5i’

4.5.17 *Keypad facility*

The purpose of the Keypad facility information element is to convey IA5 characters, e.g., entered by means of a terminal keypad.

The Keypad facility information element is coded as shown in Figure 4-25/Q.931. The default maximum length of this information element is 34 octets.

Figure 4-25/Q.931 [T108.931], p.

4.5.18 *Low layer compatibility*

The purpose of the Low layer compatibility information element is 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). The Low layer compatibility information element is transferred transparently by an ISDN between the call originating entity (e.g., the calling user) and the addressed entity. See Annex B and Annex L.

If low layer compatibility negotiation is allowed by the network (see Annex M), the Low layer compatibility information element is also passed transparently from the addressed entity to the originating entity.

The Low layer compatibility information element is coded as shown in Figure 4-26/Q.931 and in Table 4-18/Q.931. The maximum length of this information element is 16 octets.

4.5.19 *More data*

The More data information element is sent by the user to the network in a USER INFORMATION message, and delivered by the network to the destination user(s) in the corresponding USER INFORMATION message. The presence of the More data information element indicates to the destination user that another USER INFORMATION message will follow containing information belonging to the same block.

The use of the More data information element is not supervised by the network.

The More data information element is coded as shown in Figure 4-27/Q.931.

Figure 4-26/Q.931 [1T109.931] (traiter comme tableau), p. 2

Notes de la Figure 4-26/Q.931 [2T109.931] (traiter comme tableau), p. 3

H.T. [T110.931]

TABLE 4-18/Q.931 (Sheet 1 of 8)

Low layer compatibility information element

[Unable to convert Table]

Tableau 4-18/Q.931 (1 de 8) [T110.931], p. 4

H.T. [T111.931]
TABLE 4-18/Q.931 (Sheet 2 of 8)
Low layer compatibility information element

{
Information transfer rate (octets 4 and 4b)

Bits
5 4 3 2 1
Circuit mode
Packet-mode

0 0 0 0 0
—
This code shall be used for packet mode calls
1 0 0 0 0
64 kbit/s
—
1 0 0 0 1 2
× 64 kbit/s —

1 0 0 1 1
384 kbit/s
—
1 0 1 0 1
1536 kbit/s
—
1 0 1 1 1
1920 kbit/s
—

All other values are reserved.
}
{
Note 1
— When octet 4b is omitted, the low layer compatibility is bi-directional symmetric at the information transfer rate specified in octet 4. When octet 4b is included, the information transfer rate in octet 4 refers to the origination destination direction.

Note 2
— When the information transfer rate 2 × 64 kbit/s is used, the coding of octets 3 and 4 refer to both 64 kbit/s channels.
}
{
Structure (octet 4a)

Bits
7 6 5

0 0 0
default (see Note 1)
0 0 1 8
kHz integrity (Note 2)
1 0 0
service data unit integrity
1 1 1
unstructured

Note 1
— If octet 4a is omitted, or the structure field is coded ''000'', then the value of the structure attribute is according to the following:

}
{
Transfer mode
Transfer capability
Structure

circuit speech kHz integrity circuit unrestricted digital kHz integrity circuit restricted digital kHz integrity circuit audio kHz integrity circuit video kHz integrity packet unrestricted digital service data unit integrity *Note 2* — When the information transfer rate 2 × 64 kbit/s is used, 8 kHz integrity with Restricted Differential Time Delay (RDTD) is offered.	8 8 8 8 8

Tableau 4-18/Q.931 (2 de 8) [T111.931], p. 5

Blanc

H.T. [T112.931]

TABLE 4-18/Q.931 (Sheet 3 of 8)

Low layer compatibility information element

{	
Configuration (octet 4a)	
Bits 4 3	
0 0 point-to-point	
All other values are reserved.	
}	
{	
Note — If octet 4a is omitted, the configuration is assumed to be point-to-point.	
}	
{	*Establishment (octet 4a)*
Bits 2 1	
0 0 demand	
All other values are reserved.	
}	
{	
Note — If octet 4a is omitted, the method of establishment is assumed to be ‘‘demand’’.	
}	
{	*Symmetry (octet 4b)*
Bits 7 6	
0 0 bidirectional symmetric	
All other values are reserved.	
}	
{	
Note — If octet 4b is omitted, bidirectional symmetric is assumed.	
}	

Tableau 4-18/Q.931 (3 de 8) [T112.931], p. 6

Blanc

H.T. [T113.931]
TABLE 4-18/Q.931 (Sheet 4 of 8)
Low layer compatibility information element

{

User information layer 1 protocol (octet 5)

Bits
5 4 3 2 1

0 0 0 0 1
CCITT standardized rate adaption V.110 [7]/X.30 [8]. This implies the presence of octet 5a and optionally octets 5b, 5c and 5d as defined below.
0 0 0 1 0
Recommendation G.711 [10] μ-law
0 0 0 1 1
Recommendation G.711 A-law
0 0 1 0 0
Recommendation G.721 [11] 32 kbit/s ADPCM and
Recommendation I.460 [15]
0 0 1 0 1
Recommendations G.722 [12] and G.725 [35] 7 kHz audio
0 0 1 1 0
Recommendation H.261 [13] for 384 kbit/s video
0 0 1 1 1
Non-CCITT standardized rate adaption. This implies
the presence of octet 5a and, optionally, octets 5b, 5c and 5d. The use of this codepoint indicates that the user rate specified in octet 5a is defined by the user. Additionally, octet 5b, 5c and 5d, if present, are defined consistent with the user specified rate adaption.
0 1 0 0 0
CCITT standardized rate adaption V.120. This
implies the presence of octets 5a and 5b as defined below, and optionally
octets 5c and 5d.
0 1 0 0 1
CCITT standardized rate adaption X.31 [14] HDLC flag
stuffing.

All other values are reserved.

}

{

Note — If the transfer mode is ‘‘circuit mode’’, and if the
information transfer capability is ‘‘unrestricted digital information’’ or
‘‘restricted digital information’’, and if the user information layer 1 protocol is not to be identified to the network, octet 5 shall be omitted. If the transfer mode is packet mode, octet 5 may be omitted. Otherwise, octet 5
shall be present.

}

{
Synchronous/asynchronous *(octet 5a)*

Bit
7

0
Synchro-
nous
1
Asynchro-
nous

}

{
Note — Octets 5b-5d may be omitted in case of synchronous user rates.

}

{
Negotiation *(octet 5a)*

Bit
6

0
In-band negotiation not possi-
ble
1
In-band negotiation possi-
ble

}

{
Note — See Recommendations V.110 and X.30.

