Hírközlési Tájékoztató

HIF-004/2003

Jelzésrendszer specifikációk

A 7-ES JELZÉSRENDSZER SPECIFIKÁCIÓJA

ISDN FELHASZNÁLÓI EGYSÉG
NEMZETI ALKALMAZÁS
3. változat
(ISUP-N3)

A "**7-es jelzésrendszer: ISDN használói felhasználói egység ISUP-N3"** Hírközlési Tájékoztató kiadásának alkalmazásával egyetértek, kiadását elrendelem.
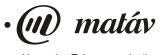

Budapest, 2003. november " "

Frischmann Gábor s.k.
HIF elnök

JELZÉSRENDSZER SPECIFIKÁCIÓK; 7-ES JELZÉSRENDSZER specifikációja (HIF-004/1998) című Hírközlési Ajánlás a gyártók és szolgáltatók széles körével egyeztetett jelzésrendszeri protokoll, mely tájékoztatást nyújt azoknak a szolgáltatóknak, amelyek hálózatukban a 7-es jelzésrendszert alkalmazni kívánják és a gyártóknak, amelyek a 7-es jelzésrendszer alkalmazásához eszközöket készítenek.

A jelzésrendszerek nemzeti specifikációját a MATÁV PKI készítette el és egyeztette a többi szolgáltatóval és gyártóval.

A Hírközlési Ajánlásban leírt nemzeti jelzésrendszeri specifikációt egészíti ki az **ISDN használói felhasználói egység (ISUP-N3),** amely tartalmazza a különböző kiegészítő szolgáltatások (supplementary service) és hívószámok hordozhatóságának megvalósításához szükséges jelzésrendszeri fejlesztéseket.

A specifikáció határozza meg a nemzeti tranzit és helyi központok interfészein alkalmazott 7-es jelzésrendszeri követelményeket.

matáv

Hungarian Telecommunications
Company Limited

*PKI*₁₈₉₁

CCS 0421

*HTC SPECIFICATION FOR
COMMON CHANNEL SIGNALLING SYSTEM No. 7*

**ISDN USER PART VERSION 3 FOR THE NATIONAL
INTERFACE (ISUP-N3)**

*ISSUE 3.0
18 Nov, 2003*

*ISSUED BY: PKI Telecommunications Development Institute
Budapest XI., Magyar Tudósok körutja 9.   H-1502 P.O.B. 520*

Normative references:

[1] *EN 300 356-1 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1997), modified]".*

[2] *EN 300 356-2 (1997): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 2: ISDN supplementary services [ITU-T Recommendations Q.730 (1997), modified]".*

[3] *EN 300 356-3 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 3: Calling Line Identification Presentation (CLIP) supplementary service [ITU-T Recommendation Q.731, clause 3 (1993), modified]".*

[4] *EN 300 356-4 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 4: Calling Line Identification Restriction (CLIR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993), modified]".*

[5] *EN 300 356-5 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 5: Connected Line Identification Presentation (COLP) supplementary service [ITU-T Recommendation Q.731, clause 5 (1993), modified]".*

[6] *EN 300 356-6 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 6: Connected Line Identification Restriction (COLR) supplementary service [ITU-T Recommendation Q.731, clause 6 (1993), modified]".*

[7] *EN 300 356-7 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 7: Terminal Portability (TP) supplementary service [ITU-T Recommendation Q.733, clause 4 (1997), modified]".*

[8] *EN 300 356-8 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 8: User-to-User Signalling (UUS) supplementary service [ITU-T Recommendation Q.737, clause 1 (1997), modified]".*

[9] *EN 300 356-9 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 9: Closed User Group (CUG) supplementary service [ITU-T Recommendation Q.735, clause 1 (1993), modified]".*

[10] *EN 300 356-10 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 10: Subaddressing (SUB) supplementary service [ITU-T Recommendation Q.731, clause 8 (1997), modified]".*

[11] *EN 300 356-11 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 11: Malicious Call Identification (MCID) supplementary service [ITU-T Recommendation Q.731, clause 7 (1997), modified]".*

[12] *EN 300 356-12 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 12: Conference Call, add-on (CONF) supplementary service [ITU-T Recommendation Q.734, clause 1 (1993), modified]".*

[13] *EN 300 356-14 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 14: Explicit Call Transfer (ECT) supplementary service [ITU-T Recommendation Q.732, clause 7 (1996), modified]".*

[14] *EN 300 356-15 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 15: Diversion supplementary services [ITU-T Recommendation Q.732, clause 2 to 5 (1996), modified]".*

[15] *EN 300 356-16 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 16: Call Hold (HOLD) supplementary service [ITU-T Recommendation Q.733, clause 2 (1993), modified]".*

[16] *EN 300 356-17 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 17: Call Waiting (CW) supplementary service [ITU-T Recommendation Q.733, clause 1 (1992), modified]".*

[17] *EN 300 356-18 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 18: Completion of Calls to*

Busy Subscriber (CCBS) supplementary service service [ITU-T Recommendation Q.733, clause 3 (1997), modified]".

[18]   *EN 300 356-19 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 19: Three party (3PTY) supplementary service [ITU-T Recommendation Q.734, clause 2 (1996), modified]".*

[19]   *EN 300 356-20 (1998): "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 3 for the international interface; Part 20: Completion of Calls on No Reply (CCNR) supplementary service (1998)".*

[20]   *EN 300 485v1.3.1: "Integrated Services Digital Network (ISDN); Definition and usage of cause and location in Digital Subscriber Signalling System No.1 (DSS1) and Signalling System No.7 (SS7) ISDN User Part (ISUP) [ITU-T Recommendation Q.850 (05/98) with addendum (not yet published), modified]".*

[21]   *EN 301 069-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Application transport Mechanism; Part 1: Protocol specification (1998)" [ITU-T Recommendation Q.765 (2000), modified].*

[22]   *EN 301 062-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Application transport Mechanism; Support of VPN applications with PSS1 information flows; Part 1: Protocol specification (1998)".*

[23]   *ES 201 296: "Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP); Signalling aspects of charging (2000)".*

[24]   *ETS 300 754-1: "Integrated Services Digital Network (ISDN); Signalling System No.7; Trancaction Capabilities (TC); Application Service Element (ASE) for Message Waiting Indication (MWI) supplementary Service; Part 1: Protocol specification (1997)".*

[25]   *EN 302 097v1.2.2: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP); Enhancements for support of Number Portability (NP) [ITU-T Recommendation Q.769.1 (2000), modified]".*

T a b l e   o f   c o n t e n t s

General

This specification describes the requirements for the National ISDN User Part version 3 (ISUP-N3) of Signalling System No. 7, applicable to the interface of the national transit and local exchanges.

