



**SLOVENSKI STANDARD**  
**SIST ETS 300 325 E1:2003**  
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**Digitalno omrežje z integriranimi storitvami (ISDN) – Programirljivi  
telekomunikacijski vmesniki (PCI) za Euro-ISDN**

Integrated Services Digital Network (ISDN); Programming Communication Interface  
(PCI) for Euro-ISDN

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33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
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## Foreword

This European Telecommunication Standard (ETS) has been produced by the Terminal Equipment (TE) Technical Committee of the European Telecommunications Standards Institute (ETSI).

Annexes B, C, D, F, G and H to this ETS are normative while annexes A, E, J and K are informative.

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## Introduction

The number of different Integrated Services Digital Network (ISDN) Programming Interfaces used by terminal equipment has hindered the development of applications using ISDN which, in turn, has proved a constraint to the usage of ISDN on modern terminal equipment.

This ETS defines the ETSI ISDN Application Programming Interface (API), called ISDN Programming Communication Interface (PCI). The ISDN PCI is an application interface for accessing and administering ISDN services.

It has been defined in order to provide a standard that terminal equipment providers should implement instead of providing their own programming interface. Thus allowing the portability of applications that use the ISDN PCI across a range of terminal equipment based on different operating systems.

The ISDN PCI has been defined with the Application Developer in mind and, where possible, eliminates the need for a detailed knowledge of ISDN. It has also been defined in such a manner that extensions provided to take advantage of future ISDN developments do not effect the operation of existing applications.

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## 1 Scope

This ETS specifies the Integrated Services Digital Network Programming Communication Interface (ISDN PCI) for the accessing and administering of the following ISDN services:

- Bearer Services (as defined in ETS 300 102-1 [2]);
- Supplementary Services (as defined in ETS 300 196);
- Virtual Circuit (VC) or Permanent Virtual Circuit (PVC) Bearer Services on the B- and D-channels.

The PCI defined in this ETS:

- covers both Basic and Primary rate ISDN access;
- is independent of operating system, hardware and programming languages. It provides language and operating system binding for common operating system environments;
- supports concurrent applications;
- supports concurrent protocol stacks related to data exchange;
- supports application access to multiple channels on multiple ISDN accesses;
- provides the Open Systems Interconnection (OSI) connection-mode network service as defined by CCITT Recommendation X.213 [7] using the method defined in ISO 9574;
- provides an interface for applications requiring direct control of ISDN services;
- shows the impact of security issues on the interface;
- has been defined to allow future extension of functionality.

Further standards specify the method of testing and detailed application specific requirements to determine conformance based on this ETS.

## 2 Normative references

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

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|-----|---|
| [1] | ETS 300 080 (1992): "Integrated Services Digital Network (ISDN); ISDN lower layer protocols for telematic terminals".   |
| [2] | ETS 300 102-1 (1990): "Integrated Services Digital Network (ISDN); User-network interface layer 3, Specifications for basic call control".  |
| [3] | ISO/IEC 8208 (1990): "Information technology; Data communications; X.25 Packet Layer Protocol for Data Terminal Equipment".   |
| [4] | ISO 7776 (1986): " Information Processing systems; Data communications; High-level data link control procedures; Description of the X.25 LAPB-compatible DTE data link procedures". |
| [5] | ISO/IEC 9646 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework".   |
| [6] | ISO/IEC ISP 10609 (1992): "Information technology; International Standardized Profiles TB, TC, TD and TE; Connection-mode Transport Service over connection-mode Network Service".  |
| [7] | CCITT Recommendation X.213 (1988): "Network Service Definition for Open Systems Interconnection for CCITT Applications".  |
| [8] | ISO CEI/9899 (1990): "Programming Language-C".  |
| [9] | ETR 018: "Integrated Services Digital Network (ISDN); Application of the BC-, HLC-, LLC- information elements by terminals supporting ISDN services".                               |