}

Tableau 4-18/Q.931 (4 de 8) [T113.931], p. 7

Blanc

H.T. [T114.931]

TABLE 4-18/Q.931 (Sheet 5 of 8)

Low layer compatibility information element

{
User rate (octet 5a)

Bits
5 4 3 2 1

0 0 0 0 0
rate is indicated by E-bits specified in Recommendation I.460
0 0 0 0 1
0.6 kbit/s Recommendations V.6 [16] and X.1 [17]
0 0 0 1 0
1.2 kbit/s Recommendation V.6
0 0 0 1 1
2.4 kbit/s Recommendations V.6 and X.1
0 0 1 0 0
3.6 kbit/s Recommendation V.6
0 0 1 0 1
4.8 kbit/s Recommendations V.6 and X.1
0 0 1 1 0
7.2 kbit/s Recommendation V.6
0 0 1 1 1
8 kbit/s Recommendation I.460
0 1 0 0 0
9.6 kbit/s Recommendations V.6 and X.1
0 1 0 0 1
14.4 kbit/s Recommendation V.6
0 1 0 1 0
16 kbit/s Recommendation I.460
0 1 0 1 1
19.2 kbit/s Recommendation V.6
0 1 1 0 0
32 kbit/s Recommendation I.460
0 1 1 1 0
48 kbit/s Recommendations V.6 and X.1
0 1 1 1 1
56 kbit/s Recommendation V.6
1 0 1 0 1
0.1345 kbit/s Recommendation X.1
1 0 1 1 0
0.100 kbit/s Recommendation X.1
1 0 1 1 1
0.075/1.2 kbit/s Recommendations V.6 and X.1 (Note)
1 1 0 0 0
1.2/0.075 kbit/s Recommendations V.6 and X.1 (Note)
1 1 0 0 1
0.050 kbit/s Recommendations V.6 and X.1
1 1 0 1 0
0.075 kbit/s Recommendations V.6 and X.1
1 1 0 1 1
0.110 kbit/s Recommendations V.6 and X.1
1 1 1 0 0
0.150 kbit/s Recommendations V.6 and X.1
1 1 1 0 1
0.200 kbit/s Recommendations V.6 and X.1
1 1 1 1 0
0.300 kbit/s Recommendations V.6 and X.1
1 1 1 1 1
12 kbit/s Recommendation V.6

All other values are reserved.
}
{

Note
— The first rate is the transmit rate in the forward direction of the call. The second rate is the transmit rate in the backward direction of the call.
}
{
Octet 5b for V.110 [7]/X.30 [8] rate adaption
}
{
Intermediate Rate (octet 5b)

Bits
7 6

0 0
Not used
0 1
8 kbit/s
1 0
16 kbit/s
1 1
32 kbit/s
}
{
Network independent clock (NIC) on transmission (Tx) (octet 5b)
(Note 1)

Bit
5

0
Not required to send data with network independent clock
1
Required to send data with network independent clock
}
{
Note 1
— Refers to transmission in the forward direction of the call.
Note 2
– See Recommendations V.110 and X.30.
}

Tableau 4-18/Q.931 (5 de 8) [T114.931], p. 8

H.T. [T115.931]
TABLE 4-18/Q.931 (Sheet 6 of 8)
Low layer compatibility information element

{
Network independent clock (NIC) on reception (Rx) (octet 5b) (Note 1)

Bit
4

0 Cannot accept data with Network Independent Clock (i.e., sender does not support this optional procedure)
1 Can accept data with Network Independent Clock (i.e., sender does support this optional procedure)
}
{ *Note 1* — Refers to transmission in the backward direction of the call
Note 2 — See recommendations V.110 [7] and X.30 [8].
}
{ *Flow control on transmission (Tx) (octet 5b) (Note 1)*

Bit
3

0 Not required to send data with flow control mechanism
1 Required to send data with flow control mechanism
}
{ *Note 1* — Refers to transmission in the forward direction of the call
}
{ *Note 2* — See Recommendations V.110 and X.30.
}
{ *Flow control on reception (Rx) (octet 5b) (Note 1)*

Bit
2

0 Cannot accept data with flow control mechanism (i.e., sender does not support this optional procedure)
1 Can accept data with flow control mechanism (i.e., sender does support this optional procedure)
}
{ *Note 1* — Refers to transmission in the backward direction of the call
}
{ *Note 2* — See Recommendations V.110 and X.30.
}
{ *Octet 5b for V.120 [9] Rate adaption*
}
{ *Rate*

adaption header/no header (octet 5b)

Bit
7

0 Rate adap-
tion header not included
1 Rate adap-
tion header included
}
{ *Multiple*
frame establishment support in data link (octet 5b)

Bit
6

0 Multiple
frame establishment not supported. Only UI frames allowed.
1 Multiple
frame establishment supported.
}

Tableau 4-18/Q.931 (6 de 8) [T115.931], p. 9

Blanc

H.T. [T116.931]

TABLE 4-18/Q.931 (Sheet 7 of 8)

Low layer compatibility information element

{
Mode of operation (octet 5b)

Bit
5

0 Bit transparent mode of operation
1 Protocol sensitive mode of operation
}
{ *Logical link identifier negotiation (octet 5b)*

Bit
4

0 Default, LLI = 256 only
1 Full protocol negotiation (Note)
}
{
Note — A connection over which protocol negotiation will be executed is indicated in bit 2 of octet 5b.
}
{ *Assignor/assignee (octet 5b)*

Bit
3

0 Message originator is ‘‘default assignee’’
1 Message originator is ‘‘assignor only’’
}
{ *In-band/out-band negotiation (octet 5b)*

Bit
2

0 Negotiation is done with USER INFORMATION messages on a temporary signalling connection
1 Negotiation is done in-band using logical link zero.
}
{ *Number of stop bits (octet 5c)*

Bits
7 6

0 0 Not used
0 1 1 bit
1 0 1.5 bits
1 1 2 bits
}

{ *Number of data bits excluding parity bit if present (octet 5c)*

Bits
5 4

0 0 Not used
0 1 5 bits
1 0 7 bits
1 1 8 bits
}
{ *Parity information (octet 5c)*

Bits
3 2 1

0 0 0
Odd
0 1 0
Even
0 1 1
None
1 0 0 Forced to 0
1 0 1 Forced to 1

}All other values are reserved.