The objective of the specification is to provide a clear description of the ISDN User Part for the implementors and the staff involved in tests, operation and maintenance. The specification is written in English in order to align the description as close as possible to the terminology used in ETSI standards and ITU-T Recommendations.

The text of this specification is based on the relevant ETSI Standards. Where any discrepancy exists between the requirements of this specification and any unreferenced part of the documents (e.g. SDLs) then these requirements shall be deemed to modify those sections of the documents.

In order to be as close as possible to the relevant ETSI standards, in this document only the exceptions and clarifications to the Base document are described.

As most of the standards give the exceptions to ITU-T Recommendations, this document specifies only the added exceptions and clarifications. If otherwise not clearly stated in a Clarification in this specification, the text of the ITU-T Recommendation shall be used as modified by the referred ETSI standard. Those parts of the specifications which are marked as "national option", "for national use", "reserved", "for further study" are in general not used unless stated otherwise.

Starting with the next Chapter, the current numbering within the Chapters follows the numbering scheme of the referenced standards.

All timer values shall be accurate to within + or - 5% of nominal values.

1   Basic services

Exceptions and Clarifications to
EN 300 356-1 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 1: Basic services

Global modifications to ITU-T Recommendations Q. 761 to 764
The text is accepted.

Modifications to ITU-T Recommendation Q. 761
Shall apply with the following additional modifications:

3   Capabilities supported by the ISDN User Part
Clarification: Replace table 1/Q.761 by:

F u n c t i o n / s e r v i c e	HTC use
Basic call	
Speech/3.1 kHz audio	+
64 kbit/s unrestricted	+
Multirate connection types (Note[1])	+
*N * 64 kbit/s connection types*	-
En-bloc address signalling	+
Overlap address signalling	+
Transit network selection	+
Continuity check	+
Forward transfer	+
Simple segmentation	+
Tones and announcements	+
Access delivery information	+
Transportation of User teleservice information	+
Suspend and resume	+
Signalling procedures for connection type allowing fallback capability	+
Propagation delay determination procedure	-
Enhanced echo control signalling procedures	-
Simplified echo control procedure	+
Automatic repeat attempt	+
Blocking and unblocking of circuits and circuit groups	+
Circuit group query	-
Dual seizure	+
Transmission alarm handling of inter-exchange circuits	+
Reset of circuits and circuit groups	+
Receipt of unreasonable signalling information	+
Compatibility procedure	+
Temporary trunk blocking	-
ISDN User Part signalling congestion control	+
Automatic congestion control	+
Interaction between ISUP and INAP	+
Unequipped Circuit identification code	-
ISDN User part availability control	+
MTP pause and resume	+
Overlength messages	+
Temporary Alternate Routing (TAR)	+
Hop counter procedure	+
Collect call request procedure	+

---

[1] *Note: Multirate connection types are 2*64, 384, 1536 and 1920 kbit/s.*

Generic signalling procedures for supplementary services	
End-to-end signalling – Pass along method	**-**
End-to-end signalling – SCCP Connection Oriented	**-**
End-to-end signalling – SCCP Connectionless	**-**
Generic number transfer	**+**
Generic digit transfer	**-**
Generic notification procedure	**+**
Service activation procedure	**+**
Remote Operations Service (ROSE) procedure	**-**
Network specific facilities procedure	**-**
Pre-release information transport	**+**
Supplementary services	
Direct Dialling In (DDI)	**+**
Multiple Subscriber Number (MSN)	**+**
Calling Line Identification Presentation / Restriction (CLIP/CLIR)	**+**
Connected Line Identification Presentation / Restriction (COLP/COLR)	**+**
Malicious Call Identification (MCID) (without the HOLD option)	**+**
Sub-addressing (SUB)	**+**
Terminal portability (TP)	**+**
Call forwarding (CFU, CFB, CFNR)	**+**
Call deflection (CD)	**+**
Call waiting (CW)	**+**
Call hold (HOLD)	**+**
Conference calling (CONF)	**+**
Three party service (3PTY)	**+**
Closed User Group (CUG)	**+**
Multilevel Precedence and Preemption (MLPP)	**-**
User-to-User Signalling (UUS), Service 1 (implicit)	**+**
User-to-User Signalling (UUS), Service 1 (explicit)	**+**
User-to-User Signalling (UUS), Service 2	**+**
User-to-User Signalling (UUS), Service 3	**+**
Explicit Call Transfer (ECT)	**+**
Completion of Calls to Busy Subscriber (CCBS)	**+**
Completion of Calls on no Reply (CCNR)	**+**
International Telecommunication Charge Card (ITCC)	**-**
Global Virtual Network Service (GVNS)	**Note**[2]
Reverse charging (REV)	**-**
Additional functions/services	
Application Transport Mechanism (APM)	**+**
Support of VPN	**+**

Key: + Represents HTC support
*   - Represents HTC non-support*

Additional function to be supported: Support of Number Portability (NP).

5   End-to-end signalling
Shall not apply.

Modifications to ITU-T Recommendation Q. 762
Shall apply

Clarification: For the messages, parameters and information elements to be used please refer to 'Modifications to ITU-T Recommendation Q. 763'.

