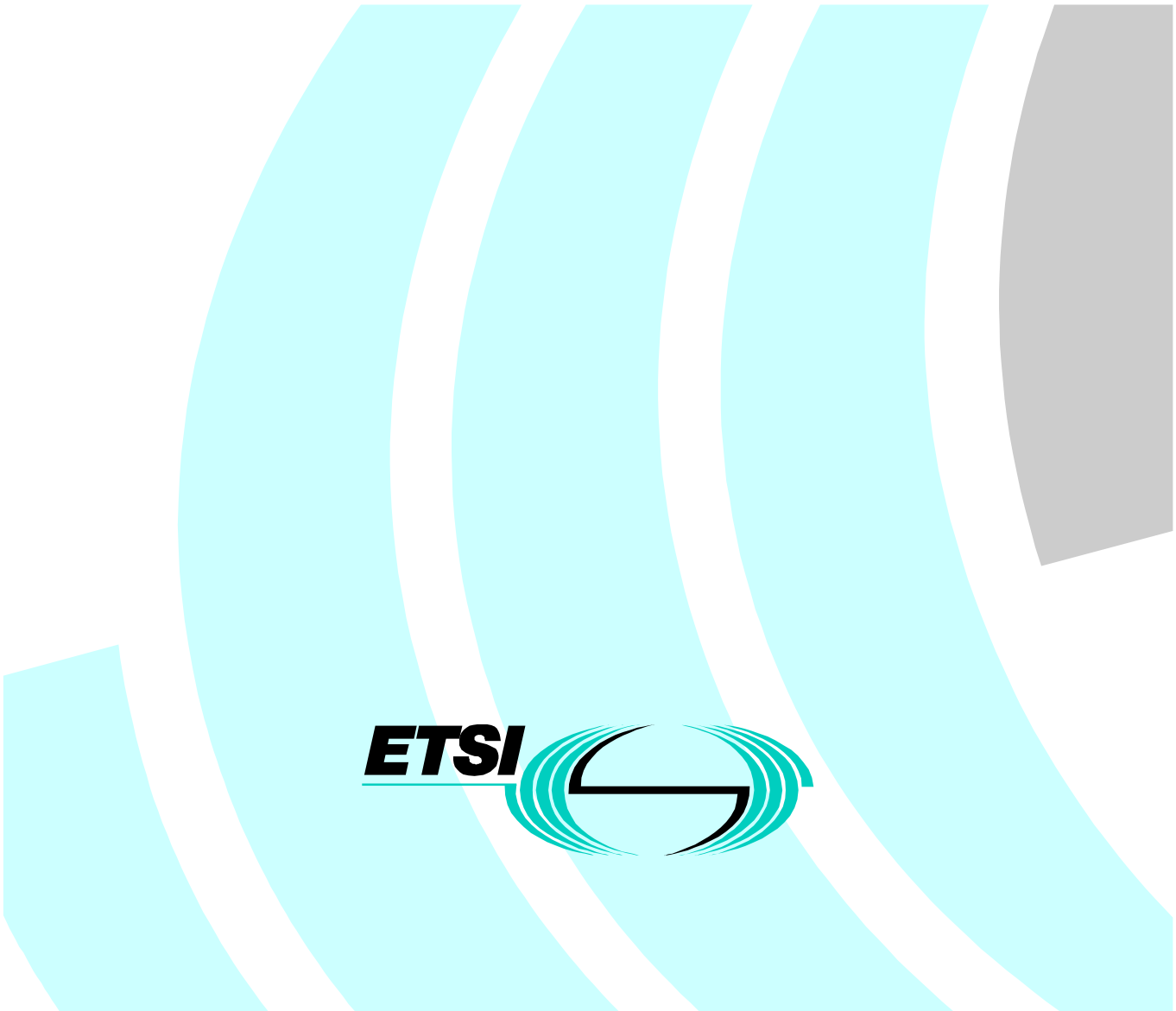
Draft EN 300 347-2 V2.1.1 (1999-02)

European Standard (Telecommunications series)

V interfaces at the digital Local Exchange (LE); V5.2 interface for the support of Access Network (AN); Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification



Reference
REN/SPS-09060-2 (37oi10co.PDF)

Keywords
V interface, V5 interface, LE, AN, PICS

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Contents

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS), and is now submitted for the Public Enquiry phase of the ETSI standards Two-step Approval Procedure.

This EN is part 2 of a multi-part standard covering the V5.2 interface as described below:

Part 1: "V5.2 interface specification";

Part 2: "Protocol Implementation Conformance Statement (PICS) proforma";

Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network layer (AN side)";

Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network layer (AN side)";

Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network layer (LE side)";

Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network layer (LE side)";

Part 7: "Test Suite Structure and Test Purposes (TSS&TP) specification for the data link layer";

Part 8: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the data link layer";

Part 9: "Test specification for the physical layer".

Proposed national transposition dates	
Date of latest announcement of this EN (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

Introduction

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a given Open Systems Interconnection (OSI) protocol. Such a statement is called a Protocol Implementation Conformance Statement (PICS).

NOTE: It is however possible to use the present document to indicate the basic requirements for an Access Network (AN) or a Local Exchange (LE) required by a network operator. Specific requirements need to be added, e.g. the Public Switched Telephone Network (PSTN) port characteristics and conditions.

1 Scope

This second part of EN 300 347 defines the Protocol Implementation Conformance Statement (PICS) proforma for the implementation flexibility allowed for a V5.2 interface defined in EN 300 347-1 [2] and the complementary standard EN 300 324-1 [1]. It allows either the Network Operator to formulate the requirements for V5.2 interface implemented in an Access Network (AN) or a Local Exchange (LE), or to decide whether an implementation meets these requirements. It details in tabular form the implementation options, i.e. the optional functions additional to those which are mandatory to implement.

The present document is in compliance with the relevant requirements and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4].

2 References

The present document incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to the present document only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1] EN 300 324-1 (V1.2): "Signalling Protocols and Switching (SPS); V interfaces at the digital Local Exchange (LE); V5.1 interface for the support of Access Network (AN); Part 1: V5.1 interface specification".

[2] EN 300 347-1 (V2.1): "Signalling Protocols and Switching (SPS); V interfaces at the digital Local Exchange (LE); V5.2 interface for the support of Access Network (AN); Part 1: V5.2 interface specification".

[3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework; Part 1: General concepts".

[4] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".

3 Definitions

For the purposes of the present document, the following definitions apply:

Protocol Implementation Conformance Statement (PICS): a statement made by the supplier of an Open Systems Interconnection (OSI) implementation or system, stating which capabilities have been implemented for a given OSI protocol (see ISO/IEC 9646-1 [3]).

PICS proforma: a document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which when completed for an OSI implementation or system becomes the PICS (see ISO/IEC 9646-1 [3]).

Static conformance review: a review of the extent to which the static conformance requirements are met by the Implementation Under Test (IUT), accomplished by comparing the PICS with the static conformance requirements expressed in the relevant standard(s) (see ISO/IEC 9646-1 [3]).

