



SLOVENSKI STANDARD
SIST ETS 300 417-2-2 E1:2003
01-december-2003

DfYbcg]b`a i `hjd`Y_g]fUb`Y`fHAŁĚ; YbYf] bYnU hYj YnUdfYbcgbc`Z b_W]cbUbcgh
cdfYa YĚ`&`"XY. : i b_W]Y`d`Ugh]`Zn] bY[UcXgY_Ug]b\ fcbYX][]HUbY\]YfU\]Y
fD8 <l`DfcZfa UgdYWZ_UW]U]nUj Y`c`g`UXbcgh]nj YXVY`f# GL

Transmission and Multiplexing (TM); Generic requirements of transport functionality of equipment; Part 2-2: Synchronous Digital Hierarchy (SDH) and Plesiochronous Digital Hierarchy (PDH) physical section layer functions; Implementation Conformance Statement (ICS) proforma specification

iTeh STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003>

Ta slovenski standard je istoveten z: ETS 300 417-2-2 Edition 1

ICS:

33.040.20 Prenosni sistem Transmission systems

SIST ETS 300 417-2-2 E1:2003 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 417-2-2 E1:2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003>



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 417-2-2

November 1997

Source: TM

Reference: DE/TM-01015-2-2

ICS: 33.020

Key words: ICS, PDH, SDH, STM, transmission, testing

**Transmission and Multiplexing (TM);
Generic requirements of transport
functionality of equipment;
Part 2-2: Synchronous Digital Hierarchy (SDH) and
Plesiochronous Digital Hierarchy (PDH)
physical section layer functions
Implementation Conformance Statement (ICS)
proforma specification**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 4 92 94 42 00 - Fax: +33 4 93 65 47 16

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1997. All rights reserved.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 417-2-2 E1:2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003>

Contents

Foreword	9
Introduction	10
1 Scope	11
2 Normative references	11
3 Definitions and abbreviations	12
3.1 Definitions	12
3.2 Abbreviations	12
4 Conformance to this ICS proforma specification	14
Annex A (normative): ICS proforma for ETS 300 417-2-1	15
A.1 Guidance for completing the ICS proforma	15
A.1.1 Purposes and structure	15
A.1.2 Abbreviations and conventions	15
A.1.3 Instructions for completing the ICS proforma	17
Annex B (normative): ICS proforma for STM-1 optical section layer	18
B.1 Identification of the implementation	18
B.1.1 Date of the statement	18
B.1.2 IUT identification	18
B.1.3 SUT identification	19
B.1.4 Product supplier	19
B.1.5 Client	20
B.1.6 ICS contact person	20
B.2 Identification of the ETS	21
B.3 Global statement of conformance of OS1 layer	21
B.4 OS1 layer description	21
B.5 OS1 layer transmission tables	23
B.5.1 OS1 source operating wavelength range, OS1_TT_So	23
B.5.2 OS1 source spectral characteristics, OS1_TT_So	24
B.5.3 OS1 source optical characteristics, OS1_TT_So	25
B.5.4 OS1 receiver characteristics, OS1_TT_Sk	26
B.5.5 OS1 regeneration characteristics, OS1/RS1_A_So, OS1/RS1_A_Sk	27
B.6 Defect, fault and performance monitoring	28
B.6.1 Port status management	28
B.6.2 Defect detection and clearance criteria	28
B.6.3 Consequent action activation and clearance criteria	29
B.6.4 Defect correlation	29
B.6.5 Performance monitoring	30
Annex C (normative): ICS proforma for STM-4 optical section layer	31
C.1 Identification of the implementation	31
C.1.1 Date of the statement	31
C.1.2 IUT identification	31

