

MODIFICATIONS TO THE NATIONAL SS NO 7 DOCUMENTS

This document contains modifications to national SS No 7 standards or specifications and some autonomous SS No 7 related documents. They have been approved by the national standardization group for network to network interface protocols (NNI-P). They should be taken into account when the appropriate signalling products are implemented. The modifications related to standards and specifications will be incorporated into the appropriate documents when the next versions are drafted.

This document covers the following SS No 7 related documents.

- 1 **SFS 5779 (1996)** , Yleisen puhelinverkon merkinanto. Kansallisen yhteiskanavamerkinantojärjestelmän ISDN-käyttäjäosa ISUP, versio 2. ITU-T -suositusten Q.761-Q.764 ja Q.766 soveltaminen Suomessa. 2. painos

modifications approved 4.2.1997, 25.8.1997,3.4.2001 and 18.12.2001
- 2 **THK:n suositus 3/95** , ISDN User Part (ISUP) version 2 of the national Signalling System No. 7; Interworking Specification
- 3 **SFS 5868 (1999)** , Yleisen puhelinverkon merkinanto. Kansallisen yhteiskanavamerkinantojärjestelmän ISDN-käyttäjäosa ISUP, versio 3. Lisäpalvelut.

modifications approved 24.11.1999
- 4 **SFS 5869:en (2001)** , Yleisen puhelinverkon merkinanto. Kansallisen yhteiskanavamerkinantojärjestelmän ISDN-käyttäjäosa ISUP, versio 3. ITU-T -suositusten Q.730 ja Q.761 - Q.766 soveltaminen Suomessa. 2. painos

modification approved 18.12.2001
- 5 Application Context Identifier (ACI) values applicable in Finland

text approved 8.10.1999
- 6 SS No 7 high speed signalling link

text approved 18.10.2000
- 7 **SFS 5749 (2001)** , Yleisen puhelinverkon merkinanto. Puhelun epäonnistumiseen liittyvän syyinformaation käsittely. 3. painos

text approved 21.8.2002
- 8 **SFS 5901:en (2002)** , Yleisen puhelinverkon merkinanto. Kansallisen yhteiskanavamerkinantojärjestelmän ISDN-käyttäjäosa ISUP, versio 4. ITU-T -suositusten Q.730 ja Q.761-Q.766 soveltaminen Suomessa

text approved 4.3.2003

1

SFS 5779 ISDN User Part ISUP

Modification approved 4.2.1997

Include new subchapter 2.1.9.2.7 .

2.1.9.2.7 Interpretation of Charge Indicator in ACM, CPG, ANM and CON

The last valid *charge indicator* value (different to *no indication*) received in ACM/CPG/ANM/CON must be used for the call. In case only *no indication* applies, value *charging* should be used. When the *no charging* applies for the call, it shall be possible to produce a **call data record**, but optionally by the use of an exchange parameter. In case of *no charge*, call data record should have indication that the charging has been inhibited. All received CHG-messages should be stored on the call data record regardless of the value of the charge indicator, if the call data record is to be produced.

Charge indicator value should **not** be checked when a CHG-message is received. (This means that CHG is never rejected based on the *no charge* indication for the call.)

Charge unit generation should be **inhibited in interworking cases** if *no charge* applies.

Free of charge indication should be given by the originating local exchange to the subscribers having Advice of Charge supplementary service active when *no charge* applies.

Modifications approved 25.8.1997

Add a note to Table 6 clause 3.9 Called party number

Note 1: This value shall be used when the contents of the Called party number are other than subscriber number, national significant number or international number and the Transit network selection parameter is not used.

Add a note to Table 6 clause 3.53 Transit network selection

Note 1: The national network/Carrier Access Code may be either national long distance or international operator code or an other technical prefix which is not part of the subscriber number, national significant number or international number.

Add a new nature of address indicator and additional text concerning address signals to Table 6 clause 3.30 Location number

1111010 Postcode of the terminal situation area

address signals: ... Autonet specifications or postcode plan ¹⁾

¹⁾ Normally the postcode consists of five digits; the 6th digit is reserved for operators' internal use. If postcodes are transferred between operators, the applied post code plan is agreed by the appropriate operators.