4 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AN	Access Network
AND	Boolean "and"
C	Conditional requirements (to be observed if the relevant conditions apply)
DTMF	Dual Tone Multiple Frequency
ID	Identification
IUT	Implementation Under Test
LE	Local Exchange
M	Mandatory requirements (these are to be observed in all cases)
N/A	Not supported, not applicable or the conditions for status are not met
No	Not supported
NOT	Absence of the item
NT1	Network Termination 1
O	Option (may be selected to suit the implementation, provided that any requirements applicable to the option are observed)
O.n	Options, but support required for either at least one or only one of the options in the group labelled with the same numeral "n"
OR	Boolean "or"
OSI	Open Systems Interconnection
PICS	Protocol Implementation Conformance Statement
PSTN	Public Switched Telephone Network
SCS	System Conformance Statement
SUT	System Under Test
Yes	Supported

5 Conformance

The supplier of a protocol implementation which is claimed to conform to EN 300 347-1 [2] and to EN 300 324-1 [1] as appropriate is required to complete a copy of the PICS proforma provided in the present document and is required to provide the information necessary to identify both the supplier and the implementation.

6 PICS proforma

Notwithstanding the provisions of the copyright clause related to the text of the present document, ETSI grants that users of the present document may freely reproduce the PICS proforma in this clause so that it can be used for its intended purposes and may further publish the completed PICS.

6.1 Identification of the implementation

6.1.1 Implementation Under Test (IUT) identification

IUT name:

.....

.....

IUT version:

.....

6.1.2 System Under Test (SUT) identification

SUT name:

.....

.....

Hardware configuration:

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.....

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Operating system:

.....

6.1.3 Product supplier

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

6.1.4 Client

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

6.1.5 PICS contact person

Name:

.....

Telephone number:

.....

Facsimile number:

.....

Additional information:

.....

.....

.....

6.2 PICS/System Conformance Statement (SCS)

Provide the relationship of the PICS with the SCS for the system:

.....

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.....

.....

6.3 Identification of the protocol

This PICS proforma applies to the following standards:

EN 300 347-1 (V2.1): "Signalling Protocols and Switching (SPS); V interfaces at the digital Local Exchange (LE), V5.2 interface for the support of Access Network (AN); Part 1: V5.2 interface specification", and the complementary standard EN 300 324-1 [1].

6.4 Global statement of conformance

The implementation described in this PICS meets all the mandatory requirements of the referenced Standard.

[ ] Yes

[ ] No

NOTE: Answering "No" to this question indicates non-conformance to the protocol specification. Non-supported mandatory capabilities are to be identified in the PICS, with an explanation of why the implementation is non-conforming.

EN 300 347-1 [2] is based on EN 300 324-1 [1] and contains only the additional requirements for the V5.2 interface. The present document, however, provides the complete PICS proforma for the V5.2 interface and therefore makes reference to both ETSs in the conformance statement tables.

Index names in the following tables are identical for identical statements in ETS 300 324-2; for statements which are not identical to ETS 300 324-2, instead of letters "M", "P" and "U" the letters "N", "R" and "V" are used for the respective index designations.

6.5 Local exchange

6.5.1 Main features

Subclauses shown in the "Reference" column of table 1 refer to EN 300 347-1 [2], unless followed by [1], indicating reference to EN 300 324-1 [1].

Table 1

Index	Protocol capability description Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
N11	ISDN-BA-Ports?		O.1	6.1.2 [1]	[ ]Yes [ ]No
N12	ISDN-PRA-Ports?		O.1	6.1.3	[ ]Yes [ ]No
M2	PSTN-Ports?		O.1	6.1.1 [1]	[ ]Yes [ ]No
N31	Bearer channel connection?		M	7.3,17	[ ]Yes [ ]No
N32	Semipermanent leased lines?		O	7.3	[ ]Yes [ ]No
N33	Pre-connected bearer channel?		O	7.3	[ ]Yes [ ]No
N41	Communication path definition?		M	8.4.1-3	[ ]Yes [ ]No
N411	C-path(s) for p-type data?	N11 OR N12 NOT (N11OR N12)	M N/A	8.4.1 a), 8.4.3	[ ]Yes [ ]No
N412	C-path(s) for f-type data?	N11 OR N12 NOT (N11OR N12)	M N/A	8.4.1 b), 8.4.3	[ ]Yes [ ]No
N413	C-path(s) for Ds-type data?	N11 OR N12 NOT (N11OR N12)	M N/A	8.4.1 c), 8.4.3	[ ]Yes [ ]No
N414	C-path for PSTN signalling?	M2 NOT M2	M N/A	8.4.1 d), 8.4.2	[ ]Yes [ ]No
N415	C-path for control?		M	8.4.1 e)	[ ]Yes [ ]No
N416	C-path for bearer channel connection?		M	8.4.1 g)	[ ]Yes [ ]No
N417	C-path for protection?	N9 NOT N9	M N/A	8.4.1 h)	[ ]Yes [ ]No
N418	C-path for link control?		M	8.4.1 f)	[ ]Yes [ ]No
N421	Logical Communication channel provisioning?		M	7.2.2	[ ]Yes [ ]No
N422	Logical to physical Communication channel allocation by provisioning?		M	7.2.2 5)	[ ]Yes [ ]No
N43	Active Communication channel on TS16 of primary link?		M	7.2.2 3), 8.4	[ ]Yes [ ]No
N44	Standby Communication channel on TS16 of secondary link?	N9 NOT N9	M N/A	7.2.2 3), 8.4	[ ]Yes [ ]No
N45	Number of physical communication channels up to 3 times the number of 2 048 kbit/s links?		M	7.2.2 4), 8.4	[ ]Yes [ ]No
N46	Number of stand-by communication channels up to 3?	N9 NOT N9	M N/A	18.1.2	[ ]Yes [ ]No
N47	Protection Switching of communication channels?	N9 NOT N9	M N/A	7.4, 8.4, 18	[ ]Yes [ ]No

(continued)

Table 1 (concluded)

Index	Protocol capability description Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
M6	Envelope Function?		M	9 [1]	[ ]Yes [ ]No
N71	ISDN BA ports only partially provisioned for on demand service (PL service)?	N11 AND MX.1 NOT (N11 AND MX.1)	M N/A	7.1.2	[ ]Yes [ ]No
N72	ISDN PRA ports only partially provisioned for on demand service (PL service)?	N12 AND MX.1 NOT (N12 AND MX.1)	M N/A	7.1.3	[ ]Yes [ ]No
N8	Multi slot connection	MX.1 NOT MX.1	M N/A	17.1	[ ]Yes [ ]No
N9	Multiple link V5.2 interface	MX.1 NOT MX.1	M N/A	7.2.2 1)	[ ]Yes [ ]No
	Predicated imaginary features:				
MX.1	if required by network operator				
MX.2	if required by national PSTN protocol, see EN 300 324-1 [1], subclause 13.1.3				
O.1 = Support of at least one of N11, N12, M2					

6.5.2 Protocol

6.5.2.1 Layer 1

Clauses/subclauses shown in the "Reference" column of table 2 refer to EN 300 347-1 [2], unless followed by [1], indicating reference to EN 300 324-1 [1].