C.1.3	SUT identification	32
C.1.4	Product supplier	32
C.1.5	Client	33
C.1.6	ICS contact person.....	33
C.2	Identification of the ETS.....	34
C.3	Global statement of conformance of OS4 layer.....	34
C.4	OS4 layer description	34
C.5	OS4 layer transmission tables	36
C.5.1	OS4 source operating wavelength range, OS4_TT_So.....	36
C.5.2	OS4 source spectral characteristics, OS4_TT_So	37
C.5.3	OS4 source optical characteristics, OS4_TT_So.....	38
C.5.4	OS4 receiver characteristics, OS4_TT_Sk	39
C.5.5	OS4 regeneration characteristics, OS4/RS4_A_So, OS4/RS4_A_Sk.....	40
C.6	OS4 layer defect, fault and performance monitoring tables	41
C.6.1	Port status management.....	41
C.6.2	Defect detection and clearance criteria.....	41
C.6.3	Consequent action activation and clearance criteria.....	42
C.6.4	Defect correlation	42
C.6.5	Performance monitoring.....	43
Annex D (normative):	ICS proforma for STM-16 optical section layer.....	44
D.1	Identification of the implementation	44
D.1.1	Date of the statement.....	44
D.1.2	IUT identification.....	44
D.1.3	SUT identification	45
D.1.4	Product supplier	45
D.1.5	Client	46
D.1.6	ICS contact person.....	46
D.2	Identification of the ETS.....	47
D.3	Global statement of conformance of OS16 layer.....	47
D.4	OS16 layer description	47
D.5	OS16 layer transmission tables	49
D.5.1	OS16 source operating wavelength range, OS16_TT_So.....	49
D.5.2	OS16 source spectral characteristics, OS16_TT_So	49
D.5.3	OS16 source optical characteristics, OS16_TT_So.....	50
D.5.4	OS16 receiver characteristics, OS16_TT_Sk	51
D.5.5	OS16 regeneration characteristics, OS16/RS16_A_So, OS16/RS16_A_Sk.....	52
D.6	OS16 layer defect, fault and performance monitoring tables	53
D.6.1	Port status management.....	53
D.6.2	Defect detection and clearance criteria.....	53
D.6.3	Consequent action activation and clearance criteria.....	54
D.6.4	Defect correlation	54
D.6.5	Performance monitoring.....	55
Annex E (normative):	ICS proforma for STM-1 electrical section layer.....	56
E.1	Identification of the implementation	56
E.1.1	Date of the statement.....	56
E.1.2	IUT identification.....	56
E.1.3	SUT identification	57
E.1.4	Product supplier	57
E.1.5	Client	58

E.1.6	ICS contact person	58
E.2	Identification of the ETS	59
E.3	Global statement of conformance of ES1 layer.....	59
E.4	ES1 layer description.....	59
E.5	ES1 layer transmission tables	59
E.5.1	ES1 layer data stream	59
E.5.2	ES1 layer connection function, ES1_C	59
E.5.3	ES1 layer trail termination functions, ES1_TT_So and ES1_TT_Sk	60
E.5.4	ES1 to RS1 adaptation functions, ES1/RS1_A_So and ES1/RS1_A_Sk	61
E.6	ES1 layer defect, fault and performance monitoring tables	62
E.6.1	Port status management.....	62
E.6.2	Defect detection and clearance criteria	63
E.6.3	Consequent action activation and clearance criteria	64
E.6.4	Defect correlation.....	64
E.6.5	Performance monitoring	65
Annex F (normative):	ICS proforma for E4 electrical section layer	66
F.1	Identification of the implementation.....	66
F.1.1	Date of the statement	66
F.1.2	IUT identification	66
F.1.3	SUT identification.....	67
F.1.4	Product supplier	67
F.1.5	Client.....	68
F.1.6	ICS contact person	68
F.2	Identification of the ETS	69
F.3	Global statement of conformance of E4 layer.....	69
F.4	E4 layer description.....	69
F.5	E4 layer transmission tables	69
F.5.1	E4 layer data stream.....	69
F.5.2	E4 layer connection function, E4_C.....	70
F.5.3	E4 layer trail termination functions, E4_TT_So and E4_TT_Sk	70
F.5.4	E4 to P4x adaptation functions, E4/P4x_A_So and E4/P4x_A_Sk	71
F.5.5	E4to P4e adaptation functions, E4/P4e_A_So and E4/P4e_A_Sk.....	72
F.5.6	E4 to P4s adaptation functions, E4/P4s_A_So and E4/P4s_A_Sk	73
F.6	E4 layer defect, fault and performance monitoring tables.....	74
F.6.1	Port status management.....	74
F.6.2	Defect detection and clearance criteria	75
F.6.3	Consequent action activation and clearance criteria	75
F.6.4	Defect correlation.....	76
Annex G (normative):	ICS proforma for E31 electrical section layer	77
G.1	Identification of the implementation.....	77
G.1.1	Date of the statement	77
G.1.2	IUT identification	77
G.1.3	SUT identification.....	78
G.1.4	Product supplier	78
G.1.5	Client.....	79
G.1.6	ICS contact person	79
G.2	Identification of the ETS	80

