



SLOVENSKI STANDARD
SIST ETS 300 392-14:1999

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Prizemni snopovni radio (TETRA) - Govor in podatki (V+D) - 14. del: Izjava o skladnosti izvedbe protokola (PICS) Proforma specifikacije

Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 14: Protocol Implementation Conformance Statement (PICS) proforma specification

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ICS:

33.070.10	Prizemni snopovni radio (TETRA)	Terrestrial Trunked Radio (TETRA)
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**Part 14: Protocol Implementation Conformance Statement (PICS)
proforma specification**

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Contents

Foreword	5
1 Scope	7
2 Normative references	7
3 Definitions and abbreviations	7
3.1 Definitions	7
3.2 Abbreviations	8
4 Conformance to this PICS proforma specification	8
Annex A (normative): Protocol ICS proforma for ETS 300 392-2	9
A.1 Guidance for completing the PICS proforma	9
A.1.1 Purposes and structure	9
A.1.2 Abbreviations and conventions	9
A.1.3 Instructions for completing the PICS proforma	11
A.2 Identification of the implementation	11
A.2.1 Date of the statement	11
A.2.2 Implementation Under Test (IUT) identification	11
A.2.3 System Under Test (SUT) identification	11
A.2.4 Product supplier	12
A.2.5 Client	13
A.2.6 PICS contact person	13
A.3 Identification of the protocol	14
A.4 Global statement of conformance	14
A.5 Major capabilities	14
A.6 Circuit Mode Control Entity (CMCE)	14
A.6.1 CMCE sub-entities and features	14
A.6.2 CMCE procedures	16
A.6.3 CMCE functions	18
A.6.4 CMCE PDUs	20
A.6.5 CMCE PDU elements	21
A.6.6 CMCE constants	31
A.6.7 CMCE timers	32
A.6.8 Negotiation capabilities	32
A.7 Mobility Management (MM)	33
A.7.1 MM features	33
A.7.2 MM procedures	33
A.7.3 MM PDUs	35
A.7.4 MM PDU elements	36
A.7.5 MM timers	39
A.8 Mobile Link Entity (MLE)	40
A.8.1 MLE features	40
A.8.2 MLE procedures	40
A.8.3 MLE PDUs	43
A.8.4 MLE timers	43
A.8.5 MLE PDU elements	43

A.9	Logical Link Control (LLC)	45
A.9.1	LLC features.....	45
A.9.2	LLC procedures.....	45
A.9.3	LLC PDUs	47
A.9.4	LLC PDU elements	48
A.9.5	LLC constants	51
A.9.6	LLC timers	52
A.10	Medium Access Control (MAC)	53
A.10.1	MAC features	53
A.10.2	MAC procedures	53
A.10.3	MAC PDUs	55
A.10.4	MAC PDU elements	56
A.10.5	MAC constants	58
A.10.6	MAC timers	58
A.11	Connection Oriented Network Protocol (CONP)	59
A.12	Specific Connectionless Network Protocol (SCLNP).....	59
A.12.1	SCLNP procedures	59
A.12.2	SCLNP PDUs.....	60
A.12.3	SCLNP PDU elements	60
	History.....	61

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Terrestrial Trunked Radio (TETRA) Project of the European Telecommunications Standards Institute (ETSI).

This ETS is a multi-part standard and will consist of the following parts:

- Part 1: "General network design";
- Part 2: "Air Interface (AI)";
- Part 3: "Inter-working", (DE/TETRA-03001-3);
- Part 4: "Gateways", (DE/TETRA-03001-4);
- Part 5: "Peripheral equipment interface", (DE/TETRA-03001-5);
- Part 6: "Line connected stations", (DE/TETRA-03001-6);
- Part 7: "Security";
- Part 9: "General requirements for supplementary services", (DE/TETRA-03030);
- Part 10: "Supplementary services stage 1";
- Part 11: "Supplementary services stage 2";
- Part 12: "Supplementary services stage 3";
- Part 13: "SDL Model of the Air Interface";
- Part 14: "PICS Proforma".**

Transposition dates	
Date of adoption:	5 December 1997
Date of latest announcement of this ETS (doa):	31 March 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	30 September 1998
Date of withdrawal of any conflicting National Standard (dow):	30 September 1998

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1 Scope

This European Telecommunication Standard (ETS) provides the Protocol Implementation Conformance Statement (PICS) proforma for the TETRA Mobile Station (MS) Air Interface (AI) defined in ETS 300 392-2 [1] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4], ETS 300 406 [2], and in ETR 212 [5]. The details of Supplementary Services (SS) and security aspects of Voice plus Data (V+D) are outside the scope of this ETS.