---

[2] *GVNS is not supported as an ETSI service, but the ITU-T parameters can still be used in conjunction with Core INAP CS2.*

Modifications to ITU-T Recommendation Q. 763
Shall apply with the following additional modifications:

1.3   Message type codes
Clarification:

- *The following messages shall be used:*

    Address complete
    Answer
    Application Transport
    Blocking
    Blocking acknowledgement
    Call progress
    Circuit group blocking
    Circuit group blocking acknowledgement
    Circuit group reset
    Circuit group reset acknowledgement
    Circuit group unblocking
    Circuit group unblocking acknowledgement
    Confusion
    Connect
    Continuity
    Continuity check request
    Facility
    Facility accepted
    Facility reject
    Facility request
    Forward transfer
    Identification request[3]
    Identification response
    Information
    Information request
    Initial address
    Loop prevention
    Pre-release information
    Release
    Release complete
    Reset circuit
    Resume
    Segmentation
    Subsequent address
    Suspend
    Unblocking
    Unblocking acknowledgement
    User Part available
    User Part test
    User-to-user information

- **Any other message will never be generated, and if received it shall be treated according to 2.9.5.2/Q.764.**

3.2 to 3.83   Description of the parameters
Clarification:

- The following parameters, information elements, and information element values shall be used:

Access delivery information	*Access delivery indicator*	*no set-up message generated* *set-up message generated*
Access transport	*Access transport*	*as defined in Q.931*

---

[3] *This message is never sent according to this specification.*

Application Transport Parameter	*Application context identifier*	*Unidentified Context and Error Handling*
		PSS 1 ASE (VPN)
		charging ASE
	ATII Release call indicator	*do not release call*
		release call
	ATII Send notification indicator	*do not send notification*
		send notificaiton
	APM segmenation indicator	*any number*
	Sequence indicator (SI)	*subsequent segment to first segment*
		new sequence
	Segmentation local reference	*any number*
	Encapsulated application info.	*any pattern*
Automatic congestion level	*Automatic congestion level*	*congestion level 1 exceeded*
		congestion level 2 exceeded
Backward call indicators	*Charge indicator*	*no indication*
		no charge
		charge
	Called party's status indicator	*no indication*
		subscriber free
	Called party's category ind.	*no indication*
		ordinary subscriber
		payphone
	End-to-end method indicator	*no end-to-end method available*
	Interworking indicator	*no interworking encountered*
		interworking encountered
	End-to-end information ind.	*no end-to-end information available*
	ISDN User Part indicator	*ISDN User Part not used all the way*
		ISDN User Part used all the way
	Holding indicator	*holding not requested*
	ISDN access indicator	*terminating access non-ISDN*
		terminating access ISDN
	Echo control device indicator	*IC half echo control dev. not included*
		IC half echo control device included
	SCCP method indicator	*no indication*
Call diversion information	*Notification subscr. option*	*unknown*
		presentation not allowed
		pres. allowed with redirection number
		pres. allowed without redirection number
	Redirection reason	*unknown*
		user busy
		no reply
		unconditional
		deflection during alerting
		deflection immediate response
		mobile subscriber not reachable
Call diversion treatment ind.	*Call to be diverted indicator*	*no indication*
		call diversion allowed
		call diversion not allowed
Call offering treatment indicator	*Call to be offered indicator*	*no indication*
		call offering not allowed
		call offering allowed
Call transfer number	*Odd/even indicator*	*as of 'Called party number'*
	Nature of address indicator	*as of 'Calling party number'*
	Numbering plan indicator	*as of 'Called party number'*
	Address presentation restr. Ind	*presentation allowed*
		presentation restricted
	Screening indicator	*user provided, not verified*
		user provided, verified and passed
		user provided, verified and failed
		network provided
	Address signal	*as of 'Called party number'*
Call transfer reference	*Call transfer reference*	*any value*
Called IN number	*as of 'Original called number'*	

Called party number	*Odd/even indicator*	*even number of address signals*
		odd number of address signals
	Nature of address	*subscriber number[4]*
		national (significant) number
		international number
		net routing nr concatenated with Called DN (8)
	Internal network number ind.	*routing to INN allowed*
		routing to INN not allowed
	Numbering plan indicator	*ISDN/Telephony numbering plan*
	Address signal	*digit 0*
		to
		digit 9
		code 11
		code 12
		ST
Calling party number	*Odd/even indicator*	*as of 'Called party number'*
	Nature of address indicator	*national (significant) number*
		international number
	Calling party number inc. ind	*complete*
		incomplete
	Numbering plan indicator	*as of 'Called party number'*
	Address presentation restr. Ind	*presentation allowed*
		presentation restricted
		address not available
	Screening indicator	*user provided, verified and passed*
		network provided
	Address signal	*as of 'Called party number'*
Calling party's category	*Calling party's category*	*operator, language French*
		operator, language English
		operator, language German
		operator, language Russian
		operator, language Spanish
		national operator (0000 1001)
		ordinary subscriber
		subscriber with priority
		data call (voice band data)
		test call
		payphone
Cause indicators	*All fields*	*As defined in Section 21 of this document*
CCNR possible indicator	*CCNR possible indicator*	*CCNR not possible*
		CCNR possible
		no indication
CCSS parameter	*CCSS call indicator*	*no indication*
		CCSS call
Circuit group supervision mtype ind.	*Type indicator*	*maintenance oriented*
		hardware failure oriented
Closed user group interlock code	*Any field*	*any pattern*
Collect call request	*Collect call request indicator*	*no indication*
		collect call requested
Conference treatment ind.	*Conference acceptance ind.*	*no indication*
		accept conference request
		reject conference request
Connected number	*Odd/even indicator*	*as of 'Called party number'*
	Nature of address indicator	*as of 'Calling party number'*
	Numbering plan indicator	*as of 'Called party number'*
	Address presentation restr. ind	*as of 'Calling party number'*
	Screening indicator	*as of 'Calling party number'*
	Address signal	*as of 'Called party number'*