G.3	Global statement of conformance of E31 layer	80
G.4	E31 layer description	80
G.5	E31 layer transmission tables	80
G.5.1	E31 layer data stream	80
G.5.2	E31 layer connection function, E31_C	81
G.5.3	E31 layer trail termination functions, E31_TT_So and E31_TT_Sk.....	81
G.5.4	E31 to P31x adaptation functions, E31/P31x_A_So and E31/P31x_A_Sk.....	82
G.5.5	E31to P31e adaptation functions, E31/P31e_A_So and E31/P31e_A_Sk	83
G.5.6	E31 to P31s adaptation functions, E31/P31s_A_So and E31/P31s_A_Sk.....	84
G.6	E31 layer defect, fault and performance monitoring tables	85
G.6.1	Port status management	85
G.6.2	Defect detection and clearance criteria	86
G.6.3	Consequent action activation and clearance criteria.....	86
G.6.4	Defect correlation	87
Annex H (normative):	ICS proforma for E22 electrical section layer	88
H.1	Identification of the implementation	88
H.1.1	Date of the statement.....	88
H.1.2	IUT identification.....	88
H.1.3	SUT identification	89
H.1.4	Product supplier	89
H.1.5	Client	90
H.1.6	ICS contact person.....	90
H.2	Identification of the ETS.....	91
H.3	Global statement of conformance of E22 layer	91
H.4	E22 layer description	91
H.5	E22 layer transmission tables.....	91
H.5.1	E22 layer data stream	91
H.5.2	E22 layer connection function, E22_C	91
H.5.3	E22 layer trail termination functions, E22_TT_So and E22_TT_Sk.....	92
H.5.4	E22 to P22x adaptation functions, E22/P22x_A_So and E22/P22x_A_Sk.....	92
H.5.5	E22to P22e adaptation functions, E22/P22e_A_So and E22/P22e_A_Sk	94
H.6	E22 layer defect, fault and performance monitoring tables	95
H.6.1	Port status management	95
H.6.2	Defect detection and clearance criteria	95
H.6.3	Consequent action activation and clearance criteria.....	96
H.6.4	Defect correlation	97
Annex J (normative):	ICS proforma for E12 electrical section layer	98
J.1	Identification of the implementation	98
J.1.1	Date of the statement.....	98
J.1.2	IUT identification.....	98
J.1.3	SUT identification	99
J.1.4	Product supplier	99
J.1.5	Client	100
J.1.6	ICS contact person.....	100
J.2	Identification of the ETS.....	101
J.3	Global statement of conformance of E12 layer	101
J.4	E12 layer description	101

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 417-2-2 E1:2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552e430ce59d/sist-ets-300-417-2-2-e1-2003)

[https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552e430ce59d/sist-ets-300-417-2-2-e1-2003)

[552e430ce59d/sist-ets-300-417-2-2-e1-2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552e430ce59d/sist-ets-300-417-2-2-e1-2003)