Tableau 4-18/Q.931 (7 de 8) [T116.931], p. 10

H.T. [T117.931]
TABLE 4-18/Q.931 (Sheet 8 of 8)
Low layer compatibility information element

{
Duplex mode (octet 5d)

Bit
7

0 Half duplex
1 Full duplex
}
{ *Modem type (octet 5d)*

Bits 6-1 coded according to network specific rules.
}
{ *User information layer 2 protocol (octet 6)*

Bits
5 4 3 2 1

0 0 0 0 1 Basic mode ISO 1745 [36]
0 0 0 1 0 CCITT Recommendation Q.921 (I.441) [3]
0 0 1 1 0 CCITT Recommendation X.25 [5], link layer
0 0 1 1 1 CCITT Recommendation X.25 Multilink
0 1 0 0 0 Extended LAPB; for half duplex operation (T.71 [37])
0 1 0 0 1 HDLC ARM (ISO 4335) [38]
0 1 0 1 0 HDLC NRM (ISO 4335)
0 1 0 1 1 HDLC ABM (ISO 4335)
0 1 1 0 0 LAN logical link control (ISO 8802/2) [39]

0 1 1 0 1 CCITT Recommentation X.75 [40]. Single Link Procedure (SLP)
All other values are reserved.
}
{ *Optional layer 2 protocol information (octet 6a)*

To be defined.
}
{ *User information layer 3 protocol (octet 7)*

Bits
5 4 3 2 1

0 0 0 1 0 CCITT Recommendation Q.931 (I.451)
0 0 1 1 0 CCITT Recommendation X.25, packet layer
0 0 1 1 1 ISO 8208 [41] (X.25 packet level protocol for data terminal equipment)
0 1 0 0 0 ISO 8348 [42] (OSI connection oriented network service specific subset of ISO 8208 and

CCITT X.25) 0 1 0 0 1	ISO 8473 [43] (OSI connection- less service)
0 1 0 1 0	CCITT Recommendation T.70 [32] minimum network layer
All other values are reserved. }	
{	*Optional layer 3 protocol informa- tion (octet 7a)*
} To be defined.	

Tableau 4-18/Q.931 (8 de 8) [T117.931], p. 11

Blanc

Figure 4-27/Q.931 [T118.931] (a traiter comme tableau), p. 12

4.5.20 *Network-specific facilities*

The purpose of the Network-specific facilities information element is to indicate which network facilities are being invoked. The Network-specific facilities information element is coded as shown in Figure 4-28/Q.931 and Table 4-19/Q.931. No more than four Network-specific facilities information elements may be included in a single message.

The maximum length of this information element is network dependent.

Figure 4-28/Q.931 [T119.931] (a traiter comme tableau), p. 13

H.T. [T120.931]

TABLE 4-19/Q.931

Network-specific facilities information element

{

Length of network identification (octet 3)

This field contains the length, in octets, of the network identification found in octet 3.1 and the repetition of octet 3.2. If the value is ‘‘0000 0000’’, then the default provider (see Annex E, § E.1) is assumed and octets 3.1 and 3.2 are omitted.

}

{

Type of network identification (octet 3.1)

Bits 7 6 5

0 0 0 user specified

0 1 0 national network identification

0 1 1 international network identification

All other values are reserved.

}

{

Network identification plan (octet 3.1)

Bits 4 3 2 1

0 0 0 0 unknown

0 0 0 1 Carrier Identification Code (Note)

0 0 1 1 Data network identification code (Recommendation X.121 [21])

All other values are reserved.

Note — Carrier Identification Codes may be an appropriate method of identifying the network serving the remote user.

}

{

Network identification (octets 3.2, etc.)

These IA5 characters are organized according to the network identification plan specified in octet 3.1. }

{
Network-specific facilities (octets 4, etc.)
 	
This field is encoded according to the rules specified by the identified network.
 	
}

Tableau 4-19/Q.931 [T120.931], p. 14

Blanc

4.5.21 *Notification indicator*

The purpose of the Notification indicator information element is to indicate information pertaining to a call.

The Notification indicator information element is coded as shown in Figure 4-29/Q.931 and Table 4-20/Q.931. The maximum length of this information element is 3 octets.

Figure 4-29/Q.931 [T121.931] (à traiter comme tableau), p. 15

H.T. [T122.931]

TABLE 4-20/Q.931

Notification indicator information element

{	
Notification description (octet 3)	
Bits 7 6 5 4 3 2 1	
0 0 0 0 0 0 0	user suspended
0 0 0 0 0 0 1	user resumed
0 0 0 0 0 1 0	bearer service change
All other values are reserved.	}

Tableau 4-20/Q.931 [T122.931], p. 16

Blanc

4.5.22 *Progress indicator*

The purpose of the Progress indicator information element is to describe an event which has occurred during the life of a call. The information element may occur two times in a message.

The Progress indicator information element is coded as shown in Figure 4-30/Q.931 and Table 4-21/Q.931. The default maximum length of this information element is 4 octets.

Figure 4-30/Q.931 [T123.931] (à traiter comme tableau), p. 17

Blanc

H.T. [T124.931]
TABLE 4-21/Q.931
Progress indicator information element

{
Coding standard (octet 3)

Bits
7 6

0 0
CCITT standardized coding, as described below
0 1
reserved for other international standards (Note)
1 0
national standard (Note)
1 1
standard specific to identified location (Note)
}
{
Note — These other coding standards should be used only when the desired progress indication cannot be represented with the CCITT-standardized coding.
}
{ *Location (octet 3)*

Bits
4 3 2 1

0 0 0 0
user
0 0 0 1
private network serving the local user
0 0 1 0
public network serving the local user
0 1 0 0
public network serving the remote user
0 1 0 1
private network serving the remote user
1 0 1 0 network beyond interworking point

All other values are reserved.
}
{
Note — Depending on the location of the users, the local public network and remote public network may be the same network.
}
{ *Progress description (octet 4)*

Bits
7 6 5 4 3 2 1
No.

0 0 0 0 0 0 1
1 Call is not end-to-end ISDN, further call progress information may be available in-band
0 0 0 0 0 1 0
2
Destination address is non-ISDN
0 0 0 0 0 1 1
3 Origination address is non-ISDN
0 0 0 0 1 0 0

4 0 0 0 1 0 0 0 8	Call has returned to the ISDN
In-band information or appropriate pattern	now available
All other values are reserved.	
Note The use of the different progress descriptions is further explained in Annex I.	—

Tableau 4-21/Q.931 [T124.931], p. 18

Blanc

4.5.23 *Repeat indicator*

The purpose of the Repeat indicator information element is to indicate how repeated information elements shall be interpreted, when included in a message. The Repeat indicator information element is included before the first occurence of the information element which will be repeated in a message. The Repeat indication information element is coded as shown in Figure 4-31/Q.931 and Table 4-22/Q.931.

Note — Use of the Repeat indication information element in conjunction with an information element that occurs only once in a message shall not of itself constitute an error.