Table 2

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P1.1	layer 1 balanced?	MX.1 not MX.1	M N/A	4 [1]	[ ]Yes [ ]No
P1.2	layer 1 coaxial?	MX.1 not MX.1	M N/A	4 [1]	[ ]Yes [ ]No
R1.3	layer 1 link maintenance requirements		M	16.1	[ ]Yes [ ]No
P1.4	detection of loss of signals; 1 ms below 20 dB?		O.1	16.1.2	[ ]Yes [ ]No
P1.5	detection of loss of signals; 10 consecutive ZEROs?		O.1	16.1.2	[ ]Yes [ ]No
R1.6	link control requirements and procedures?		M	16.2	[ ]Yes [ ]No
O.1 = Support of at least one of these items is required.					

6.5.2.2 Layer 2

Clauses/subclauses shown in the "Reference" column of table 3 refer to EN 300 347-1 [2], unless followed by [1], indicating a reference to EN 300 324-1 [1].

Table 3

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P2.11	frame structure for peer to peer communication?		M	9.1 [1]	[ ]Yes [ ]No
P2.12	format of fields for data link envelop?		M	9.2 [1]	[ ]Yes [ ]No
P2.13	envelope address value for control protocol?		M	10.3.2.3	[ ]Yes [ ]No
P2.14	envelope address value for PSTN protocol?	M2 NOT M2	M N/A	10.3.2.3	[ ]Yes [ ]No
P2.15	envelope address value for BCC protocol?		M	10.3.2.3	[ ]Yes [ ]No
R2.16	envelope address values for ISDN ports?	N11 OR N12 NOT (N11 OR N12)	M N/A	9.2.2.2 [1]	[ ]Yes [ ]No
R2.17	envelope address value for protection protocol?	N9 NOT N9	M N/A	10.3.2.3	[ ]Yes [ ]No
R2.18	envelope address value for link control protocol?		M	10.3.2.3	[ ]Yes [ ]No
P2.2	data link sublayer of LAPV5 for control protocol?		M	10 [1]	[ ]Yes [ ]No
P2.3	data link sublayer of LAPV5 for PSTN protocol?	M2 NOT M2	M N/A	10 [1]	[ ]Yes [ ]No
R2.4	data link sublayer of LAPV5 for bearer connection control protocol?		M	10	[ ]Yes [ ]No
R2.5	2 data link sublayers of LAPV5 for protection protocol?	N9 NOT N9	M N/A	10	[ ]Yes [ ]No
R2.6	data link sublayer of LAPV5 for link control protocol?		M	10	[ ]Yes [ ]No

6.5.2.3 Layer 3

6.5.2.3.1 PSTN functions

Subclauses shown in the "Reference" column of table 4 refer to EN 300 324-1 [1].

Table 4

Index	Protocol capability Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
P3.11	Dual Tone Multiple Frequency (DTMF) senders/receivers?	M2 NOT M2	M N/A	13.1.2	[ ]Yes [ ]No
P3.12	tone generators?	M2 NOT M2	M N/A	13.1.2	[ ]Yes [ ]No
P3.13	announcement?	M2 NOT M2	M N/A	13.1.2	[ ]Yes [ ]No

6.5.2.3.2 PSTN protocol

Subclauses shown in the "Reference" column of table 5 refer to EN 300 324-1 [1].

Table 5

Index	Protocol capability Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
P3.2	PSTN protocol entity?	M2 NOT M2	M N/A	13.2	[ ]Yes [ ]No
P3.3	PSTN call control entity?	M2 NOT M2	M N/A	13.5 - 13.7	[ ]Yes [ ]No

6.5.2.3.3 Control protocol

Subclauses shown in the "Reference" column of table 6 refer to EN 300 324-1 [1].

Table 6

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P4.0	Control protocol entity?		M	14.4.4	[ ]Yes [ ]No

6.5.2.3.4 Port control protocol

Subclauses shown in the "Reference" column of table 7 refer to EN 300 324-1 [1], unless followed by [2], indicating a reference to EN 300 347-1 [2].

Table 7

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P4.11	ISDN BA user port status indication and control?	N11 NOT N11	M N/A	14.1	[ ]Yes [ ]No
R4.12	ISDN PRA user port status indication and control?	N12 NOT N12	M N/A	15.3 [2]	[ ]Yes [ ]No
R4.13	performance monitoring for ISDN BA user port?	N11 AND MX.1 NOT (N11 AND MX.1)	M N/A	14.1.4	[ ]Yes [ ]No
R4.14	performance monitoring for ISDN PRA user port?	N12 AND MX.1 NOT (N12 AND MX.1)	M N/A	15.3.4 [2]	[ ]Yes [ ]No
P4.2	PSTN user port status indication and control?	M2 NOT M2	M N/A	14.2	[ ]Yes [ ]No

6.5.2.3.5 Common control protocol

Subclauses shown in the "Reference" column of table 8 refer to EN 300 324-1 [1].

Table 8

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R5.1	variant and interface ID control?		M	14.5	[ ]Yes [ ]No
R5.2	verify re-provisioning?	MX.1 NOT MX1	M NA	14.5	[ ]Yes [ ]No
R5.3	re-provisioning synchronization?	MX.1 NOT MX1	M NA	14.5	[ ]Yes [ ]No
R5.4	Accelerated port state alignment?	MX.1 NOT MX1	M NA	15.4.5	[ ]Yes [ ]No

6.5.2.3.6 BCC protocol

Clauses/subclauses shown in the "Reference" column of table 9 refer to EN 300 347-1 [2].

Table 9

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R6.1	Bearer Channel Connection?		M	7.3, 17	[ ]Yes [ ]No
R6.2	Bearer Channel Connection Auditing?		M	7.3, 17	[ ]Yes [ ]No

6.5.2.3.7 Protection protocol

Clauses/subclauses shown in the "Reference" column of table 10 refer to EN 300 347-1 [2].

Table 10

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R7.1	Protection switching of group 1?	N9 NOT N9	M N/A	7.4, 18	[ ]Yes [ ]No
R7.2	Protection switching of group 2?	N9 NOT N9	M N/A	7.4, 18	[ ]Yes [ ]No

6.5.2.3.8 Link control protocol

Subclauses shown in the "Reference" column of table 11 refer to EN 300 347-1 [2].

Table 11

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R8.1	Link control protocol?		M	16.3	[ ]Yes [ ]No

6.5.3 Protocol data units

6.5.3.1 PSTN protocol

6.5.3.1.1 Messages

Subclauses shown in the "Reference" column of table 12 refer to EN 300 324-1 [1].

Table 12

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.1	ESTABLISH?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.2	ESTABLISH ACK?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.3	SIGNAL?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.4	SIGNAL ACK?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.5	STATUS?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.6	STATUS ENQUIRY?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.7	DISCONNECT?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.8	DISCONNECT COMPLETE?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.9	PROTOCOL PARAMETER?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.3	[ ]Yes [ ]No

6.5.3.1.2 Information elements; general

Subclauses shown in the "Reference" column of table 13 refer to EN 300 324-1 [1].