J.5	E12 layer transmission tables	102
J.5.1	E12 layer data stream.....	102
J.5.2	E12 electrical section connection function, E12_C.....	102
J.5.3	E12layer trail termination functions, E12_TT_So and E12_TT_Sk	102
J.5.4	E12 to P12x adaptation functions, E12/P12x_A_So and E12/P12x_A_Sk	104
J.5.5	E12 to P12s adaptation functions, E12/P12s_A_So and E12/P12s_A_Sk	105
J.6	E12 layer defect, fault and performance monitoring tables.....	108
J.6.1	Port status management.....	108
J.6.2	Defect detection and clearance criteria	108
J.6.3	Consequent action activation and clearance criteria	109
J.6.4	Defect correlation.....	110
Annex K (normative): ICS proforma for T12 electrical section layer		111
K.1	Identification of the implementation.....	111
K.1.1	Date of the statement	111
K.1.2	IUT identification	111
K.1.3	SUT identification.....	112
K.1.4	Product supplier	112
K.1.5	Client.....	113
K.1.6	ICS contact person	113
K.2	Identification of the ETS	114
K.3	Global statement of conformance of T12 layer	114
K.4	T12 layer description.....	114
K.5	T12 layer transmission tables.....	114
K.5.1	T12 layer data stream.....	114
K.5.2	T12layer connection function, T12_C.....	114
K.5.3	T12layer trail termination functions, T12_TT_So and T12_TT_Sk.....	115
K.5.4	T12 to SD adaptation functions, T12/SD_A_So and T12/SD_A_Sk.....	115
K.6	T12 layer defect, fault and performance monitoring tables.....	116
K.6.1	Port status management.....	116
K.6.2	Defect detection and clearance criteria	116
K.6.3	Consequent action activation and clearance criteria	116
K.6.4	Defect correlation.....	117
Annex L (normative): ICS proforma for E0 electrical section layer		118
L.1	Identification of the implementation.....	118
L.1.1	Date of the statement	118
L.1.2	IUT identification	118
L.1.3	SUT identification.....	119
L.1.4	Product supplier	119
L.1.5	Client.....	120
L.1.6	ICS contact person	120
L.2	Identification of the ETS	121
L.3	Global statement of conformance of E0 layer	121
L.4	E0 layer description.....	121
L.5	E0 layer transmission tables	121
L.5.1	E0 layer data stream.....	121
L.5.2	E0 layer connection function, E0_C.....	121
L.5.3	E0 layer trail termination functions, E0_TT_So and E0_TT_Sk	122
L.5.4	E0 to P0s adaptation functions, E0/P0s_A_So and E0/P0s_A_Sk	123

L.6	E0 layer defect, fault and performance monitoring tables	124
L.6.1	Port status management	124
L.6.2	Defect detection and clearance criteria	124
L.6.3	Consequent action activation and clearance criteria	124
L.6.4	Defect correlation	125
Annex M (informative):	Bibliography	126
History		127

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 417-2-2 E1:2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003>

Foreword

This European Telecommunication Standard (ETS) has been produced by the Transmission and Multiplexing (TM) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS provides the Implementation Conformance Statement (ICS) proforma specification to be used in connection with conformance/approval testing of Synchronous Digital Hierarchy (SDH) equipment. It is one of a family of ETSs covering various aspects of SDH equipment standards.

The ICS proforma specification will ultimately consist of 8 sub-parts of ETS 300 417, numbered 1-2 to 8-2, each of which will correspond to sub-parts 1-1 to 8-1 of ETS 300 417, respectively. The ICS sub-parts are:

- Part 1-2: ETS 300 417-1-2: "General information about Implementation Conformance Statement (ICS) proforma specification";
- Part 2-2: ETS 300 417-2-2: "Synchronous Digital Hierarchy (SDH) and Plesiochronous Digital Hierarchy (PDH) physical section layer functions Implementation Conformance Statement (ICS) proforma specification";**
- Part 3-2: ETS 300 417-3-2: "STM-N regenerator and multiplex section layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 4-2: ETS 300 417-4-2: "SDH path layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 5-2: ETS 300 417-5-2: "PDH path layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 6-2: ETS 300 417-6-2: "Synchronization layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 7-2: ETS 300 417-7-2: "Auxiliary layer functions Implementation Conformance Statement (ICS) proforma specification";
- Part 8-2: ETS 300 417-8-2: "Major compound functions, Implementation Conformance Statement (ICS) proforma specification".