Figure 4-31/Q.931 [T125.931] (à traiter comme tableau), p. 19

H.T. [T126.931]

TABLE 4-22/Q.931

Repeat indicator information element

{ *Repeat indication (octet 1)* Bits 4 3 2 1 0 0 1 0	Prioritized list for selecting one possibility (Note)

All other values are reserved.
}
{
Note
	— Used for Bearer service change procedures (see Annex O).

}	

Tableau 4-22/Q.931 [T126.931], p. 20

Blanc

4.5.24 *Restart indicator*

The purpose of the Restart indicator information element is to identify the class of the facility (i.e., channel or interface) to be restarted.

The Restart indicator information element is coded as shown in Figure 4-32/Q.931 and Table 4-23/Q.931. The maximum length of this information element is 3 octets.

Figure 4-32/Q.931 [T127.931] (à traiter comme tableau), p. 21

H.T. [T128.931]

TABLE 4-23/Q.931

Restart indicator information element

{
Class (octet 3)

Bits
3 2 1

0 0 0
Indicated channels (Note 1)
1 1 0
Single interface (Note 2)
1 1 1
All interfaces

All other values are reserved.

}

{
Note 1 — The channel identification information element must be included and indicates which channels are to be restarted.

Note 2 — If non-associated signalling is used, the channel identification information element must be included to indicate the interface to be restarted if it is other than the one on which the D-channel is present.

}

Tableau 4-23/Q.931 [T128.931], p. 22

Blanc

4.5.25 *Segmented message*

The purpose of the Segmented message information element is to indicate that the transmission in which it appears is part of a segmented message, in addition to the use of message type SEGMENT. When included in a message segment, it appears directly after the message type information element (see Annex K).

The Segmented message information element is coded as shown in Figure 4-33/Q.931 and Table 4-24/Q.931.

Figure 4-33/Q.931 [T129.931] (à traiter comme tableau), p. 23

H.T. [T130.931]

TABLE 4-24/Q.931

Segmented message information element

{ *First segment indicator (octet 3)*
Bit 8
0 Subsequent segment to first segment
1 First segment of segmented message
}
{ *Number of segments remaining (octet 3)*
Binary number indicating the number of remaining segments within the message to be sent.
}
{ *Segmented message type (octet 4)*
Type of message being segmented coded as per § 4.4.
Note — Bit 8 is reserved for possible future use as an extension bit. }

Tableau 4-24/Q.931 [T130.931], p. 24

4.5.26 *Sending complete*

The purpose of the Sending complete information element is to optionally indicate completion of called party number, see §§ 5.1.3, 5.2.1 and 5.2.4.

It is a single octet information element coded as shown in Figure 4-34/Q.931.

Figure 4-34/Q.931 [T131.931] (a traiter comme tableau), p. 25

4.5.27 *Signal*

The purpose of the Signal information element is to allow the network to optionally convey information to a user regarding tones and alerting signals. (See §§ 7 and 8.)

The Signal information element is coded as shown in Figure 4-35/Q.931 and Table 4-25/Q.931. The length of this information element is 3 octets.

The Signal information element may be repeated in a message.

Figure 4-35/Q.931 [T132.931] (a traiter comme tableau), p. 26

H.T. [T133.931]

TABLE 4-25/Q.931

Signal information element

{

Signal value (octet 3)

Bits 8 7 6 5 4 3 2 1	
0 0 0 0 0 0 0 0	dial tone on
0 0 0 0 0 0 0 1	ring back tone on
0 0 0 0 0 0 1 0	intercept tone on
0 0 0 0 0 0 1 1	network congestion tone on
0 0 0 0 0 1 0 0	busy tone on
0 0 0 0 0 1 0 1	confirm tone on
0 0 0 0 0 1 1 0	answer tone on
0 0 0 0 0 1 1 1	call waiting tone on
0 0 0 0 1 0 0 0	off-hook warning tone on
0 0 1 1 1 1 1 1	tones off
0 1 0 0 0 0 0 0	alerting on — pattern 0 (Note)
0 1 0 0 0 0 0 1	alerting on — pattern 1 (Note)
0 1 0 0 0 0 1 0	alerting on — pattern 2 (Note)
0 1 0 0 0 0 1 1	alerting on — pattern 3 (Note)
0 1 0 0 0 1 0 0	alerting on — pattern 4 (Note)
0 1 0 0 0 1 0 1	alerting on — pattern 5 (Note)
0 1 0 0 0 1 1 0	alerting on — pattern 6 (Note)
0 1 0 0 0 1 1 1	alerting on — pattern 7 (Note)
0 1 0 0 1 1 1 1	alerting off

All other values are reserved.

}

{

Note — The use of these patterns is network-dependent.

Tableau 4-25/Q.931 [T133.931], p. 27

Blanc

4.5.28 *Transit network selection*

The purpose of the Transit network selection information element is to identify one requested transit network. The Transit network selection information element may be repeated in a message to select a sequence of transit networks through which a call must pass. See Annex C.

The Transit network selection information element is coded as shown in Figure 4-36/Q.931 and Table 4-26/Q.931. The default maximum length of this information element is network dependent.

Figure 4-36/Q.931 [T134.931] (a traiter comme tableau), p. 28

H.T. [T135.931]

TABLE 4-26/Q.931

Transit network selection information element

{
Type of network identification (octet 3)

Bits
7 6 5

0 0 0 user specified
0 1 0 national network identification
0 1 1 international network identification

All other values are reserved.
}
{ *Network identification plan (octet 3)*

Bits
4 3 2 1

0 0 0 0 unknown
0 0 0 1 Carrier Identification Code (Note)
0 0 1 1 Data network identification code (Recommendation X.121) [21]

All other values are reserved.
Note — Carrier Identification Codes may be an appropriate method of identifying the network serving the remote user.
}
{ *Network identification (octet 4)*

These IA5 characters are organized according to the network identification plan specified in octet 3.
}

Tableau 4-26/Q.931 [T135.931], p. 29

4.5.29 *User-user*

The purpose of the User-user information element is to convey information between ISDN users. This information is not interpreted by the network, but rather is carried transparently and delivered to the remote user(s).

The User-user information element is coded as shown in Figure 4-37/Q.931 and Table 4-27/Q.931. There are no restrictions on the content of the user information field.

In SETUP, ALERTING, CONNECT, DISCONNECT, RELEASE and RELEASE COMPLETE messages, the User-user information element has a network dependent maximum size of 35 or 131 octets. The evolution to a single maximum value is the long term objective; the exact maximum value is the subject of further study.