---

[4] *The use of "subscriber number" is not preferred.*

Continuity indicators	*Continuity indicator*	*continuity check failed*
		continuity check successful
Correlation ID	*Correlation ID*	*any pattern*
Display information	*Display information*	*any pattern*
End of optional parameters	*End of optional parameters*	*End of optional parameters*
Event information	*Event indicator*	*alerting*
		progress
		in-band info/pattern is now available
	Event presentation restr. ind.	*no indication*
Facility indicator	*Facility indicators*	*user-to-user service*
Forward call indicators	*National/international call ind.*	*call to be treated as a national call*
		call to be treated as an internat. call
	End-to-end method indicator	*as of 'Backward call indicators'*
	Interworking indicator	*as of 'Backward call indicators'*
	End-to-end information ind.	*as of 'Backward call indicators'*
	ISDN User Part indicator	*as of 'Backward call indicators'*
	ISDN User Part preference ind.	*ISDN user part preferred all the way*
		ISDN user part not required
		ISDN user part required all the way
	ISDN access indicator	*originating access non-ISDN*
		originating access ISDN
	SCCP method indicator	*as of 'Backward call indicators'*
Generic notification	*Notification indicator*	*user suspended*
		user resumed
		call completion delay
		conference established
		conference disconnected
		other party added
		isolated
		reattached
		other party isolated
		other party reattached
		other party split
		other party disconnected
		conference floating
		call is a waiting call
		call transfer, alerting
		call transfer, active
		remote hold
		remote retrieval
		call is diverting
Generic number	*Number qualifier indicator*	*additional connected number*
		additional calling party number
	Odd/even indicator	*as of 'Called party number'*
	Nature of address indicator	*subscriber number (see[4])*
		national (significant) number
		international number
		PISN specific number
	Number incomplete	*as of 'Calling party number'*
	Numbering plan indicator	*unknown*
		ISDN (telephony) numbering plan
	Address presentation restr. ind	*as of 'Calling part number'*
	Screening indicator	*as of 'Call transfer number'*
	Address signal	*as of 'Called party number'*
Hop counter	*Hop counter*	*any value*
Information indicators	*Calling party address resp. ind.*	*calling party address not available*
		calling part address included
	Hold provided indicator	*hold not provided*
	Calling party's category resp. ind.	*calling party's category not included*
	Charge information resp. ind.	*charge information not included*
	Solicited information indicator	*solicited*

Information request indicators	*Calling party address req. ind.*	*calling party address requested*
	Holding indicator	*holding not requested*
	Calling party's category req. ind.	*calling party's category not reqd*
	Charge information request ind.	*charge information rot requested*
	Malicious call iden. req. ind.	*malicious call identification requested*
Location number	*Odd/even indicator*	*as of 'Called party number'*
	Nature of address indicator	*as of 'Calling party number'*
	Internal network number ind.	*as of 'Called party number'*
	Numbering plan indicator	*as of 'Called party number'*
	Address presentation restr. Ind	*as of 'Calling party number'*
	Screening indicator	*as of 'Calling party number'*
	Address signal	*as of 'Called party number'*
Loop prevention indicators	*Type*	*request*
		response
	Response indicator	*insufficient information*
		no loop exists
		simultaneous transfer
MCID request indicators	*MCID request indicator*	*MCID requested*
	Holding indicator	*Holding not requested*
MCID response indicators	*MCID response indicator*	*MCID not included*
		MCID included
	Hold provided indicator	*Hold not provided*
Message compatibility info	*Transit at intermediate node ind.*	*transit interpretation*
		end node interpretation
	Release call indicator	*do not release call*
		release call
	Send notification indicator	*do not send notification*
		send notification
	Discard message indicator	*do not discard message (pass on)*
		discard message
	Pass on not possible indicator	*release call*
		discard information
	BB/NB interworking indicator	*pass on*
		discard message
		release call
Nature of connection indicators	*Satellite indicator*	*no satellite circuit in the connection*
		one satellite circuit in the connection
		two satellite circuit in the connection
	Continuity check indicator	*continuity check not required*
		continuity check reqd on this circuit
		cont. check perfd on previous circuit
	Echo control device indicator	*OG half echo control device not incl.*
		OG half echo control device included
Network management controls	*TAR indicator*	*no indication*
		TAR controlled
Optional backward call ind.	*In-band information indicator*	*no indication*
		in-band information/pattern available
	Call diversion may occur ind.	*no indication*
		call forwarding may occur
	Simple segmentation indicator	*no additional info will be sent*
		additional info will be sent in a SGM
	MLPP user indicator	*no indication*
Optional forward call ind.	*Closed user group call ind.*	*non-CUG call*
		CUG call, OG access allowed
		CUG call, OG access not allowed
	Simple segmentation indicator	*as of 'Optional backward call ind.'*
	Connected line id. req ind	*not requested*
		requested
Original called number	*Odd/even indicator*	*as of 'Called party number'*
	Nature of address indicator	*as of 'Calling party number'*
	Numbering plan indicator	*as of 'Called party number'*

	Address presentation restr. ind	as of 'Calling party number'
	Address signal	as of 'Called party number'
Parameter compatibility info	Nth upgraded parameter name	as required
	Transit at intermediate node ind.	transit interpretation
		end node interpretation
	Release call indicator	do not release call
		release call
	Send notification indicator	do not send notification
		send notification
	Discard message indicator	do not discard message (pass on)
		discard message
	Discard parameter indicator	do not discard parameter (pass on)
		discard parameter
	Pass on not possible indicator	release call
		discard message
		discard parameter
	BB/NB interworking indicator	pass on
		discard message
		release call
		discard parameter
Range and status	Range	ant pattern
	Status	any pattern
Redirecting number	Odd/even indicator	as of 'Called party number'
	Nature of address indicator	as of 'Calling party number'
	Numbering plan indicator	as of 'Called party number'
	Address presentation restr. ind	as of 'Calling party number'
	Address signal	as of 'Called party number'
Redirection information	Redirecting indicator	call diverted
		call diverted, all redirection info restricted
		call diverted, redirection number restrd
	Original redirection reason	unknown/not available
	Redirection counter	001 to 101
	Redirecting reason	as of Call diversion information
Redirection number	Odd/even indicator	as of 'Called party number'
	Nature of address indicator	as of 'Calling party number'
	Internal network number ind.	as of 'Called party number'
	Numbering plan indicator	as of 'Called party number'
	Address signal	as of 'Called party number'
Redirection number restriction	Presentation restricted ind.	presentation allowed
		presentation restricted
SCF ID	SCF ID	any pattern
Service activation	Feature code	call transfer
Subsequent number	Odd/even indicator	as of 'Called party number'
	Address signal	as of 'Called party number'
Suspend/resume indicators	Suspend/resume indicator	ISDN subscriber initiated
		network initiated
Transit network selection	Odd/even indicator	as of 'Called party number'
	Type of network identification	national network identification
	Network identification plan	0 (zero)
	Network identification	Network identification
Transmission medium req.	Transmission medium req.	speech
		64 kbit/s unrestricted
		3.1 kHz audio
		64 kbit/s preferred
		2×64 kbit/s unrestricted
		384 kbit/s unrestricted
		1536 kbit/s unrestricted
		1920 kbit/s unrestricted
Transmission medium req. prime	Transm. medium req. prime	speech
		3.1 kHz audio

