
15	zValue		c70		>= 0			c71		>= 0		

A.5.15.3.3 Fourth level components (DOUpdate) - display attributes

Table A.57 - VT-Data fourth level components - display attributes

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	AttrId											
1	graphicCharacter-Rep	P 12.1	m		>= 0			m		>= 0		
2	foregroundColour		m		>= 0			m		>= 0		
3	backgroundColour		m		>= 0			m		>= 0		
4	emphasis		m		Any			m		Any		
5	font		m		>= 0			m		>= 0		
6	fevGrCharRep		c5		Null			c5		Null		
7	fevForCol		c5		Null			c5		Null		
8	fevBakCol		c5		Null			c5		Null		
9	fevEmph		c5		Null			c5		Null		
10	fevFont		c5		Null			c5		Null		
B	AttrExtent											
11	global		m		Null			m		Null		
12	address		m					m				
13	beginning		m		Table A.55B			m		Table A.55B		
14	ending		m		Table A.55B			m		Table A.55B		
15	modal		m		Null			m		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15.3.4 Fourth level components (DOUpdate) - logical display attributes

Table A58 - VT-DATA fourth level components - logical display attributes

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	LogAttrExtent											
1	global	P 12.1	m		Null			m		Null		
2	address		m					m				
3	beginning		m		Table A.56B			m		Table A.56B		
4	ending		m		Table A.56B			m		Table A.56B		
5	modal		m		Null			m		Null		

A.5.15.3.5 Fourth level components (DOUpdate) - buffer copy parameters

Table A.59 - VT-DATA fourth level components - buffer copy parameters

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A		P 12.1										
1	address		m		Table A.55B			m		Table A.55B		
2	rioName		c123		Any			m		Any		
3	recordID		o		Any			m		Any		
4	rendition		o		pres, absent			m		pres, absent		
5	structure		o		0-2, absent			m		0-2, absent		
B												
6	address		m		Table A.55B			m		Table A.55B		
7	rioName		c123		Any			m		Any		
8	recordID		o		Any			m		Any		
9	rendition		o		pres, absent			m		present, abs		
10	structure		o		0-2, absent			m		0-2, absent		
11	ripple		o		pres, absent			m		present, abs		
C												
12	address		m		Table A.55B			m		Table A.55B		
13	rioName		c123		Any			m		Any		
14	recordID		o		Any			m		Any		
15	rendition		o		pres, absent			m		present, abs		
16	structure		o		pres, absent			m		present, abs		
D												
17	address		m		Table A.55B			m		Table A.55B		
18	rioName		c123		Any			m		Any		
19	recordID		o		Any			m		Any		
20	rendition		o		pres, absent			m		present, abs		
21	structure		o		pres, absent			m		present, abs		
22	ripple		o		pres, absent			m		present, abs		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15.4 Third level components (COupdate)

Table A.60 - VT-DATA third level components (COupdate)

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	COupdate	P 12.2	m					m				
2	coName		m		Any			m		Any		
	objectUpdate (CHOICE)											
3	characterUpdate		c76		Any			c76		Any		
4	booleanUpdate		m					m				
5	values		m		Any			m		Any		
6	mask		o		Any			m		Any		
7	symbolicUpdate		c77		Any			c77		Any		
8	integerUpdate		c78		Any			c78		Any		
9	bitStringUpdate		c79		Any			c79		Any		
10	multi-element		c83		Table A.61A			c83		Table A.61A		
11	cco		c82		Table A.61B			c82		Table A.61B		
12	fdco		c5		Table A.62			c5		Table A.62		
13	feico		c80		Table A.63A			c80		Table A.63A		
14	fepco		c81		Table A.63B			c81		Table A.63B		
15	rio		c53		Table A.63C			c53		Table A.63C		
16	other		o					o				

A.5.15.4.1 Fourth level components (COupdate) - multi-element and CCO

Table 61 - VT DATA fourth level components (COupdate) - multi-element and CCO

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	Multi Element CO	P 12.2										
1	identifier		m		>= 1			m		>= 1		
	update (CHOICE)											
2	characterUpdate		c84		Any			c84		Any		
3	booleanUpdate		c85					c85				
4	values		m		Any			m		Any		
5	mask		o		Any			m		Any		
6	symbolicUpdate		c86		Any			c86		Any		
7	integerUpdate		c87		Any			c87		Any		
8	bitStringUpdate		c88		Any			c88		Any		
B	CCO	P 12.2.1										
9	kCoordinate		m		>= 1			m		>= 1		
10	fCoordinate		m		>= 1			m		>= 1		
11	zCoordinate		o		>= 1			m		>= 1		
12	entryControlIndex		o		>= 1			m		>= 1		
13	deviceObjectIndex		o		>= 1			m		>= 1		
14	feprIndex		o		>= 1			m		>= 1		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.15.4.2 Fourth level components (COupdate) - FDCO

Table A.62 - VT DATA fourth level components (COupdate) - FDCO

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	FDCO	P 12.2.2										
1	labelFcoordinate		m		>= 1			m		>= 1		
2	labelZcoordinate		c70		>= 1			c71		>= 1		
3	status		o		0-2			m		0-2		
4	extent		o					m				
5	position-G.MeasurePair		m					m				
6	xvalue	P 12.2	m		>= 1			m		>= 1		
7	yvalue		c68		>= 1			c69		>= 1		
8	dimension (G.MeasurePair)	P 12.2.2	m					m				
9	xvalue	P 12.2	m		>= 1			m		>= 1		
10	yvalue		c68		>= 1			c69		>= 1		
11	attributes	P 12.2.2	o					m				
12	graphicCharacter Repertoire		m		>= 0			m		>= 1		
13	foregroundColour		m		>= 0			m		>= 1		
14	backgroundColour		m		>= 0			m		>= 1		
15	emphasis		m		Any			m		Any		
16	font		m		>= 0			m		>= 1		
17	nextField		o		Any			m		Any		
18	previousField		o		Any			m		Any		
19	transmissionPolicy		o		0-4			m		0-4		
20	entryControlList		o					m				
21	entryControl		m					m				
22	deviceObjectList		m		Any			m		Any		
23	feirList		m					m				
24	feicoName		m		Any			m		Any		
25	recordIndex		m		>= 1			m		>= 1		
26	feprList		m					m				
27	fepcoName		m		Any			m		Any		
28	recordIndex		m		>= 1			m		>= 1		

