ISDN MESSAGE SET (1TR6_NSA)

Reference Manual

November 1990
R01

SUPPORTED MESSAGE SETS

A number of ISDN D-Channel Layer 3 Message Sets are available to support all application monitor and simulation tests. CCITT is the international message set and is provided as the default to all ISDN users.

Contact your IDACOM/HP sales representative to either purchase additional sets and/or update existing message sets.

The following table contains a complete list of all currently available message sets and the corresponding release dates and numbers.

Message Set	Description	Release Date	Release #
International			
CCITT_1988	CCITT Q.931/I.451 Network Layer, Blue Book (1988)	November 1990	R01
North America			
ATT_5E6	AT&T 5D5-900-321, 5E6 Generic Program (03/89)	November 1990	R01
ATT_41449	AT&T Primary Rate Interface Spec, TR41449 (07/89)	November 1990	R01
NT_S208-4	Northern Telecom NIS S208-4 (1988), Functional	November 1990	R01
NT_S208-2	Northern Telecom NIS S208-2 (1986), Stimulus	November 1990	R01
NT_A211-1	Northern Telecom NIS A211-1, Issue AB01 (03/87)	November 1990	R01
Europe			
VN2_133e	CNET Tech Spec ST/LAA/RSM/ 133, Ed 3 (07/88) English	November 1990	R01
VN2_133f	CNET Tech Spec ST/LAA/RSM/ 133, Ed 3 (07/88) French	November 1990	R01
1TR6_MGK	FTZ 1TR6 ISDN-D-Kanal-Protokoll (Ausgabe 1.90) - MGK	November 1990	R01
1TR6_NSA	FTZ 1TR6 ISDN-D-Kanal-Protokoll (Ausgabe 1.90) - NStAnl	November 1990	R01
Asia			
NTT_INS-89	NTT INS Net 64/1500 Service Interface (1989)	November 1990	R01

PREFACE

This manual is intended to provide a list of message identifiers, information element identifiers, and information element structures for the 1TR6_NSA Message Set. Refer to the ISDN Programmer's Manual for a list of identifiers and structures for the CCITT (default) message set.

This manual is not intended to provide basic user instruction, but rather provides examples which apply standard techniques for writing layer 3 test scripts using the Interactive Test Language (ITL). Refer to the Programmer's Reference Manual for general programming information, and the ISDN Programmer's Manual for more information and examples regarding ISDN test scripts. Refer to the machine specific User Manual for a quick reference to the basic operation of the protocol tester and for instructions to load and operate the software.

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TABLE OF CONTENTS

SUPPORTED MESSAGE SETS

PREFACE

1 INTRODUCTION 1-1

1.1 Using Message Identifiers 1-1

1.2 Using IE Identifiers 1-2

1.3 Using IE Structures 1-3

2 MESSAGE IDENTIFIERS 2-1

2.1 N1 Protocol Discriminator (value = 0X41) 2-1

2.2 N0 Protocol Discriminator (value = 0X40) 2-1

3 IE IDENTIFIERS 3-1

3.1 Codeset 0 3-1

3.2 Codeset 5 3-1

3.3 Codeset 6 3-1

3.4 Codeset 7 3-1

4 IE STRUCTURES 4-1

4.1 Add Transmission Attr IE (I#ATA) 4-1

4.2 Connected Address IE (I#CAD) 4-1

4.3 Call Identity IE (I#CAI) 4-2

4.4 Cause IE (I#CAU) 4-2

4.5 Channel Identification IE (I#CHI) 4-3

4.6 Charging Information IE (I#CIF) 4-3

4.7 Status Des Geruf TIn IE (I#CLS) 4-4

TABLE OF CONTENTS [continued]