In USER INFORMATION messages sent in association with a circuit-mode connection, the User-user information element has a network dependent maximum size of 35 or 131 octets. For USER INFORMATION messages sent in a temporary or permanent user-user signalling connection, the user information field contained inside this information element has a maximum size equal to the maximum size of messages defined in § 3, that is 260 octets.

Note — The User-user information element is transported transparently by an ISDN between a call originating entity, e.g., a calling user and the addressed entity, e.g., a remote user or a high layer function network node addressed by the call originating entity.

Figure 4-37/Q.931 [T136.931] (a traiter comme tableau), p. 30

Blanc

H.T. [T137.931]
TABLE 4-27/Q.931
User-user information element

{
Protocol discriminator (octet 3)

Bits through
|
8 7 6 5 4 3 2 1 through
|
0 0 0 0 0 0 0 0 User-specific protocol (Note
1) through
|
0 0 0 0 0 0 0 1 OSI high layer proto-
cols through
|
0 0 0 0 0 0 1 0 X.244 [44] (Note
2) through
|
0 0 0 0 0 0 1 1 Reserved for system
management convergence function through
|
0 0 0 0 0 1 0 0 IA5 characters (Note
4) through
|
0 0 0 0 0 1 1 1 Rec. V.120 [9] rate adap-
tion through
|
0 0 0 0 1 0 0 0 Q.931 (I.451) user-network
call control messages reserved for other network layer or
layer 3 protocols, including Recommendation X.25
[5]. (Note 3)
through | ˜ 0˜ 0˜ 1˜ 0˜ 0˜ 0˜ 0
0˜ 0˜ 1˜ 1˜ 1˜ 1˜ 1˜ 1
$$
} through |

$$fo0 1 0 0 0 0 0 0 } above {
0 1 0 0 1 1 1 1
$$fe $$
} national
use. reserved for other network layer or
layer 3 protocols, includ-
ing
Recommendation X.25. (Note
3) through
|
$$fo0 1 0 1 0 0 0 0 } above {
1 1 1 1 1 1 1 0
$$fe $$
}
}
{ through
| All other values are
reserved. *Note
1* — The user information is struc-
tured according to user needs.

Note 2 — The user information is
structured according to Rec. X.244 which specifies the structure of X.25 call user
data.

Note 3 — These values are
reserved to discriminate these protocol discriminators from the first octet of a Rec. X.25
packet including general format identifier.

Note 4 consists of IA5 characters. }	— The user information

luster **Tableau 4-27/Q.931 [T137.931], p. 31**

Blanc

4.6 *Supplementary services information elements*

4.6.1 *Date/time*

The purpose of the Date/time information element is to provide the date and time to the user. It indicates the point in time when the message has been generated by the network.

Note — It is a network dependent matter whether the time indicated is local time or Coordinated Universal Time (UTC) and which calender is used for referencing the date.

The Date/time information element is coded as shown in Figure 4-38/Q.931. Octets 3-8 are binary coded (bit 1 being the least significant bit).

Figure 4-38/Q.931 [T138.931] (à traiter comme tableau), p. 32

Blanc

4.6.2 *Facility*

The purpose of the Facility information element is to indicate the invocation and operation of supplementary services, identified by the corresponding operation value within the Facility information element. The Facility information element is defined in Figures 4-39/Q.931 to 4-43/Q.931 and Tables 4-28/Q.931 to 4-33/Q.931.

Note — The generic structure and codepoints for the Facility information element are defined in Recommendation Q.932. This section contains only the coding required for procedures described in § 7 of this Recommendation.

The Facility information element may be repeated in a given message.

The maximum length of the Facility information element is application dependent consistent with the maximum length of the message.

Figure 4-39/Q.931 [T139.931] (à traiter comme tableau), p. 33

Blanc

H.T. [T140.931]
TABLE 4-28/Q.931
Facility information element

{
Service discriminator (octet 3)

Bits
5 4 3 2 1

1 0 0 0 1
supplementary service applications

All other values reserved.
}
{
Class (octet 4)

Bits
8 7

1 0
context-specific

All other values reserved.
}
{
Form (octet 4)

Bits
6

1
constructor

All other values reserved.
}
{
Component tag (octet 4)

Bits
5 4 3 2 1

0 0 0 0 1
invoke
0 0 0 1 0
return result
0 0 0 1 1
return error
0 0 1 0 0
reject
}
{
Length format (octet 5)

Bits
8

0
length of the component length field is one octet

All other values reserved.
}
{
Length of component (octet 5 bits 7-1)

This field indicates the total length of the contents of the component field (i.e., octet 6 and its subparts). It is the binary coding of the number of octets of the component, with bit 1 as the least significant bit (2^0).
}
{
Component (octet 6)
 	
The structure of the component field varies, according to the specific component indicated in the component tag field. See the remainder of § 4.6.2.
}

Tableau 4-28/Q.931 [T140.931], p. 34

Blanc

H.T. [T141.931]

TABLE 4-29/Q.931

Abstract Syntax Notation 1 (ASN.1) representation of user-user information

service components

lw(60p) | lw(12p) | lw(156p) . OPERATION User-User-Service lw(60p) | cw(12p) | lw(156p) . Argument ::= SEQUENCE (Service, Preferred) lw(60p) | cw(12p) | lw(156p) . Result ::= empty lw(60p) | cw(12p) | lw(156p) . Errors ::= Not Supported lw(60p) | cw(12p) | lw(156p) . ::=1 lw(60p) | cw(12p) | lw(156p) . Service ::= { [1] IMPLICIT INTEGER { ervice1 (1), [1] IMPLICIT INTEGER Service2 (2), [1] IMPLICIT INTEGER Service3 (3 }

} lw(60p) | cw(12p) | lw(156p) . Preferred ::= { [2] IMPLICIT BOOLEAN { es (TRUE), [2] IMPLICIT BOOLEAN No (FALSE) }

} lw(60p) | cw(12p) | lw(156p) . ERROR Not Supported lw(60p) | cw(12p) | lw(156p) . Parameter ::= empty lw(60p) | cw(12p) | lw(156p) . ::= 1 lw(228p) .

{ *Note* : See Recommendations X.208 and X.209 for a complete definition of ASN.1.

} _

Tableau 4-29/Q.931 [T141.931], p. 35

Blanc

4.6.2.1 *Invoke component*

The invoke component is used to request the indicated supplementary service.

The invoke component is coded as shown in Figure 4-40/Q.931.

The length of the invoke component is 14 octets.