The supplier of an S-mode implementation shall complete the sending part of the table if the implementation supports the semantics of an Application VT-user or the receiving part if it supports the semantics of a Terminal VT-user. In all other cases where the FDCO is supported, the supplier shall fill in the complete table.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.5.15.4.3 Fourth level components (COupdate) - FEICO, FEPCO, RIO

Table A.63 - VT DATA fourth level components (COupdate) - FEICO, FEPCO, RIO

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	FEICOupdate	P 12.2.3										
1	index		m		>= 1			m		>= 1		
2	content		m					m				
B	FEPCOupdate	P 12.2.4										
3	index		m		>= 1			m		>= 1		
4	event		m					m				
5	condition		m					m				
6	reactions		m					m				
C	RIOupdate	P 12.2.5										
7	recordId		o		Any			m		Any		
8	operation		m		0-2			m		0-2		
9	updates		m		Any valid update- See Note			m		Any valid update		

The supplier of an S-mode implementation shall complete the sending part of the table for parts A and B if the implementation supports the semantics of an Application VT-user or the receiving part for parts A and B if it supports the semantics of a Terminal VT-user. In all other cases where a FEICO and/or a FEPCO is supported, the supplier shall fill in the complete table.

NOTE – See table A.52 above. This references one of two places of the ASN.1 text in Part 1 of ISO/IEC 9041 which are recursive.

An indication of the level of recursion supported by the implementation shall be given and whether the same level of support is provided for each level of recursion. Any differences in level of support at the recursive levels from the top level claimed in tables A.52 to A.63 above shall be identified in table A.64.

Table A.64 - VT DATA Fourth level components (COupdate) - recursion limitations

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.5.16 VT-NEG-INVITE (NIQ)

Table A.65 - VT-NEG-INVITE

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	ParamIdentList	P 12.2										
1	displayObjects		c37		Table A.76			m		Table A.76		
2	controlObjects		c40		Table A.82			m		Table A.82		
3	deviceObjects		c43		Table A.85			m		Table A.85		
4	deliveryControl		c46		Null			m		Null		

A.5.17 VT-NEG-REJECT (NJQ)

Table A.66 - VT-NEG-REJECT

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	ParamIdentList	P 12.2										
1	displayObjects		m		Table A.76			c37		Table A.76		
2	controlObjects		m		Table A.82			c40		Table A.82		
3	deviceObjects		m		Table A.85			c43		Table A.85		
4	deliveryControl		m		Null			c46		Null		

A.5.18 VT-NEG-OFFER (NOQ)

Table A.67 - VT-NEG-OFFER

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	ParamOfferList	P 12.2										
1	displayObjects		c37		Table A.78			m		Table A.78		
2	controlObjects		c40		Table A.83			m		Table A.83		
3	deviceObjects		c43		Table A.86			m		Table A.86		
4	deliveryControl		c46		bits 0-2 any			m		bits 0-2 any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.19 VT-RELEASE-REQ (RLQ)

This VT PDU has no parameters

A.5.20 VT-RELEASE-RESP (RLR)

Table A.68 - VT-RELEASE-RESP

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	result2											
1	success	P 12.2	m		Null			m		Null		
2	fail		c106					c106				
	Reason											
3	userA		o		Any			m		Any		
4	userB		o		0			m		0		
5	provider		m		0			m		0		

A.5.21 VT-REQUEST-TOKEN (RTQ)

This VT PDU has no parameters.

A.5.22 VT-START-NEG-REQ (SNQ)

Table A.69 - VT-START-NEG-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	Profile											
1	name	P 12.2	c25		Any			m				
2	ProfileArgumOfferList		c26		Table A.74A			m		Table A.74A		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.23 VT-START-NEG-RESP (SNR)

Table A.70 - VT-START-NEG-RESP

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
	result2											
1	success	P 12.2	m		Null			m		Null		
2	fail		m					m				
	Reason											
3	userA		o		Any			m		Any		
4	userB		o		0-4			m		0-4		
5	provider		m		0-4			m		0-4		
6	ProfileArgumValueList	P 12.1	c27		Table A.75A			c29		Table A.75A		

A.5.24 VT-SWITCH-PROFILE-REQ (SPQ)

Table A.71 - VT-SWITCH-PROFILE-REQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	Form 1											
	Profile											
1	name	P 12.2	c25		Any			m		Any		
2	ProfileArgumOfferList		c26		Table A.74A			m		Table 74A.A		
B	Form 2 - SPQ2		c103					c103				
3	profile		m					m				
4	name	P 12.2	c25		Any			m		Any		
5	ProfileArgumOfferList		c26		Table A.74A			m		Table 74A.A		
6	retList	P 12.1	m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.5.25 VT-SWITCH-PROFILE-RESP (SPR)

Table A.72 - VT-SWITCH-PROFILE-RESP

Ref.	Name of Item	Base Refer-ence	SENDING					RECEIVING				
			Status	Sup-port	Type/Length/Value		Extra Info. Ref.	Sta-tus	Sup-port	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	Form 1											
	Result2											
1	success	P 12.2	m		Null			m		Null		
2	fail		m					m				
	Reason											
3	userA		o		Any			m		Any		
4	userB		o		0-4			m		0-4		
5	provider		m		0-4			m		0-4		
6	ProfileArgumValueList	P 12.1	c27		Table A.75A			c30		Table A.75A		
B	Form 2 - SPR2											
	Result2											
7	success	P 12.2	m		Null			m		Null		
8	fail		m					m				
	Reason											
9	userA		o		Any			m		Any		
10	userB		o		0-4			m		0-4		
11	provider		m		0-4			m		0-4		
12	ProfileArgumValueList	P 12.1	c27		Table A.75A			c31		Table A.75A		
13	retList		m		Any			m		Any		

Note 1:See S 28.1.3 for conditions on this item.