4 IE STRUCTURES [continued]

4.8 Congestion Level IE (I#CONLV) 4-4

4.9 Destination Address IE (I#DAD) 4-4

4.10 Display IE (I#DSP) 4-4

4.11 Date IE (I#DTE) 4-5

4.12 Facility Select IE (I#FSE) 4-5

4.13 Key IE (I#KEY) 4-6

4.14 More Data IE (I#MDAT) 4-6

4.15 Network Specific Facilities IE (I#NSF) 4-6

4.16 Origination Address IE (I#OAD) 4-7

4.17 Shift IE (I#SHI) 4-8

4.18 Service Indicator IE (I#SIN) 4-8

4.19 Status Of Facilities IE (I#SOF) 4-9

4.20 User To User Information IE (I#UTU) 4-9

1 INTRODUCTION

The 1TR6_NSA message set is implemented in accordance with: FTZ Guideline 1 TR 6, Part 3 of 1 TR 3 (Revision 1.90), Signalling Between DIVO(ISDN) Central Offices and ISDN Customer Premises Equipment, ISDN D-Channel Protocol (Layer 3) - PABX Procedures.

The message set name (1TR6_NSA) is used with the LOAD_MESSAGE_SET command or the *Load Message Set* function key under the **MessageSet** topic. This name is also displayed on various menus, and is used to identify the message set variation when layer 3 complete report format is selected. The corresponding entry on the Message Set Selection Menu identifies the message set name, description, and release number:

1TR6_NSA FTZ 1TR6 ISDN-D Kanal Protokoll (Ausgabe 1.90) - NstAnl R01

This message set contains unique identifiers which can be used in ISDN test scripts to reference received and transmitted messages. These identifiers are listed in three sections:

- Message Type Identifiers
- Information Element Identifiers
- Information Element Structures (including parameter field selectors and associated field values constants)

The following subsections provide some examples illustrating the use of each of these types of identifiers. Refer to the ISDN Programmer's Manual for more information and detailed examples.

1.1 Using Message Identifiers

Message identifiers uniquely identify a message type in both received and transmitted messages, and are expressed in the following form:

M#xxxx (eg. M#SETUP)

In addition, the following default identifiers (specific received messages only) are also included with each message set:

- M#ANY (any valid message)
- M#INVALID (an invalid message)
- M#UNDEF (an unknown/undefined message type)

Example 1:
After receiving a Setup message, perform an action (eg. send a Setup Acknowledge response, increment a counter, etc.).

```
M#SETUP ?L3_MSG
ACTION[
      ( code specifying action taken if Setup message received )
]ACTION
```

Example 2:
Send an Alert message in an I frame complete with desired information elements.

```
M#ALERT MESSAGE>
      I#DISPLAY
      I#SIGNAL
<SEND
```

Message identifiers can also be used for filter/trigger management from within a script.

Example 3:
Set the display/report filter to only pass Setup and Connect messages.

```
R_FILTER            ( Select the display filter )
F3=NONE             ( Block all message types )
M#SETUP F+MSG       ( Pass Setup messages )
M#CONN  F+MSG       ( Pass Connect messages )
```

1.2 Using IE Identifiers

IE identifiers uniquely identify an information element in both received and transmitted messages, and are expressed in the following form:

I#xxxx (eg. I#CAUSE)

Example 1:
Determine if the Cause IE appears in the last received message at least once.

```
I#CAUSE 1 ?L3_IE
IF
      ( code specifying action taken if the first Cause IE is found )
ELSE
      ( code specifying action taken if the first Cause IE is not found;
        ie: none present )
ENDIF
```

Example 2:
Prepare a Cause IE for later inclusion and transmission within a message.

```
I#CAUSE ELEMENT>
      ALL_EXCLUDED
      OCTET_3 INCLUDED
      OCTET_4 INCLUDED
      OCTET_5 INCLUDED
<ELEMENT
```

Also in this group are octet identifiers which uniquely identify an octet number that can be used for any IE that contains that octet number. Octet identifiers are used in both received and transmitted messages and are expressed in the following form:

OCTET_xx (eg. OCTET_3.1)

Example 1:
Determine if Octet 3A is present in the Cause IE of the latest message received.

```
I#CAUSE OCTET_3A ?L3_OCTET
IF
    ( code specifying action taken if the octet is present;
      ie: process the specified Recommendation )
ENDIF
```

1.3 Using IE Structures

Information element structures consist of the information element parameter field selectors and the associated field value identifiers.