Figure 4-40/Q.931 [T142.931] (a traiter comme tableau), p. 36

Blanc

H.T. [T143.931]

TABLE 4-30/Q.931 (Sheet 1 of 2)

Invoke component within facility information element

{
Class (octet 6 and 6.3)

Bits
8 7

0 0
universal

All other values reserved.
}
{
Form (octet 6 and 6.3)

Bit
6

0
primitive

All other values reserved.
}
{
Length format (octet 6.1 and 6.4)

Bits
8

0
length is one octet

All other values reserved.
}
{
Length of invoke identifier (octet 6.1 bits 7-1)

This field indicates the total length of the contents of invoke identifier field (i.e., octet 6.2). It is the binary coding of the number of the octets of the invoke identifier, with bit 1 as the least significant bit (2^0).
}
{
Invoke identifier (octet 6.2)

This field contains a unique identification used to identify the requests of a supplementary service and is used to correlate this request with the corresponding replies.
}
{
Length of operation value (octet 6.4 bits 7-1)

This field indicates the total length of the contents of the operation value field (i.e., octet 6.5). It is the binary coding of the number of octets of the operation value, with bit 1 as the least significant bit (2^0). At the present time only single octet operation values have been defined.
}

Tableau 4-30/Q.931 (1 de 2) [T143.931], p. 37

H.T. [T144.931]

TABLE 4-30/Q.931 (Sheet 2 of 2)

Invoke component within facility information element

{
Operation value (octet 6.5)
 	
Bits
8 7 6 5 4 3 2 1
 	
0 0 0 0 0 0 0 1 user-user information
 	
All other values reserved.
}
{ *Operation-specific fields (octet 6.6, etc.)*
 	
Each operation value may have a number of associated fields. These fields vary from operation to operation value. See the remainder of }§ 4.6.2.1.

Tableau 4-30/Q.931 (2 de 2) [T144.931], p. 38

4.6.2.1.1 *Operation-specific fields for user-user information supplementary service*

The user-user information supplementary service operation-specific fields within the invoke component of the Facility information element are used to indicate details of the requested user-user information supplementary service.

These fields are coded as shown in Figure 4-41/Q.931 and Table 4-31/Q.931.

The length of these fields is 6 octets.

Figure 4-41/Q.931 [T145.931] (à traiter comme tableau), p. 39

Blanc

H.T. [T146.931]
TABLE 4-31/Q.931 (Sheet 1 of 2)

{
Class (octets 6.6, 6.8 and 6.8.3)

Bits
8 7

0 0 universal
1 0 context-specific

All other values reserved.
}
{ *Form (octet 6 and 6.3)*

Bit
6

0 primitive
1 constructor

All other values reserved.
}
{ *Length format (octet 6.1 and 6.4)*

Bit
8

0 length is one octet

All other values reserved.
}
{ *Length of sequence (octet 6.7, bits 7-1)*

This field indicates the total length of the following sequence of field (i.e., octet 6.8 and its subparts). It is the binary coding of the number of octets of the service, with bit 1 as the least significant bit (2^0).
}
{ *Length of service (octet 6.8.1, bits 7-1)*

This field indicates the total length of the contents of the service field (i.e., octet 6.8.2). It is the binary coding of the number of octet of the service, with bit 1 as the least significant bit (2^0). At the present time, only single octet service values have been
}defined.

Tableau 4-31/Q.931 (1 de 2) [T146.931], p. 40

–v'1P'

H.T. [T147.931]
TABLE 4-31/Q.931 (Sheet 2 of 2)

{
Service (octet 6.8.2) (Note)

Bits
8 7 6 5 4 3 2 1

0 0 0 0 0 0 0 1 Service 1
0 0 0 0 0 0 1 0 Service 2
0 0 0 0 0 0 1 1 Service 3

All other values reserved.
}
{
Note — The meaning of user-user information supplementary services 1, 2, and 3 are defined in Recommendation I.257A.
}
{
Length of preferred (octet 6.8.4)

This field indicates the total length of the preferred field (i.e., octet 6.8.5). It is the binary coding of the number of octets of the preferred field with bit 1 as the least significant field (2^0). At the present time, only single octet preferred values have been defined.
}
{
Preferred (octet 6.8.5)

Bits
8 7 6 5 4 3 2 1

0 0 0 0 0 0 0 0 False (service is required)
0 0 0 0 0 0 0 1 True (service is preferred)
}

Table 4-31/Q.931 [T147.931], p.

4.6.2.2 *Return result component*

The return result component enables the performing entity to provide a positive reply to a successfully performed operation to the invoking entity.

The return result component is coded as shown in Figure 4-42/Q.931.

Figure 4-42/Q.931 [T148.931] (à traiter comme tableau), p. 42

Blanc

H.T. [T149.931]

TABLE 4-32/Q.931

Return result component within facility information element

{
Class (octet 6)
 	
Bits
8 7
 	
0 0 universal
 	
All other values reserved.
}
{ *Form (octet 6)*
 	
Bits
6
 	
0 primitive
 	
All other values reserved.
}
{ *Length format (octet 6.1)*
 	
Bits
8
 	
0 length is one octet
 	
All other values reserved.
}
{ *Length of invoke identifier (octet 6.1 bit 7-1)*
 	
This field indicates the total length of the contents of invoke identifier field (i.e., octet 6.2). It is the binary coding of the number of the octets of the invoke identifier, with bit 1 as the least significant bit (2^0).
}
{ *Invoke identifier (octet 6.2)*
 	
This field is used to correlate the positive response to the supplementary service requested by the invoking entity.
}

Tableau 4-32/Q.931 [T149.931], p. 43

Blanc

4.6.2.3 *Return error component*

The return error component enables the performing entity to return the negative reply to the invoking entity.

The return error component is coded as shown in Figure 4-43/Q.931.

Figure 4-43/Q.931 [T150.931] (a traiter comme tableau), p. 44

Blanc

H.T. [T151.931]

TABLE 4-33/Q.931

Return error component within facility information element

{
Class (octets 6 and 6.3)
Bits 8 7
0 0 universal
All other values reserved.
}
{ *Form (octet 6 and 6.3)*
Bits 6
0 primitive
All other values reserved.
}
{ *Length format (octet 6.1 and 6.4)*
Bits 8
0 length is one octet
All other values reserved.
}
{ *Length of invoke identifier (octet 6.1 bit 7-1)*
This field indicates the total length of the contents of invoke identifier field (i.e., octet 6.2). It is the binary coding of the number of the octets of the invoke identifier, with bit 1 as the least significant bit (2^0).
}
{ *Invoke identifier (octet 6.2)*
This field is used to correlate the negative response to the supplementary service requested by the invoking entity.
}
{ *Length of error value (octet 6.4, bits 7-1)*
This field indicates the total length of the contents of the error value field (i.e., octet 6.5). It is the binary coding of the number of octets of the service, with bit 1 as the least significant bit (2^0). At the present time only a single octet error value has been defined.
}
{ *Error value (octets 6.5)*

Bits 8 7 6 5 4 3 2 1	
0 0 0 0 0 0 0 1	not supported

Tableau 4-33/Q.931 [T151.931], p. 45

Blanc

4.6.3 *Feature activation*

This information element is defined in Recommendation Q.932 [4].

