
**Information technology —
Telecommunications and information
exchange between systems — Private
Integrated Services Network —
Inter-exchange signalling protocol —
Private User Mobility (PUM) — Call
handling additional network features**

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseau privé à intégration de
services — Protocole de signalisation d'interéchange — Mobilité de
l'utilisateur privé (PUM) — Caractéristiques additionnelles de réseau de
traitement d'appel*

Reference number
ISO/IEC 17878:2000(E)



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

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

International Standard ISO/IEC 17878 was prepared by ECMA (as ECMA-284) 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.

Annexes A and E form a normative part of this International Standard. Annexes B, C and D 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 (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 for Private User Mobility call handling additional network features ANF-PUMI and ANF-PUMO.

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.

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Private User Mobility (PUM) — Call handling additional network features

1 Scope

This International Standard specifies the signalling protocol for the support of the Private User Mobility call handling additional network features (ANF-PUMI and ANF-PUMO) at the Q reference point between Private Integrated Services Network Exchanges (PINX) connected together within a Private Integrated Services Network (PISN).

ANF-PUMI is a feature that directs incoming calls to a PUM user within the PISN regardless of the PUM user's geographical location within the PISN, provided that the PUM user's location is known.

ANF-PUMO permits the PISN to process call requests from a PUM user at the home location, if required.

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 17877.

The signalling protocol for ANF-PUMI and ANF-PUMO 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-PUMI / ANF-PUMO 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 11571:1998, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Addressing*.

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 13241:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Route restriction class additional network feature.*

ISO/IEC 13868:1995, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Name identification supplementary services.*

ISO/IEC 13873:1995, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call diversion supplementary services.*

ISO/IEC 13874:1999, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Path replacement additional network feature.*

ISO/IEC 14843:1996, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call offer supplementary service.*

ISO/IEC 14844:1996, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Do not disturb and do not disturb override supplementary services.*

ISO/IEC 14846:1996, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call intrusion supplementary service.*

ISO/IEC 15050:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Advice of charge supplementary services.*

ISO/IEC 15054:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call interception additional network feature.*

ISO/IEC 15056:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Transit counter additional network feature.*

ISO/IEC 15431:1999, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Wireless terminal call handling additional network features.*

ISO/IEC 15506:1997, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Message waiting indication supplementary service.*

ISO/IEC 15772:1998, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Common information additional network feature.*

ISO/IEC 15992:1998, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call priority interruption and call priority interruption protection supplementary services.*

ISO/IEC 17875:2000, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Private User Mobility (PUM) — Registration supplementary service.*

ISO/IEC 17876:2000, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Private User Mobility (PUM) — Registration supplementary service.*

ISO/IEC 17877:2000, *Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Private User Mobility (PUM) — Call handling additional network features.*

ETS 300 415:1996, *Private Integrated Services Network (PISN); Terms and definitions.*

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

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.850:1998, *Usage of cause and location in the digital subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN user part.*

ITU-T Rec. Q.950:1993, *Digital Subscriber Signalling System No. 1 (DSS 1) — Supplementary services protocols, structure and general principles*.

ITU-T Rec. Z.100:1993, *Specification and description language*.

