

SCCP ANSI/ITU/TTC/CHINESE TTC 1997

STATEMENT OF COMPLIANCE

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1 General

1.1 Introduction

This document describes how Ericsson Portable TTC component compiles with the TTC 1997 standards specified in Reference [1], Reference [2], Reference [3] and Reference [4].

1.2 Terms

DPC	Destination Point Code.
EIN	Ericsson Infotech AB.
GT	Global Title.
GTT	Global Title Translation.
ISDN-UP	Integrated Services Digital Network-User Part.
LU DT	Long Unitdata message.
LU DTS	Long Unitdata Service message.
MTP	Message Transfer Part.
MTP-SAP	SAP to access the services provided by MTP.
NSDU	Network Service Data Unit.
PC	Point code.
SAP	Service Access Point
SCCP	Signaling Connection Control Part.
SCMG	SCCP Management.
SMI	Subsystem Multiplicity Indicator.
SOG	Subsystem Out of service Grant.
SOR	Subsystem Out of service Request.
SS7	Signaling Subsystem No.7.
SSN	SubSystem Number.
UDT	Unitdata message.



UDTS	Unitdata Service message.
XUDT	Extended Unitdata message.
XUDTS	Extended Unitdata Service message.

1.3 Concept

The terms that are used are:

C	The module complies with the specified section in the standard.
N	The module does not comply with the specified section in the standard.
P	The module complies partly with the specified section in the standard. Specify in a note what in the module does comply and what does not.
-	There is nothing to implement in the referred section (always placed in column C).

1.4 History

Table 1 Revision history

Status	Revision	Date	Author	Comment
-	A	01-02-23	Adele McKeown	Based on Document 1551-CAA 201 23 Revision B. First version for ITU SCCP R7.
-	B	01-05-31	Jose Pousa	New template used. The following functionality is included in this version of the document: <ul style="list-style-type: none">• SCCP signaling relay point for connectionless messages,• LUDT messages segmentation,• SCCP load sharing,• Statistics updates.
-	C	02-08-20	Antonio Quintanilla	Frozen local reference number added.
-	D	02-12-12	Karl-Johan Grinnemo	Updated according to inspection 2002-10-18.
-	E	03-06-30	Stefan Henrikson	Updated to R10. Changed comments on relay node and SSC.



-	E1	03-12-05	Peter Svensson	Added note 26.
TAPP	F	05-04-19	xtskarl	<p>General updates and improvements of the compliance statements before the R11 release. The most important changes are:</p> <ul style="list-style-type: none"> • Usage N_STATE_ind instead of N_PCSTATE_ind. Note 35, 36, 37 • Congestion handling. Notes 10, 11, 12. • Replaced all notes for ITU-T functionality that are deleted or out of scope in the TTC standard with a common note, i.e. note 1 and a statement that there is nothing to implement. • Clarification and more descriptive comment for the following Notes 4, 5, 9 • Added note 13 for usage of N_STATE indication primitive in this implementation.
-	G	07-02-26	XMRALBA	Converted to XML format (FM2XML feature)
-	H	08-03-13	XMRKISH	<p>Changed reference style (FM2XML feature). Replaced from “signalling” to signaling”. Corrected spelling errors.</p> <p>Updated after PC review: added Note 12; changed JT-Q714 2.7.4 from N to P.</p>





2 Compliance Lists

2.1 JT-Q.711, Functional Description of SCCP

Table 2 JT-Q.711, Functional Description of SCCP

	References	C	N	P	Comments
1.	Scope and field of application	-			
2.	References	-			
2.1	Normative References	-			
2.2	Informative References	-			
3.	Definitions	-			
3.1		X			
3.2		X			
4.	Abbreviations and acronyms	-			
5.	General characteristic	-			
5.1	Technique of description	X			
5.2	Primitives	X			
5.3	Peer-to-peer communication	X			
5.4	Model of the connection-oriented network service	-			Note 1
5.5	Model of the connectionless network service	X			
5.6	Contents of the Q.71x - Series Recommendations	X			
6.	Services provided by the SCCP	X			
6.1	Connection-oriented services	-			Note 1
6.1.1	Temporary signaling connections	-			Note 1
6.1.1.1	Description	-			Note 1
6.1.1.1.1	Connection establishment phase	-			Note 1
6.1.1.1.2	Data transfer phase	-			Note 1
6.1.1.1.3	Connection release phase	-			Note 1