Table 13

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.10	protocol discriminator?	M2 NOT M2	M N/A	13.4.2	[ ]Yes [ ]No
U1.11	layer 3 address?	M2 NOT M2	M N/A	13.4.3	[ ]Yes [ ]No
U1.12	pulse notification?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.1	[ ]Yes [ ]No
U1.13	line information?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.2	[ ]Yes [ ]No
U1.14	state?	M2 NOT M2	M N/A	13.4.6.3	[ ]Yes [ ]No
U1.15	autonomous signalling sequence?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.4	[ ]Yes [ ]No
U1.16	sequence response?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.5	[ ]Yes [ ]No
U1.17	sequence-number?	M2 NOT M2	M N/A	13.4.7.1	[ ]Yes [ ]No
U1.18	cadenced-ringing?	M2 NOT M2	M N/A	13.4.7.2	[ ]Yes [ ]No
U1.19	pulsed-signal?	M2 NOT M2	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.20	steady-signal?	M2 NOT M2	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.21	digit-signal?	M2 NOT M2	M N/A	13.4.7.5	[ ]Yes [ ]No
U1.22	recognition-time?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.6	[ ]Yes [ ]No
U1.23	enable-autonomous-acknowledge?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.24	disable-autonomous-acknowledge?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.8	[ ]Yes [ ]No
U1.25	cause?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.26	resource-unavailable?	M2 NOT M2	M N/A	13.4.7.10	[ ]Yes [ ]No
U1.27	enable-metering?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.11	[ ]Yes [ ]No
U1.28	metering-report?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.12	[ ]Yes [ ]No
U1.29	Attenuation?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.13	[ ]Yes [ ]No

6.5.3.1.3 Information elements; pulse type

Subclauses shown in the "Reference" column of table 14 refer to EN 300 324-1 [1].

Table 14

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.30	pulse type: Pulsed normal polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.31	pulse type: Pulsed reversed polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.32	pulse type: Pulsed battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.33	pulse type: Pulsed on hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.34	pulse type: Pulsed reduced battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.35	pulse type: Pulsed no battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.36	pulse type: Initial ring?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.37	pulse type: Meter pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.38	pulse type: 50 Hz pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.39	pulse type: Register recall?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.40	pulse type: Pulsed off hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.41	pulse type: Pulsed b-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.42	pulse type: Earth loop pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.43	pulse type: Pulsed b-wire connected to battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.44	pulse type: Pulsed a-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.45	pulse type: Pulsed a-wire connected to battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.46	pulse type: Pulsed c-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.47	pulse type: Pulsed c-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.48	pulse type: Pulsed normal battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.49	pulse type: Pulsed a-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.50	pulse type: Pulsed b-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No

6.5.3.1.4 Information elements; steady signals

Subclauses shown in the "Reference" column of table 15 refer to EN 300 324-1 [1].

Table 15

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.51	steady signal: Normal polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.52	steady signal: Reversed polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.53	steady signal: Battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.54	steady signal: No battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.55	steady signal: Off hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.56	steady signal: On hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.57	steady signal: Battery on a-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.58	steady signal: A-wire on earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.59	steady signal: No battery on a-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.60	steady signal: No battery on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.61	steady signal: Reduced battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.62	steady signal: No battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.63	steady signal: Alternate reduced power/no power?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.64	steady signal: Normal battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.65	steady signal: Stop ringing?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.66	steady signal: Start pilot frequency?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.67	steady signal: Stop pilot frequency?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.68	steady signal: Low impedance on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.69	steady signal: B-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.70	steady signal: B-wire disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.71	steady signal: Normal battery on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.72	steady signal: Low loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.73	steady signal: High loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.74	steady signal: Anomalous loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.75	steady signal: A-wire disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.76	steady signal: C-wire on earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.77	steady signal: C-wi re disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.97	steady signal: Signal:Ramp to Reversed Polarity?	M2 and MX.2 not (M2 and MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.98	steady signal: Signal: Ramp to Normal Polarity?	M2 and MX.2 not (M2 and MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No

6.5.3.1.5 Information elements; cause types

Subclauses shown in the "Reference" column of table 16 refer to EN 300 324-1 [1].

Table 16

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.78	cause type: Response to status enquiry?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.79	cause type: Protocol discriminator error?	M2 NOT M2		13.4.7.9	[ ]Yes [ ]No
U1.80	cause type: L3 address error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.81	cause type: Message type unrecognized?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.82	cause type: Out of sequence information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.83	cause type: Repeated optional information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.84	cause type: Mandatory information element missing?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.85	cause type: Unrecognized information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.86	cause type: Mandatory information element content error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.87	cause type: Optional information element content error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.88	cause type: Message not compatible with state?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.89	cause type: Repeated mandatory information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.90	cause type: Too many information elements?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No

6.5.3.1.6 Information elements; information element fields

Subclauses shown in the "Reference" column of table 17 refer to EN 300 324-1 [1].

Table 17

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.91	suppression indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.92	acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.93	suppression indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.94	acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.95	digit acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.5	[ ]Yes [ ]No
U1.96	repetition indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.11	[ ]Yes [ ]No

6.5.3.2 Control protocol

6.5.3.2.1 Messages

Subclauses shown in the "Reference" column of table 18 refer to EN 300 324-1 [1].

Table 18

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U2.1	common control and port control messages?		M	14.4.1	[ ]Yes [ ]No

6.5.3.2.2 Information elements; general

Subclauses shown in the "Reference" column of table 19 refer to EN 300 324-1 [1].

Table 19

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U2.5	protocol discriminator?		M	14.4.2.2	[ ]Yes [ ]No
U2.6	layer 3 addresses?		M	14.4.2.3	[ ]Yes [ ]No

6.5.3.2.3 Information elements; port control

Subclauses shown in the "Reference" column of table 20 refer to EN 300 324-1 [1], unless followed by [2], indicating a reference to EN 300 347-1 [2].

Table 20

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U3.1	FE101 activate access?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.2	FE102 activation initiated by user?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.3	FE103 DS activated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.4	FE104 access activated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.5	FE105 deactivate access?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.6	FE106 access deactivated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U4.1	FE201/202 unblock?		M	14.4.2.5.4	[ ]Yes [ ]No
U4.2	FE203/204 block?		M	14.4.2.5.4	[ ]Yes [ ]No
U4.3	FE205 block request?		M	14.4.2.5.4	[ ]Yes [ ]No
U5.1	FE206 performance grading?	R4.13 OR R4.14 NOT (R4.13 OR R4.14)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U5.2	FE207 D-channel block?	N11 OR N12 NOT (N11 OR N12)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U5.3	FE208 D-channel unblock?	N11 OR N12 NOT (N11 OR N12)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
V5.4	FE209 TE out of service?	N12 NOT N12	M N/A	15.3.2 [2]	[ ]Yes [ ]No
V5.5	FE210 Failure inside network?	N12 NOT N12	M N/A	15.3.2 [2	[ ]Yes [ ]No

6.5.3.2.4 Information elements; common control

Subclauses shown in the "Reference" column of table 21 refer to EN 300 324-1 [1].

