INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

Q.2762

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(02/95)

**B-ISDN APPLICATION PROTOCOLS
OF THE NETWORK**

BROADBAND INTEGRATED SERVICES
DIGITAL NETWORK (B-ISDN) – GENERAL
FUNCTIONS OF MESSAGES AND SIGNALS
OF THE B-ISDN USER PART (B-ISUP)
OF SIGNALLING SYSTEM No. 7

ITU-T Recommendation Q.2762

(Previously "CCITT Recommendation")

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation Q.2762 was prepared by ITU-T Study Group 11 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 7th of February 1995.

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NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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SUMMARY

This Recommendation is one of a set of Recommendations that describe the Broadband ISDN User Part. It describes the elements of signalling information and their function used by the B-ISDN User Part protocol to support basic bearer services and supplementary services for Capability Set 1 B-ISDN applications.

Other ITU-T Recommendations in this set include:

– ITU-T Recommendation Q.2761 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Functional Description of the B-ISDN User Part (B-ISUP) of Signalling System No. 7.*

– ITU-T Recommendation Q.2763 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes.*

– ITU-T Recommendation Q.2764 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures.*

– ITU-T Recommendation Q.2730 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Supplementary services.*

– ITU-T Recommendation Q.2660 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Interworking between Signalling System No. 7 – Broadband ISDN User Part (B-ISUP) and Narrow-band ISDN User Part (N-ISUP).*

– ITU-T Recommendation Q.2650 (1995), *Broadband ISDN, interworking between Signalling System No. 7 – Broadband ISDN User Part (B-ISUP) and Digital Subscriber Signalling System No. 7 (DSS 2).*

– ITU-T Recommendation Q.2610 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Usage of cause and location in B-ISDN User Part and DSS 2.*

BROADBAND INTEGRATED SERVICES DIGITAL NETWORK (B-ISDN) – GENERAL FUNCTIONS OF MESSAGES AND SIGNALS OF THE B-ISDN USER PART (B-ISUP) OF SIGNALLING SYSTEM No. 7

(Geneva, 1995)

1 Scope

This Recommendation describes the elements of signalling information and their function used by the B-ISDN User Part protocol to support basic bearer services and supplementary services for Capability Set 1 B-ISDN applications. The encoding of these elements, the format of the messages in which they are conveyed and their application in the B-ISDN User Part signalling procedures are described in Recommendations Q.2763, Q.2764, Q.2730 and Q.2610.

The B-ISDN User Part is applicable to international B-ISDN networks. At transit nodes the B-ISDN User Part supports the N-ISUP services depicted in ISUP 1992 Recommendations.

Furthermore, the B-ISDN User Part is suitable for national applications. Most signalling procedures, information elements and message types specified for international use are also required in typical national applications. Moreover, coding space has been reserved in order to allow national Administrations and recognized operating agencies to introduce network specific signalling messages and elements of information within the internationally standardized protocol structure.

1.1 Relationships to other Recommendations

The B-ISDN User Part protocol which supports the Capability Set 1 ATM bearer services is described in Recommendations Q.2761 to Q.2764. An overview of the B-ISDN User Part protocol is provided in Recommendation Q.2761. Message formats and message field codings are defined in Recommendation Q.2763, while the signalling procedures are described in Recommendation Q.2764. Exceptions against Recommendations Q.730, Q.731, Q.733, Q.735 and Q.737 are provided in Recommendation Q.2730 to provide for supplementary services. Requirements for interworking between N-ISDN User Part and the B-ISDN User Part are provided in Recommendation Q.2660. Requirements or functions for interworking between the B-ISDN User Part and Recommendation Q.2931 are included in Recommendation Q.2650.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

[1]   ITU-T Recommendation I.413 (1993), *B-ISDN User-network Interface.*

[2]   ITU-T Recommendation Q.2931 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Digital Subscriber Signalling System No. 2 (DSS 2) – User-Network Interface (NNI) layer 3 specification for basic call/connection control.*