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 300 392-2 (1996): "Radio Equipment and Systems (RES); Trans-European Trunked Radio (TETRA); Voice plus Data (V + D); Part 2: Air Interface (AI)".
- [2] ETS 300 406 (1995): "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardisation methodology".
- [3] ISO/IEC 9646-1 (1994): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-7 (1995): "Information technology - Open systems interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [5] ETR 212 (1995): "Methods for Testing and Specification (MTS); Implementation Conformance Statement (ICS) proforma style guide".
- [6] ISO 8208: "X25 packet layer protocol for Data Terminal equipment".
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- [7] ISO 8348: "Information processing systems - Data communications - Network service definition".

3 Definitions and abbreviations

3.1 Definitions

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

- terms defined in ETS 300 392-2 [1];
- terms defined in ISO/IEC 9646-1 [3] and in ISO/IEC 9646-7 [4].

In particular, the following terms defined in ISO/IEC 9646-1 [3] 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.

Protocol ICS (PICS): An ICS for an implementation or system claimed to conform to a given protocol specification.

3.2 Abbreviations

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

BS	Base Station
CC	Call Control sub entity within CMCE
CMCE	Circuit Mode Control Entity
CONP	Connection Oriented Network Protocol
DTMF	Dual Tone Multi Frequency
ETS	European Telecommunication Standard
ICS	Implementation Conformance Statement
ITSI	Individual TETRA Subscriber Identity
IUT	Implementation Under Test
LLC	Logical Link Control
LLME	Lower Layer Management Entity
MAC	Medium Access Control
MCC	Mobile Country Code
MLE	Mobile Link Entity
MM	Mobility Management
MNC	Mobile Network Code
MS	Mobile Station
PDU	Protocol Data Unit
PICS	Protocol Implementation Conformance Statement
PTT	Push To Talk
RES	Radio Equipment and Systems
SCLNP	Specific Connectionless Network Protocol
SAP	Service Access Point
SCS	System Conformance Statement
SDS	Short Data Services sub entity within CMCE
SDU	Service Data Unit
SP	Service Primitive
SS	Supplementary Service sub entity within CMCE
SUT	System Under Test
SwMI	Switching and Management Infrastructure
V+D	Voice plus Data

4 Conformance to this PICS proforma specification

If it claims to conform to this ETS, the actual PICS proforma to be filled in by a supplier shall be technically equivalent to the text of the PICS proforma given in annex A, and shall preserve the numbering/naming and ordering of the proforma items.

A PICS which conforms to this ETS shall be a conforming PICS proforma completed in accordance with the guidance for completion given in clause A.1.

Annex A (normative): Protocol ICS proforma for ETS 300 392-2

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

A.1 Guidance for completing the PICS proforma

A.1.1 Purposes and structure

The purpose of this PICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in ETS 300 392-2 [1] may provide information about the implementation in a standardised manner.

The PICS proforma is subdivided into subclauses for the following categories of information:

- Guidance for completing the PICS proforma;
- Identification of the implementation;
- Identification of the protocol;
- Global statement of conformance;
- Circuit Mode Control Entity (CMCE);
- Mobility Management (MM);
- Mobile Link Entity (MLE);
- Logical Link Control (LLC);
- Medium Access Control (MAC);
- Connection Oriented Network Protocol (CONP);
- Specific Connectionless Network Protocol (SCLNP).

A.1.2 Abbreviations and conventions

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guide-lines presented in ISO/IEC 9646-7 [4].

Item column:

The item column contains a number which identifies the item in the table.