Transmission medium used	*All fields*	*as of 'Transmission medium req. prime'*
UID actions indicators	*Through-connection instruction*	*no indication*
		through-connect in both directions
	T_9 timer instruction indicators	*no indication*
		stop or do not start T_9
UID capability indicators	*Through-connection indicator*	*no indication*
		through connection modification possible
	T_9 timer indicator	*no indication*
		stopping of T_9 timer possible
User service information	*All fields*	*according to Q.931*
User service information prime	*All fields*	*according to Q.931*
User teleservice information	*All fields*	*according to Q.931*
User-to-user indicators, request type		
	Service 1 / 2 / 3	*no information*
		request, not essential
		request, essential
response type		
	Service 1 / 2 / 3	*no information*
		not provided
		provided
	Network discard indicator	*no indication*
		UUI discarded by the network
User-to-user information		*any pattern*

The Extension indicator and Filler fields are coded as appropriate.

- ***Any other parameters or parameter values not listed above will never be generated, and if received it shall be treated according to 2.9.5.2/Q.764.***

4 ISDN User Part messages and codes

<u>Clarification to Table 30/Q.763:</u> *The format of the Information message is:*

*TABLE 30 Message type: **Information***

Parameter name	Reference	Type	Length
Message type	*2.1*	*F*	*1*
Information indicators	*3.28*	*F*	*2*
Calling party number	*3.10*	*O*	*4-12*
End of optional parameters	*3.20*	*O*	*1*

<u>Clarification to table 31/Q.763:</u> *The format of the Information request message is:*

*TABLE 31 Message type: **Information Request***

Parameter name	Reference	Type	Length
Message type	*2.1*	*F*	*1*
Information request indicators	*3.29*	*F*	*2*

Modifications to ITU-T Recommendation Q. 764
Shall apply with the following additional modifications:

2   Basic call control and signalling procedures

2.1   Successful call setup

2.1.1   Forward address signalling - En-bloc operation

2.1.1.1   Actions required at the originating exchange
Clarification to item a): The selection of the outgoing route will also depend on the calling party's category.

Clarification to item b): On national calls, the address information may be the national number as well. The subscriber number is also allowed, but not preferred.

Clarification to item c): The originating or interworking exchange always sends the calling party number parameter. If the number is not available, the appropriate indication is sent.
The call reference and SCCP connection request parameters are not used.

Clarification to item d): Through connection of the transmission path will be completed in the forward direction after receiving the Answer or Connect Message.

2.1.1.2   Actions required at an intermediate national exchange
Clarification to item a): The selection of the outgoing route will also depend on the calling party's category. The user service information and the user teleservice information is not used for routing purposes. The transmission medium requirement parameter is not modified.

2.1.1.3   Actions required at an outgoing international exchange
Clarification to item a): As of 2.1.1.2.a).

Clarification to item b): If the received calling party number is not in international number format, then it is converted to international number (i.e. country/trunk code is added) and the nature of address is set to "international number".

2.1.1.4   Actions required at an intermediate international exchange
Clarification to item a): As of 2.1.1.2.a).

2.1.1.5   Actions required at an incoming international exchange
Clarification to item a): As of 2.1.1.2.a).

Clarification to item c): As of 2.1.1.1.d).

2.1.1.6   Actions required at the destination exchange
Clarification to item a): The selection of the called party will also depend on the calling party's category.

2.1.2   Forward address signalling - Overlap operation
Clarifications: As of 2.1.1.

Clarification to 2.1.2.1 item d): Through connection of the transmission path in the backward direction at the originating exchange will be completed immediately after sending the IAM.

2.1.3   Calling party number
Clarification: The calling party number is always included in the initial address message. If the number is not available, the appropriate indication ("address not available") is sent. The calling party number is requested if it was not included in the initial address message and the address not available information was not received (e.g. in case of interworking with exchanges using an earlier version of ISUP). This request is done by using the INR/INF messages.

2.1.4 Address complete message, connect message and call progress message
Clarification to item 2.1.4.2 and 2.1.4.4: The Awaiting Answer Timer (T_9) is not used in the intermediate national and intermediate international exchanges.

Clarification to item 2.1.4.6.b)): In case of test calls, the Awaiting Answer Timer (T_9) is not started.

2.1.6 Information messages
Clarification: If no calling party number parameter is included in the Initial address message, the calling party number is requested by sending an Information request message (calling party address requested, malicious call identification requested) backward. In transit / interworking situation the exhange always includes the calling party number, or an indication that the address not available in the Initial address message.

2.1.9 Charging
Clarification: The function is desribed in section 24 (Signalling aspects of charging).

2.1.11 Transit network selection
Clarification: Shall apply.

2.2 Unsuccessful call set-up
Clarification to item 2.2.3: The exchange initiating a release procedure has the controlling function.

2.3 Normal call release
Clarification: 2.3.1 item d) also applies.

2.4 Suspend, resume
Clarification: The call originating exchange has the controlling function.

2.6 Propagation delay determination procedure
Clarification: This function is not used.

2.7.2 Enhanced echo control signalling procedures
Clarification: This function is not used. The echo control is done according to 2.7.1 (Simple echo control signalling procedures).

2.8.3 Circuit group query
Clarification: This function is not used.

2.9.1 Dual seizure
Clarification to item 2.9.1.3 Method 1: The exchange with lower signalling point code will start the selection from the lowest CIC and the other starts from the highest.

2.9.9 Temporary trunk blocking after release
Clarification: This function is not used.

2.12 Unequipped circuit identification code message
Clarification: This function is not used.

TABLE A1/Q.764: Timers used in the ISDN User Part
Clarification: T_6 = 90 sec (default value)
T_9 = 90 sec (default value)

2 ISDN Supplementary services (general description)

Exceptions and Clarifications to
EN 300 356-2 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 2: ISDN supplementary services

Modifications to ITU-T Recommendation Q. 730

Shall apply with the following additional modifications:

1.2   Network specific facilities
Clarification: This function is not used.

1.3.2   General digit transfer
Clarification: This function is not used.

1.3.3   Remote operations service (ROSE) capability
Clarification: This function is not used.

1.4   End-to-end signalling
Clarification: This function is not used.

Appendix II   Redirection
Clarification: This function is not used.