[3]   ITU-T Recommendation Q.2761 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Functional Description of the B-ISDN User Part (B-ISUP) of Signalling System No. 7.*

[4]   ITU-T Recommendation Q.2763 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes.*

[5]   ITU-T Recommendation Q.2764 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures.*

[6]   ITU-T Recommendation Q.2730 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Signalling System No. 7 B-ISDN User Part (B-ISUP) – Supplementary services.*

[7]   ITU-T Recommendation Q.2660 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Interworking between Signalling System No. 7 – Broadband ISDN User Part (B-ISUP) and Narrow-band ISDN User Part (N-ISUP).*

[8]   ITU-T Recommendation Q.2650 (1995), *Broadband ISDN, interworking between Signalling System No. 7 – Broadband ISDN User Part (B-ISUP) and Digital Subscriber Signalling System No. 7 (DSS 2).*

[9]   ITU-T Recommendation Q.2610 (1995), *Broadband Integrated Services Digital Network (B-ISDN) – Usage of cause and location in B-ISDN User Part and DSS 2.*

3   Abbreviations

For the purposes of this Recommendation, the following abbreviations are used:

ATM	Asynchronous Transfer Mode
BCOB-A	Broadband Connection Oriented Bearer – Sub-category A
BCOB-X	Broadband Connection Oriented Bearer – Sub-category X
B-ISDN	Broadband Integrated Services Digital Network
B-ISUP	Broadband Integrated Services Digital Network User Part
ITU-T	International Telecommunication Union – Telecommunication Standardization
MTP	Message Transfer Part
SACF	Single Association Control Function
VC	Virtual Channel
VCC	Virtual Channel Connection
VPC	Virtual Path Connection
VPCI	Virtual Path Connection Identifier

4   Signalling messages

Table 1 is a list of the B-ISDN User Part message acronyms.

4.1   Address Complete Message (ACM)

A message sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received.

4.2   Answer Message (ANM)

A message sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received and the call has been answered. In semi-automatic working this message has a supervisory function. In automatic working this message is used in conjunction with charging information in order to:

–   start metering the charge to the calling subscriber (see Recommendation Q.28); and

–   start measurement of call duration for international accounting purposes (see Recommendation E.260).

TABLE 1/Q.2762

B-ISDN User Part message acronym list

Acronym	Message
ACM	Address Complete
ANM	Answer
BLA	Blocking Acknowledgement
BLO	Blocking
CCE	Consistency Check End
CCEA	Consistency Check End Acknowledge
CSR	Consistency Check Request
CSRA	Consistency Check Request Acknowledge
CFN	Confusion
CPG	Call Progress
FOT	Forward Transfer
IAA	IAM Acknowledge
IAM	Initial Address
IAR	IAM Reject
NRM	Network Resource Management
RAM	Reset Acknowledgement
REL	Release
RES	Resume
RLC	Release Complete
RSM	Reset
SAM	Subsequent Address
SGM	Segmentation
SUS	Suspend
UBA	Unblocking Acknowledgement
UBL	Unblocking
UPA	User Part Available
UPT	User Part Test
USR	User-to-User Information

4.3   Blocking message (BLO)

A message sent only for maintenance purposes to the exchange at the other end of a virtual path connection, to cause an engaged condition of that resource for subsequent calls outgoing from that exchange. An exchange receiving the blocking message must be capable of accepting incoming calls on the concerned resource unless it has also sent a blocking message for that resource.

4.4 Blocking Acknowledgement message (BLA)

A message sent in response to a blocking message indicating that the resource has been blocked.

4.5 Call Progress message (CPG)

A message, sent in either direction during the set-up or active phase of the call indicating that an event, which is of significance to the originating or terminating access, has occurred.

4.6 Confusion message (CFN)

A message sent in response to any message (other that a confusion message) if the exchange does not recognize the message or detects a part of the message as being unrecognized and the instruction indicator requested notification.

4.7 Consistency Check End message (CCE)

A message sent to the exchange at the other end of a virtual path connection indicating the end of the consistency check sequence and to deactivate the consistency check ATM cell monitoring devices.