Table 21

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U6.1	verify re-provisioning?	R5.2 NOT R5.2	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.2	ready for re-provisioning?	R5.2 OR R5.3 NOT (R5.2 OR R5.3)	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.3	not ready for re-provisioning?	R5.2 OR R5.3 NOT (R5.2 OR R5.3)	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.4	switch-over to new variant?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.5	re-provisioning started?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.6	cannot re-provision?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.7	request variant and interface ID?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.8	variant and interface ID?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.9	blocking started?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.10	restart?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.11	restart acknowledge?		M	14.4.2.5.5	[ ]Yes [ ]No
V6.12	Unblock all relevant PSTN and ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.13	Unblock all relevant PSTN and ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.14	Unblock all relevant PSTN and ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.15	Unblock all relevant PSTN and ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.16	Unblock all relevant PSTN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.17	Unblock all relevant PSTN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.18	Unblock all relevant PSTN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.19	Unblock all relevant PSTN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.20	Unblock all relevant ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.21	Unblock all relevant ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.22	Unblock all relevant ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.23	Unblock all relevant ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.24	Block all PSTN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.25	Block all PSTN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.26	Block all PSTN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.27	Block all PSTN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.28	Block all ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.29	Block all ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.30	Block all ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.31	Block all ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No

6.5.3.3 BCC protocol

6.5.3.3.1 Messages

Subclauses shown in the "Reference" column of table 22 refer to EN 300 347-1 [2].

Table 22

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V7.1	BCC protocol messages?		M	17.3	[ ]Yes [ ]No

6.5.3.3.2 Information elements

Subclauses shown in the "Reference" column of table 23 refer to EN 300 347-1 [2].

Table 23

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V7.21	BCC reference number?		M	17.4.1	[ ]Yes [ ]No
V7.22	Message type?		M	17.3	[ ]Yes [ ]No
V7.23	User port identification?		M	17.4.2.1	[ ]Yes [ ]No
V7.24	ISDN port time slot identification?	N11 OR N12 NOT (N11 OR N12)	M N/A	17.4.2.2	[ ]Yes [ ]No
V7.25	V5 Time slot identification?		M	17.4.2.3	[ ]Yes [ ]No
V7.26	Multi slot map?	N8 NOT N8	M N/A	17.4.2.4	[ ]Yes [ ]No
V7.27	Reject cause?		M	17.4.2.5	[ ]Yes [ ]No
V7.28	Protocol error cause?		M	17.4.2.6	[ ]Yes [ ]No
V7.29	Connection incomplete?		M	17.4.2.7	[ ]Yes [ ]No

6.5.3.4 Protection switching protocol

6.5.3.4.1 Messages

Subclauses shown in the "Reference" column of table 24 refer to EN 300 347-1 [2].

Table 24

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V8.1	Protection switching protocol messages?	N9 NOT N9	M N/A	18.4	[ ]Yes [ ]No

6.5.3.4.2 Information elements

Subclauses shown in the "Reference" column of table 25 refer to EN 300 347-1 [2].

Table 25

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V8.2	Protection switching protocol information elements?	N9 NOT N9	M N/A	18.5	[ ]Yes [ ]No

6.5.3.5 Link control protocol

6.5.3.5.1 Messages

Subclauses shown in the "Reference" column of table 26 refer to EN 300 347-1 [2].

Table 26

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V9.1	Link control protocol messages?		M	16.3.1.1	[ ]Yes [ ]No

6.5.3.5.2 Information elements

Subclauses shown in the "Reference" column of table 27 refer to EN 300 347-1 [2].

Table 27

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V9.2	Link control protocol information elements?		M	16.3.2	[ ]Yes [ ]No

6.6 Access network

6.6.1 Main features

Clauses/subclauses shown in the "Reference" column of table 28 refer to EN 300 347-1 [2], unless followed by [1], indicating a reference to EN 300 324-1 [1].

Table 28

Index	Protocol capability description Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
N11	ISDN-BA-Ports?		O.1	6.1.2 [1]	[ ]Yes [ ]No
N12	ISDN-PRA-Ports?		O.1	6.1.3	[ ]Yes [ ]No
M2	PSTN-Ports?		O.1	6.1.1 [1]	[ ]Yes [ ]No
N31	Bearer channel connection?		M	7.3,17	[ ]Yes [ ]No
N32	Semipermanent leased lines?		O	7.3	[ ]Yes [ ]No
N33	Preassigned bearer channel?		O	7.3	[ ]Yes [ ]No
N41	Communication path definition?		M	8.4.1-3	[ ]Yes [ ]No
N411	C-path(s) for p-type data?	N11 OR N12 NOT (N11 OR N12)	M N/A	8.4.1 a), 8.4.3	[ ]Yes [ ]No
N412	C-path(s) for f-type data?	N11 OR N12 NOT (N11 OR N12)	M N/A	8.4.1 b), 8.4.3	[ ]Yes [ ]No
N413	C-path(s) for Ds-type data?	N11 OR N12 NOT (N11 OR N12)	M N/A	8.4.1 c), 8.4.3	[ ]Yes [ ]No
N414	C-path for PSTN signalling?	M2 NOT M2	M N/A	8.4.1 d), 8.4.2	[ ]Yes [ ]No
N415	C-path for control?		M	8.4.1 e)	[ ]Yes [ ]No
N416	C-path for bearer channel connection?		M	8.4.1 g)	[ ]Yes [ ]No
N417	C-path for protection?	N9 NOT N9	M N/A	8.1.4 h)	[ ]Yes [ ]No
N418	C-path for link control?		M	8.4.1 f)	[ ]Yes [ ]No
N421	Logical Communication channel provisioning?		M	7.2.2	[ ]Yes [ ]No
N422	Logical to physical Communication channel allocation by provisioning?		M	7.2.2 5)	[ ]Yes [ ]No
N43	Default active Communication channel?		M	7.2.2 3), 8.4	[ ]Yes [ ]No
N44	Default standby Communication channel?	N9 NOT N9	M N/A	7.2.2 3), 8.4	[ ]Yes [ ]No
N45	Number of physical communication channels up to 3 times the number of 2 048 kbit/s links?		M	7.2.2 4), 8.4	[ ]Yes [ ]No
N46	Number of backup communication channels up to 3?	N9 NOT N9	M N/A	18.1.2	[ ]Yes [ ]No
N47	Protection Switching of communication channels?	N9 NOT N9	M N/A	7.4, 8.4, 18	[ ]Yes [ ]No
M6	Envelope Function?		M	9 [1]	[ ]Yes [ ]No
N71	ISDN ports only partially provisioned for on demand service (PL service)?	N11 AND MX.1 NOT (N11 AND MX.1)	M N/A	7.1.2	[ ]Yes [ ]No
N72	ISDN PRA ports only partially provisioned for on demand service (PL service)?	N12 AND MX.1 NOT (N12 AND MX.1)	M N/A	7.1.3	[ ]Yes [ ]No
N8	Multi slot connection	MX.1 NOT MX.1	M N/A	17.1	[ ]Yes [ ]No
N9	Multiple link V5.2 interface	MX.1 NOT MX.1	M N/A	7.2.2 1)	[ ]Yes [ ]No
	Predicated imaginary features:				
MX.1	if required by network operator				
MX.2	if required by national PSTN protocol, see EN 300 324-1 [1], subclause 13.1.3				
MX.3	if required by network operator for an AN with separate NT1				
O.1 at least one of N11, N12, M2					

6.6.2 Protocol

6.6.2.1 Layer 1

Clauses/subclauses shown in the "Reference" column of table 29 refer to EN 300 347-1 [2], unless followed by [1], indicating a reference to EN 300 324-1 [1].