In case of call redirection the location information of both original and redirecting terminal is carried forward using following parameters:

- location information of the original terminal: Location Number -parameter
- location information of the redirecting terminal: Generic Number - parameter

Modifications approved 3.4.2001

6.1 Exceptions Table 6 clause 2.1

continuity; remark changed from 'not used' to 'used nationally (see clause 7.1 item 2.1.8)'

6.1 Exceptions Table 6 clause 3.1

continuity indicators; remark changed from 'not used' to 'used nationally (see clause 7.1 item 2.1.8)'

7.1 Exceptions and clarifications Table 7 clause 2.1.8

continuity-check; remark changed from 'not used' to 'Can be used only if agreed between operators.'

Modification approved 18.12.2001

6.1 Exceptions Table 6 clause 3.9

Called party number: add a new note: The NoA value 0000 001 (subscriber number) can be used in interconnection situations also in other cases than subscriber number if the interconnecting operators have agreed upon it.

2

THK:n suositus 3/95 ISUP2 interworking

modification approved 20.11.1996

modified text to the clauses 5.4.1.1.3 and 5.6.1.1.3 concerning TUP1 and TUP2 bit B

Bit B, closed user group information indicator		Optional forward call indicators	
0	closed user group information not included		not applicable
1	closed user group information included CUG indicator within CUG information field: BA = 10 CUG Call, Outgoing access allowed BA = 11 CUG Call, Outgoing access not allowed		bits BA according to "CUG call indicator in TUP" and "Closed user group interlock code parameter field" according to TUP coding. Bits HG of the forward call indicators are set to 00 (ISUP preferred) Bits HG of the forward call indicators are set to 00 (ISUP preferred)

modification approved 15.9.1998

modified text to the clauses 5.4.2.1 and 5.6.2.1

5.4.2.1

TUP1

ISUP2

CLF

REL message with cause 16 normal call clearing
Location 10 beyond an interworking point

5.6.2.1

TUP2

ISUP2

CLF

REL message with cause 16 normal call clearing
Location 10 beyond an interworking point

3

SFS 5868 ISDN User Part ISUP version 3, supplementary services

Modifications approved 24.11.1999

p. 35, loop prevention message

bit D value 0 is changed to value 1 discard message

p. 27-29, subclause 4.17 UUS

text *applicable* is added after each ETSI modification

4

SFS 5869:en ISDN User Part ISUP version 3

Modification approved 18.12.2001

6.1 National modifications Table 6 clause 3.9

Called party number: add a new note: The NoA value 0000 001 (subscriber number) can be used in interconnection situations also in other cases than subscriber number if the interconnecting operators have agreed upon it.

5

Application Context Identifier (ACI) values applicable in Finland

Approved 8.10.1999

Application Context Identifier (ACI) is a value that uniquely identifies the application using the application transport mechanism. The ACI is included in Application Transport Parameter (APP) in ISUP. It is coded as a seven bit field (see Q.765).

This document contains all allocated ACI values which are applicable in Finland. This document will be updated always when there is a new ACI value allocated. This ensures that there is no need to update the ISUP standard only because of a new ACI value allocation.

The following values have been allocated to Application Context Identifier (ACI):

- 0 Unidentified Context and Error Handling (UCEH) ASE
- 1 Private Signalling System No1 (PSS1) ASE (VPN)
- 2 Out Channel Call Related User Interaction (OCCRUI) ASE
- 3 Charging ASE (ES 201 296)
- 4 GFT ASE
- 5-63 spare
- 64-127 Reserved for non-standardized applications

6

SS No 7 high speed signalling link

Approved 18.10.2000

ITU-T recommendation Q.703 (07/96) annex A 'Additions for a national option for high speed signalling links' is applicable in Finland with the following comments

clauses A.1, A.2, A.10 and A.12

only 2.0 Mbit/s data rate is applicable

clause A.2.3.5

Extended sequence numbers (12 bits) are used. FSN field conveyed in MTP3 Changeover Order and Changeover Acknowledgement message types is extended from 7 to 12 bits. Spare fields in these message types is extended from 1 bit to 4 bits.

clause A.10.2.2

It is an implementation option whether error rate high indication is given to level 3 immediately after detection of the fifth interval error or after fifth expire of the timer T8.

7

SFS 5749 Puhelun epäonnistumiseen liittyvän syyinformaation käsittely

Modifications approved 21.8.2002

kohta 4.5 alakohta 2)

Tekstissä tiedotus 3 korvataan tiedotuksella 7 seuraavasti:

Näin ollen TUP:n LOS-sanomaa tai ISUP:n syykoodia 27 vastaava tiedotus 7 annetaan vain kohdan 1) mukaisessa tilanteessa aikavalvonnan lauettua tai kohdan 2) mukaisessa tilanteessa.