4.8 Consistency Check End Acknowledge message (CCEA)

A message sent in response to a continuity check end message indicating the result of the consistency check and that the consistency check monitoring device has been activated.

4.9 Consistency Check Request message (CSR)

A message sent for maintenance purposes to the exchange at the other end of a virtual path connection to verify the consistent and correct allocation of a virtual path connection identifier to a virtual path. The test will cause the remote (receiving) exchange to activate an ATM cell monitoring device for the indicated resource.

4.10 Consistency Check Request Acknowledge message (CSRA)

A message sent in response to a consistency check request message indicating that the ATM cell monitoring device has been activated for the indicated resource.

4.11 Forward Transfer message (FOT)

A message sent in the forward direction on semi-automatic calls when the outgoing international exchange operator wants the help of an operator at the incoming international exchange. The message will normally serve to bring an assistance operator (see Recommendation Q.101) into the circuit if the call is automatically set up at the exchange. When the call is completed via an operator (incoming or delay operator) at the incoming international exchange, the message should preferably cause this operator to be recalled.

4.12 Initial Address Message (IAM)

A message sent in the forward direction to initiate seizure of an outgoing virtual channel and to transmit number and other information relating to the routing and handling of a call.

4.13 IAM Acknowledgement message (IAA)

A message sent in the backward direction in response to an IAM message. The IAA indicates that the IAM has been accepted and the requested bandwidth on the incoming leg (both directions) is available.

4.14 IAM Reject message (IAR)

A message sent in the backward direction in response to an IAM message indicating call refusal due to resource unavailability.

4.15 Network Resource Management message (NRM)

A message sent in order to modify network resources associated with a certain call. The message is sent along an established path in any direction in any phase of the call.

4.16 Release message (REL)

A message sent in either direction to indicate that the call/connection is being released due to the reason (cause) supplied and that the resources are ready to be made available for new traffic on receipt of the release complete message.

4.17 Release Complete message (RLC)

A message sent in either direction in response to the receipt of a released message, when the resources of the call/connection concerned have been made available for new traffic.

4.18 Reset Message (RSM)

A message sent to release a resource (e.g. a virtual connection or a signalling identifier) when, due to memory mutilation or other causes it is unknown whether for example, a release or a release complete message is appropriate.

4.19 Reset Acknowledgement Message (RAM)

A message sent in response to a reset message indicating that the resources have been released.

4.20 Resume message (RES)

A message sent in either direction indicating that the calling or called party, after having been suspended, is reconnected.

4.21 Segmentation Message (SGM) (national use)

Message sent in either direction to convey an additional segment of an overlength message.

4.22 Subsequent Address Message (SAM)

A message that may be sent in the forward direction following an initial address message, to convey additional called party number information.

4.23 Suspend message (SUS)

A message sent in either direction indicating that the calling or called party has been temporarily disconnected.

4.24 Unblocking message (UBL)

A message sent to the exchange at the other end of a virtual path connection to cancel, in that exchange, the engaged condition of the resource caused by a previously sent blocking message.

4.25 Unblocking Acknowledgement message (UBA)

A message sent in response to an unblocking message indicating that the resource has been unblocked.

4.26 User Part Available message (UPA)

A message sent in either direction as a response to a user part test message, to indicate that the user part is available.

4.27 User Part Test message (UPT)

A message sent in either direction to test the status of a user part marked as unavailable for a signalling point.

4.28 User-to-User information message (USR)

A message to be used for the transport of user-to-user signalling independent of call control messages.

5 Signalling information

5.1 Parameters

5.1.1 ATM Adaptation Layer (AAL) parameters

Information sent in the forward or backward direction to indicate the requested/proposed ATM adaptation layer attribute values (end-to-end significance) for the ATM adaptation layer elements of procedures to be used for the call. The information is of significance to both users and local exchanges. It is transferred transparently between local exchanges.

5.1.2 Access delivery information

Information sent in the backward direction indicating that a set-up indication was generated at the destination access.