Table 29

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P1.1	layer 1 balanced?	MX.1 NOT MX.1	M N/A	4 [1]	[ ]Yes [ ]No
P1.2	layer 1 coaxial?	MX.1 NOT MX.1	M N/A	4 [1]	[ ]Yes [ ]No
R1.3	layer 1 link maintenance requirements?		M	16.1	[ ]Yes [ ]No
P1.4	detection of loss of signals; 1 ms below 20 dB?		O.1	16.1.2	[ ]Yes [ ]No
P1.5	detection of loss of signals; 10 consecutive ZEROs?		O.1	16.1.2	[ ]Yes [ ]No
R1.6	link control requirements and procedures?		M	16.2	[ ]Yes [ ]No
O.1 = Support of at least one of these items is required.					

6.6.2.2 Layer 2

Clauses/subclauses shown in the "Reference" column of table 30 refer to EN 300 347-1 [2], unless followed by [1], indicating a reference to EN 300 324-1 [1].

Table 30

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P2.11	frame structure for peer to peer communication?		M	9.1 1]	[ ]Yes [ ]No
P2.12	format of fields for data link envelop?		M	9.2 [1]	[ ]Yes [ ]No
P2.13	envelope address value for control protocol?		M	10.3.2.3	[ ]Yes [ ]No
P2.14	envelope address value for PSTN protocol?	M2 NOT M2	N/A	10.3.2.3	[ ]Yes [ ]No
P2.15	envelope address values for ISDN ports?	N11 OR N12 NOT (N11 OR N12)	M N/A	9.2.2.2 [1]	[ ]Yes [ ]No
R2.16	envelope address value for BCC protocol?		M	10.3.2.3	[ ]Yes [ ]No
R2.17	envelope address value for protocol Protection?	N9 NOT N9	M N/A	10.3.2.3	[ ]Yes [ ]No
R2.18	envelope address values for link control protocol?		M	9.2.2.2 [1]	[ ]Yes [ ]No
P2.2	data link sublayer of LAPV5 for control protocol?		M	10 [1]	[ ]Yes [ ]No
P2.3	data link sublayer of LAPV5 for PSTN protocol?	M2 NOT M2	M N/A	10 [1]	[ ]Yes [ ]No
R2.4	data link sublayer of LAPV5 for bearer connection control protocol?		M	10	[ ]Yes [ ]No
P2.4	frame relay function in the AN	N11 OR N12 NOT (N11 OR N12)	M N/A	11	[ ]Yes [ ]No
R2.5	data link sublayer of LAPV5 for protection protocol?	N9 NOT N9	M N/A	10	[ ]Yes [ ]No
R2.6	data link sublayer of LAPV5 for link control protocol?		M	10	[ ]Yes [ ]No

6.6.2.3 Layer 3

6.6.2.3.1 PSTN protocol

Subclauses shown in the "Reference" column of table 31 refer to EN 300 324-1 [1].

Table 31

Index	Protocol capability Does the implementation support ...	Condition for status	Status	Reference	Support (Yes/No)
P3.17	Control of time critical sequences by AN?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.1.2	[ ]Yes [ ]No
P3.2	PSTN protocol entity?	M2 NOT M2	M N/A	13.2	[ ]Yes [ ]No
P3.3	PSTN call control entity?	M2 NOT M2	M N/A	13.5 - 13.7	[ ]Yes [ ]No
P3.4	meter pulse scheduling in the AN?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.11, 13.4.7.12	[ ]Yes [ ]No

6.6.2.3.2 Control protocol

Subclauses shown in the "Reference" column of table 32 refer to EN 300 324-1 [1].

Table 32

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P4.0	Control protocol entity?		M	14.4.4	[ ]Yes [ ]No

6.6.2.3.3 Port control protocol

Subclauses shown in the "Reference" column of table 33 refer to EN 300 324-1 [1], unless followed by [2], indicating a reference to EN 300 347-1 [2].

Table 33

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
P4.11	ISDN BA user port status indication and control?	N11 NOT N11	M N/A	14.1	[ ]Yes [ ]No
R4.12	ISDN PRA user port status indication and control?	N12 NOT N12	M N/A	15.3 [2]	[ ]Yes [ ]No
R4.13	performance monitoring for ISDN BA user ports?	N11 AND MX.3 NOT (N11 AND MX.3)	M N/A	14.1.4	[ ]Yes [ ]No
R4.14	performance monitoring for ISDN PRA user port?	N12 AND MX.3 NOT (N12 AND MX.3)	M N/A	15.3.4 [2]	[ ]Yes [ ]No
P4.2	PSTN user port status indication and control?	M2 NOT M2	M N/A	14.2	[ ]Yes [ ]No

6.6.2.3.4 Common control protocol

Subclauses shown in the "Reference" column of table 34 refer to EN 300 324-1 [1].

Table 34

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R5.1	variant and interface ID control?		M	14.5	[ ]Yes [ ]No
R5.2	verify re-provisioning?	MX.1 NOT MX1	M NA	14.5	[ ]Yes [ ]No
R5.3	re-provisioning synchronization?	MX.1 NOT MX1	M NA	14.5	[ ]Yes [ ]No
R5.4	Accelerated port state alignment?	MX.1 NOT MX1	M NA	15.4.5	[ ]Yes [ ]No

6.6.2.3.5 BCC protocol

Clauses/subclauses shown in the "Reference" column of table 35 refer to EN 300 347-1 [2].

Table 35

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R6.1	Bearer Channel Connection?		M	7.3, 17	[ ]Yes [ ]No
R6.2	Bearer Channel Connection Auditing?		M	7.3, 17	[ ]Yes [ ]No

6.6.2.3.6 Protection protocol

Clauses/subclauses shown in the "Reference" column of table 36 refer to EN 300 347-1 [2].

Table 36

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R7.1	Protection switching of group 1?	N9 NOT N9	M N/A	7.4, 18	[ ]Yes [ ]No
R7.2	Protection switching of group 2?	N9 NOT N9	M N/A	7.4, 18	[ ]Yes [ ]No

6.6.2.3.7 Link control protocol

Subclauses shown in the "Reference" column of table 37 refer to EN 300 347-1 [2].

Table 37

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
R8.1	Link control protocol?		M	16.3	[ ]Yes [ ]No

6.6.3 Protocol data units

6.6.3.1 PSTN protocol

6.6.3.1.1 Messages

Subclauses shown in the "Reference" column of table 38 refer to EN 300 324-1 [1].