3   Calling Line Identification Presentation (CLIP) supplementary service

Exceptions and Clarifications to
EN 300 356-3 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 3: Calling Line Identification
Presentation (CLIP) supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 3

Shall apply with the following additional modifications:

3.7   Interaction with other networks
Clarification: In case of incoming calls from other signalling systems (e.g. R2-N) the calling party number is always indicated as 'presentation restricted'.

4 Calling Line Identification Restriction (CLIR) supplementary service

Exceptions and Clarifications to
EN 300 356-4 (1998): Signalling System No. 7 ISDN User Part version 3 for the international interface; Part 4: Calling Line Identification Restriction (CLIR) supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 4

Shall apply with the following additional modifications:

4.7 Interaction with other networks
Clarification: In case of outgoing calls to R2-N signalling system the calling party number is always provided on request.

5 Connected Line Identification Presentation (COLP) supplementary service

Exceptions and Clarifications to
EN 300 356-5 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 5: Connected Line Identification
Presentation (COLP) supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 5

Shall apply without additional modifications.

6 Connected Line Identification Restriction (COLR) supplementary service

Exceptions and Clarifications to
EN 300 356-6 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 6: Connected Line Identification
Restriction (COLR) supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 6

Shall apply without additional modifications.

7 Terminal Portability (TP) supplementary service

Exceptions and Clarifications to
EN 300 356-7 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 7: Terminal Portability (TP)
supplementary service

Modifications to ITU-T Recommendation Q. 733, clause 4

Shall apply without additional modifications.

8 User-to-User Signalling (UUS) supplementary service

Exceptions and Clarifications to
EN 300 356-8 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 8: User-to-User Signalling (UUS)
supplementary service

Modifications to ITU-T Recommendation Q. 737, clause 1

Shall apply without additional modifications.

9   Closed User Group (CUG) supplementary service

Exceptions and Clarifications to
EN 300 356-9 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 9: Closed User Group (CUG)
supplementary service

Modifications to ITU-T Recommendation Q. 735, clause 1

Shall apply with the following additional modifications:

1.2.1   General description
Clarification: The data for each CUG that a user belongs to, are stored at the local exchange to which the user is connected (decentralised administration of CUG data).

10 Subaddressing (SUB) supplementary service

Exceptions and Clarifications to
EN 300 356-10 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 10: Subaddressing (SUB)
supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 8

Shall apply without additional modifications.

11 Malicious Call Identification (MCID) supplementary service

Exceptions and Clarifications to
EN 300 356-11 (1998): Signalling System No. 7 ISDN User Part version 3 for the international interface; Part 11: Malicious Call Identification (MCID) supplementary service

Modifications to ITU-T Recommendation Q. 731, clause 7

Shall apply with the following modifications:

7.4 Coding requirements

Clarification: For the MCID supplementary service the Information and Information request messages are used instead of Identification and Identification request respectively. The format and coding of these messages are described in Clause 1 of this document.

7.5 Signalling requirements

Clarification to item 7.5.2.1.1: On receipt of an Information request message with calling party address requested and malicious call identification requested indication the originating exchange (or interworking exchange) shall send an Information message with bit A of information indicators set to "calling part address included". The calling party number shall be included in the calling party number parameter.

When the calling party address is not available, an Information message with calling party address not available indication shall be returned.

Clarification to item 7.5.2.2: If no calling party number parameter is received in the Initial address message, the calling party number is requested by sending an Information request message (calling party address requested, malicious call identification requested) backward, and the IAM is withheld until the request is fulfilled. In transit / interworking situation the exhange always includes the calling party number, or an indication that the address not available in the Initial address message.

Clarification to item 7.5.2.4.1: The incoming international gateway exchange will respond to the received Information request message based on its own information. The Information request message shalll never be sent to the international network.

Clarification to item 7.5.2.5.1: If the received IAM contains called party number parameter with indication "address not available", the INR message is not sent. T39 is not used.

Clarification (general): The signalling procedure for the Information request/Information procedure is described in Section 1 of this document.

10. Interaction with other networks

Clarification: According to this specification the INF/INR is used for the MCID supplementary service. If IDR is received from an other network (exchange) behaving not according to this specification, the request shall be fulfilled according to the base ETSI specification (ETS 300 356-11).

12 Conference Call, add-on (CONF) supplementary service

Exceptions and Clarifications to
EN 300 356-12 (1998): Signalling System No. 7 ISDN User Part version 3 for the international interface; Part 12: Conference Call, add-on (CONF) supplementary service

Modifications to ITU-T Recommendation Q. 734, clause 1

Shall apply with the following additional modifications:

1.5   Signalling requirements

Clarification: The network option for user notification is supported. The conference floating option is not supported. The requirements for the echo control and propagation delay determination are not applicable.

14[5] Explicit Call Transfer (ECT) supplementary service

Exceptions and Clarifications to
EN 300 356-14 (1998): Signalling System No. 7 ISDN User Part version 3 for the international interface; Part 14: Explicit Call Transfer (ECT) supplementary service

Modifications to ITU-T Recommendation Q. 732, clause 7

Shall apply with the following additional modifications:

7.5   Signalling requirements

Clarification to item 7.5.2.1.1.2.1: The originating local exchange shall reject the call transfer on timer (T_{ECT}) expiry or on reception of Loop prevention (response) message containing the response indicator set to "insufficient information" and an identical call transfer reference parameter, for both calls.

Clarification to item 7.5.2.1.1.3: The echo control and propagation delay determination procedure is not necessary in the originating local exchange.