8

SFS 5901:en ISDN User Part ISUP version 4

Modifications approved 4.3.2003

All texts are additions to the text of the standard SFS5901 if it is not stated otherwise.

Q.763

2 References

ITU-T Recommendation Q.763 Addendum 1

3.1 Table 5/Q.763

Number portability forward information (not used) 3.101 1000 1101

3.24 Generic digits

b) Type of digits

coding 00011 business communications group identity used only
the coding is defined in clause 2.105.4 of SFS 5901

3.26 Generic number

a) number qualifier indicator

values marked reserved are not used

c) nature of address indicator

value PISN specific number not used (note - included in the Q.763 Corrigendum
1)

national additions

modifications to the text

- coding of other fields in connection with these additional codes
is changed to

- coding of other fields related to the additional code INAP

and

the text related to the coding is changed to the following

Nature of address indicator: 000 0010 unknown

Numbering plan indicator: 110 National numbering plan
Address presentation restricted indicator: 01 presentation restricted
Screening indicator: 11 network provided

Note 1

the term Nature of address indicator is changed to Numbering plan indicator

Note 3 (new)

The numbering plan indicator value 110 is used for national numbering plan in case of location number and for E.212 in case of IMSI.

3.30 Location number

b) nature of address indicator

NoA 000 0011 used nationally

APRI 10 not used

3.36 Network specific facility

The length is 4 octets.

3.46 Redirection number

Nature of address indicator

The used codes are
000 0011 national significant number
000 0100 international number
Other codes are not used.

3.82 Application transport parameter (APP)

Note: The coding specified in Q.763 Addendum 1 is used.

Only the NoA values national (significant) number and international number are used.

3.86 Called directory number

The text related to c) is removed.

3.90 Network routing number

NoA values 0001 and 0010 are used nationally.

3.101 Number portability forward information

Not used.

Clause 4 ISDN user part messages

Tables 21, 22, 23, 24, 32

~~Redirect status (national use) 3.98 O 3-?~~

Table 32

~~QoR capability (network option) 3.91 O 3~~
~~Redirect capability (national use) 3.96 O 3~~
~~Redirect counter (national use) 3.97 O 3~~
~~Redirect forward inf (national use) 3.99 O 3-?~~
~~Number portability forward information (network option) 3.101 O 3-?~~

Table 32

change the length as following

National call reference, Note 1	3.1003	O	8	-
Global call reference	3.zx	O	8-?	ETSI

Table 33

~~Redirect counter (national use) 3.97 O 3~~
~~Redirect backward inf. (national use) 3.100 O 3-?~~

Table 44

The text concerning table 44 is removed.

Table 45

The strikethrough of Reference, Type and Length is removed in IN Service Capability.

Table 45/Q.763 (new)

~~Pivot status(national use) 3.92 O 3~~
~~Redirect status (national use) 3.98 O 3-?~~

Annex A, Table A.1

- 3.5 Backward call indicators
- Holding ind. (not used) Ignore
Bit L:
- 3.23 Forward call indicators
- End-to-end indicator Ignore
Bit E:
- 3.29 Information request indicators
- Spare
Bits B and H
- 3.54 Transmission medium requirement
- The clause is removed.

Annex A, Table A.2

- 3.23 Forward call indicators
- End-to-end indicator Ignore
Bit E:

Q.764

Subclauses 2.1.1.1 a), 2.1.2.1 a)

Connection type 1536 kbit/s not used.

Subclause 2.1.1.1 c)

The text replaces text in 2.1.1.1 c) in the second ii -item.

Subclauses 2.1.1.1 d), 2.1.1.2 d), 2.1.2.1 d) and 2.1.2.2. c)

The text is changed to Continuity Check procedure in clause 7/Q.724 is not used.

Subclause 2.1.2.1 c)

The ii-item (test calls) is not applicable.

Subclause 2.1.4.6

The bits are changed to BA in the first instance in the text.

Q.730

Appendix II

The text (and header) relating to Appendix II is removed.

Two new subclauses are added: 8.6 and 8.7. Both contain the text saying that they have an informative status, describing a network option.