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INTERNATIONAL STANDARD

ISO/IEC 20117

First edition
2004-05-15

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Message centre monitoring and mailbox identification supplementary services

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Réseau privé à intégration de services — Protocole de signalisation d'échange — Services supplémentaires de surveillance du centre du message et d'identification de boîte aux lettres

Reference number
ISO/IEC 20117:2004(E)

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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 20117 was prepared by ECMA (as ECMA-347) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

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Introduction

This International Standard is one of a series defining services and signalling protocols applicable to Private Integrated Services Networks (PISNs). The series uses ISDN concepts as developed by ITU-T and conforms to the framework of International Standards for Open Systems Interconnection as defined by ISO/IEC.

This International Standard specifies the signalling protocol for use at the Q reference point in support of the Message Centre Monitoring supplementary service as well as the Mailbox Identification supplementary service. The protocol defined in this International Standard forms part of the PSS1 protocol (informally known as QSIG).

SS-MCM is based on SS-MWI and includes its entire functionality. The interoperability with SS-MWI is therefore guaranteed. Compared to SS-MWI, SS-MCM offers an enhanced functionality for monitoring status changes of messages stored in the Served User's Mailbox as follows:

- individual activation and deactivation for the monitoring of messages of different Message Type(s) within the Mailbox as well as interrogation of the actual SS-MCM configuration;
- retrieval of information about all messages (i.e. new and retrieved messages) in the mailbox independent of the Message Status;
- request of detailed updated information about messages stored in the mailbox.

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, ITU-T, ETSI and other international and national standardization bodies. It represents a pragmatic and widely based consensus.

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Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Message centre monitoring and mailbox identification supplementary services

1 Scope

This International Standard specifies the signalling protocol for the support of the Message Centre Monitoring supplementary service (SS-MCM) as well as the Mailbox Identification supplementary service (SS-MID) at the Q reference point between Private Integrated services Network eXchanges (PINXs) connected together within a Private Integrated Services Network (PISN).

The supplementary service MCM enables a Served User to get informed by a Message Centre about the status and status changes of messages stored in that Served Users Mailbox.

The supplementary service MID enables a Message Centre to identify a specific mailbox of a Served User in case the Served User has more than one mailbox within the Message Centre. In addition SS-MID enables a Served User to authenticate himself/herself at a specific mailbox located within the Messages Centre.

The Q reference point is defined in ISO/IEC 11579-1.

Service specifications are produced in three stages and according to the method specified in ETS 300 387. This International Standard contains the stage 3 specification for the Q reference point and satisfies the requirements identified by the stage 1 and stage 2 specifications in ISO/IEC 20116.

The signalling protocol for SS-MCM and SS-MID uses certain aspects of the generic procedures for the control of supplementary services specified in ISO/IEC 11582.

This International Standard also specifies additional signalling protocol requirements for the support of interactions at the Q reference point between SS-MCM as well as SS-MID and other supplementary services and ANFs.

NOTE Additional interactions that have no impact on the signalling protocol at the Q reference point can be found in the relevant stage 1 specifications.

2 Conformance

In order to conform to this International Standard, a PINX shall satisfy the requirements identified in the Protocol Implementation Conformance Statement (PICS) proforma in Annex A.

Conformance to this International Standard includes conforming to those clauses that specify protocol interactions between SS-MCM as well as SS-MID and other supplementary services and ANFs for which signalling protocols at the Q reference point are supported in accordance with the stage 3 standards concerned.

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3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 11572:2000, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Circuit mode bearer services — Inter-exchange signalling procedures and protocol*

ISO/IEC 11574:2000, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Circuit-mode 64 kbit/s bearer services — Service description, functional capabilities and information flows*

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)*

ISO/IEC 11582:2002, *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*

ISO/IEC 13873:2003, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call Diversion supplementary services*

ISO/IEC 15505:2003, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Message Waiting Indication supplementary service*

ISO/IEC 15506:2003, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Message Waiting Indication supplementary service*

ISO/IEC 20116:2004, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Message centre monitoring and mailbox identification supplementary services*

ISO 8601:2000, *Data elements and interchange formats — Information interchange — Representation of dates and times*

ETS 300 387:1994, *Private Telecommunication Network (PTN); Method for the specification of basic and supplementary services*

ITU-T Rec. I.112:1993, *Vocabulary of terms for ISDNs*

ITU-T Rec. I.210:1993, *Principles of telecommunication services supported by an ISDN and the means to describe them*

ITU-T Rec. Q.950:2000, *Digital Subscriber Signalling System No. 1 (DSS 1) — Supplementary services protocols, structure and general principles*

ITU-T Rec. Z.100:1999, *Specification and Description Language*

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