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Information technology — Telecommunications and information exchange between systems — Private Integrated Services Networks — Addressing

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Réseaux privés à intégration de services — Adressage



Contents

Foreword	iv
Introduction	v
1 Scope	1
2 Conformance	1
3 References (normative)	1
4 Definitions	2
4.1 Address	2
4.1.1 Number 4.1.2 Subaddress	2 2
4.2 Domain	2
4.2.1 Sub-Domain	2
4.3 Explicit Numbering Plan 0 4.4 Implicit Numbering Plan 0	2 2
4.4.1 Prefix 4.4.2 Service Code	2 2
4.5 Numbering Plan	2
 4.5.1 Native Numbering Plan 4.5.2 Foreign Numbering Plan 4.5.3 Private Integrated Services Network Numbering Plans (PISN NP) 	2 2 2
4.6 ISDN Numbering Plan (ISDN NP) 4.7 Private Numbering Plan (PNP)	2 2
 4.7.1 PNP Number 4.7.2 Region 4.7.3 Region Code (RC) 4.7.4 Regional Number (RN) 4.7.5 Complete Number 	2 2 2 3 3 3
 4.8 Dialling Plan 4.9 Numbering Plan Identifier (NPI) 4.10 Type of Number (TON) 4.11 Escape Code 4.12 Selection Address/Number 4.13 Identification Address/Number 4.14 Multiple Subscriber Number (MSN) 4.15 PISN Administrator 	3 3 3 3 3 3 3 3 3 3
5 List of acronyms	3
6 PISN addressable entities	4

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7 Requirements on numbering plans, and on their inter-relationships	4
7.1 Coding of PISN numbering plans7.2 Content of PISN numbers	5 5
7.2.1 PISN numbers using the IA5 character coding scheme7.2.2 DCC and ICD numbering plans	5 5
7.3 Content of the number digits in a PISN Numbering Plan	5
7.3.1 ISDN NP 7.3.2 PNP 7.3.3 Unknown NP 7.3.4 DCC NP 7.3.5 ICD NP	5 6 6 6 6
7.4 Structure of Private Numbering Plans	6
7.4.1 PNP in the IA5 character coding format7.4.2 PNP in the binary coding format	6 7
 7.5 Relationship between the Private and the ISDN Numbering Plan 7.6 Relationship between other members of the PISN NP and the ISDN NP 7.7 Relationship between PNP numbers in different PISNs 	7 7 7
8 Number handling requirements of private integrated services network exchanges	8
8.1 PINX Requirements for the Acceptance of Received Numbers	10
8.1.1 Numbering formats accepted with IA5-coded Selection Numbers8.1.2 Numbering formats accepted with IA5-coded Identification Numbers	10 10
8.2 PINX requirements for the provision of numbers	11
8.2.1 Numbering formats provided with Selection Numbers8.2.2 Numbering formats provided with Identification Numbers	11 12
9 Address handling requirements of terminals attached to private integrated services network exchanges	12
9.1 Selection Number handling	12
9.1.1 Outgoing calls 9.1.2 Incoming calls	12 13
9.2 Identification Number handling	13
9.2.1 Sending of identification address 9.2.2 Reception of identification address	13 13
10 Subaddressing in PISNs	13
10.1 Treatment of subaddresses in a pure PISN environment10.2 Treatment of subaddresses in interworking situations10.3 Interworking with the public ISDN	13 13 14
11 Selection address handling of terminals supporting sub-addressing	14
Annexes	
A - Bibliography	15
B - Use of Private and Public ISDN Numbering Plans within a PISN Numbering Plan	16
C - MSN Arrangements	17
D - Terminal Interchangeability	18
E - Relationship between Dialling and Numbering Plans at the PISN User Interface, and Numbering Plans at the PISN-to-Terminal Interface	19
F - Coding of Number Information	20

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 1157 was prepared by ECMA (as ECMA-155) and was adopted, under a special "fast-track procedure", by Joint Technical Commune ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

This second edition cancels and replaces the first edition (ISO/IEC 11571:1994), which has been technically revised.

Annexes C and F form an integral part of this International Standard. Annexes A, B, D and E are for information only.



Introduction

This International Standard is one of a series of International Standards which are applicable to Private Integrated Services Networks (PISNs). Its purpose is to serve as a general and common reference for all addressing-related statements in other standards on PISNs.

This International Standard is based on the ISDN concept as developed by ITU-T and refined by ETSI for European applications, but modified to cover the particularities of PISNs. It conforms to the framework of International Standards for Open Systems Interconnector as defined by ISO/IEC.

This International Standard enables the Administrator of a PISN to choose whether

- the ISDN Numbering Plan according to ITU-T Rec. E.164, or
- a Private Numbering Plan, or
- an Implicit Numbering Plan, or
- an OSI NSAP addressing plan, or
- any combination of these numbering plans

shall be employed as native numbering plan(s) in its PISN (PISN NP).

In addition, the Administrator can employ PISN subaddressing in order to expand the addressing capacity beyond the capacity of the PISN NP.

The impact of this on terminal interchangeability between sees of public and private ISDNs is indicated in annex D.

This International Standard 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, ITC, ETSI and other international and national standardization bodies. It represents a pragmatic and widely based consensus.

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1 Scope

This International Standard defines the requirements for the handling of network addresses for the identification of entities which use or provide telecommunication services offered by Private Integrated Services Networks (PISNs). This International Standard covers numbering including the requirements for the support of a Private Numbering Plan, the addressing of network service access points for open systems interconnection (OSI NSAP addressing), and the support of subaddressing.

This International Standard is applicable to Private Integrated Services Network Exchanges with broad-band and narrow-band capabilities (PINX) and to terminals to be attached to the access of PINXs. Any use by a PINX of the Support of Private Numbering Plans supplementary service provided by a public ISDN is outside the scope of this International Standard.

Although this International Standard downot explicitly describe its application to location-independent (mobile) addressable entities, this application is not precluded.

2 Conformance

In order to conform to this International Standard PINX shall meet the mandatory requirements of clauses 6 to 8 and 10.

In order to conform to this International Standard, a terminal for attachment to an access of a PINX shall meet the mandatory requirements of clauses 9 and 11.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and the maintain registers of currently valid International Standards.

ISO/IEC 8348:1996,	Information technology - Open Systems Intercornection - Network Service Definition.
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).
ITU-T Rec. E.160:1993,	Definitions relating to national and international numbering plans.
ITU-T Rec. E.164:1991,	Numbering plan for the ISDN era.
ITU-T Rec. I.334:1988,	Principles relating ISDN numbers/sub-addresses to the OSL reference model network layer addresses (Blue Book).
ETS 300 059:1991,	Integrated Services Digital Network (ISDN); Subaddressing (SUB) supplementary service; Service description.
ETS 300 062:1991,	Integrated Services Digital Network (ISDN); Direct Dialling In (DDI) supplementary service; Service description.
ETS 300 089:1992,	Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description.
ETS 300 094:1992,	Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Service description.
ETS 300 102-1:1990,	Integrated Services Digital Network (ISDN); User-network interface layer 3 specifications for basic call control

In addition to these normative references, informative references are listed in annex A.