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Zasebno omrežje z integriranimi storitvami (PISN) - Standardni profil za priključitev opreme radijskega osebnega klica (RPE) na PISN

Private Integrated Services Network (PISN); Profile Standard for the connection of Radio Paging Equipment (RPE) to a PISN

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Foreword

This European Telecommunication Standard (ETS) has been produced by the European Computer Manufacturers Association (ECMA) on behalf of its members and those of the European Telecommunications Standard Institute (ETSI).

This ETS is one of a series of ECMA standards defining services and signalling protocols applicable to Private Integrated Services Networks (PISNs). The series uses the ISDN concepts as developed by the ITU-T (formerly CCITT) and is also within the framework of standards for open system interconnection as defined by ISO.

This ETS specifies the functional profile for interconnecting Radio Paging Equipment (RPE) with PISNs to permit interoperability between equipment from different vendors.

This ETS is based upon the practical experience of ECMA member companies and the results of their active and continuous participation in the work of ISO/IEC JTC1, ITU-T, ETSI and various international and national standardization bodies. It represents a pragmatic and widely based consensus.

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Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	30 September 1997
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1 Scope

This Profile Standard specifies the combination of base standards, together with the selection of appropriate options and parameter values, necessary to interface a Radio Paging Equipment (RPE) to a Private Integrated Services Network Exchange (PINX).

The standard provides for two methods of connection of an RPE to a PINX. With the first method, the RPE is connected in a similar manner to a TE connected at the S reference point using an ISDN basic access interface at layer 1. With the second method the RPE is connected in a similar manner to another PINX connected at the C reference point using an ISDN basic access interface or a primary rate interface at layer 1. In this case static mapping is employed between the C reference point and the Q reference point. The C, Q and S reference points are defined in ISO/IEC 11579-1 [4].

This Standard states requirements upon implementations to achieve interoperability between equipment on each side of the RPE/PINX interface.

NOTE: Implementation of one or more profiles from this Standard does not preclude a manufacturer from offering other means of interconnection.

2 Conformance

A system conforms to this Standard if it correctly performs all the mandatory capabilities defined in the requirement list (RL) and the profile specific implementation conformance statement (ICS). Note that more capabilities may be mandatory than in the base standards (annex A and B).

3 References

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[1] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statements - Requirements and guidance on ICS and ICS proformas".

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https://standards.iteh.ai/catalog/standards/sist/[illegible]

[2] ISO/IEC 11571 (1994): "Information technology - Telecommunications and information exchange between systems - Numbering and sub-addressing in private integrated services network".

[3] ISO/IEC 11572 (1994): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit-mode bearer services - Inter-exchange signalling procedures and protocol".

[4] ISO/IEC 11579-1 (1994): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Part 1: Reference configuration for PISN Exchanges (PINX)".

[5] ISO/IEC 11582 (1995): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Generic functional protocol for the support of supplementary services - Inter-exchange signalling procedures and protocol".

[6] ISO/IEC 13868 (1995): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Name identification supplementary services".

[7] ISO/IEC 13869 (1995): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Call transfer supplementary service".

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[8] ISO/IEC 15054 (1996): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-Exchange Signalling Protocol - Call Interception Additional Network Feature".

[9] ISO/IEC 13873 (1995): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Call diversion supplementary services".

[10] ISO/IEC 13874 (1995): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Path replacement additional network feature".

[11] ETS 300 011 (1992): "Integrated Services Digital Network (ISDN); Primary rate user-network interface; Layer 1 specification and test principles".

[12] ETS 300 012 (1992): "Integrated Services Digital Network (ISDN); Basic user-network interface; Layer 1 specification and test principles".

[13] ETS 300 192 (1992): "Private Telecommunication Network (PTN); Signalling protocol at the S-reference point; Circuit mode basic services".

[14] ETS 300 362 (1994): "Private Telecommunication Network (PTN); Inter-exchange signalling protocol; Call offer supplementary service".

[15] ETS 300 364 (1994): "Private Telecommunication Network (PTN); Inter-exchange signalling protocol; Do not disturb and do not disturb override supplementary services".

[16] ETS 300 366 (1994): "Private Telecommunication Network (PTN); Inter-exchange signalling protocol; Call completion supplementary services".

[17] ETS 300 402-1 (1995): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 1: General aspects".

[18] ETS 300 402-2 (1995): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 2: General protocol specification".

[19] ETS 300 402-4 (1996): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 4: Protocol Implementation Conformance Statement (PICS) proforma specification for the general protocol".

[20] ETS 300 426 (1995): "Private Telecommunication Network (PTN); Inter-exchange signalling protocol; Call intrusion supplementary service".

[21] CCITT Q.850 (1993): "Usage of cause and location in the Digital Subscriber Signalling System No.1 and the Signalling System No.7 ISDN User Part".

[22] ESPA 4.4.8 (1992): "Proposal for standard supplementary services for interworking of Private ISDN and Radio Paging".

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