
**Information technology —
Telecommunications and information
exchange between systems — Private
Integrated Services Network —
Inter-exchange signalling protocol — Route
Restriction Class additional network feature**

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseau privé à intégration de services —
Protocole de signalisation d'interéchange — Caractéristique de réseau
additionnelle de classe de restriction de route*



Contents

1 SCOPE	1
2 CONFORMANCE.....	1
3 NORMATIVE REFERENCES	1
4 DEFINITIONS.....	2
4.1 EXTERNAL DEFINITIONS	2
5 LIST OF ACRONYMS.....	3
6. SIGNALLING PROTOCOL FOR THE SUPPORT OF ANF-RRC.....	3
6.1 ANF-RRC DESCRIPTION	3
6.2 ANF-RRC OPERATIONAL REQUIREMENTS.....	3
6.2.1 <i>Requirements on the Originating PINX</i>	3
6.2.2 <i>Requirements on a Transit PINX</i>	3
6.2.3 <i>Requirements on a Terminating PINX</i>	3
6.2.4 <i>Requirements on the Incoming Gateway PINX</i>	3
6.2.5 <i>Requirements on the Outgoing Gateway PINX</i>	4
6.3 ANF-RRC CODING REQUIREMENTS	4
6.3.1 <i>Operations</i>	4
6.3.2 <i>Information elements</i>	4
6.3.2.1 <i>Facility information element</i>	4
6.3.3 <i>Messages</i>	5
6.4 ANF-RRC STATE DEFINITIONS.....	5
6.5 ANF-RRC SIGNALLING PROCEDURES.....	5
6.5.1 <i>Actions at the Originating PINX</i>	5
6.5.1.1 <i>Normal procedures</i>	5
6.5.1.2 <i>Exceptional procedures</i>	5
6.5.2 <i>Actions at a Transit PINX</i>	5
6.5.2.1 <i>Normal procedures</i>	5
6.5.2.2 <i>Exceptional procedures</i>	5
6.5.3 <i>Actions at a Terminating PINX</i>	5
6.6 ANF-RRC IMPACT OF INTERWORKING WITH PUBLIC ISDNs	5
6.6.1 <i>Actions at an Incoming Gateway PINX</i>	5
6.6.1.1 <i>Normal procedures</i>	5
6.6.1.2 <i>Exceptional procedures</i>	6
6.6.2 <i>Actions at an Outgoing Gateway PINX</i>	6
6.6.2.1 <i>Normal procedures</i>	6
6.6.2.2 <i>Exceptional procedures</i>	6
6.7 ANF-RRC IMPACT OF INTERWORKING WITH NON-ISDNs	6
6.7.1 <i>Actions at an Incoming Gateway PINX</i>	6
6.7.1.1 <i>Normal procedures</i>	6
6.7.1.2 <i>Exceptional procedures</i>	6
6.7.2 <i>Actions at an Outgoing Gateway PINX</i>	6
6.7.2.1 <i>Normal procedures</i>	6
6.7.2.2 <i>Exceptional procedures</i>	6
6.8 PROTOCOL INTERACTIONS BETWEEN ANF-RRC AND OTHER SUPPLEMENTARY SERVICES AND ANFS.....	7
6.8.1 <i>Interaction with Calling Name Identification Presentation (SS-CNIP)</i>	7
6.8.2 <i>Interaction with Connected Name Identification Presentation (SS-CONP)</i>	7

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6.8.3 Interaction with Call Forwarding Unconditional (SS-CFU) 7

