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Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Recall supplementary service

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseau privé à intégration de services —
Protocole de signalisation d'interéchange — Service supplémentaire de
rappel*



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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. 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 15052 was prepared by ECMA (as ECMA-214) 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.

Annex A forms an integral part of this International Standard. Annexes B and C are for information only.

Introduction

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

This International Standard specifies the signalling protocol for use at the Q reference point in support of the Recall supplementary service.

The 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 JTC 1, ITU-T, 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 specifies the signalling protocol for the support of Recall supplementary service (SS-RE) at the Q reference point between Private Integrated Services Network Exchanges (PINXs) connected together within Private Integrated Services Network (PISN).

SS-RE is a supplementary service which provides for the re-direction of a transferred call back to the served user if the call is unanswered. SS-RE is only applicable after transfer by join, not after transfer by rerouting.

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 CCITT Recommendation I.130. 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 15051.

The signalling protocol for SS-RE operates on top of the signalling protocol for basic circuit switched call control, as specified in ISO/IEC 11572, and 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-RE and other supplementary services and ANFs. However, the interaction with the Call Transfer supplementary service is specified as part of SS-RE signalling procedures as it is the essential aspect of the Recall supplementary service.

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.

This International Standard is applicable to PINXs which can be interconnected to form a PISN.

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-RE 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.

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 ISO maintain registers of currently valid International Standards.

ISO/IEC 11572:1997,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit mode bearer services - Inter-exchange signalling procedures and protocol.</i>
ISO/IEC 11574:1994,	<i>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.</i>
ISO/IEC 11579-1:1994,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Part 1: Reference configuration for PISN Exchanges (PINX).</i>
ISO/IEC 11582:1995,	<i>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.</i>

ISO/IEC 13865:1995,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Specification, functional model and information flows - Call transfer supplementary service.</i>
ISO/IEC 13868:1995,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Name identification supplementary services.</i>
ISO/IEC 13869:1995,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Call transfer supplementary service.</i>
ISO/IEC 13873:1995,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Call diversion supplementary services.</i>
ISO/IEC 15051:1997,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Specification, functional model and information flows - Recall supplementary service.</i>
ISO/IEC 15054:1997,	<i>Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Inter-exchange signalling protocol - Call interception additional network feature.</i>
CCITT Rec. I.112:1988,	<i>Vocabulary of terms for ISDNs.</i>
CCITT Rec. I.130:1988,	<i>Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN.</i>
CCITT Rec. I.210:1988,	<i>Principles of telecommunication services supported by an ISDN and the means to describe them.</i>
CCITT Rec. Z.100:1988,	<i>Specification and description language.</i>

4 Definitions

For the purposes of this International Standard, the following definitions apply.

4.1 External definitions

This International Standard uses the following terms defined in other documents:

– Application Protocol Data Unit	(ISO/IEC 11582)
– Basic Service	(CCITT Rec. I.210)
– Call, Basic Call	(ISO/IEC 11582)
– End PINX	(ISO/IEC 11582)
– Gateway PINX	(ISO/IEC 11572)
– Integrated Services Digital Network	(CCITT Rec. I.112)
– Interpretation APDU	(ISO/IEC 11582)
– Private Integrated Services Network (PISN)	(ISO/IEC 11579-1)
– Private Integrated Services Network Exchange (PINX)	(ISO/IEC 11579-1)
– Primary Call	(ISO/IEC 13865)
– Primary PINX	(ISO/IEC 13869)
– Secondary Call	(ISO/IEC 13865)
– Secondary PINX	(ISO/IEC 13869)
– Signalling	(CCITT Rec. I.112)
– Supplementary Service	(CCITT Rec. I.210)
– Supplementary Service Control Entity	(ISO/IEC 11582)
– User	(ISO/IEC 11574)
– User B	(ISO/IEC 13865)
– User C	(ISO/IEC 13865)