A.5.26 VT-URGENT-DATA (UDQ)

Table A.73 - VT-URGENT-DATA

Ref.	Name of Item	Base Refer-ence	SENDING					RECEIVING				
			Sta-tus	Sup-port	Type/Length/Value		Extra Info. Ref.	Sta-tus	Sup-port	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	COupdate	P 12.1	m		Table A.60 items 1-10			m		Table A.60 items 1-10		

If the support for items 1 to 10 of table A.60 differs from the "normal" priority case, then the differences shall be identified if necessary by replication of table A.60.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.6 Lower Level Negotiation Elements

Depending on the selections made in clause A.4, individual VT PDUs may or may not be supported. Individual tables in clause A.6 shall be completed if the corresponding table entries in clause A.4 indicate that the VT PDU is supported by the implementation in question.

If an implementation supports S-mode and A-mode and the support for VTPDU parameters is different, tables in clause 6 may be replicated - one for each mode. Only those tables shall be replicated where the differences occur and replicated tables shall be labelled with the suffix "-A" for A-mode and the suffix "-S" for S-mode.

The tables are organised in a similar way to the structure of the ASN.1 text in Part 1 of ISO/IEC 9041. The ASN.1 text separates out certain lower level productions which may be referenced by different upper level ASN.1 text. This avoids the need to duplicate ASN.1 text. In a similar way, the tables in clause A.6 may be referenced by higher level tables more than once. The assumption is made that an implementation will provide the same level of support for a given piece of ASN.1 no matter how it is referenced. If this is not the case for a given implementation, the tables in question shall be replicated so that the differing levels of support may be specified. Only those tables shall be replicated where the differences occur and replicated tables shall be labelled with the suffix "-1", "-2" and so on.

If it is not possible to fit in sufficient information in the table for a specific entry, then a reference may be inserted in the "Extra Info Ref" column. Additional sheets may then be filled in to satisfy the reference.

The tables are organised in a tree structure. In traversing the tree, decisions are made at the nodes as to whether a parameter at that node is mandatory, optional or conditional. If the parameter at the node is supported by an implementation, then the classification below that node comes into force.

Example: It is possible, therefore, to indicate that a parameter is mandatory even though its parent parameter is optional. If the parent parameter is supported by the implementation, then the offspring mandatory parameters shall be supported also.

Any given table may contain requirements in relation to more than one level in the tree structure. In this case, indentation of the text is used to identify the various levels.

m : mandatory

This VTPDU-parameter is mandatory within the context of the table at this point and shall be supported by implementations claiming to conform with ISO/IEC 9041.

o: optional

This VTPDU-parameter is optional within the context of the table at this point and may be supported by implementations claiming to conform with ISO/IEC 9041.

c: conditional

This VTPDU-parameter is conditional within the context of the table at this point and support is conditional on the value(s) of other VTE-parameter(s) in ISO/IEC 9040 and shall be supported wherever those conditions are met by implementations claiming to conform with ISO/IEC 9041.

x: excluded

This VTPDU-parameter shall not be sent and shall be treated as a protocol error if received. This occurs only in the context of a particular VTE-profile, as a result of the evaluation of a conditional status in which the predicate references a VTE-profile specification.

-: not selected

This VTPDU-parameter is not used because one or more functional units or other parameters that would require or allow its use is/are not supported. This occurs as the result of evaluation of conditional expressions associated with this parameter.

To specify the level of support for each VTE-parameter, the following classification shall be used to fill in the "support" column:

y : supported

This VTPDU-parameter is supported by this implementation.

-: not supported

This VTPDU-parameter is not supported by this implementation.

lg: syntax only supported

The full semantics for this VTPDU-parameter is not supported by this implementation but syntax checking is supported. This response is allowed only in the "support" column for "receiving".

The "allowed (values)" columns contain the values that may be used for the ASN.1 type referenced in the VT abstract syntax in clause 12 of Part 1 of ISO/IEC 9041. The use of the term "Any" implies that any legal value may be used for the referenced ASN.1 type.

The "supported (values)" column shall be filled in to identify which of the "allowed values" is supported by this implementation. If all "allowed (values)" are supported, then "all" shall be used to fill in this column.

Wherever the implementation places restrictions on the length of SEQUENCE OF or SET OF productions, this shall be stated.

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.1 Second and third level parameters - ASQ, SPQ, SNQ

Table A.74 - Second and third level parameters - ASQ, SPQ, SNQ

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	ProfileArgumOfferList	P 12.2										
1	specialProfileArgums		c90					m				
2	identifier		m		>= 1			m		>= 1		
	offeredValues(choice)											
3	boolean		c92		2 bits, any			m		2 bits, any		
4	integer		c94		Table A.90			m		Table A.90		
5	string		c96		SET OF any			m		SET OF any		
6	objid		c98		SET OF any			m		SET OF any		
7	vteParams		c26		See B			m		See B		
B	ParamOfferList											
8	displayObjects		c38		Table A.78			m		Table A.78		
9	controlObjects		c41		Table A.83			m		Table A.83		
10	deviceObjects		c44		Table A.86			m		Table A.86		
11	deliveryControl		c47		bits 0-2 any			m		Bits 0-2 any		