4.6.4 *Feature indication*

This information element is defined in Recommendation Q.932 [4].

4.6.5 *Switchhook*

The purpose of the Switchhook information element is to indicate the status of the terminal switchhook to the network for use in supplementary services.

The Switchhook information element is coded as shown in Figure 4-44/Q.931 and Table 4-34/Q.931. The length of this information element is 3 octets.

Figure 4-44/Q.931 [T152.931] (a traiter comme tableau), p. 46

H.T. [T153.931]
TABLE 4-34/Q.931
Switchhook information element

{	
Switchhook value (octet 3)	
bit	
1	
0 on-hook	
1 off-hook	}

Tableau 4-34/Q.931 [T153.931], p. 47

4.7 *Information elements for packet communications*

The information elements defined below are intented to be used in the support of packet communications as described in § 6 and Recommendation X.31 [14].

The use of these information elements for out-of-band call control for packet calls is for further study.

4.7.1 *Information rate*

The purpose of the Information rate information element is to notify the terminating user of the throughput indicated by the incoming Recommendation X.25 [5] call request packet.

The Information rate information element is coded as shown in Figure 4-45/Q.931 and Tables 4-35/Q.931 and 4-36/Q.931.

The maximum length of this information element is 6 octets.

Figure 4-45/Q.931 [T154.931] (a traiter comme tableau), p. 48

Blanc

H.T. [T155.931]
TABLE 4-35/Q.931
Information rate information element

{
Incoming/outgoing information rate (octets 3 and 4)

The incoming outgoing information rate fields are used to indicate the information rate in the direction network to user, and user to network respectively.

The information rate for the direction of data transmission from the calling DTE is indicated in bits 5, 4, 3, 2 and 1 of octet 3. The information rate for the direction of data transmission from the called DTE is indicated in bits 5, 4, 3, 2 and 1 of octet 4. The bits are coded as specified in Table 4-36/Q.931.

}

{
Minimum incoming/outgoing information rate (octets 5 and 6)

The minimum information rate for the direction of data transmission from the calling DTE is indicated in bits 5, 4, 3, 2 and 1 of octet 5.
The minimum information rate for the direction of data transmission from the called DTE is indicated in bits 5, 4, 3, 2 and 1 of octet 6.
The bits are encoded as specified in Table 4-36/Q.931.

}

Tableau 4-35/Q.931 [T155.931], p. 49

H.T. [T156.931]
TABLE 4-36/Q.931
Throughput class coding

Bits					Throughput class (bit/s)
5	4	3	2	1	
0	0	0	0	0	Reserved
0	0	0	0	1	Reserved
0	0	0	1	0	Reserved
0	0	0	1	1	75
0	0	1	0	0	150
0	0	1	0	1	300
0	0	1	1	0	600
0	0	1	1	1	1200
0	1	0	0	0	2400
0	1	0	0	1	4800
0	1	0	1	0	9600
0	1	0	1	1	19200
0	1	1	0	0	48000
0	1	1	0	1	Reserved
0	1	1	1	0	Reserved
0	1	1	1	1	Reserved

Tableau 4-36/Q.931 [T156.931], p. 50

4.7.2 *End-to-end transit delay*

The purpose of the End-to-end transit delay information element is to request and indicate the nominal maximum permissible transit delay applicable on a per call basis to that virtual call.

The End-to-end transit delay is coded as shown in Figure 4-46/Q.931 and Table 4-37/Q.931.

The maximum length of this information element is 11 octets.

Figure 4-46/Q.931 [T157.931] (a traiter comme tableau), p. 51

H.T. [T158.931]
TABLE 4-37/Q.931
End-to-end transit delay information element

{
Cumulative transit delay value [octet 3 (bits 1-2) octets 3a and 3b]

Cumulative transit delay value binary enco ded in milleseconds. Bit 2 of octet 3 is the highest order bit and bit 1 of octet 3b is the lowest order bit. The cumulative transit delay value occupies 16 bits total.
}

{
Requested end-to-end transit delay value [octet 4 (bits 1-2) octets 4a and 4b]

Requested en-to-end transit delay value binary enco ded in milleseconds. Bit 2 of octet 4 is the highest order bit and bit 1 of octet 4b is the lowest order bit. The requested end-to-end transit delay value occupies 16 bits total.
}

{
Maximum end-to-end transit delay value [octet 5 (bits 1-2) octets 5a and 5b]

Maximum end-to-end transit delay value binary enco ded in milleseconds. Bit 2 of octet 5 is the highest order bit and bit 1 of octet 5b is the lowest order bit. The maximum end-to-end transit delay value occupies 16 bits total.

Note — For a Recommendation X.31 typ e of access to an ISDN the procedures only apply in the notification phase at the terminating exchange. At the terminating exchange, if the End-to-End Transit Delay facility is present in the X.25[5] incoming call request packet, the contents should be copied into End-to-end transit delay information element as follows:

i) The cumulative transit delay field (octets 3 and 4) of the X.25 end-to-end transit delay facility should be copied into octets 3, 3a and 3b. The bit order should be preserved as described above in the description.

ii) If octets 5 and 6 are present in the X.25 end-to-end transit delay facility, they should be interpreted as the requested end-to-end transit delay value. The value present should be copied into octets 4, 4a and 4b.

The bit order should be preserved as described above in the description.

iii) If octets 7 and 8 are present in the X.25 end-to-end transit delay facility, the value present is the minimum end-to-end transit delay allowed. Octets 7 and 8 should be copied into octets 5, 5a and 5b. The bit order should be preserved as described above in the description.

}

Tableau 4-37/Q.931 [T158.931], p. 52

Blanc

4.7.3 *Packet layer binary parameters*

The purpose of the Packet layer binary parameters information element is to indicate requested layer 3 parameter values to be used for the call.

The Packet layer binary parameters information element is coded as shown in Figure 4-47/Q.931 and Table 4-38/Q.931.

The maximum length of this information element is 3 octets.