4 Definitions

For the purpose 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 (ANF)	(ISO/IEC 11582)
— AllCall registration	(ISO/IEC 17875)
— Application Protocol Data Unit (APDU)	(ISO/IEC 11582)
— Basic service	(ITU-T Rec. I.210)
— Call, Basic call	(ISO/IEC 11582)
— Call independent	(ISO/IEC 11582)
— Call independent signalling connection	(ISO/IEC 11582)
— Call related	(ISO/IEC 11582)
— Complete number	(ISO/IEC 11571)
— Co-ordination function	(ISO/IEC 11582)
— End PINX	(ISO/IEC 11582)
— InCall registration	(ISO/IEC 17875)
— Incoming Gateway PINX	(ISO/IEC 11572)
— Incoming PUM call	(ISO/IEC 17877)
— Interpretation APDU	(ISO/IEC 11582)
— Home PINX	(ISO/IEC 17877)
— Hosting address	(ISO/IEC 17877)
— Network Facility Extension (NFE)	(ISO/IEC 11582)
— Originating PINX	(ISO/IEC 11572)
— Private Integrated Services Network (PISN)	(ISO/IEC 11579-1)
— Private Integrated Services Network Exchange (PINX)	(ISO/IEC 11579-1)
— PISN number	(ISO/IEC 11571)
— Signalling	(ITU-T Rec. I.112)
— Supplementary service	(ITU-T Rec. I.210)
— Supplementary Service Control Entity	(ISO/IEC 11582)
— Subsequent PINX	(ISO/IEC 11572)
— Terminating PINX	(ISO/IEC 11572)
— Transit PINX	(ISO/IEC 11572)
— User	(ISO/IEC 11574)
— PUM user	(ISO/IEC 17877)
— Visitor PINX	(ISO/IEC 17877)

4.2 Alternative identifier : An identifier, other than the PISN number, which identifies the PUM user uniquely.

4.3 Home data base (HDB) : The database in which the data on the current location and associated parameters of a cordless terminal or a mobile user are stored.

4.4 Rerouting PINX : The PINX which executes the rerouting of the incoming PUM call to the current Visitor PINX.

NOTE 1 - In case of rerouting, the Rerouting PINX is either the Originating PINX or the Incoming Gateway PINX. In case of forward switching, the Rerouting PINX is the PUMI-detect PINX.

4.5 PUMI-detect PINX : The PINX which detects that an incoming call is to a PUM user.

NOTE 2 - The PUMI-detect PINX is either the Home PINX, a Transit PINX, the Incoming Gateway PINX or the Originating PINX.

4.6 Terminal equipment (TE) : An item of equipment attached to a telecommunication network to provide access for a user to one or more services.

4.7 Visitor data base (VDB) : The database in which location information concerning a cordless terminal or a mobile user is stored, as long as the cordless terminal or the mobile user are localized in the corresponding visitor area.

5 List of acronyms

ANF	Additional Network Feature
ANF-CINT	Call Interception additional network feature
ANF-CMN	Common Information additional network feature
ANF-WTMI	Wireless Terminal Incoming call additional network feature
ANF-PR	Path Replacement additional network feature
(ANF-)PUMI	Private User Mobility Incoming Call (additional network feature)
(ANF-)PUMO	Private User Mobility Outgoing Call (additional network feature)
ANF-RRC	Route Restriction Class additional network feature
ANF-TC	Transit counter additional network feature
APDU	Application Protocol Data Unit
ASN.1	Abstract Syntax Notation no. 1
HDB	Home Data Base
ISDN	Integrated Services Digital Network
NFE	Network Facility Extension
PICS	Protocol Implementation Conformance Statement
PINX	Private Integrated Services Network Exchange
PISN	Private Integrated Services Network
PUM	Private User Mobility
SDL	Specification and Description Language
SS-AOC	Advice Of Charge supplementary services
SS-CD	Call Deflection supplementary service
SS-CFB	Call Forwarding Busy supplementary service
SS-CFNR	Call Forwarding No Reply supplementary service
SS-CFU	Call Forwarding Unconditional supplementary service
SS-CI	Call Intrusion supplementary service
SS-CNIP	Calling Name Identification Presentation supplementary service
SS-CO	Call Offer supplementary service
SS-CPI(P)	Call Priority Interruption (Protection) supplementary service

SS-DNDO	Do Not Disturb Override supplementary service
SS-MWI	Message Waiting Indication supplementary service
TE	Terminal Equipment
VDB	Visitor Data Base

6 Signalling protocol for the support of ANF-PUMI

6.1 ANF-PUMI description

ANF-PUMI enables calls to be directed to a PUM user within the PISN. As there is no predetermined PINX for the connection of a PUM user to the PISN, the directing of such calls requires that information regarding the location of the user is available.