A.6.2 Second and third level parameters - ASR, SPR, SNR

Table A.75 - Second and third level parameters - ASR, SPR, SNR

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	ProfileArgumValueList	P 12.2										
1	specialProfileArgums		c91					c119				
2	identifier		m		>= 1			c119		>= 1		
	value (CHOICE)											
3	boolean		c93		true/false			c119		true/false		
4	integer		c95		Any			c119		Any		
5	string		c97		Any			c119		Any		
6	objid		c99		Any			c119		Any		
7	vteParams		c27		See B			c119		See B		
B	ParamValueList											
8	displayObjects		c39		Table A.80			c119		Table A.80		
9	controlObjects		c42		Table A.84			c119		Table A.84		
10	deviceObjects		c45		Table A.88			c119		Table A.88		
11	deliveryControl		c48		0-2			c119		0-2		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.3 Third level parameters - CDS identifiers

Table A.76 - Third level parameters - CDS identifiers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Identifier	P 12.3.1	m					m				
2	name		m					m				
3	ParameterIdents		m					m				
4	dimensions		m		Null			m		Null		
5	xParamIdent		m		Table A.77A			m		Table A.77A		
6	yParamIdent		m		Table A.77A			m		Table A.77A		
7	zParamIdent		m		Table A.77A			m		Table A.77A		
8	erasure		m		Null			m		Null		
9	repertoire		m		Table A.77B			m		Table A.77B		
10	emphasis		m		Table A.77C			m		Table A.77C		
11	foreground		m		Table A.77D			m		Table A.77D		
12	background		m		Table A.77D			m		Table A.77D		
13	access		m		Null			m		Null		
14	blockParams		c4		Table A.77E			c4		Table A.77E		
15	fieldParams		c5		Table A.77F			c5		Table A.77F		
16	rippleCapability		c89		Null			c89		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.3.1 Fourth level parameters - CDS identifiers

Table A.77 - Fourth level parameters - CDS identifiers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	DimensionParamIdent	P 12.3.1										
1	bound		m		Null			m		Null		
2	addressing		m		Null			m		Null		
3	absolute		m		Null			m		Null		
4	window		m		Null			m		Null		
B	CompoundRepertoire Ident											
5	capability		m		Null			m		Null		
6	RepertoireFontIdent		m					m				
7	null		m		Null			m		Null		
8	SEQUENCE		m					m				
8	assignment		m		Null			m		Null		
9	fontCapability		m		Null			m		Null		
10	fontNames		m					m				
11	Null		m		Null			m		Null		
12	PrintableString		m		empty string			m		empty string		
C	CompoundEmphasisIdent											
13	null		m		Null			m		Null		
14	PrintableString		m		empty string			m		empty string		
D	CompoundColourIdent											
15	capability		m		Null			m		Null		
16	assignment		m					m				
17	Null		m		Null			m		Null		
18	PrintableString		m		empty string			m		empty string		
E	BlockParamIdent											
19	capability		m		Null			m		Null		
20	bound		m		Null			m		Null		
F	FieldParamIdent											
21	capability		m		Null			m		Null		
22	maxFields				Null			m		Null		
23	maxFieldElements		m		Null			m		Null		
24	accessOutside		m		Null			m		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.4 Third level parameters - CDS offers

Table A.78 - Third level parameters - CDS offers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Offer	P 12.3.2	m					m				
2	name		m		Any			m		Any		
3	ParameterOffers		m					m				
4	dimensionOffer		c100		bits 0-2 any			c122		bits 0-2 any		
5	xParamOffer		c100		Table A.79A			c122		Table A.79A		
6	yParamOffer		c100		Table A.79A			c122		Table A.79A		
7	zParamOffer		c100		Table A.79A			c122		Table A.79A		
8	erasureOffer		c100		bits 0-1 any			c122		bits 0-1 any		
9	repertoireOfferList		c100		Table A.79B			c122		Table A.79B		
10	emphasisOfferList		c100		Table A.79C			c122		Table A.79C		
11	foregroundColourOffer		c100		Table A.79D			c122		Table A.79D		
12	backgroundColourOffer		c100		Table A.79D			c122		Table A.79D		
13	access		c100		bits 0-2 any			c122		bits 0-2 any		
14	blockParams		c107		Table A.79E			c4		Table A.79E		
15	fieldParams		c110		Table A.79F			c5		Table A.79F		
16	rippleCapability		c113		bits 0-1 any			c89		bits 0-1 any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.4.1 Fourth level parameters - CDS Offers

Table A.79 - Fourth level parameters - CDS offers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	DimensionParamOffer	P 12.3.2										
1	bound		c100		Null/Table A.90			c122		Null/Table A.90		
2	addressing		c100		bits 0-2 any			c122		bits 0-2 any		
3	absolute		c100		bits 0-1 any			c122		bits 0-1 any		
4	window		c100		Null/Table A.90			c122		Null/Table A.90		
B	CompoundRepertoireOffer											
5	repertoireCapability		c100		Table A.90			c122		Table A.90		
6	SEQUENCE OF RepertoireFontOffer		c100					c122				
7	null		m		Null			m		Null		
8	SEQ OF SEQ		m					m				
9	repertoire		c100					c122				
10	type		o		Any			m		Any		
11	iso2022		m		SEQ ESC seqs			m		SEQ ESC seqs		
12	isonnnn		o		ANY			m		ANY		
13	fontCapability		c100		Table A.90			c122		Table A.90		
14	SEQUENCE OF		c100					c122				
15	FontAssignment		m					m				
16	type		o		Any			m		Any		
17	vtadhoc		m		Any			m		Any		
18	isonnnn		o		ANY			m		ANY		
C	CompoundEmphasisOffer	P 12.3.2										
19	null		m		Null			m		Null		
20	strings		m		Any			m		Any		
D	CompoundColourOffer											
21	colourCapability		c100		Table A.90			c122		Table A.90		
22	colourValues		c100					c122				
23	type		o		Any			m		Any		
24	iso6429		m		Name in 6429			m		Name in 6429		
25	isonnnn		o		ANY			m		ANY		
E	BlockParamOffer											
26	capability		c100		Bits 0-1 any			c122		Bits 0-1 any		
	bound		c100		Null/Table A.90			c122		Null/Table A.90		
F	FieldParamOffer											
26	capability		c100		Bits 0-1 any			c122		Bits 0-1 any		
27	maxFields		c100		Null/Table A.90			c122		Null/Table A.90		
28	maxFieldElements		c100		Null/Table A.90			c122		Null/Table A.90		
29	accessOutside		c100		Bits 0-1 any			c122		Bits 0-1 any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.5 Third level parameters - CDS Values