The parameter field selectors are expressed in the following form:

->xxx_yyyy (eg. ->BC_CODING_STANDARD)

where: xxx = the information element associated with that parameter field (eg: Bearer Capability)
yyyy = the parameter field (either a string or a bit field)

The field value identifiers are expressed in the following form:

#xxxxx (eg. #INTERNATIONAL = 0b00000001)

All parameter field selectors are used with the *DEC and *COD structure indicators. *DEC provides the base address of the decoder parameter structure. When used with a field selector, decoded parameter values can be accessed. *COD complements *DEC and provides the base address of the coder parameter structure for the current connection. The contents of specific parameter fields can then be changed prior to transmission.

Example 1:
Depending on the contents of the received Bearer Capability Coding Standard parameter field (Octet 3, 2 bits), perform one of two different actions.

```
*DEC ->BC_CODING_STANDARD @      ( Obtain the received value )
#CCITT =                         ( Compare with identifier )
IF
      T." Coding Standard is CCITT" TCR
ELSE
      T." Coding Standard is not CCITT" TCR
ENDIF
```

NOTE
The preceding example uses a bit field and @ (fetch); ! (store) and T. (print value) can also be used. If the parameter is a string (a sequence of one or more characters), !STRING or T.TYPE can be used.

Example 2:
Set the appropriate values of the two parameter fields of Octet 4 of the Bearer Capability IE prior to transmission.

```
#CIRCUIT_MODE *COD ->BC_TRANSFER_MODE !
#384KBIT/S    *COD ->BC_TRANSFER_RATE !
```

2
MESSAGE IDENTIFIERS

2.1 N1 Protocol Discriminator (value = 0X41)

M#ALERT	Alerting
M#CALL_SENT	Call Sent
M#CANC_ACK	Cancel Acknowledge
M#CANC_REJ	Cancel Reject
M#CONN	Connect
M#CONN_ACK	Connect Acknowledge
M#CON_CON	Congestion Control
M#DET	Detach
M#DISC	Disconnect
M#FAC	Facility
M#FAC_ACK	Facility Acknowledge
M#FAC_CANC	Facility Cancel
M#FAC_REG	Facility Register
M#FAC_REJ	Facility Reject
M#INFO	Information
M#REG_ACK	Register Acknowledge
M#REG_REJ	Register Reject
M#REL	Release
M#REL_ACK	Release Acknowledge
M#SETUP	Setup
M#SETUP_ACK	Setup Acknowledge
M#STATUS	Status
M#USER_INFO	User Information

2.2 N0 Protocol Discriminator (value = 0X40)

M#CLOSE	Close
M#CLO_ACK	Close Acknowledge
M#FAC_STA	Facility Status
M#STA_ACK	Status Acknowledge
M#STA_REJ	Status Reject

3
IE IDENTIFIERS

3.1 Codeset 0

I#CAD	Connected Address
I#CAI	Call Identity
I#CAU	Cause
I#CHI	Channel Identification
I#CONLV	Congestion Level
I#DAD	Destination Address
I#DSP	Display
I#KEY	Key
I#MDAT	More Data
I#NSF	Network Specific Facilities
I#OAD	Origination Address
I#SHI	Shift
I#UTU	User To User Information

3.2 Codeset 5

I#SHI	Shift

3.3 Codeset 6

I#ATA	Add Transmission Attr
I#CIF	Charging Information
I#CLS	Status Des Geruf TIn
I#DTE	Date
I#FSE	Facility Select
I#SHI	Shift
I#SIN	Service Indicator
I#SOF	Status Of Facilities

3.4 Codeset 7

I#SHI	Shift

4
IE STRUCTURES

4.1 Add Transmission Attr IE (I#ATA)

Possible octet inclusions/exclusions:

OCTET_3

->ATA_FLAG	Flag, Octet 3
#INDICATION	*indication*
#REQUEST	*request*
->ATA_ATTR	Attributes, Octet 3
#KEINE_SATELLITENVERB	*keine Satellitenverb*
#EINE_SATELLITENVERB	*eine Satellitenverb*
#ZWEI_SATELLITENVERB	*zwei Satellitenverb*
#DREI_SATELLITENVERB	*drei Satellitenverb*