Item description column:

The item description column describes in free text each respective item (e.g. elements, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Status column:

The following notations, defined in ISO/IEC 9646-7 [4], are used for the status column:

m	mandatory - the capability is required to be supported.
o	optional - the capability may be supported or not.
n/a	not applicable - in the given context, it is impossible to use the capability.
x	prohibited (excluded) - there is a requirement not to use this capability in the given context.
o.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies a unique group of related optional items and the logic of their selection which is defined immediately following the table.

ci conditional - the requirement on the capability ("m", "o", "x" or "n/a") depends on the support of other optional or conditional items. "i" is an integer identifying a unique conditional status expression which is defined immediately following the table.

Reference column:

The reference column gives reference to ETS 300 392-2 [1], except where explicitly stated otherwise.

Support column:

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [4], are used for the support column:

Y or y	supported by the implementation
N or n	not supported by the implementation
N/A, n/a or -	no answer required (allowed only if the status is n/a, directly or after evaluation of a conditional status)

It is also possible to provide a comment to an answer in the space provided at the bottom of the table.

NOTE 1: As stated in ISO/IEC 9646-7 [4], support for a received PDU requires the ability to encode/decode all mandatory elements of that PDU. Supporting a PDU while having no ability to encode/decode a mandatory element is non-conformant. Support for an element of a PDU means that the semantics of that element are supported. It does not mean that the element shall always be present in the PDU.

Values allowed column:

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The values allowed column contains the type, the list, the range, or the length of values allowed. The following notations are used:

-	range of values:	<min value> .. <max value>
	EXAMPLE:	5 .. 20
-	list of values:	<value1>, <value2>,, <valueN>
	EXAMPLE:	2,4,6,8,9
	EXAMPLE:	'1101'B, '1011'B, '1111'B
	EXAMPLE:	'0A'H, '34'H, '2F'H
-	list of named values:	<name1>(<val1>), <name2>(<val2>),, <nameN>(<valN>)
	EXAMPLE:	reject(1), accept(2)
-	length:	size (<min size> .. <max size>)
	EXAMPLE:	size (1 .. 8)

Values supported column:

The values supported column shall be filled in by the supplier of the implementation. In this column, the values or the ranges of values supported by the implementation shall be indicated.

References to items:

For each possible item answer (answer in the support column) within the PICS proforma exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns are discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.5/4 is the reference to the answer of item 4 in table 5 of annex A.

EXAMPLE 2: A.6/3b is the reference to the second answer (i.e. in the second support column) of item 3 in table 6 of annex A.

Prerequisite line:

A prerequisite line takes the form: Prerequisite: <predicate>.

A prerequisite line in the beginning of a clause or table indicates that the whole clause or the whole table is not required to be completed if the predicate is FALSE.

NOTE 2: In this PICS proforma, all the tables have a prerequisite independently on the status of the predicate referred to being mandatory or optional. This is done for readability reasons.

A.1.3 Instructions for completing the PICS proforma

The supplier of the implementation shall complete the PICS proforma in each of the spaces provided. In particular, an explicit answer shall be entered, in each of the support or supported column boxes provided, using the notation described in subclause A.1.2.

If necessary, the supplier may provide additional comments in space at the bottom of the tables, or separately on sheets of paper.

More detailed instructions are given at the beginning of the different subclauses of the PICS proforma.

A.2 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.

A.2.1 Date of the statement

.....

A.2.2 Implementation Under Test (IUT) identification

IUT name:

.....

.....

IUT version:

.....

A.2.3 System Under Test (SUT) identification

SUT name:

.....

.....

Hardware configuration:

.....
.....
.....

Operating system:

.....

A.2.4 Product supplier

Name:

.....

Address:

.....
.....
.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....
.....
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A.2.5 Client

(If different from product supplier)

Name:

.....

Address:

.....

.....

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

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A.2.6 PICS contact person

(A person to contact if there are any queries concerning the content of the PICS)

Name:

.....

Telephone number:

.....

Facsimile number:

.....

E-mail address:

.....

Additional information:

.....

.....