Table A.80 - Third level parameters - CDS values

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Values	P 12.3.3	m					m				
2	name		m		Any			m		Any		
3	ParameterValues		m					m				
4	dimension		c101		1-3			c102		1-3		
5	xParamValues		c101		Table A.81A			c102		Table A.81A		
6	yParamValues		c101		Table A.81A			c102		Table A.81A		
7	zParamValues		c101		Table A.81A			c102		Table A.81A		
8	erasure		c101		True/false			c102		True/false		
9	repertoire		c101		Table A.81B			c102		Table A.81B		
10	emphasis		c101		Table A.81C			c102		Table A.81C		
11	foregroundColour		c101		Table A.81D			c102		Table A.81D		
12	backgroundColour		c101		Table A.81D			c102		Table A.81D		
13	access		c101		0-2			c102		0-2		
14	blockParams		c108		Table A.81E			c102		Table A.81E		
15	fieldParams		c111		Table A.81F			c102		Table A.81F		
16	rippleCapability		c114		"yes","no"			c102		"yes", "no"		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.5.1 Fourth level parameters - CDS values

Table A.81 - Fourth Level Parameters - CDS Values

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	DimensionParamValues	P 12.3.3										
1	bound		c101		Null/>=1			c102		Null/>=1		
2	addressing		c101		0-2			c102		0-2		
3	absolute		c101		True/false			c102		True/false		
4	window		c101		Null/>=1			c102		Null/>=1		
B	CompoundRepertoireValue											
5	repertoireCapability		c101		Any			c102		Any		
6	SEQUENCE OF RepertoireFontValue		c101					c102				
7	null		m		Null			m		Null		
8	SEQUENCE		m					m				
9	repertoireAssignt		c101					c102				
10	type		o		Any			m		Any		
11	iso2022		m		ESC strings			m		ESC strings		
12	isonnnn		o		ANY			m		ANY		
13	fontCapability		c101		>=1			c102		>=1		
14	SEQUENCE OF		c101					c102				
15	FontAssignment		m					m				
16	type		o		Any			m		Any		
17	vtadhoc		m		Any			m		Any		
18	isonnnn		o		ANY			m		ANY		
C	CompoundEmphasisValue											
19	null		m		Null			m		Null		
20	strings		m		Any			m		Any		
D	CompoundColourValue	P 12.3.3										
21	capability		c101		>=1			c102		>=1		
22	assignments		c101					c102				
23	type		o		Any			m		Any		
24	iso6429		m		Name in 6429			m		Name in 6429		
25	isonnnn		o		ANY			m		ANY		
E	BlockParamValues											
26	capability		c101		True/false			c102		True/false		
27	bound		c101		Null/any			c102		Null/any		
F	FieldParamValues											
28	capability		c101		True/false			c102		True/false		
29	maxFields		c101		Null/>=1			c102		Null/>=1		
30	maxFieldElements		c101		Null/>=1			c102		Null/>=1		
31	accessOutside		c101		0-1			c102		0-1		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.6 Third level parameters - CSS identifiers

Table A.82 - Third level parameters - CSS identifiers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Identifier	P 12.4.1	m					m				
2	name		m		Any			m		Any		
3	ParameterIdents		m					m				
4	typeIdentifier		m		Null			m		Null		
5	access		m		Null			m		Null		
6	trigger		m		Null			m		Null		
7	size		m		Null			m		Null		
8	category		m		Null			m		Null		
9	repertoire		m		Null			m		Null		
10	priority		m		Null			m		Null		
11	structure		m		Null			m		Null		
12	multiElement		c83					m				
13	ElementParamIdent		m					m				
14	elementIdentifier		m		>=1			m		>=1		
15	size		m		Null			m		Null		
16	category		m		Null			m		Null		
17	repertoire		m		Null			m		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.7 Third level parameters - CSS offers

Table 83 - Third level parameters - CSS offers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Offer	P12.4.2	m					m				
2	name		m		Any			m		Any		
3	ParameterOffers		m					m				
4	typeIdentifier		c100					c122				
5	objId		m		Any			m		Any		
6	name		m		Any			m		Any		
7	access		c100		Bits 0-6 any			c122		Bits 0-6 any		
8	trigger		c100		Bits 0-1 any			c122		Bits 0-1 any		
9	size		c100		Table A.90			c122		Table A.90		
10	category		c100		Bits 0-4 any			c122		Bits 0-4 any		
11	repertoire		c100		Table A.79B items 8-12			c122		Table A.79B items 8-12		
12	priority		c100		Bits 0-2 any			c122		Bits 0-2 any		
13	structure		c100		Null/Tbl A.90			c122		Null/tbl 90		
14	multiElement		c116					m				
15	ElementParamOffer		m					m				
16	elementId		m		>=1			m		>=1		
17	size		c100		Table A.90			c122		Table A.90		
18	category		c100		Bits 0-4 any			c122		Bits 0-4 any		
19	repertoire		c100		Table A.79B items 8-12			c122		Table A.79B items 8-12		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.8 Third level parameters - CSS values