4.2 Connected Address IE (I#CAD)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->CAD_ADDR_TYPE	Type of address, Octet 3
#UNKNOWN	*unknown*
#INTERNATIONAL	*international number*
#NATIONAL	*national number*
->CAD_ADDR_PLAN	Numbering plan, Octet 3
#UNKNOWN_PLAN	*unknown*
#ISDN_PLAN	*ISDN numbering plan Rec. E.164*
->CAD_ADDRESS	Address digits, Octet 4 *
(IA5 characters)	*max. length 16 octets*

4.3 Call Identity IE (I#CAI)

Possible octet inclusions/exclusions:

OCTET_3

->CAI_ID	Call identity, Octet 3 *
(hex characters)	*max. length 8 octets*

4.4 Cause IE (I#CAU)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->CAU_VALUE	Cause value, Octet 3
#INVALID_CR	*Nicht zulaessiger CR-Wert*
#BEARER_SERVICE_UNIMPL	*Unbekannter Service Indicator*
#CALL_ID_NONEXISTENT	*Unbekannte Call Identity*
#CALL_ID_IN_USE	*Call identity bereits zugeordnet*
#NO_CHANNEL_AVAIL	*Kein Nutzkanal frei*
#FACILITY_UNIMPL	*Angegebener FAC-Code ist unbekannt*
#FACILITY_NOT_SUBSCRIBED	*DM abgelehnt, Tln keine Berechtig.*
#OUTGOING_CALL_BARRED	*Abgehende Verbindung nicht moeglich*
#USER_ACCESS_BUSY	*User access busy*
#NEG_GBG_VERGLEICH	*Verbindung unmoeglich wegen GBG*
#NONEXISTENT_CUG	*GBG existiert nicht*
#SPV_NICHT_ERLAUBT	*Verbindung nicht moeglich*
#DEST_NOT_OBTAINABLE	*Verbindung im Netz nicht aufbaubar*
#NUMBER_CHANGED	*Rufnummer bei B-Tln geaendert*
#OUT_OF_ORDER	*Endgeraet nicht betriebsbereit*
#NO_RESPONSE	*Kein TE hat auf SETUP geantwortet*
#USER_BUSY	*B-Teilnehmer besetzt*
#INCOMING_BARRED	*B hat Sperre gegen ankommende Verb*
#CALL_REJECTED	*Verbindungswunsch abgelehnt*
#NTWK_CONGESTION	*Engpass im Netz*
#REMOTE_INITIATED	*Vom fernen Ende abgelehnt/ausgel.*
#LOC_PROC_ERR	*Ausloesen wegen lokalen Fehlern*
#REM_PROC_ERR	*Fehler am fernen Ende*
#REM_SUSPENDED	*Verbindung in HALTEN oder SUSPEND*
#REM_RESUMED	*Verb. nicht mehr in HALTEN/SUSPEND*
#USER_INFO_DISCARDED	*USER INFO wird lokal zurueckgew.*
->C_CODING_STANDARD	Coding standard, Octet 4
#NATIONAL	*national standard*
->C_LOCATION	Location, Octet 4
#PUBLIC_NETWORK	*public network*
#PRIVATE_NETWORK	*private network*
#KEINE_ANGABE_ENT	*keine Angabe ueber Entstehungsort*

4.5 Channel Identification IE (I#CHI)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4, OCTET_5

->CID_INT_PRESENT	Interface ident., Octet 3
#IMPLICIT	*implicitly identified*
->CHI_PAT1	Interface type, Octet 3
#CHI_BA	*basic interface*
#CHI_PRI	*primary interface*
->CHI_P/E	P/E, Octet 3
#PREFERRED	*bevorzugter Kanal*
#EXCLUSIVE	*vorgeschriebener Kanal*
->CHI_PAT2	D-Channel Indicator, Octet 3
#NOT_D_CHANNEL	*not D-channel*
->CHI_ICS	ICS, Octet 3
#NO_CHANNEL	*kein Kanal*
#SEE_CHAN_NO	*siehe Channel Number*
#ANY_CHANNEL	*beliebiger Kanal*
->CID_CODING_STANDARD	Coding standard, Octet 4
#NATIONAL	*national standard*
->CID_NUMBER/MAP	Number/Map, Octet 4
#NUMBER	*number*
->CID_CHANNEL/MAP_TYPE	Chan./Map type, Octet 4
#B_CHANNEL_UNITS	*B-channel units*
->CHI_CHANNEL	Channel number, Octet 5 *
(hex characters)	*max. length 1 octets*