Table 2 JT-Q.711, Functional Description of SCCP

6.1.1.2	Network service primitives and parameters	-			Note 1
6.1.1.2.1	Overview	-			Note 1
6.1.1.2.2	Connection establishment phase	-			Note 1
6.1.1.2.3	Data transfer phase	-			Note 1
6.1.1.2.4	Release phase	-			Note 1
6.1.1.3	Additional SCCP primitive and interface elements		X		
6.1.1.3.1	Notice service		X		
6.1.1.3.2	Connection establishment interface elements	-			Note 1
6.1.2	Permanent signaling connections	-			Note 1
6.1.2.1	Description	-			Note 1
6.1.2.2	Primitives and parameters	-			Note 1
6.2	Connectionless services	X			
6.2.1	Description	X			
6.2.2	Primitives and parameters of the connectionless service	-			
6.2.2.1	Overview	X			
6.2.2.2	Parameters	-			
6.2.2.2.1	Address	X			
6.2.2.2.2	Sequence control	X			
6.2.2.2.3	Return option	X			
6.2.2.2.4	Reason for return	X			
6.2.2.2.5	User data	X			
6.2.2.2.6	Importance	-			Note 1
6.2.2.3	Primitives	-			
6.2.2.3.1	UNITDATA	X			
6.2.2.3.2	NOTICE	X			
6.2.3	State transition diagram	X			
6.3	SCCP management	-			Note 1
6.3.1	Description	-			Note 1



Table 2 JT-Q.711, Functional Description of SCCP

6.3.2	Primitives and parameters of the SCCP management	-			Note 1
6.3.2.1	Overview	-			Note 1
6.3.2.2	Parameters	-			Note 1
6.3.2.2.1	Affected subsystem	-			Note 1, Note 11
6.3.2.2.2	User status	-			Note 1, Note 11
6.3.2.2.3	Subsystem multiplicity indicator	-			Note 1, Note 11
6.3.2.2.4	Affected signaling point	-			Note 1, Note 11
6.3.2.2.5	Signaling point status	-			Note 1, Note 11
6.3.2.2.6	Remote SCCP Status	-			Note 1, Note 11
6.3.2.2.7	Restricted Importance Level	-			Note 1, Note 11
6.3.2.3	Primitives	-			Note 1, Note 11
6.3.2.3.1	COORD	-			Note 1, Note 11
6.3.2.3.2	STATE	-			Note 1, Note 5, Note 11
6.3.2.3.3	PCSTATE	-			Note 1, Note 11
7.	Definition of the lower boundary of the SCCP	-			
7.1	MTP-SAP	X			
7.2	MTP Primitives and parameters	X			
7.2.1	TRANSFER	X			
7.2.2	PAUSE	X			
7.2.3	RESUME	X			
7.2.4	STATUS	X			
7.2.5	Notification of completion MTP Restart procedure	X			
7.3	State transition diagram	X			
8.	Functions provided by the SCCP	X			
8.1	Connection-oriented functions	-			Note 1
8.1.1	Functions for temporary signaling connections	-			Note 1
8.1.1.1	Connection establishment functions	-			Note 1

Table 2 JT-Q.711, Functional Description of SCCP

8.1.1.2	Data transfer phase function	-			Note 1
8.1.1.3	Release phase functions	-			Note 1
8.1.2	Functions for permanent signaling connections	-			Note 1
8.1.2.1	Connection establishment phase and connection release phase functions	-			Note 1
8.1.2.2	Data transfer phase functions	-			Note 1
8.2	Connectionless service functions	X			
8.3	Management functions	-			Note 1
8.4	Routing and translation functions	X			