Table A.84 - Third level parameters - CSS values

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Values	P 12.4.3	m					m				
2	name		m		Any			m		Any		
3	ParameterValues		m					m				
4	typeIdentifier		c101					c102				
5	objId		m		Any			m		Any		
6	name		m		Any			m		Any		
7	access		c101		0-6			c102		0-6		
8	trigger		c101		True/false			c102		True/false		
9	size		c101		>=1			c102		>=1		
10	category		c101		0-4			c102		0-4		
11	repertoire		c101		Table A.81B items 8-12			c102		Table A.81B items 8-12		
12	priority		c101		0-2			c102		0-2		
13	structure		c101		Null/>=1			c102		Null/>=1		
14	multiElement		c117					c102				
15	ElementParamValue		m					m				
16	ElementId		m		>=1			m		>=1		
17	size		c101		>=1			c102		>=1		
18	category		c101		0-4			c102		0-4		
19	repertoire		c101		Table A.81B items 8-12			c102		Table A.81B items 8-12		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.9 Third level parameters - DEV identifiers

Table A.85 - Third level parameters - DEV identifiers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Identifier	P 12.5.1	m					m				
2	name		m		Any			m		Any		
3	ParameterIdents		m					m				
4	defaultCOaccess		m		Null			m		Null		
5	defaultCOpriority		m		Null			m		Null		
6	deviceRepertoire		m		Table A.77B items 6-12			m		Table A.77B items 6-12		
7	deviceEmphasis		m		Table A.77C			m		Table A.77C		
8	deviceForeground		m		Table A.77D items 16-18			m		Table A.77D items 16-18		
9	deviceBackground		m		Table A.77D items 16-18			m		Table A.77D items 16-18		
10	minimumXarrayLength		m		Null			m		Null		
11	minimumYarrayLength		m		Null			m		Null		
12	deviceControlObjectNames		m		Null			m		Null		
13	deviceDisplayObjectName		m		Null			m		Null		
14	terminationEventList		m		Null			m		Null		
15	terminationLength		m		Null			m		Null		
16	terminationTimeout		m		Null			m		Null		
17	defaultCOtrigger		m		Null			m		Null		
18	defaultCOinitialValue		m		Null			m		Null		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.10 Third level parameters - DEV offers

Table A.86 - Third level parameters - DEV offers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Offer	P 12.5.2	m					m				
2	name		m		Any			m		Any		
3	ParameterOffers		m					m				
4	defaultCOaccess		c100		Bits 0-6 any			c122		Bits 0-6 any		
5	defaultCOpriority		c100		Bits 0-2 any			c122		Bits 0-2 any		
6	deviceRepertoire Assignment		c100		Table A.79B items 6-12 and 14-18			c122		Table A.79B items 6-12 and 14-18		
7	deviceEmphasis Assignment		c100		Table A.79C			c122		Table A.79C		
8	deviceForeground Assignment		c100		Table A.79D items 22-25			c122		Table A.79D items 22-25		
9	deviceBackground Assignment		c100		Table A.79D items 22-25			c122		Table A.79D items 22-25		
10	minimumXarrayLength		c100		Table A.90			c122		Table A.90		
11	minimumYarrayLength		c100		Table A.90			c122		Table A.90		
12	deviceControlObject Names		c100		Any strings			c122		Any strings		
13	deviceDisplayObject Name		c100		Any strings			c122		Any strings		
14	terminationEventList		c100		Table A.87A			c122		Table A.87A		
15	terminationLength		c100		Table A.87B			c122		Table A.87B		
16	terminationTimeout		c100		Table A.87C			c122		Table A.87C		
17	defaultCOtrigger		c100		Bits 0-1 any			c122		Bits 0-1 any		
18	defaultCOinitialValue		c100					c122				
19	value		m		Any			m		Any		
20	mask		m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

A.6.10.1 Fourth level parameters - DEV offers

Table A.87 - Fourth level parameters - DEV offers

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	terminationEventList	P 12.5.2										
1	event		m		ANY			m		ANY		
2	eventID		m					m				
3	IntegerOffer		m		Table A.90			m		Table A.90		
4	Null		m		Null			m		Null		
B	terminationLength											
5	length		m		Table A.90			m		Table A.90		
6	eventID		m					m				
7	IntegerOffer		m		Table A.90			m		Table A.90		
8	Null		m		Null			m		Null		
C	terminationTimeout	P 12.5.2										
9	TimeOffer		m					m				
10	value		m					m				
11	multiplier		m		Any			m		Any		
12	exponent		m		Any			m		Any		
13	range		m					m				
14	lowerMultiplier		m		Any			m		Any		
15	lowerExponent		m		Any			m		Any		
16	upperMultiplier		m		Any			m		Any		
17	upperExponent		m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.11 Third level parameters - DEV values

Table A.88 - Third level parameters - DEV values

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	Values	P 12.5.3	m					m				
2	name		m		Any			m		Any		
3	ParameterValues		m					m				
4	defaultCOaccess		c101		0-6			c102		0-6		
5	defaultCOpriority		c101		0-2			c102		0-2		
6	deviceRepertoire Assignment		c101		Table A.81B items 6-12 and 14-18			c102		Table A.81B items 6-12 and 14-18		
7	deviceEmphasis Assignment		c101		Table A.81C			c102		Table A.81C		
8	deviceForeground Assignment		c101		Table A.81D items 22-25			c102		Table A.81D items 22-25		
9	deviceBackground Assignment		c101		Table A.81D items 22-25			c102		Table A.81D items 22-25		
10	minimumXarray Length		c101		>=1			c102		>=1		
11	minimumYarray Length		c101		>=1			c102		>=1		
12	deviceControlObject Names		c101		Any strings			c102		Any strings		
13	deviceDisplayObject Name		c101		Any			c102		Any		
14	terminationEventList		c101		Table A.89A			c102		Table A.89A		
15	terminationLength		c101		Table A.89B			c102		Table A.89B		
16	terminationTimeout		c101		Table A.89C			c102		Table A.89C		
17	defaultCOtrigger		c101		True/false			c102		True/false		
18	defaultCOinitialValue		c101					c102				
19	value		m		Any			m		Any		
20	mask		m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