6.8.4 Interaction with Call Forwarding Busy (SS-CFB)..... 7

6.8.5 Interaction with Call Forwarding No Reply (SS-CFNR) 7

6.8.6 Interaction with Call Deflection (SS-CD) 7

6.8.7 Interaction with Call Transfer (SS-CT)..... 7

6.8.8 Interaction with Completion of Calls to Busy Subscriber (SS-CCBS)..... 7

6.8.9 Interaction with Completion of Calls on No Reply (SS-CCNR)..... 7

6.8.10 Interaction with Path Replacement (ANF-PR) 7

 6.8.10.1 Actions at the ANF-PR Requesting PINX 7

 6.8.10.2 Actions at the ANF-PR Cooperating PINX..... 8

 6.8.10.3 Actions at a Transit PINX on the path of the new connection..... 8

 6.8.10.4 Actions at a Transit PINX on the path of the retained connection 8

6.8.11 Interaction with Call Offer (SS-CO)..... 8

6.8.12 Interaction with Call Intrusion (SS-CI)..... 8

6.8.13 Interaction with Do Not Disturb (SS-DND)..... 8

6.8.14 Interaction with Do Not Disturb Override (SS-DNDO) 8

6.9 ANF-RRC PARAMETER VALUES (TIMERS) 8

ANNEX A 9

A.1 INTRODUCTION 9

A.2 INSTRUCTIONS FOR COMPLETING THE PICS PROFORMA..... 9

 A.2.1 General structure of the PICS proforma 9

 A.2.2 Additional information 10

 A.2.3 Exception information 10

A.3 PICS PROFORMA FOR THIS INTERNATIONAL STANDARD 10

 A.3.1 Implementation identification 10

 A.3.2 Protocol summary..... 11

 A.3.3 General..... 11

 A.3.4 Procedures 11

 A.3.5 Coding 12

ANNEX B 13

B.1 SDL REPRESENTATION OF ANF-RRC AT THE ORIGINATING PINX 13

B.2 SDL REPRESENTATION OF ANF-RRC AT THE TRANSIT PINX 14

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 13241 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

Annex A forms an integral part of this International Standard. Annex B is 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 (PISNs). The series uses ISDN concepts as developed by CCITT and conforms to the framework of Standards for Open Systems Interconnection as defined by ISO.

This particular International Standard specifies the signalling protocol for use at the Q reference point in support of the Route Restriction Class additional network feature.

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Route Restriction Class additional network feature

1 Scope

This International Standard specifies the signalling protocol for the support of the Route Restriction Class (RRC) additional network feature (ANF-RRC) at the Q reference point between Private Integrated Services Network Exchanges (PINXs) connected together within a Private Integrated Services Network (PISN).

ANF-RRC is a feature which applies in the establishment phase of a call, allowing that call to access facilities that are within an allowable restriction range.

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 13242.

The signalling protocol for ANF-RRC 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 ANF-RRC and other supplementary services and ANFs.

This International Standard is applicable to PINXs which can interconnect 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.

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 11571:1994, *Information technology — Telecommunications and information exchange between systems — Numbering and sub-addressing in private integrated services networks.*

ISO/IEC 11572:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Circuit mode bearer services — Inter-exchange signalling procedures and protocol.*

ISO/IEC 11574:1994, *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 11582:1995, *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.*

ISO/IEC 13242:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Route Restriction Class additional network feature.*

CCITT Rec. I.112 (1988), *Vocabulary of Terms for ISDNs.*

CCITT Rec. I.130 (1988), *Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN.*

CCITT Rec. I.210 (1988), *Principles of telecommunication services supported by an ISDN and the means to describe them.*

CCITT Rec. Z.100 (1988), *Specification and Description Language.*

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.

- Additional Network Feature	(ISO/IEC 13242)
- Application Protocol Data Unit (APDU)	(ISO/IEC 11582)
- Basic Service	(CCITT Rec. I.210)
- Call, Basic Call	(ISO/IEC 11572)
- End PINX	(ISO/IEC 11572)
- Facility	(ISO/IEC 13242)
- Facility Restriction Class	(ISO/IEC 13242)
- Incoming Gateway PINX	(ISO/IEC 11572)
- Interpretation APDU	(ISO/IEC 11582)
- Network Facility Extension (NFE)	(ISO/IEC 11582)
- Originating PINX	(ISO/IEC 11572)
- Outgoing Gateway PINX	(ISO/IEC 11572)
- Preceding PINX	(ISO/IEC 11572)
- Private Integrated Services Network (PISN)	(ISO/IEC 11579-1)
- Private Integrated Services Network Exchange (PINX)	(ISO/IEC 11579-1)
- Route Access Class	(ISO/IEC 13242)
- Signalling	(CCITT Rec. I.112)
- Subsequent PINX	(ISO/IEC 11572)
- Supplementary Service	(CCITT Rec. I.210)
- Supplementary Services Control Entity	(ISO/IEC 11572)
- Terminating PINX	(ISO/IEC 11572)
- Transit PINX	(ISO/IEC 11572)
- User	(ISO/IEC 11574)