6.2 ANF-PUMI operational requirements

6.2.1 Requirements on the Rerouteing PINX

ISO/IEC 11572 protocol control procedures for call establishment at the outgoing side of an inter-PINX link shall apply to the establishment of the connection to the Visitor PINX. ISO/IEC 11572 protocol control procedures for call clearing shall apply to the release of the connection to the PUMI-detect PINX.

Generic procedures for the call related control of supplementary services, as specified in ISO/IEC 11582 for an End PINX, shall apply.

6.2.2 Requirements on the PUMI-detect PINX

ISO/IEC 11572 protocol control procedures for call establishment at the incoming side of an inter-PINX link shall apply to the establishment of the connection from the Originating or Incoming Gateway PINX. ISO/IEC 11572 protocol control procedures for call clearing shall apply to the release of the connection to the Rerouteing PINX.

Generic procedures for the call related control of supplementary services, as specified in ISO/IEC 11582 for an End PINX, shall apply.

Generic procedures for the call independent control (connection oriented) of supplementary services, as specified in ISO/IEC 11582 for an Originating PINX, shall apply.

6.2.3 Requirements on the Home PINX

Generic procedures for the call independent control (connection oriented) of supplementary services, as specified in ISO/IEC 11582 for a Terminating PINX, shall apply.

6.2.4 Requirements on the Visitor PINX

ISO/IEC 11572 protocol control procedures for call establishment at the incoming side of an inter-PINX link shall apply to the establishment of the connection from the Rerouteing PINX.

Generic procedures for the call related control of supplementary services, as specified in ISO/IEC 11582 for an End PINX, shall apply.

6.2.5 Requirements on a Transit PINX

Basic call procedures for call establishment and call clearing at a Transit PINX, as specified in ISO/IEC 11572, shall apply.

Generic procedures for the call related control and call independent control (connection oriented) of supplementary services, as specified in ISO/IEC 11582 for a Transit PINX, shall apply.

6.3 ANF-PUMI coding requirements

6.3.1 Operations

The operations pumiEnquiry, pumiDivert and pumiInform defined in Abstract Syntax Notation number 1 (ASN.1) in table 1 shall apply.

Table 1 — Operations in support of call handling additional network features

Private-User-Mobility-Call-Handling-Operations { iso (1) standard (0) pss1-pum-call-handling (17878) pum-call-handling-operations (0)}	
DEFINITIONS EXPLICIT TAGS ::=	
BEGIN	
IMPORTS	OPERATION, ERROR FROM Remote-Operation-Notation { joint-iso-ccitt (2) remote-operations (4) notation (0) } Extension FROM Manufacturer-specific-service-extension-definition { iso (1) standard (0) pss1-generic-procedures (11582) msi-definition (0) } PSS1InformationElement FROM Generic-parameters-definition { iso (1) standard (0) pss1-generic-procedures (11582) pss1-generic-parameters (6) } Name FROM Name-Operations { iso (1) standard (0) pss1-name (13868) name-operations (0) } basicServiceNotProvided, invalidServedUserNumber, notAvailable FROM General-Error-List { ccitt (0) recommendation (0) q (17) 950 general-error-list (1) } Address, PartyNumber, PartySubaddress, PresentedNumberScreened FROM Addressing-Data-Elements { iso (1) standard (0) pss1-generic-procedures (11582) addressing-data-elements (9) };
<i>-- Operations for ANF-PUMI: --</i>	
PumiEnquiry ::=	OPERATION <i>-- Sent from the PUMI-detect PINX to the Home PINX.</i> ARGUMENT EnquiryArg RESULT EnquiryRes ERRORS { invalidServedUserNumber, locationNotKnown, notAvailable, basicServiceNotProvided, unspecified }
PumiDivert ::=	OPERATION <i>-- Sent from the PUMI-detect PINX to the Rerouteing PINX.</i> ARGUMENT DivertArg RESULT DummyRes ERRORS { notAvailable, unspecified }
PumiInform ::=	OPERATION <i>-- Sent from the Rerouteing PINX to the Visitor PINX.</i> ARGUMENT InformArg
EnquiryArg ::=	SEQUENCE { pisinNumber PartyNumber, <i>-- The PISN number of the PUM user</i> qSIGInfoElement PSS1InformationElement,