7.9   Parameter values (timers)

Clarification: T_{ECT} = 4 sec

---

[5] *EN 300 356-13 is not issued by ETSI, therefore not included here.*

15 Diversion supplementary services

Exceptions and Clarifications to
EN 300 356-15 (1998): Signalling System No. 7 ISDN User Part version 3 for the international interface; Part 15: Diversion supplementary services

Modifications to ITU-T Recommendation Q. 732, clause 2

Shall apply with the following additional modifications:

2.3   Operational requirements
Clarification: The following network provider options are supported:

Network provider option	Value
Served user call retention on invocation of diversion (forwarding or deflection)	Clear call to the served user on invocation of call diversion
Served user call retention when forwarding is rejected at forwarded-to user	No action at the forwarding user
Served user call retention when deflection is rejected	No action at the forwarding user
Total number of diversion for each call	5 (Five)
Call forwarding on no reply timer	15 sec

2.5   Signalling requirements
Clarification to 2.5.2.1.1: CPG message also can be used for the transfer of the call diversion information, the generic notification indicator and the redirection number.

Clarification to 2.5.2.5.1.2.c): Option B (immediate connection, after IAM) is supported.

Modifications to ITU-T Recommendation Q. 732, clause 3

Shall apply without additional modifications.

Modifications to ITU-T Recommendation Q. 732, clause 4

Shall apply without additional modifications.

Modifications to ITU-T Recommendation Q. 732, clause 5

Shall apply without additional modifications.

16 Call Hold (HOLD) supplementary service

Exceptions and Clarifications to
EN 300 356-16 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 16: Call Hold (HOLD)
supplementary service

Modifications to ITU-T Recommendation Q. 733, clause 2

Shall apply without additional modifications.

17 Call Waiting (CW) supplementary service

Exceptions and Clarifications to
EN 300 356-17 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 17: Call Waiting (CW)
supplementary service

Modifications to ITU-T Recommendation Q. 733, clause 1

Shall apply without additional modifications.

18 Completion of Calls to Busy Subscriber (CCBS) supplementary service

Exceptions and Clarifications to
EN 300 356-18 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 18: Completion of Calls to Busy
Subscriber (CCBS) supplementary service

Modifications to ITU-T Recommendation Q. 733, clause 3

Shall apply with the following additional modifications:

3.5 Signalling procedures

Clarifications to item 3.5.1.1.1.1:

- The number of outstanding CCBS requests for user A is limited to 5.
- The callingPartyNumber contains the number of A in the CcbsRequest invoke.
- The retain option is supported.

Clarification to item 3.5.1.1.2.2:

- The length of the CCBS queue at destination B is limited to 5.

3.6 Interactions with other supplementary services

Clarification to item 3.6.10.2.2.c: If destination B has activated a CFB, and destination B is busy upon arrival of a CCBS call, the CCBS call is forwarded as a normal call. The CCSS parameter in the forwarded IAM message is deleted. The TC-dialogue is terminated by destination B according to 3.5.5.4.1.a) (second option).

3.9 Parameter values (timers)

Clarifications: $T_{CCBS-T1}$ = 30 sec,
$T_{CCBS-T2}$ = 10 sec,
$T_{CCBS-T3}$ = 45 min,
$T_{CCBS-T4}$ = 15 sec,
$T_{CCBS-T8}$ = 10 sec.

19 Three Party (3PTY) supplementary service

Exceptions and Clarifications to
EN 300 356-19 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 19: Three Party (3PTY)
supplementary service

Modifications to ITU-T Recommendation Q. 734, clause 2

Shall apply with the following additional modifications:

2.5 Signalling requirements
Clarification: The network option for user notification is supported. The requirements for the echo control and propagation delay determination are not applicable.

20 Call Completion on No Reply (CCNR) supplementary service

Exceptions and Clarifications to
EN 300 356-20 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Part 20: Call Completion on no Reply
(CCNR) supplementary service

Shall apply with the following modifications:

7   Signalling requirements

Clarifications to item 7.1.1.1.1:

- The number of outstanding CCNR requests for user A is limited to 5.
- The callingPartyNumber contains the number of A in the CcnrRequest invoke.
- The retain option is supported.

Clarification to item 7.1.1.2.2:

- The length of the CCNR queue at destination B is limited to 5.

8   Interactions with other supplementary services

Clarification to item 8.10.2.2.c: Upon the arrival of a CCNR call, if a CCNR is activated, the TC-dialogue is terminated by destination B according to subclause 7.5.4.1.b). After expiry of the No Reply timer, the call is forwarded as a normal call. The CCSS parameter in the forwarded Initial Address message is deleted. (second option)

11   Parameter values (timers)

Clarifications:

$T_{CCNR-T1}$ = 30 sec,
$T_{CCNR-T2}$ = 10 sec,
$T_{CCNR-T3}$ = 45 min,
$T_{CCNR-T4}$ = 15 sec,
$T_{CCNR-T8}$ = 10 sec.

21 Definition and usage of cause and location in DSS1 and SS7 ISUP

Exceptions and Clarifications to
EN 300 485v1.3.1: Definition and usage of cause and location in Digital Subscriber Signalling System No.1 and Signalling System No.7 ISDN User Part

<u>Shall apply without additional modifications.</u>

22 Support of Virtual Private Network (VPN) applications

Exceptions and Clarifications to
EN 301 062-1 (1998): Signalling System No. 7 ISDN User Part version 3
for the international interface; Support of VPN applications with PSS1
information flows

Modifications to ITU-T Recommendation Q. 765.1, clause 1

Shall apply with the following additional modifications:

1.   Scope
Clarification: The following network options are supported:

Network option	Value
Support of GFP functionality at transit PINX nodes	Full support
Support of GFP functionality at gateway PINX nodes	Full support
Continuatuion of calls with no application association	Supported
Relocation of gateway function	Supported

7.2.3.2.6 Gateway PINX transformation request mechanism
Shall apply.

23 Application Transport Mechanism

Exceptions and Clarifications to
EN 301 069-1 (1998): Signalling System No. 7 ISDN User Part (ISUP); Application Transport Mechanism

Shall apply without additional modifications.

24 Signalling aspects of charging

Exceptions and Clarifications to
ES 201 296 (2000): Signalling System No. 7 ISDN User Part (ISUP);
Signalling aspects of charging

Shall apply with the following modifications:

6   Application process functions

Clarification to item 6.1.1.4.b: The fixed time unit 1 second by default.