Figure 4-47/Q.931 [T159.931] (a traiter comme tableau), p. 53

Blanc

H.T. [T160.931]

TABLE 4-38/Q.931

Packet layer binary parameters information element

{	
Fast select (octet 3)	
Bit	
5 4	
$$fo0 0	} above {
0 1	
$$fe	$$
}	Fast select not
requested 1 0	
Fast select requested with no restriction of response	
1 1	Fast select requested with restrictions
of response }	
{	*Expedited data (octet*
3)	
Bit	
3	
0	No request/request
denied	
1	Request indicated/request
accepted }	
{	*Delivery confirmation (octet*
3)	
Bit	
2	
0	Link-by-link
confirmation	
1	End-to-end
confirmation }	
{	*Modulus (octet*
3)	
Bit	
1	
0	modulus 8 sequenc-
ing	
1	modulus 128 sequenc-
ing }	

ne **Tableau 4-38/Q.931 [T160.931], p. 54**

Blanc

4.7.4 *Packet layer window size*

The purpose of the Packet layer window size information element is to indicate requested layer 3 window size value to be used for the call. The values are binary-encoded.

The Packet layer window size is coded as shown in Figure 4-48/Q.931.

The maximum length of this information element is 4 octets.

Figure 4-48/Q.931 [T161.931] (à traiter comme tableau), p. 55

Blanc

4.7.5 *Packet size*

The purpose of the Packet size information element is to indicate the requested packet size values to be used for the call. The values are encoded $\log_2$.

The Packet size information element is coded as shown in Figure 4-49/Q.931.

The maximum length of this information element is 4 octets.

Figure 4-49/Q.931 [T162.931] (a traiter comme tableau), p. 56

Blanc

4.7.6 *Redirecting number*

The purpose of the Redirecting number information element is to identify the number from which a call diversion or transfer was invoked.

The Redirecting number information element is coded as shown in Figure 4-50/Q.931 and Table 4-39/Q.931.

The maximum length of this information element is network dependent.

Figure 4-50/Q.931 [T163.931] (a traiter comme tableau), p. 57

Blanc

H.T. [T164.931]
TABLE 4-39/Q.931 (Sheet 1 of 2)
Redirecting number information element

{
Type of number (octet 3) (Note 1)

Bits
7 6 5

0 0 0 unknown
(Note 2)
0 0 1 international
number (Note 3)
0 1 0 national
number (Note 3)
0 1 1 network
specific number (Note 4)
1 0 0 subscriber
number (Note 3)
1 1 0 abbreviated
number
1 1 1 reserved for
extension

All other values are reserved.
}
{ *Note 1* — For the definition of international, national and subscriber number, see Recommendation I.330 [18].

Note 2 — The type of number ‘‘unknown’’ is used when the user or the network has no knowledge of the type of number, e.g., international number, national number, etc. In this case the number digits field is organized according to the network dialling plan; e.g., prefix or escape digits might be present.

Note 3 — Prefix or escape digits shall not be included.

Note 4 — The type of number ‘‘network specific number’’ is used to indicate administration/service number specific to the serving network, e.g., used to acces an operator.
}
{ *Numbering plan identification (octet 3)*
}
{ *Numbering plan (applies for type of number = 000, 001, 010 and 100)*

Bits
4 3 2 1

0 0 0 0 unknown
(Note)
0 0 0 1
ISDN/telephony numbering plan (Recommendation E.164 [19]/E.163
[20])
0 0 1 1 data number-
ing plan (Recommendation X.121) [21]
0 1 0 0 telex number-
ing plan (Recommendation F.69) [22]
1 0 0 0 national stan-
dard numbering plan
1 0 0 1 private
numbering plan
1 1 1 1 reserved for

extension

All other values are reserved.
}
{
Note — The numbering plan ‘‘unknown’’ is used when the user or the network has no knowledge of the numbering plan. In this case the number digits field is organized according to the network dialling plan; e.g., prefix or escape digits might be present.
}
{ *Presentation indicator (octet 3a)*

Bits
7 6

0 0 Presentation allowed

0 1 Presentation restricted

All other values are reserved.
}
{
Note — At the redirecting user-network interface, the presentation indicator is used for indicating the intention of the redirecting user for the presentation of the redirecting number to the called used. This may also be requested on a subscription basis. If octet 3a is omitted, and the network does not support subscription information for the redirecting number information restrictions, the value ‘‘00 — presentation allowed’’ is assumed.
}

Tableau 4-39/Q.931 (1 de 2) [T164.931], p. 58

H.T. [T165.931]

TABLE 4-39/Q.931 (Sheet 2 of 2)

Redirecting number information element

{	
Screening indicator (octet 3a)	
Bits 2 1	
0 0	User-provided, not screened
0 1	User-provided, verified and passed
1 0	User-provided, verified and failed
1 1	Network provided
}	
{	
Note	— If octet 3a is omitted, ''00 — user-provided, not screened'' is assumed.
}	
{	*Reason for redirection (octet 3b)*
Bits 4 3 2 1	
0 0 0 1	Call forwarding busy or called DTE busy
0 0 1 0	Call forwarding no reply
1 0 0 1	Called DTE out of order
1 1 1 1	Call forwarding unconditional or systematic call redirection
1 0 1 0	Call forwarding by the called DTE
All other values are reserved.	
}	
{	*Number digits (octets 4, etc.)*
This field is coded with IA5 characters, according to the formats specified in the appropriate numbering/dialling plan.	
}	

Tableau 4-39/Q.931 (2 de 2) [T165.931], p. 59

Blanc

4.7.7 *Transit delay selection and indication*

The purpose of the Transit delay selection and indication information element is to request and indicate the nominal maximum permissible transit delay applicable on a per call basis to that virtual call.

The Transit delay selection and indication information element is coded as shown in Figure 4-51/Q.931 and Table 4-40/Q.931.

The maximum length of this information element is 5 octets.

Figure 4-51/Q.931 [T166.931] (a traiter comme tableau), p. 60

H.T. [T167.931]

TABLE 4-40/Q.931

Transit delay selection and indication information element

{
Transit delay selection and indication value [octet 3 (bits 1-2), octets 3a and 3b]
 	
Transit delay value binary encoded in milliseconds. Bit 2 of octet 3 is the highest order bit and bit 1 of octet 3b is the lowest order bit. The transit delay value occupies 16 bits total.
 	
Note — For access to an ISDN a Recommendation X.31[14] type of the procedures only apply in the notification phase at the terminating exchange. At the terminating exchange, if the Transit Delay Selection and Indication facility is present in the X.25 [5] incoming call request packet, the two octet value should be copied into octets 3, 3a and 3b with the highest order bit contained in bit 2 of octet 3 and the lowest order bit contained in bit 1 of octet 3b.
 	
}

Tableau 4-40/Q.931 [T167.931], p. 61