Table 1 — Operations in support of call handling additional network features (continued)

		-- The basic call information elements Bearer capability, High layer compatibility, -- Low layer compatibility can be embedded in the qSIGInfoElement -- in accordance with clause 6.5.2.1.	
DivertArg ::=	SEQUENCE	argExtension PumiExtension OPTIONAL } { hostingAddr PartyNumber, -- The PISN number of the hosting user, -- always a Complete Number. callingNumber PresentedNumberScreened, pumIdentity PumIdentity, -- The PISN number (always a Complete Number) -- and/or an alternative identifier of the PUM user. qSIGInfoElement PSS1InformationElement, -- The basic call information elements Bearer capability, High layer compatibility, -- Low layer compatibility, and Progress indicator -- can be embedded in the qSIGInfoElement in accordance with clause 6.5.2.1.	
InformArg ::=	SEQUENCE	callingUserSub [1] PartySubaddress OPTIONAL, callingUserName [2] Name OPTIONAL, pumUserSub [3] PartySubaddress OPTIONAL, argExtension PumiExtension OPTIONAL } { pumIdentity PumIdentity, -- The PISN number (always a Complete Number) -- and/or an alternative identifier of the PUM user.	
EnquiryRes ::=	CHOICE	argExtension PumiExtension OPTIONAL } { currLocation [1] IMPLICIT CurrLocation, cfuActivated [2] IMPLICIT CfuActivated }	
CurrLocation ::=	SEQUENCE	{ hostingAddr PartyNumber, -- The PISN number of the hosting user, -- always a Complete Number. PumIdentity PumIdentity, -- The PISN number (always a Complete Number) -- and/or an alternative identifier of the PUM user. argExtension PumiExtension OPTIONAL }	
CfuActivated ::=	SEQUENCE	{ divToAddress Address, divOptions SubscriptionOption, pumName [1] Name OPTIONAL, argExtension PumiExtension OPTIONAL }	
SubscriptionOption ::=	ENUMERATED	{ noNotification (0), notificationWithoutDivertedToNr (1), notificationWithDivertedToNr (2) }	
DummyRes ::=	CHOICE	{ null NULL, extension [1] IMPLICIT Extension, sequOfExtn [2] IMPLICIT SEQUENCE OF Extension }	
PumiExtension ::=	CHOICE	{ extension [4] IMPLICIT Extension, sequOfExtn [5] IMPLICIT SEQUENCE OF Extension }	
PumIdentity ::=	CHOICE	{ pisenNumber PartyNumber, alternativeld [10] IMPLICIT Alternativeld, both [11] IMPLICIT SEQUENCE { pisenNumber PartyNumber, alternativeld Alternativeld } }	
Alternativeld ::=	OCTET STRING(SIZE(1..20))		
-- Operation for ANF-PUMO --			

Table 1 — Operations in support of call handling additional network features (concluded)

PumoCall ::=	OPERATION	PumoArg	
	ARGUMENT		
PumoArg ::=	SEQUENCE	{ destinationNumber	[0] PartyNumber OPTIONAL,
		pumIdentity	[1] PumIdentity OPTIONAL,
		-- The PISN number (always a Complete Number)	
		-- and/or an alternative identifier of the PUM user.	
		sendingComplete	[2] IMPLICIT NULL OPTIONAL,
		extension	CHOICE
		{single	[3] IMPLICIT Extension,
		multiple	[4] IMPLICIT SEQUENCE OF Extension }
			OPTIONAL }
pumiEnquiry	PumiEnquiry	::=	localValue 93
pumiDivert	PumiDivert	::=	localValue 94
pumiInform	PumiInform	::=	localValue 95
pumoCall	PumoCall	::=	localValue 96
locationNotKnown	ERROR	::=	localValue 1015
unspecified	Unspecified	::=	localValue 1008
Unspecified		::=	ERROR PARAMETER Extension
END	-- of Private-User-Mobility-Call-Handling-Operations		

6.3.2 Information elements

6.3.2.1 Facility information element

The operations defined in 6.3.1 shall be coded in the Facility information element in accordance with ISO/IEC 11582.