5.1.3 Additional calling party number

Information sent in the forward direction in the form of an address pertaining to a supplementary service where an additional user provided identification of the calling party is necessary.

5.1.4 Additional connected number

Information sent in the backward direction in the form of an address pertaining to a supplementary service where an additional user provided identification of the connected party is necessary.

5.1.5 ATM cell rate

Information classified by the cell rate identifier indicating the number of cells per second that are required for the call. The cell rate value is unchanged as it traverses the B-ISDN network.

5.1.6 Automatic congestion level

Information sent to the exchange at the other end of a virtual path connection to indicate that a particular level of congestion exists at the sending exchange.

5.1.7 Backward narrow-band interworking indicator

Information sent in the backward direction describing the signalling capabilities within the network connection when interworking with the N-ISDN is encountered.

5.1.8 Broadband bearer capability

Information sent in the forward direction to indicate a requested broadband connection oriented bearer service (Recommendation F.811) to be provided by the network.

5.1.9 Broadband high layer information

Information sent in the forward direction which should be used by the remote user for compatibility checking.

5.1.10 Broadband low layer information

Information sent in the forward or backward direction to provide a means which should be used for compatibility checking by an addressed entity (e.g. a remote user or an interworking unit or a high layer function network node addressed by the calling user).

5.1.11 Call diversion information

Information sent in the backward direction indicating the redirecting reason and the notification subscription option of the redirecting user.

5.1.12 Call diversion may occur

Information sent in the backward direction indicating that call diversion may occur, depending on the response received (or lack thereof) from the called party.

5.1.13 Call history information

Information sent in backward direction to indicate the accumulated propagation delay of a connection.

5.1.14 Called party number

Information to identify the called party.

5.1.15 Called party sub-address

Information provided by the calling user to identify the sub-address (see Recommendation I.330) of the called party of a call. It is transferred transparently between local exchanges.

5.1.16 Called party's indicators

Information sent in the backward direction consisting of the called party's status indicator and the called party's category indicator.

5.1.17 Calling party number

Information sent in the forward direction to identify the calling party.

5.1.18 Calling party sub-address

Information provided by the calling user to identify a sub-address (see Recommendation I.330) associated with the origin of a call. It is transferred transparently between originating and terminating local exchanges.

5.1.19 Calling party's category

Information sent in the forward direction indicating the category of the calling party and, in the case of semi-automatic calls, the service language to be spoken by the incoming, delay and assistance operators.

5.1.20 Cause indicator

Information sent in either direction indicating where and why the call failed or was cleared.

5.1.21 Charge indicator

Information sent in the backward direction indicating whether or not the call is chargeable.

5.1.22 Closed user group information

Information sent in the forward direction indicating that the call is to be treated as a closed user group call with or without outgoing access and giving the closed user group interlock code to be used.

5.1.23 Connected line identity request

Information sent in the forward direction indicating a request for the connected party number to be returned.

5.1.24 Connected number

Information sent in the backward direction to identify the connected party.

5.1.25 Connected sub-address

Information sent in the backward direction to identify the sub-address (see Recommendation I.330) of one connected party of a call. The connected sub-address may be different from the called party sub-address because of changes (e.g. redirection, transfer) during the lifetime of a call. This information is transferred transparently between terminating and originating local exchanges.

5.1.26 Connection element identifier

Information sent to identify the ATM virtual connection. It includes the virtual path connection identifier and the virtual channel identifier.

5.1.27 Consistency check result information

Information sent indicating the result of the consistency check.

5.1.28 Destination signalling identifier

The destination signalling identifier identifies the call control or maintenance association at the receiving end. The first origination signalling identifier value received is reflected as the destination signalling identifier value.

5.1.29 Echo control information

Information sent in the backward and forward direction indicating whether a half echo control device is requested for the connection or whether or not a half echo control device is included in the connection.

5.1.30 Forward narrow-band interworking indicator

Information sent in the forward direction describing the signalling capabilities within the network connection when interworking with N-ISDN has occurred.