4.6 Charging Information IE (I#CIF)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->CIF_GEA	Art der Gebuehren., Octet 3
#ANZAHL_EINHEITEN	*Abgelauf. Gebuehreneinheiten*
->CIF_ANZAHL	Anzahl, Octet 4 *
(IA5 characters)	*max. length 12 octets*

4.7 Status Des Geruf Tln IE (I#CLS)

Possible octet inclusions/exclusions:

OCTET_3

->SDT_STATUS	Status, Octet 3
#KEINE_ANGABE	*keine Angabe*
#TLN_WIRD_GERUFEN	*Tln wird gerufen*

4.8 Congestion Level IE (I#CONLV)

->CL_CONGESTION_LEVEL	Congestion level
#RECEIVER_READY	*receiver ready*
#RECEIVER_NOT_READY	*receiver not ready*

4.9 Destination Address IE (I#DAD)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->DAD_ADDR_TYPE	Type of address, Octet 3
#UNKNOWN	*unknown*
#INTERNATIONAL	*international number*
#NATIONAL	*national number*
->DAD_ADDR_PLAN	Numbering plan, Octet 3
#UNKNOWN_PLAN	*unknown*
#ISDN_PLAN	*ISDN numbering plan Rec. E.164*
->DAD_ADDRESS	Address digits, Octet 4 *
(IA5 characters)	*max. length 16 octets*

4.10 Display IE (I#DSP)

Possible octet inclusions/exclusions:

OCTET_3

->DSP_DISPLAY	Displayinhalt, Octet 3 *
(IA5 characters)	*max. length 40 octets*

4.11 Date IE (I#DTE)

Possible octet inclusions/exclusions:

OCTET_3

->DTE_DATA	Date, Octet 3 *
(IA5 characters)	*max. length 14 octets*

4.12 Facility Select IE (I#FSE)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->FSE_FAC_CODE	Facility Code, Octet 3
#SPERRE	*Sperre*
#ANRUFUMLEITUNG_ST	*Anrufweiterschaltung I*
#ANRUFUMLEITUNG_FW	*Anrufweiterschaltung II*
#KONFERENZ	*Konferenz*
#B_KANAL_UEBERNEHMEN	*B-Kanal uebernehmen*
#HALT_AKTIVIEREN	*Aktivschalten einer gehaltenen Verb*
#DREIERKONFERENZ	*Dreierkonferenz*
#DIENSTWECHSEL_1	*Einseitiger Dienstwechsel*
#DIENSTWECHSEL_2	*Zweiseitiger Dienstwechsel*
#NR_IDENTIFIZIERUNG	*Rufnummer Identifizierung*
#GBG	*Geschlossene Benutzergruppe*
#ANZ_UEBERGEBENER_RUF	*Anzeige: uebergebener Ruf*
#ANZ_UMLEITUNG	*Anzeige: umgesch./weitergesch. Ruf*
#ANZ_UNTERDRUECKEN	*Unterdruecken A-Rufnummer*
#VERB_AKTIVIEREN	*Nutzung der Verbindung aktivieren*
#VERB_DEAKTIVIEREN	*Nutzung der Verbindung deaktivieren*
#SPV	*Semipermanente Verbindung*
#RW_DIENSTWECHSEL_2	*Rueckwech. b. zweiseit. Dienstwech.*
#ANRUFUMLEITUNG_PN	*Anrufumleitung im privaten Netz*
->FSE_SERVICE	Service, Octet 4
#NICHT_RELEVANT	*DM gilt fuer alle Dienste*
#FERNSPRECHEN	*Fernsprechen*
#A/B-DIENSTE	*a/b-Dienste*
#X.21-DIENSTE	*X.21-Dienste*
#FAX_GRUPPE_4	*Telefax Gruppe 4*
#BTX_64KBIT/S	*Btx (64 kbit/s)*
#DUE_64KBIT/S	*Datenuebertragung (64 kbit/s)*
#X.25-DIENSTE	*X.25 Dienste*
#TELETEX	*Teletex 64*
#MIXED_MODE_1TR6	*Mixed mode*