Transposition dates

Date of adoption:	24 October 1997
Date of latest announcement of this ETS (doa):	28 February 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 August 1998
Date of withdrawal of any conflicting National Standard (dow):	31 August 1998

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 telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

A client of a test laboratory who requests a conformance/approval test shall provide to the test laboratory a completed ICS proforma for each layer to be tested and a detailed system description of the implementation.

The ICS proforma is not another complete description of the related specification, but rather a compact form of its static conformance requirements, to be used by the test laboratory to identify which test shall be performed on a given implementation. Not every feature of a profile specification is contained in the related ICS proforma. For particular cases requiring specific information the ICS can refer to the appropriate clause of the related specification by means of references, notes and or comments.

The ICS proforma captures the implementation flexibility allowed by the related specification and details which option are left to the implementor, which are conditionally dependent on other option taken by the implementor.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 417-2-2 E1:2003](https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-552c430ce59d/sist-ets-300-417-2-2-e1-2003>

1 Scope

This European Telecommunication Standard (ETS) provides the Implementation Conformance Statement (ICS) proforma specification for the Synchronous Digital Hierarchy (SDH) equipment physical section layer functions defined in ETS 300 417-2-1 [2] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [7] and ETS 300 406 [3].

2 Normative references

This ETS 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 this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 417-1-1 (1996): "Transmission and Multiplexing (TM); Generic functional requirements for SDH equipment; Generic processes and performance".
- [2] ETS 300 417-2-1 (1996): "Transmission and Multiplexing (TM); Generic requirements of transport functionality of equipment: SDH and PDH Physical section layer functions".
- [3] ETS 300 406 (1995): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [4] ETS 300 232: "Transmission and Multiplexing (TM); Optical interfaces for equipments and systems relating to the Synchronous Digital Hierarchy [ITU-T Recommendation G.957 (1993) modified]".
- [5] ITU-T Recommendation G.957 (1993): "Optical interfaces for equipments and systems relating to the synchronous digital hierarchy".
- [6] ISO/IEC 9646-1 (1994): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [7] ISO/IEC 9646-7 (1995): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [8] CCITT Recommendation G.703 (1991): "Physical/electrical characteristics of hierarchical digital interfaces".
- [9] CCITT Recommendation G.704 (1991): "Synchronous frame structures used at primary and secondary hierarchical levels".
- [10] CCITT Recommendation G.751 (1988): "Digital multiplex equipments operating at third order bit rate of 34 368 kbit/s and fourth order bit rate of 139 264 kbit/s and using positive justification".
- [11] ITU-T Recommendation G.823 (1993): "The control of jitter and wander within digital networks which are based on the 2 048 kbit/s hierarchy".
- [12] ITU-T Recommendation G.825 (1993): "The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)".
- [13] ITU-T Recommendation G.958 (1993): "Digital line systems based on the synchronous digital hierarchy for use on optical fibre cables".
- [14] ETS 300 167 (1993): "Transmission and Multiplexing (TM); Functional characteristics of 2 048 kbit/s interfaces".

- [15] ETS 300 337 (1993): "Transmission and Multiplexing (TM); Generic frame structures for the transport of various signals (including Asynchronous Transfer Mode (ATM) cells and Synchronous Digital Hierarchy (SDH) elements) at the CCITT Recommendation G.702 hierarchical rates of 2 048 kbit/s, 34 368 kbit/s and 139 264 kbit/s".
- [16] ETS 300 166 (1993): "Transmission and Multiplexing (TM); Physical and electrical characteristics of hierarchical digital interfaces for equipment using the 2 048 kbit/s - based plesiochronous or synchronous digital hierarchies".
- [17] prETS 300 417-6-1 (1997): "Transmission and Multiplexing (TM); Generic functional requirements for Synchronous Digital Hierarchy (SDH) equipment; Part 6-1: Synchronization distribution layer functions".
- [18] ITU-T Recommendation G.652 (1993): "Characteristics of a single-mode optical fibre cable".
- [19] ITU-T Recommendation G.653 (1993): "Characteristics of a dispersion-shifted single-mode optical fibre cable".
- [20] ITU-T Recommendation G.654 (1993): "Characteristics of a 1550 nm wavelength loss-minimized single-mode optical fibre cable".
- [21] ITU-T Recommendation G.742 (1988): "Second order digital multiplex equipment operating at 8448 kbit/s and using positive justification".
- [22] ITU-T Recommendation G.706 (1991): "Frame alignment and cyclic redundancy check (CRC) procedures relating to basic frame structures defined in Recommendation G.704".
- [23] prETS 300 417-6-2: "Transmission and Multiplexing (TM); Generic requirements of transport functionality of equipment; Part 6-2: Synchronization layer functions Implementation Conformance Statement (ICS) proforma specification".
<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-5113ce59d/sist-ets-300-417-2-2-e1-2003>