5.1.31 In-band information indicator

Information sent in the backward direction indicating that in-band information or an appropriate pattern is now available.

5.1.32 Location number

Information sent to indicate the location of a user in the term of an E.164 number.

5.1.33 Maximum end-to-end transit delay

Information sent in the forward direction indicating the maximum delay requested by the calling user for the requested virtual path connection.

5.1.34 MLPP Precedence

Information sent in the forward direction in association with the invocation of the Multilevel Precedence and Preemption (MLPP) supplementary service.

5.1.35 MLPP user information

Information sent in the backward direction to indicate that the called user is an MLPP user.

5.1.36 Narrow-band bearer capability

Information sent in the forward or backward direction to indicate the requested/proposed narrow-band ISDN bearer capability (see Recommendation I.231). In case the calling user asks for a certain service but allows fallback to another service, this parameter field contains the fallback service.

5.1.37 Narrow-band high layer compatibility

Information sent in the forward or backward direction to provide a means which could be used by the remote user for compatibility checking. In case the calling user asks for a certain service but allows fallback to another service, this parameter field contains the fallback service.

5.1.38 Narrow-band low layer compatibility

Information sent in the forward or backward direction to provide a means which could be used for compatibility checking by an addressed entity (e.g. a remote user, an interworking unit or a high layer function network node addressed by the user).

5.1.39 National/international call indicator

Information sent in the forward direction indicating in the destination national network whether the call has to be treated as an international call or as a national call.

5.1.40 Notification

Information sent in either direction intended to provide supplementary service (e.g. diversion services) notification to the user.

5.1.41 OAM traffic descriptor

Information classified by the cell rate identifier indicating the number of cells per second required for OAM traffic on the virtual connection.

5.1.42 Original called number

Information sent in the forward direction when a call is redirected and identifies the original called party.

5.1.43 Origination ISC point code

Information sent in the initial address message of an international call, indicating the point code of the originating ISC.

5.1.44 Origination signalling identifier

The Origination Signalling Identifier (OSID) is assigned by a node sending a call control or maintenance message, and is used to identify the signalling association at that end.

5.1.45 Progress indicator

Information sent in the forward or backward direction to describe an event which has occurred during the lifetime of the call.

5.1.46 Propagation delay counter

Information sent in forward direction to indicate the propagation delay of a connection. This information is accumulated whilst the parameter is transferred through the network. The propagation delay information is represented by a counter counting in integer multiples of 1 ms.

5.1.47 Redirecting number

Information sent in the forward direction when a call is diverted, indicating the number from which the call was diverted.

5.1.48 Redirection information

Information sent in either direction giving information about call redirection or call re-routing.

5.1.49 Redirection number

Information sent in the backward direction indicating the number towards which the call must be re-routed or has been forwarded.

5.1.50 Redirection number restriction

Information sent in the backward direction indicating whether the diverted-to user allows the presentation of his number.

5.1.51 Resource identifier

Information sent identifying the resources to be reset or (un)blocked.

5.1.52 Segmentation indicator (national use)

Information sent in the forward and backward direction to indicate that the current message is/is not segmented, and that the segmented information (if any) will follow.

5.1.53 Subsequent number

Information sent in the forward direction in case of call set-up with overlap address signalling, conveying one or more address signals of the called party number.

5.1.54 Suspend/Resume indicators

Information sent in the suspend and resume messages to indicate whether suspend/resume was initiated by an ISDN subscriber or by the network.

5.1.55 Transit network selection (national use)

Information sent in the initial address message indicating the transit network(s) requested to be used in the call.

5.1.56 User-to-user indicators

Information sent in association with a request (or response to a request) for user-to-user signalling supplementary service(s).

5.1.57 User-to-user information

Information generated by a user and transferred transparently through the inter-exchange network between the originating and terminating local exchanges.

5.2 Parameter information

5.2.1 Access delivery indicator

An indicator sent in the backward direction indicating that a set-up indication was generated at the destination access.

