



# SLOVENSKI STANDARD

## SIST EN 301 823-1-1 V1.1.1:2006

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**Širokopasovna radijska dostopovna omrežja (BRAN) – Zelo zmogljivo radijsko lokalno omrežje (HIPERLAN), tip 2 – Specifikacija za preskušanje skladnosti protokola krmiljenja podatkovnih povezav (DLC) – 1. del: Funkcija za prenos osnovnih podatkov – 1. poddel: Izjava o skladnosti izvedbe protokola (PICS) - Proforma specifikacija**

Broadband Radio Access Networks (BRAN) HIPERLAN Type 2: Conformance testing for the Data Link Control (DLC) protocol; Part 1: Basic data transport function; Sub-part 1: Protocol Implementation Conformance Statement (PICS) proforma.

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*European Standard (Telecommunications series)*

**Broadband Radio Access Networks (BRAN);  
HIPERLAN Type 2;  
Conformance testing for the  
Data Link Control (DLC) protocol;  
Part 1: Basic data transport function;  
Sub-part 1: Protocol Implementation Conformance  
Statement (PICS) proforma**

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**Reference**

DEN/BRAN-002T004-1-1

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**ETSI**

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## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Project Broadband Radio Access Networks (BRAN).

The present document is part 1, sub-part 1 of a multi-part deliverable covering Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Conformance testing for the Data Link Control (DLC) protocol; Part 1: Basic data transport function, as identified below:

Each part consists of the following sub-parts:

**Sub-part 1: "Protocol Implementation Conformance Statement (PICS) proforma";**

Sub-part 2: "Test Suite Structure and Test Purposes (TSS&TP) specification";

Sub-part 3: "Abstract Test Suite (ATS) specification".

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## 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 a Protocol Implementation Conformance Statement (PICS).

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# 1 Scope

The present document provides the Protocol Implementation Conformance Statement (PICS) proforma for BRAN HIPERLAN Type 2; Conformance testing for the Data Link Control (DLC) protocol, Part 1: Basic data transport function, as defined in TS 101 761-1 [1] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [4] and ETS 300 406 [2].

It details (in tabular form) the implementation options, i.e. the optional functions additional to those which are mandatory to implement.

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- 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.

- iTeh STANDARD PREVIEW**  
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- [1] ETSI TS 101 761-1 (V1.1.1): "Broadband Radio Access Networks (BRAN); HIPERLAN Type 2; Data Link Control (DLC) Layer; Part 1: Basic Data Transport Functions".
- [2] ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".  
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- [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".

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# 3 Definitions and abbreviations

## 3.1 Definitions

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

- terms defined in TS 101 761-1 [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):** 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:** document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

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



## 3.2 Abbreviations

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

AP	Access Point
ARQ	Automatic Repeat Request
BCH	Broadcast CHannel
CC	Central Controller
CL	Convergence Layer
DCC	DLC user Connection Control
DCCH	Dedicated Control CHannel
DLC	Data Link Control
EC	Error Control
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
LCCH	Link Control CHannel
LCH	Long CHannel
MAC	Medium Access Control
MT	Mobile Terminal
PDU	Protocol Data Unit
PHY	Physical layer
PICS	Protocol ICS
RLC	Radio Link Control
RSS	Received Signal Strength
SCH	Short CHannel
SCS	System Conformance Statement
SUT	System Under Test

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## 4 Conformance to this PICS proforma specification

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If it claims to conform to the present document, 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 the present document 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 TS 101 761-1

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 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 TS 101 761-1 [1] may provide information about the implementation in a standardized 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 TS 101 761-1 [1];
- global statement of conformance;
- roles;
- major capabilities;
- PDUs;
- PDU parameters.

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#### A.1.2 Abbreviations and conventions

The PICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines 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. parameters, 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.
- i irrelevant (out-of-scope) - capability outside the scope of the reference specification. No answer is requested from the supplier.

NOTE 1: This use of "i" status is not to be confused with the suffix "i" to the "o" and "c" statuses above.

### Reference column

The reference column makes reference to TS 101 761-1 [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).

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If this PICS proforma is completed in order to describe a multiple-profile support in a system, it is necessary to be able to answer that a capability is supported for one profile and not supported for another. In that case, the supplier shall enter the unique reference to a conditional expression, preceded by "?" (e.g. ?3). This expression shall be given in the space for comments provided at the bottom of the table. It uses predicates defined in the SCS, each of which refers to a single profile and which takes the value TRUE if and only if that profile is to be used.

EXAMPLE 1: ?3: IF prof1 THEN Y ELSE N

NOTE 2: As stated in ISO/IEC 9646-7 [4], support for a received PDU requires the ability to parse all valid parameters of that PDU. Supporting a PDU while having no ability to parse a valid parameter is non-conformant. Support for a parameter on a PDU means that the semantics of that parameter are supported.

### Values allowed column

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)