Table 38

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.1	ESTABLISH?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.2	ESTABLISH ACK?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.3	SIGNAL?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.4	SIGNAL ACK?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.5	STATUS?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.6	STATUS ENQUIRY?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.7	DISCONNECT?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.8	DISCONNECT COMPLETE?	M2 NOT M2	M N/A	13.3	[ ]Yes [ ]No
U1.9	PROTOCOL PARAMETER?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.3	[ ]Yes [ ]No

6.6.3.1.2 Information elements; general

Subclauses shown in the "Reference" column of table 39 refer to EN 300 324-1 [1].

Table 39

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.10	protocol discriminator?	M2 NOT M2	M N/A	13.4.2	[ ]Yes [ ]No
U1.11	layer 3 address?	M2 NOT M2	M N/A	13.4.3	[ ]Yes [ ]No
U1.12	pulse notification?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.1	[ ]Yes [ ]No
U1.13	line information?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.2	[ ]Yes [ ]No
U1.14	state?	M2 NOT M2	M N/A	13.4.6.3	[ ]Yes [ ]No
U1.15	autonomous signalling sequence?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.4	[ ]Yes [ ]No
U1.16	sequence response?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.6.5	[ ]Yes [ ]No
U1.17	sequence-number?	M2 NOT M2	M N/A	13.4.7.1	[ ]Yes [ ]No
U1.18	cadenced-ringing?	M2 NOT M2	M N/A	13.4.7.2	[ ]Yes [ ]No
U1.19	pulsed-signal?	M2 NOT M2	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.20	steady-signal?	M2 NOT M2	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.21	digit-signal?	M2 NOT M2	M N/A	13.4.7.5	[ ]Yes [ ]No
U1.22	recognition-time?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.6	[ ]Yes [ ]No
U1.23	enable-autonomous-acknowledge?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.24	disable-autonomous-acknowledge?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.8	[ ]Yes [ ]No
U1.25	cause?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.26	resource-unavailable?	M2 NOT M2	M N/A	13.4.7.10	[ ]Yes [ ]No
U1.27	enable-metering?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.11	[ ]Yes [ ]No
U1.28	metering-report?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.12	[ ]Yes [ ]No
U1.29	Attenuation?	M2 and MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.13	[ ]Yes [ ]No

6.6.3.1.3 Information elements; pulse type

Subclauses shown in the "Reference" column of table 40 refer to EN 300 324-1 [1].

Table 40

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.30	pulse type: Pulsed normal polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.31	pulse type: Pulsed reversed polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.32	pulse type: Pulsed battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.33	pulse type: Pulsed on hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.34	pulse type: Pulsed reduced battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.35	pulse type: Pulsed no battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.36	pulse type: Initial ring?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.37	pulse type: Meter pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.38	pulse type: 50 Hz pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.39	pulse type: Register recall?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.40	pulse type: Pulsed off hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.41	pulse type: Pulsed b-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.42	pulse type: Earth loop pulse?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.43	pulse type: Pulsed b-wire connected to battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.44	pulse type: Pulsed a-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.45	pulse type: Pulsed a-wire connected to battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.46	pulse type: Pulsed c-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.47	pulse type: Pulsed c-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.48	pulse type: Pulsed normal battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.49	pulse type: Pulsed a-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.50	pulse type: Pulsed b-wire disconnected?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No

6.6.3.1.4 Information elements; steady signals

Subclauses shown in the "Reference" column of table 41 refer to EN 300 324-1 [1].

Table 41

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.51	steady signal: Normal polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.52	steady signal: Reversed polarity?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.53	steady signal: Battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.54	steady signal: No battery on c-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.55	steady signal: Off hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.56	steady signal: On hook?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.57	steady signal: Battery on a-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.58	steady signal: A-wire on earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.59	steady signal: No battery on a-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.60	steady signal: No battery on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.61	steady signal: Reduced battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.62	steady signal: No battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.63	steady signal: Alternate reduced power/no power?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.64	steady signal: Normal battery?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.65	steady signal: Stop ringing?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.66	steady signal: Start pilot frequency?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.67	steady signal: Stop pilot frequency?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.68	steady signal: Low impedance on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.69	steady signal: B-wire connected to earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.70	steady signal: B-wire disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.71	steady signal: Normal battery on b-wire?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.72	steady signal: Low loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.73	steady signal: High loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.74	steady signal: Anomalous loop impedance?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.75	steady signal: A-wire disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.76	steady signal: C-wire on earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.77	steady signal: C-wire disconnected from earth?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.97	steady signal: Signal:Ramp to Reversed Polarity?	M2 and MX.2 not (M2 and MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No
U1.98	steady signal: Signal: Ramp to Normal Polarity?	M2 and MX.2 not (M2 and MX.2)	M N/A	13.4.7.4	[ ]Yes [ ]No

6.6.3.1.5 Information elements; cause types

Subclauses shown in the "Reference" column of table 42 refer to EN 300 324-1 [1].

Table 42

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.78	cause type: Response to status enquiry?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.79	cause type: Protocol discriminator error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.80	cause type: L3 address error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.81	cause type: Message type unrecognized?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.82	cause type: Out of sequence information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.83	cause type: Repeated optional information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.84	cause type: Mandatory information element missing?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.85	cause type: Unrecognized information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.86	cause type: Mandatory information element content error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.87	cause type: Optional information element content error?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.88	cause type: Message not compatible with state?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.89	cause type: Repeated mandatory information element?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No
U1.90	cause type: Too many information elements?	M2 NOT M2	M N/A	13.4.7.9	[ ]Yes [ ]No

6.5.3.1.6 Information elements; information element fields

Subclauses shown in the "Reference" column of table 43 refer to EN 300 324-1 [1].

Table 43

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U1.91	suppression indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.92	acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.3	[ ]Yes [ ]No
U1.93	suppression indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.94	acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.7	[ ]Yes [ ]No
U1.95	digit acknowledge request indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.5	[ ]Yes [ ]No
U1.96	repetition indicator?	M2 AND MX.2 NOT (M2 AND MX.2)	M N/A	13.4.7.11	[ ]Yes [ ]No

6.6.3.2 Control protocol

6.6.3.2.1 Messages

Subclauses shown in the "Reference" column of table 44 refer to EN 300 324-1 [1].

Table 44

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U2.1	common control and port control messages?		M	14.4.1	[ ]Yes [ ]No

6.6.3.2.2 Information elements; general

Subclauses shown in the "Reference" column of table 45 refer to EN 300 324-1 [1].

Table 45

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U2.5	protocol discriminator?		M	14.4.2.2	[ ]Yes [ ]No
U2.6	layer 3 addresses?		M	14.4.2.3	[ ]Yes [ ]No

6.6.3.2.3 Information elements; port control

Subclauses shown in the "Reference" column of table 46 refer to EN 300 324-1 [1], unless followed by [2], indicating a reference to EN 300 347-1 [2].