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

- terms defined in ETS 300 417-2-1 [2];
- terms defined in ISO/IEC 9646-1 [6] and in ISO/IEC 9646-7 [7].

In particular, the following terms defined in ISO/IEC 9646-1 [6] apply:

Implementation Conformance Statement (ICS): A statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented. The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, etc.

ICS proforma: A document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS.

3.2 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

A	Adaptation function
AI	Adapted Information
AIS	Alarm Indication Signal
BER	Bit Error Ratio
C	Connection function
CI	Characteristic Information
CID	Consecutive Identical Digits

CMI	Coded Mark Inversion
CP	Connection Point
D	Data
EMF	Equipment Management Function
EMS	Equipment Management System
E0	Electrical interface signal 64 kbit/s
E12	Electrical interface signal 2 048 kbit/s
E22	Electrical interface signal 8 448 kbit/s
E31	Electrical interface signal 34 368 kbit/s
E4	Electrical interface signal 139 264 kbit/s
ES1	STM-1 electrical interface signal 155 520 kbit/s
EX	EXtinction ratio
FAS	Frame Alignment Signal
FS	Frame Start
HDB3	High Density Bipolar of order 3
IF	In Frame
ICS	Implementation Conformance Statement
ID	IDentifier
IUT	Implementation Under Test
LED	Light Emitting Diode
LOF	Loss Of Frame
LOS	Loss Of Signal
MI	Management Information
MLM	Multi-Longitudinal Mode (laser)
MON	MONitored
N_B	Near-end Block
NE	Network Element
NMON	Not MONitored
OFS	Out of Frame Second
OOF	Out Of Frame state
OS	Optical Section
OS1	STM-1 Optical Section
OS4	STM-4 Optical Section
OS16	STM-16 Optical Section
P0s	64 kbit/s layer (transparent)
P12s	2 048 kbit/s PDH path layer with synchronous 125 μ s frame structure according to ETS 300 167 [14]
P12x	2 048 kbit/s layer (transparent)
P22e	8 448 kbit/s PDH path layer with 4 plesiochronous 2 048 kbit/s
P22x	8 448 kbit/s layer (transparent)
P31e	34 368 kbit/s PDH path layer with 4 plesiochronous 8 448 kbit/s
P31s	34 368 kbit/s PDH path layer with synchronous 125 μ s frame structure according to ETS 300 337 [15]
P31x	34 368 kbit/s layer (transparent)
P4e	139 264 kbit/s PDH path layer with 4 plesiochronous 34 368 kbit/s
P4s	139 264 kbit/s PDH path layer with synchronous 125 μ s frame structure according to ETS 300 337 [15]
P4x	139 264 kbit/s layer (transparent)
PDH	Plesiochronous Digital Hierarchy
QL	Quality Level
RS	Regenerator Section
RS1	STM-1 Regenerator Section
RS4	STM-4 Regenerator Section
RS16	STM-16 Regenerator Section
SEC	SDH Equipment Clock
SCS	System Conformance Statement
SD	Synchronization Distribution layer
SDH	Synchronous Digital Hierarchy
Sk	Sink
SLM	Single-Longitudinal Mode (laser)
So	Source
SQLCH	SQULCH
SSD	Server Signal Degrade

ITC STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/368fc60b-b394-442a-b74f-83142e608000/ets-300-417-2-2-e1-2003>