#FERNWIRKEN	*Fernwirken*
#GRAFIKTELEFONDIENSTE	*Grafiktelefondienste*
#BILDSCHIRMTEXT_NS	*Bildschirmtext (neuer Standard)*
#BILDTELEFON	*Bildtelefon*

4.13 Key IE (I#KEY)

Possible octet inclusions/exclusions:

OCTET_3

->KEY_CONTENTS (IA5 characters)	Keypad information, Octet 3 * *max. length 32 octets*

4.14 More Data IE (I#MDAT)

NOTE
There are no selectors for this information element.

4.15 Network Specific Facilities IE (I#NSF)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4, OCTET_5, OCTET_6, OCTET_7, OCTET_8

->NSF_CODE	Facility Code, Octet 4
#SPERRE	*Sperre*
#ANRUFUMLEITUNG_ST	*Anrufweiterschaltung I*
#ANRUFUMLEITUNG_FW	*Anrufweiterschaltung II*
#KONFERENZ	*Konferenz*
#B_KANAL_UEBERNEHMEN	*B-Kanal uebernehmen*
#HALT_AKTIVIEREN	*Aktivschalten einer gehaltenen Verb*
#DREIERKONFERENZ	*Dreierkonferenz*
#DIENSTWECHSEL_1	*Einseitiger Dienstwechsel*
#DIENSTWECHSEL_2	*Zweiseitiger Dienstwechsel*
#NR_IDENTIFIZIERUNG	*Rufnummer Identifizierung*
#GBG	*Geschlossene Benutzergruppe*
#ANZ_UEBERGEBENER_RUF	*Anzeige: uebergebener Ruf*
#ANZ_UMLEITUNG	*Anzeige: umgesch./weitergesch. Ruf*
#ANZ_UNTERDRUECKEN	*Unterdruecken A-Rufnummer*
#VERB_AKTIVIEREN	*Nutzung der Verbindung aktivieren*
#VERB_DEAKTIVIEREN	*Nutzung der Verbindung deaktivieren*
#SPV	*Semipermanente Verbindung*
#RW_DIENSTWECHSEL_2	*Rueckwech. b. zweiseit. Dienstwech.*
#ANRUFUMLEITUNG_PN	*Anrufumleitung im privaten Netz*

->NSF_SERVICE	Service, Octet 5
#NICHT_RELEVANT	*DM gilt fuer alle Dienste*
#FERNSPRECHEN	*Fernsprechen*
#A/B-DIENSTE	*a/b-Dienste*
#X.21-DIENSTE	*X.21-Dienste*
#FAX_GRUPPE_4	*Telefax Gruppe 4*
#BTX_64KBIT/S	*Btx (64 kbit/s)*
#DUE_64KBIT/S	*Datenuebertragung (64 kbit/s)*
#X.25-DIENSTE	*X.25 Dienste*
#TELETEX	*Teletex 64*
#MIXED_MODE_1TR6	*Mixed mode*
#FERNWIRKEN	*Fernwirken*
#GRAFIKTELEFONDIENSTE	*Grafiktelefondienste*
#BILDSCHIRMTEXT_NS	*Bildschirmtext (neuer Standard)*
#BILDTELEFON	*Bildtelefon*
->NSF_ADD_INFO	Additional Info., Octet 6
(numeric value)	*range 0 through 255*
->NSF_AS	Art der Sperre, Octet 7
#SPERR_ALLE	*Sperre aller abgehenden Verbind.*
#SPERR_FERN	*Sperre abghd. Fernverbindungen*
#SPERR_AUSL	*Sperre abghd. Auslandsverbindungen*
#SPERR_INTERKONT	*Sperre abghd. Interkontinentalverb.*
->NSF_ADDR_TYPE	Type of address, Octet 7
#UNKNOWN	*unknown*
#INTERNATIONAL	*international number*
#NATIONAL	*national number*
->NSF_ADDR_PLAN	Numbering plan, Octet 7
#UNKNOWN_PLAN	*unknown*
#ISDN_PLAN	*ISDN numbering plan Rec. E.164*
->NSF_CHANNEL	Channel number, Octet 7 *
(hex characters)	*max. length 1 octets*
->NSF_EAZ_INIT	EAZ init. Seite, Octet 7 *
(IA5 characters)	*max. length 2 octets*
->NSF_GBG	GBG-Index, Octet 7 *
(IA5 characters)	*max. length 2 octets*
->NSF_EAZ_ABH	EAZ abhaeng. Seite, Octet 8 *
(IA5 characters)	*max. length 2 octets*