Table 46

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U3.1	FE101 activate access?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.2	FE102 activation initiated by user?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.3	FE103 DS activated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.4	FE104 access activated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.5	FE105 deactivate access?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U3.6	FE106 access deactivated?	N11 NOT N11	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U4.1	FE201/202 unblock?		M	14.4.2.5.4	[ ]Yes [ ]No
U4.2	FE203/204 block?		M	14.4.2.5.4	[ ]Yes [ ]No
U4.3	FE205 block request?		M	14.4.2.5.4	[ ]Yes [ ]No
U5.1	FE206 performance grading?	R4.13 OR R4.14 NOT (R4.13 OR R4.14)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U5.2	FE207 D-channel block?	N11 OR N12 NOT (N11 OR N12)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
U5.3	FE208 D-channel unblock?	N11 OR N12 NOT (N11 OR N12)	M N/A	14.4.2.5.4	[ ]Yes [ ]No
V5.4	FE209 TE out of service?	N12 NOT N12	M N/A	15.3.2 [2]	[ ]Yes [ ]No
V5.5	FE210 Failure inside network?	N12 NOT N12	M N/A	15.3.2 [2]	[ ]Yes [ ]No

6.6.3.2.4 Information elements; common control

Subclauses shown in the "Reference" column of table 47 refer to EN 300 324-1 [1].

Table 47

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
U6.1	verify re-provisioning?	R5.2 NOT R5.2	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.2	ready for re-provisioning?	R5.2 OR R5.3 NOT (R5.2 OR R5.3)	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.3	not ready for re-provisioning?	R5.2 OR R5.3 NOT (R5.2 OR R5.3)	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.4	switch-over to new variant?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.5	re-provisioning started?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.6	cannot re-provision?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.7	request variant and interface ID?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.8	variant and interface ID?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.9	blocking started?	R5.3 NOT R5.3	M N/A	14.4.2.5.5	[ ]Yes [ ]No
U6.10	restart?		M	14.4.2.5.5	[ ]Yes [ ]No
U6.11	restart acknowledge?		M	14.4.2.5.5	[ ]Yes [ ]No
V6.12	Unblock all relevant PSTN and ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.13	Unblock all relevant PSTN and ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.14	Unblock all relevant PSTN and ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.15	Unblock all relevant PSTN and ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.16	Unblock all relevant PSTN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.17	Unblock all relevant PSTN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.18	Unblock all relevant PSTN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.19	Unblock all relevant PSTN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.20	Unblock all relevant ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.21	Unblock all relevant ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.22	Unblock all relevant ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.23	Unblock all relevant ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.24	Block all PSTN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.25	Block all PSTN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.26	Block all PSTN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.27	Block all PSTN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.28	Block all ISDN ports request?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.29	Block all ISDN ports accepted?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.30	Block all ISDN ports rejected?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No
V6.31	Block all ISDN ports completed?	R5.4 NOT R5.4	M N/A	15.4.5	[ ]Yes [ ]No

6.6.3.3 BCC protocol

6.6.3.3.1 Messages

Subclauses shown in the "Reference" column of table 48 refer to EN 300 347-1 [2].

Table 48

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V7.1	BCC protocol messages?		M	17.3	[ ]Yes [ ]No

6.6.3.3.2 Information elements

Subclauses shown in the "Reference" column of table 49 refer to EN 300 347-1 [2].

Table 49

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V7.21	BCC reference number?		M	17.4.1	[ ]Yes [ ]No
V7.22	Message type?		M	17.3	[ ]Yes [ ]No
V7.23	User port identification?		M	17.4.2.1	[ ]Yes [ ]No
V7.24	ISDN port time slot identification?	N11 OR N12 NOT (N11 OR N12)	M N/A	17.4.2.2	[ ]Yes [ ]No
V7.25	V5 Time slot identification?		M	17.4.2.3	[ ]Yes [ ]No
V7.26	Multi slot map?	N8 NOT N8	M N/A	17.4.2.4	[ ]Yes [ ]No
V7.27	Reject cause?		M	17.4.2.5	[ ]Yes [ ]No
V7.28	Protocol error cause?		M	17.4.2.6	[ ]Yes [ ]No
V7.29	Connection incomplete?		M	17.4.2.7	[ ]Yes [ ]No

6.6.3.4 Protection switching protocol

6.6.3.4.1 Messages

Subclauses shown in the "Reference" column of table 50 refer to EN 300 347-1 [2].

Table 50

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V8.1	Protection switching protocol messages?	N9 NOT N9	M N/A	18.4	[ ]Yes [ ]No

6.6.3.4.2 Information elements

Subclauses shown in the "Reference" column of table 51 refer to EN 300 347-1 [2].

Table 51

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V8.2	Protection switching protocol information elements?	N9 NOT N9	M N/A	18.5	[ ]Yes [ ]No

6.6.3.5 Link control protocol

6.6.3.5.1 Messages

Subclauses shown in the "Reference" column of table 52 refer to EN 300 347-1 [2].

Table 52

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V9.1	Link control protocol messages?		M	16.3.1.1	[ ]Yes [ ]No

6.6.3.5.2 Information elements

Subclauses shown in the "Reference" column of table 53 refer to EN 300 347-1 [2].

Table 53

Index	Protocol capability Does the implementation support ...	Conditions for status	Status	Reference	Support (Yes/No)
V9.2	Link control protocol information elements?		M	16.3.2	[ ]Yes [ ]No

Annex A (informative): Instructions for completing the PICS proforma

A.1 Identification of the implementation

Identification of the Implementation Under Test (IUT) and the system in which it resides (the System Under Test (SUT)) should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the PICS should be named as the contact person.

The SCS as defined in ISO/IEC 9646-1 [3] is a document supplied by the client or product supplier that summarizes which OSI International Standards, ITU-T (CCITT) Recommendations, ETSs or other standards are implemented and to which conformance is claimed. The PICS/SCS subclause should describe the relationship of the PICS to the SCS.

A.2 Global statement of conformance

If the answer to the statement in subclause 6.4 is "Yes", all subsequent subclauses should be completed to facilitate selection of test cases for optional functions.

If the answer to the statement in subclause 6.4 is "No", all subsequent subclauses should be completed, and all non-supported mandatory capabilities should be identified and explained.

A.3 Main features

Each question in subclauses 6.5.1 and 6.6.1 refers to a major function of the protocol which requires clarification in the PICS. Answering "Yes" to a particular question states that the implementation supports all the mandatory procedures for that function defined in the referenced subclause(s) of the standard(s). Answering "No" to a particular question in subclauses 6.5.1 or 6.6.1 states that the implementation does not support that function of the protocol. Some of these items are optional and in some cases the option is dependent on the implementation of other items. In these cases, if the invoking capability is supported, the ability to support the item is mandatory. These conditions are made clear in the text of each item.

A.4 Protocol

Indicating support for an item in subclauses 6.5.2 or 6.5.3 states that the implementation has the capability to support the protocol provisions that may exist.

A.5 Protocol data units

Indicating support for an item in subclauses 6.5.3 or 6.6.3 states that the implementation has the capability to support the protocol provisions that may exist.

Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

- ETS 300 324-2: "Signalling Protocols and Switching (SPS); V interfaces at the digital Local Exchange (LE); V5.1 interface for the support of Access Network (AN); Part 2: Protocol Implementation Conformance Statements (PICS) proforma".

History

Document history				
V2.1.1	February 1999	Public Enquiry	PE 9925:	1999-02-19 to 1999-06-18