25 Message Waiting Indication (MWI) supplementary service

Exceptions and Clarifications to
ETS 300 754-1 (1997): Signalling System No. 7; Transaction Capabilities;
Application Service Element for Message Waiting Indication (MWI)
supplementary service

Shall apply with the following additional modifications:

6   Operational requirements
Clarification: The following network options are supported:

Network option	Value
Support of subscription option for registration of the ISDN number(s) of the controlling user(s)	*yes*
Provide additional information during deferred invocation	*yes*
Maximum number of controlling user's ISDN numbers registered by the network	*25*
Maximum number of active instances per receiving user	*150*

Clarification: The following subscription options are supported:

Subscription option	Value
Invocation mode	*combined mode*
Override of invocation mode by controlling user allowed	*no*
Registration of ISDN number(s) of the controlling user(s)	*Yes*

7   Coding requirements
Clarification to item 7.1.2: In case of national MWI, the Receiving user number and the Controlling user number shall have the type of National Number.   The value of "All services" in the Basic Service parameter means all available services and should be accepted if at least one service is available for that user.

9   Signalling procedures
Clarification to item 9.3.1: In case of national MWI, the Called Party Address and Calling Party Address in SCCP shall have the type of National Number.

26 Enhancements for support of Number Portability (NP)

Exceptions and Clarifications to
EN 302 097v1.2.2: Signalling System No. 7; ISDN User Part; Enhancements
for support of Number Portability (NP)

Shall apply with the following additional modifications:

6   Call Control and signalling procedures
Clarification: The Query on Release procedure and the Concatenated Addressing method is used.

Annex B   Procedures for the Separate Network Routing Number Addressing method
Clarification: This method is not used.

Annex C   Procedures to support Query on Release
Clarification: Procedures for QoR with the forward and backward indications (Section C.2) shall not apply. Procedures for QoR with the backward indications only (Section C.3) is used.

Annex E   Procedures for forward transfer of number portability status information
Clarification: This method is not used.

D o c u m e n t h i s t o r y			
Status	*Date*	*Author*	*D e t a i l s o f c h a n g e*
Issue 0.1	*08-09-1992*	*Cs. Elekes Á. Szommer*	***First edition** for internal use, based on **ETSI ISUP version 1**.*
Issue 0.2	*13-04-1993*	*Cs. Elekes Á. Szommer*	*The basis of the specification is changed to ITU-T Rec. Q.767. The white book additions are deleted. Basic Call (CCS 0421-1) and Supplementary Services (CCS 0421-2) are joined into one document.*
Issue 0.3	*04-10-1993*	*Cs. Elekes Á. Szommer*	*Corrections based on suppliers responses: B.1.9; C.2.1; C.3.AA; C.4; D.2.1.4; D.2.1.5; D.2.1.7.5; D.2.1.11; D.2.1.14.*
Issue 1.0	*23-11-1995*	*Cs. Elekes*	*Corrections based on field trial experiences: C.3.10; C.3.13; D.1.3, D.2.1.1; D.2.1.2; D.2.1.3; D.2.1.4; D.2.1.11; D.2.1.14; D.2.5, D.2.10.1, E.4, plus editorial corrections.*
Issue 1.1	*11-03-1997*	*Cs. Elekes*	*First edition for **ETSI ISUP version 2**. The basis of the specification is changed to ETSI ETS 300 356-1 to 300 356-19. The detailed changes from the previous version are not given here.*
Issue 1.2	*18-06-1997*	*Cs. Elekes*	*Correction based on suppliers responses: 1.M761.5, 1.M762.2, 1.M763.2.1, 1.M763.3.1, 1.M763.3.AA, 1.M763.3.AB, 1.M763.parameters_and_parameter_valu, 1.M763.4, 1.M764.2.1.1.2, 1.M764.2.1.3, 1.M764.2.1.6, 1.M764.2.1.9, 1.M764.2.1.13, 2.M730.1.4, 11.3, 11.7, 11.9, 11.10, 11.13, 18.11, 18.12.*
Issue 1.3	*08-07-1997*	*Cs. Elekes*	*18.7*
Issue 1.4	*08-07-1997*	*Cs. Elekes*	*1.M763.4.TableAB*
Issue 2.0	*04-08-1998*	*Cs. Elekes*	*14.9, 18.12. **Frozen version for ETSI ISUP version 2.***
Issue 2.1	*10-05-1999*	*Cs. Elekes*	*First edition for **ETSI ISUP version 3**. The basis of the specification is changed to the ETSI ISUP v 3. The detailed changes from the previous version are not given here. The following national specific functions are deleted: Charging, Trunk offering.*
Issue 2.2	*27-06-1999*	*Cs. Elekes*	*Editorial changes: 1.M763.3.39, 1.M763.3.44, 1.M763.3.46, 1.M763.3.56, 1.M763.3.64, 1.M763.3.69, 1.M763.3.72, 15.2.5.2.5.1.2.d.*
Issue 2.3	*13-10-2000*	*Cs. Elekes*	*1.M763.3.Intelligent Network call, 1.M763.3.Called IN number, 1.M763.3.Calling Party Number, 1.M763.3.Calling party's category, 18.3.5.1.1.1.1, 18.3.5.1.1.2.2, 18.3.6.10.2.2.c, 20.7.1.1.1.1, 20.7.1.1.2.2, 20.8.10.2.2.c.*
Issue 2.4	*14-12-2001*	*Cs. Elekes*	*1.M761.3.Transit Network Selection; 1.M763.3.Transit Network Selection; 2.1.11; 23.Reference.date; 24.6; 24.7; 24.9.*
Issue 2.5	*31-05-2002*	*Cs. Elekes*	*Enhancements for support of Number Portability. Normative References; General; 1.M761.3; 1.M763.3.Call Transfer Number; 1.M763.3.Called Party Number; 1.M763.3.Cause indicators; 1.M763.3.Connected Number; 1.M763.3.Location Number; 1.M763.3.Original Called Number; 1.M763.3.Redirecting Number; 1.M763.3.Redirection Number; 21; 22; 23; 24; 25; 26.*
Issue 2.6	*17-06-2002*	*Cs. Elekes*	*26.AnnexC.*
Issue 3.0	*18-11-2003*	*Cs. Elekes*	*26.AnnexE.*