5.2.2 Address presentation restricted indicator

Information sent in either direction to indicate that the address information is not to be presented to a public network user, but can be passed to another public network. It may also be used to indicate that the address cannot be ascertained.

5.2.3 Address signal

An element of information in a network number. The address signal may indicate digit values 0 to 9, code 11 or code 12. One address signal value (ST) is reserved to indicate the end of the called party number.

5.2.4 Broadband/Narrow-band interworking indicator

Information indicating reaction to be taken if unrecognized information is received at a broadband/narrow-band interworking point.

5.2.5 Called party's category

Information sent in the backward direction indicating the category of the called party, e.g. ordinary subscriber or payphone.

5.2.6 Called party's status indicator

Information sent in the backward direction indicating the status of the called party, e.g. subscriber free.

5.2.7 Calling party number incomplete (national use)

Information sent in the forward direction indicating that the complete calling party number is not included.

5.2.8 Cause value

Information sent identifying the specific reason why the call failed or was cleared. Cause values are defined in Recommendations Q.850 and Q.2610.

5.2.9 Cell rate identifier

Information sent to identify the applicability of the cell rate. The use of the peak cell rate (and for future releases the use of the average cell rate) in traffic control is specified in Recommendation I.371.

5.2.10 Closed user group call indicator

Information sent as part of the closed user group information indicating whether or not outgoing access from that closed user group (e.g. to users without closed user group) is allowed for that call.

5.2.11 Coding standard

Information sent in association with a parameter (e.g. cause indicators) identifying the standard in which the parameter format is described.

5.2.12 Diagnostic

Information sent in association with a cause and which provides supplementary information about the reason for sending the message. Diagnostic values are defined in Recommendations Q.850 and Q.2610.

5.2.13 Discard message indicator

Information sent to inform another node to discard the related message, due to compatibility reasons.

5.2.14 Discard parameter indicator

Information sent to inform another node to discard the related parameter, due to compatibility reasons.

5.2.15 Extension indicator

Information sent in every octet in a multi-octet parameter field with variable length, indicating whether the octet is the last one or is followed by another one.

5.2.16 Filler

A number of bits used to complete a partially used octet to full octet length. Mainly the filler is used in number parameters that are carrying odd number of digits, where remaining four bits in the last octet have no digit information.

5.2.17 Incoming half echo control device request indicator

Information sent to request the activation or deactivation of an incoming half echo control device.

5.2.18 Incoming half echo control device indicator

Information sent to inform whether an incoming half echo control device has been included or not.

5.2.19 Instruction indicator

Information indicating the reactions to be taken if an unrecognized message, unrecognized parameter or unrecognized parameter value is received.

5.2.20 Internal network number indicator

Information sent to the destination exchange for specific numbers, e.g. roaming numbers, indicating whether or not the number contained in the parameter is generated by the network.

5.2.21 Interworking indicator

Information sent in either direction indicating whether or not Signalling System No. 7 is used in all parts of the narrow-band network connection.

5.2.22 ISDN access indicator

Information sent in either direction indicating whether or not the narrow-band access signalling protocol is ISDN.

5.2.23 ISDN User Part indicator

Information sent in either direction to indicate that the ISDN User Part is used in all parts of the narrow-band network connection. When sent in the backward direction, the preceding parts are those towards the called party.

5.2.24 ISDN User Part preference indicator

Information sent in the forward direction indicating whether or not ISDN User Part is required for all parts of the narrow-band network connection.

5.2.25 Location

Information sent in either direction indicating where an event (e.g. release) was generated.

5.2.26 More data indicator

Information provided by the user and sent as part of a user-to-user information parameter indicating to the destination user(s) that another user-to-user information parameter containing information belonging to the same block (protocol data unit) will follow.

5.2.27 Nature of address indicator

Information sent in association with an address indicating the nature of that address, e.g. ISDN international number, ISDN national significant number, or ISDN subscriber number.

5.2.28 Network discard indicator

This indicator indicates that user-to-user information included in the call control message has been discarded by the network.