When conveying the invoke APDU of operations defined in 6.3.1 the destinationEntity data element of the NFE shall contain value endPINX.

When conveying the invoke APDU of operations defined in 6.3.1, the Interpretation APDU shall either be omitted or be included with value rejectAnyUnrecognisedInvokePdu.

6.3.2.2 Other information elements

Any other information elements (e.g. Calling party number, Called party number) shall be coded in accordance with the rules of ISO/IEC 11572 and ISO/IEC 11582.

6.3.3 Messages

The Facility information element shall be conveyed in the messages as specified in clause 10 of ISO/IEC 11582.

Messages used for call establishment shall be as specified in ISO/IEC 11572.

6.4 ANF-PUMI state definitions

6.4.1 States at the Rerouteing PINX

The procedures for the Rerouteing PINX are written in terms of the following conceptual states existing within the ANF-PUMI Supplementary Service Control entity in that PINX in association with a particular call.

6.4.1.1 State ExecIdle

Ready for receipt of a pumiDivert APDU.

6.4.2 States at the PUMI-detect PINX

The procedures for the PUMI-detect PINX are written in terms of the following conceptual states existing within the ANF-PUMI Supplementary Service Control entity in that PINX in association with a particular call.

6.4.2.1 State PUMI-Idle

ANF-PUMI is not operating.

6.4.2.2 State PUMI-Detected

A call to a PUM user has been detected and a pumiEnquiry invoke APDU requesting the current location of the PUM user has been sent to the Home PINX.

6.4.2.3 State PUMI-Divert

The current location of the PUM user is known and a pumiDivert invoke APDU has been sent to the Rerouteing PINX.

6.4.3 States at the Home PINX

The procedures for the Home PINX are written in terms of the following conceptual states existing within the ANF-PUMI Supplementary Service Control entity.

6.4.3.1 State HomeIdle

Ready for receipt of a pumiEnquiry APDU.

6.4.4 States at the Visitor PINX

The procedures for the Visitor PINX are written in terms of the following conceptual states existing within the ANF-PUMI Supplementary Service Control entity in that PINX in association with a particular call.

6.4.4.1 State VisitIdle

Ready for receipt of a pumiInform APDU.

6.5 ANF-PUMI signalling procedures for invocation and operation

Examples of message sequences are shown in annex C.

6.5.1 Actions at the Rerouteing PINX

The SDL representation of procedures at the Rerouteing PINX is shown in D.1 of annex D.

6.5.1.1 Normal procedures

On receipt of a pumiDivert invoke APDU in a FACILITY message during basic call protocol control state Outgoing Call Proceeding, the Rerouteing PINX shall determine whether it can proceed with ANF-PUMI. If so, it shall initiate a new call establishment to the Visitor PINX and release the leg towards the PUMI-detect PINX by sending a DISCONNECT message containing a pumiDivert return result APDU.

The SETUP message for the new call establishment shall include a pumiInform invoke APDU.

The following specific basic call information elements shall be included in the SETUP message:

- Called party number, containing the number received in the hostingAddr data element within the pumiDivert invoke APDU;
- Called party subaddress, containing the subaddress received in the pumUserSub data element within the pumiDivert invoke APDU (optional);
- Calling party number, containing the number received in the callingNumber data element within the pumiDivert invoke APDU;
- Calling party subaddress, containing the subaddress received in the callingUserSub data element within the pumiDivert invoke APDU (optional);
- Bearer capability information element as received in embedded form within the pumiDivert invoke APDU, and any of the following information elements which were also received in embedded form in this APDU: High layer compatibility, Low layer compatibility and Progress indicator information elements.

The pumiInform invoke APDU shall contain the data element pumIdentity with the same contents as the corresponding data element in the argument of the received pumiDivert invoke APDU.

6.5.1.2 Exceptional procedures

If the Rerouteing PINX can not proceed with ANF-PUMI, it shall answer the pumiDivert invoke APDU with a return error APDU containing the error notAvailable.