4.16 Origination Address IE (I#OAD)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->OAD_ADDR_TYPE	Type of address, Octet 3
#UNKNOWN	*unknown*
#INTERNATIONAL	*international number*
#NATIONAL	*national number*

->OAD_ADDR_PLAN	Numbering plan, Octet 3
#UNKNOWN_PLAN	*unknown*
#ISDN_PLAN	*ISDN numbering plan Rec. E.164*
->OAD_ADDRESS	Address digits, Octet 4 *
(IA5 characters)	*max. length 16 octets*

4.17 Shift IE (I#SHI)

->SH_TYPE	Shift type
#LOCKING	*Codeumschaltung mit Feststellung*
#NON_LOCKING	*Codeumschaltung ohne Feststellung*
->SH_CODESET	Codeset ident.
#CODESET0	*Codesatz 0*
#CODESET6	*Codesatz 6*
#CODESET7	*Codesatz 7*

4.18 Service Indicator IE (I#SIN)

Possible octet inclusions/exclusions:

OCTET_3, OCTET_4

->SIN_SERVICE	Service, Octet 3
#NICHT_RELEVANT	*DM gilt fuer alle Dienste*
#FERNSPRECHEN	*Fernsprechen*
#A/B-DIENSTE	*a/b-Dienste*
#X.21-DIENSTE	*X.21-Dienste*
#FAX_GRUPPE_4	*Telefax Gruppe 4*
#BTX_64KBIT/S	*Btx (64 kbit/s)*
#DUE_64KBIT/S	*Datenuebertragung (64 kbit/s)*
#X.25-DIENSTE	*X.25 Dienste*
#TELETEX	*Teletex 64*
#MIXED_MODE_1TR6	*Mixed mode*
#FERNWIRKEN	*Fernwirken*
#GRAFIKTELEFONDIENSTE	*Grafiktelefondienste*
#BILDSCHIRMTEXT_NS	*Bildschirmtext (neuer Standard)*
#BILDTELEFON	*Bildtelefon*
->SIN_ADD_INFO	Additional Info., Octet 4
(numeric value)	*range 0 through 255*

4.19 Status Of Facilities IE (I#SOF)

Possible octet inclusions/exclusions:

OCTET_3

->SOF_DM	Aktivierte Dienst., Octet 3
#SPERRE_ABGEHENDE	*Sperre gegen abgehende Verb. aktiv*
#UMLEITUNG_ST	*Anrufweiterschaltung I aktiviert*
#UMLEITUNG_FW	*Anrufweiterschaltung II aktiviert*
#GBG	*Anschluss gehoert zu einer GBG*
#GEBUEHREN_ANZEIGER	*Gebuehrenanzeiger eingerichtet*
#DM_IDENTIFIZIERUNG	*Rufnummernidentifizierung vorhanden*

4.20 User To User Information IE (I#UTU)

Possible octet inclusions/exclusions:

OCTET_3

->UTU_INFO	User-user info., Octet 3 *
(hex characters)	*max. length 255 octets*