A.6.11.1 Fourth level parameters - DEV values

Table A.89 - Fourth level parameters - DEV values

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
A	terminationEventList	P 12.5.3										
1	event		m		ANY			m		ANY		
2	event-id		m		>=1			m		>=1		
3	NULL		m		Null			m		Null		
B	terminationLength											
4	length		m		>=1			m		>=1		
5	event-id		m		>=1			m		>=1		
6	NULL		m		Null			m		Null		
C	terminationTimeout											
7	time		m		Any			m		Any		
8	exponent		m		Any			m		Any		
9	event-id		m		Any			m		Any		
10	NULL		m		Null			m		Null		

A.6.12 Fourth level parameters for negotiation - common parameters

Table A.90 - Fourth level parameters for negotiation - common parameters

Ref.	Name of Item	Base Reference	SENDING					RECEIVING				
			Status	Support	Type/Length/Value		Extra Info. Ref.	Status	Support	Type/Length/Value		Extra Info. Ref.
					Allowed	Supported				Allowed	Supported	
1	IntegerOffer	P 12.2	m					m				
2	individualValue		m		Any			m		Any		
3	range		m					m				
4	minimum		m		Any			m		Any		
5	maximum		m		Any			m		Any		

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

Annex B

(normative)

Conditional expressions

This annex defines the conditional key used in annex A. In table B.1, each conditional expression is identified by the sequence of characters cnn, where nn is an integer value. In the conditional expressions, individual table entry replies are referenced by the character sequence nn/mma where nn is the table number in annex A, mm is the row number in that table and "a" is optional and where present refers to the receiver entry.

Table B.1 - Conditional Expressions

Ref.	Conditional expression	Comment
c1	At least one of the S-mode and A-mode default profiles must be supported	
c2	If 9/2 then m else o	MIN
c3	If 9/9 then m else o	Fields
c4	If 9/8 then m else –	Blocks
c5	If 9/9 then m else –	Fields
c6	If (14/1 = "two" or "three") then m else –	Dim = "two" or "three"
c7	If (15/1 = "two" or "three") then m else –	Dim = "two" or "three"
c8	If (16/1 = "two" or "three") then m else –	Dim = "two" or "three"
c9	If 14/1 = "three" then m else –	Dim = "three"
c10	If 15/1 = "three" then m else –	Dim = "three"
c11	If 16/1 = "three" then m else –	Dim = "three"
c12	If 34/1 then m else –	Initiator
c13	If 34/2 then m else –	Responder
c14	If 33/1="simple delivery control" or 33/1="quarantined delivery control" then m else –	
c15	If 10/1 or {10/2 and (9/1 or 9/2 or 9/3or 9/5)} then m else –	S-mode, A-mode and token related primitives
c16	If {VTE-profile with "high" priority CO supported} then m else –	
c17	If {VTE-profile with "urgent" priority CO supported} then m else –	
c18	If 36/1(sender) then m else –	Response only if request
c19	If 37/1(sender) then m else –	Response only if request
c20	If 10/1 then o elseif {10/2 and 37/7a} then m else –	S-mode, A-mode and Response only if request
c21	If 37/7a then m else –	Response only if request
c22	If 38/1a then m else –	Response only if request
c23	If 39/1a then m else –	Response only if request
c24	If any of 9/(1-13) then m else –	Any functional units
c25	If any of 7/(2-6 OR 8-11 OR other registered profiles) then m else –	Any user profile
c26	If c25 and {any profile has mandatory arguments} then m elseif c25 and { any profile only has optional arguments} then o else –	
c27	If c25 and {any profile has mandatory or optional arguments} then m else –	
c28	If 41/9a then m else –	
c29	If 69/2a then m else –	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

Ref.	Conditional expression	Comment
c30	If 71/2a then m else –	
c31	If 71/5a then m else –	
c32	If 10/3 then m else -	Mode switching
c33	If 9/1 or 9/2 then m else -	SWP or MIN
c34	If 9/8 then o else -	Blocks
c35	If 9/9 then o else -	Fields
c36	If {47/1 value 2 (either) supported} then m else -	
c37	If {any display object parameters are negotiable} then m else –	
c38	If {any profile has mandatory display object arguments} then m elseif {any profile has optional display object arguments} then o else –	
c39	If {any profile has mandatory or optional display object arguments} then m else –	
c40	If {any control object parameters are negotiable} then m else –	
c41	If {any profile has mandatory control object arguments} then m elseif {any profile has optional control object arguments} then o else –	
c42	If {any profile has mandatory or optional control object arguments} then m else –	
c43	If {any device object parameters are negotiable} then m else –	
c44	If {any profile has mandatory device object arguments} then m elseif {any profile has optional device object arguments} then o else –	
c45	If {any profile has mandatory or optional device object arguments} then m else –	
c46	If {delivery control is negotiable} then m else –	
c47	If {any profile has mandatory argument for delivery control} then m elseif {any profile has optional argument for delivery control} then o else –	
c48	If {any profile has mandatory or optional argument for delivery control} then m else –	
c49	If 10/2 then o else –	A-mode
c50	If 10/2 then m else –	A-mode
c51	If {10/2 and 9/9} then o else –	A-mode and Fields
c52	If {10/2 and 9/9} then m else –	A-mode and Fields
c53	If 9/10 then m else –	RIOs
c54	If 14/3 or 15/3 ={"no constraint" or "higher only"} them m else –	x-addressing
c55	If 14/3 or 16/3 ={"no constraint" or "higher only"} them m else –	x-addressing
c56	If 14/7 or 15/7 ={"no constraint" or "higher only"} them m else –	y-addressing
c57	If 14/7 or 16/7 ={"no constraint" or "higher only"} them m else –	y-addressing
c58	If {any of 14/3 or 14/7 or 14/11 or 15/3 or 15/7 or 15/11} = {"no constraint" or "higher only"} them m else –	x-, y- or z-addressing
c59	If {any of 14/3 or 14/7 or 14/11 or 16/3 or 16/7 or 16/11} = {"no constraint" or "higher only"} them m else –	x-, y- or z-addressing
c60	If c58 and {14/4 or 14/8 or 14/12 or 15/4 or 15/8 or 15/12} = "yes" then m else –	x-, y- or z-absolute
c61	If c59 and {14/4 or 14/8 or 14/12 or 16/4 or 16/8 or 16/12} = "yes" then m else –	x-, y- or z-absolute
c62	If 11/2 or 12/2 then m else –	Erasure
c63	If 11/2 or 13/2 then m else –	Erasure
c64	If 14/3 or 15/3 = "no constraint" them m else –	x-addressing
c65	If 14/3 or 16/3 = "no constraint" them m else –	x-addressing
c66	If 14/7 or 15/7 = "no constraint" them m else –	y-addressing
c67	If 14/7 or 16/7 = "no constraint" them m else –	y-addressing
c68	If 14/1 or 15/1 = {"two" or "three"} then m else –	Dim = "two" or "three"
c69	If 14/1 or 16/1 = {"two" or "three"} then m else –	Dim = "two" or "three"