5.2.29 Network identification plan (national use)

Information sent to indicate the identification plan for identifying the network, e.g. Recommendation X.121 or E.212.

5.2.30 Network identification (national use)

Information sent to identify a network.

5.2.31 Notification indicator

Information sent in either direction intended to provide supplementary service notification to a user.

5.2.32 Notification subscription option

Information sent in the backward direction indicating that the diversion with or without redirection number can be presented to the calling user.

5.2.33 Numbering plan indicator

Information sent in association with a number indicating the numbering plan used for that number (e.g. ISDN number, Telex number).

5.2.34 Odd/even indicator

Information sent in association with an address, indicating whether the number of address signals contained in the address is even or odd.

5.2.35 Original redirection reason

Information sent in either direction indicating the reason why the call was originally redirected.

5.2.36 Outgoing half echo control device request indicator

Information sent to request the activation or deactivation of an outgoing half echo control device.

5.2.37 Outgoing half echo control device indicator

Information sent to inform whether an outgoing half echo control device has been included or not.

5.2.38 Pass on not possible indicator

Information sent to inform another node on what action to take if "pass on" was requested due to compatibility reason but "pass on" was not possible due to interworking with pre-ISUP 1992 signalling.

5.2.39 Redirecting indicator

Information sent in either direction indicating whether the call has been diverted or re-routed and whether or not presentation of redirection information to the calling party is restricted.

5.2.40 Redirecting reason

Information sent in either direction indicating, in the case of calls undergoing multiple redirections, the reason why the call has been redirected.

5.2.41 Redirection counter

Information sent in either direction indicating the number of redirections which have occurred on a call.

5.2.42 Redirection reason

Information sent in the call diversion information parameter and the redirection information parameter to indicate the reason for the redirection.

5.2.43 Release call indicator

Information sent to inform another node to release the call or not, by compatibility reasons, if the related message or parameter is unrecognized.

5.2.44 Resource indicator

Information sent as part of the Resource identifier parameter identifying the type of resource to be reset or (un)blocked.

5.2.45 Resource value

Information sent as part of the Resource identifier parameter identifying a particular resource.

5.2.46 Screening indicator

Information sent in either direction to indicate whether the address was provided by the user or network.

5.2.47 Send notification indicator

Information sent to inform another node to sent notification, due to compatibility reasons, if the related message or parameter is unrecognized.

5.2.48 Transit at intermediate exchange indicator

Information sent to inform a transit node (type B), whether it shall react on the rest of the instruction indicators or not, if the related message or parameter is unrecognized.

5.2.49 Type of network identification (national use)

Information sent to inform whether the identification of a network is by ITU-T standardization identification or by national network identification.

5.2.50 Virtual channel identifier

Information sent in the forward and backward direction identifying the virtual channel (multiplexed on a virtual path) between two B-ISDN ATM exchanges.

5.2.51 Virtual path connection identifier

Information sent in the forward and backward direction identifying the virtual path connection between two B-ISDN ATM exchanges.

5.2.52 VPCI check result indicator

Information sent in the backward direction indicating the success/failure of the consistency check.

5.2.53 Call diversion may occur indicator

Information sent in the backward direction indicating that call diversion may occur.

5.2.54 Binary code

A code allocated to a closed user group administered by a particular ISDN or data network.

5.2.55 Control ID

Information sent in the forward and backward direction expressing in pure binary representation the identification number allocated to the signalling association.

5.2.56 Look-ahead for busy indicator

Information sent in the forward direction indicating whether the LFB option is allowed or if the path for the call is reserved.

5.2.57 MLPP service domain

Information sent in the forward direction identifying the specific MLPP service domain subscribed to by the calling user.

5.2.58 Precedence level

Information sent in the forward direction indicating the priority of the call.

5.2.59 Priority

Information sent in the forward and backward direction, indicating whether or not the repeated information elements are in ascending, descending or no prioritized order.

5.2.60 Repeat indicator

Information sent in the forward and backward direction, indicating whether or not the information element is repeated.