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

Ref.	Conditional expression	Comment
c70	If 14/1 or 15/1 = "three" then m else –	Dim = "three"
c71	If 14/1 or 16/1 = "three" then m else –	Dim = "three"
c72	If {all that exist of 14/3 and 14/7 and 14/11} or {all that exist of 15/3 and 15/7 and 15/11} = {"no constraint"} then m else –	x-, y- and z-addressing
c73	If {all that exist of 14/3 and 14/7 and 14/11} or {all that exist of 16/3 and 16/7 and 16/11} = {"no constraint"} then m else –	x-, y- and z-addressing
c74	If {all that exist of 14/3 and 14/7 and 14/11} or {all that exist of 15/3 and 15/7 and 15/11} = {"no constraint" or "higher only"} then m else –	x-, y- and z-addressing
c75	If {all that exist of 14/3 and 14/7 and 14/11} or {all that exist of 16/3 and 16/7 and 16/11} = {"no constraint" or "higher only"} then m else –	x-, y- and z-addressing
c76	If a "character" control object is supported then m else –	
c77	If a "symbolic" control object is supported then m else –	
c78	If an "integer" control object is supported then m else –	
c79	If a "transparent" control object is supported then m else –	
c80	If 32/5 then m else –	FEICO
c81	If 32/6 then m else –	FEPCO
c82	If 32/7 then m else –	CCO
c83	If 9/7 then m else –	Structured COs functional unit
c84	If a "character" multi-element control object is supported then m else –	
c85	If a "boolean" multi-element control object is supported then m else –	
c86	If a "symbolic" multi-element control object is supported then m else –	
c87	If an "integer" multi-element control object is supported then m else –	
c88	If a "transparent" multi-element control object is supported then m else –	
c89	If 9/11 then m else –	Ripple
c90	If {any profile has mandatory special arguments} then m elseif {any profile has optional special arguments} then o else –	
c91	If {any profile has mandatory or optional special arguments} then m else –	
c92	If {any profile has mandatory special arguments of type "boolean"} then m elseif {any profile has optional special arguments of type "boolean"} then o else –	
c93	If {any profile has mandatory or optional special arguments of type "boolean"} then m else –	
c94	If {any profile has mandatory special arguments of type "integer"} then m elseif {any profile has optional special arguments of type "integer"} then o else –	
c95	If {any profile has mandatory or optional special arguments of type "integer"} then m else –	
c96	If {any profile has mandatory special arguments of type "string"} then m elseif {any profile has optional special arguments of type "string"} then o else –	
c97	If {any profile has mandatory or optional special arguments of type "string"} then m else –	
c98	If {any profile has mandatory special arguments of type "object identifier"} then m elseif {any profile has optional special arguments of type "object identifier"} then o else –	
c99	If {any profile has mandatory or optional special arguments of type "object identifier"} then m else –	
c100	If 9/2 and parameter is negotiable then m elseif the VTE-profile specified in the VTPDU has a mandatory profile argument for this parameter then m elseif the VTE-profile specified in the VTPDU has an optional profile argument for this parameter then o else x	

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

Ref.	Conditional expression	Comment
c101	If 9/2 and parameter is negotiable then m elseif the VTE-profile for the current-VTE has a mandatory or optional profile argument for this parameter then m else x	
c102	If 9/2 and parameter is negotiable then m elseif the VTE-profile for the draft-VTE has a mandatory or optional profile argument for this parameter then m else x	
c103	If 9/13 then m else –	Context retention
c104	If 9/12 then m else –	Exceptions
c105	place holder for dependent conformance	
c106	If 10/2 or 9/3 then m else -	A-mode collision or negotiated release
c107	If c4 then 100 else –	
c108	If c4 then 101 else –	
c109	If c4 then 102 else –	
c110	If c5 then 101 else –	
c111	If c5 then 102 else –	
c112	If c5 then 103 else –	
c113	If c61 then 101 else –	
c114	If c61 then 102 else –	
c115	If c61 then 103 else –	
c116	If c55 then 100 else –	
c117	If c55 then 101 else –	
c118	If c55 then 102 else –	
c119	If 74/xa then m else – (where x is the item number)	
c120	If 32a/3 greater than 1 then m else –	Multi-element CO only
c121	If 32b/2 is "character" then m else –	Only for "character" category
c122	If 9/2 and parameter is negotiable then m elseif the VTE-profile specified in the VTPDU has a mandatory or optional profile argument for this parameter then m else x	
c123	If 9/10 then o else –	RIOs

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS Not for Resale

© ISO/IEC

ICS 35.100.70

Descriptors: data processing, information interchange, network interconnection, open systems interconnection, application layer, communication procedure, protocols, implementation.

Price based on 65 pages

--`,,```,,,,````-`-`,,`,,`,`,,`---

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS

Not for Resale