2.2 JT-Q.712, Definition and Function of SCCP Messages

Table 3 JT-Q.712, Definition and Function of SCCP Messages

References		C	N	P	Comments
1.	Signaling Connection Control Part Messages	-			Note 1
1.1	Connection Confirm (CC)	-			Note 1
1.2	Connection Request (CR)	-			Note 1
1.3	Connection Refused (CREF)	-			Note 1
1.4	Data Acknowledgement (AK)	-			Note 1
1.5	Data Form 1 (DT1)	-			Note 1
1.6	Data Form 2 (DT2)	-			Note 1
1.7	Expedited Data (ED)	-			Note 1
1.8	Expedited Data Acknowledgement (EA)	-			Note 1
1.9	Inactivity Test (IT)	-			Note 1
1.10	Protocol Data Unit Error (ERR)	-			Note 1
1.11	Released (RLSD)	-			Note 1
1.12	Release Complete (RLC)	-			Note 1



Table 3 JT-Q.712, Definition and Function of SCCP Messages

References		C	N	P	Comments
1.13	Reset Confirm (RSC)	-			Note 1
1.14	Reset Request (RSR)	-			Note 1
1.15	Subsystem-Allowed (SSA)	-			Note 1
1.16	Subsystem-out-of-Service-Grant (SOG)	-			Note 1
1.17	Subsystem-out-of-Service-Request (SOR)	-			Note 1
1.18	Subsystem-Prohibited (SSP)	-			Note 1
1.19	Subsystem-Status-Test (SST)	-			Note 1
1.20	Unitdata (UDT)	X			
1.21	Unitdata Service (UDTS)	X			
1.22	Extended Unitdata (XUDT)	X			
1.23	Extended Unitdata Service (XUDTS)	X			
1.24	Subsystem Congested (SSC)	-			Note 1
1.25	Long Unitdata (LUDT)	-			Note 1
1.26	Long Unitdata Service (LUDTS)	-			Note 1
2.	SCCP Parameter	-			
2.1	Affected Point Code	-			Note 1
2.2	Affected Subsystem Number	-			Note 1
2.3	Calling/Called party address	X			
2.4	Credit	-			Note 1
2.5	Data	X			Note 1
2.6	Diagnostic	-			Note 1
2.7	Error Cause	-			Note 1
2.8	End of Optional Parameters	X			
2.9	Local Reference Number (Source/Destination)	-			Note 1
2.10	Protocol Class	X			
2.11	Receive Sequence Number	-			Note 1
2.12	Refusal Cause	-			Note 1
2.13	Release Cause	-			Note 1

Table 3 JT-Q.712, Definition and Function of SCCP Messages

References		C	N	P	Comments
2.14	Reset Cause	-			Note 1
2.15	Return Cause	X			
2.16	Segmenting/Reassembling	-			Note 1
2.17	Sequencing/Segmenting	-			Note 1
2.18	Subsystem Multiplicity Indicator	-			Note 1
2.19	Hop Counter	X			
2.20	Segmentation	X			
2.21	Importance	-			Note 1
2.22	Congestion Level	-			Note 1
2.23	Long Data	-			Note 1
3.	Inclusion of Fields in the Messages			X	Note 7
4.	References	-			
4.1	Normative References	-			
4.2	Informative References	-			

2.3 JT-Q.713, SCCP Formats and Codes

Table 4 JT-Q.713, SCCP Formats and Codes

References		C	N	P	Comments
1.	General	X			
1.1	Message type code	X			
1.2	Formatting principles	X			
1.3	Mandatory fixed part	X			
1.4	Mandatory variable part	X			
1.5	Optional part	X			
1.6	End of optional parameters octet	X			
1.7	Order of transmission	X			
1.8	Coding of spare bits	X			
1.9	National message types and parameters	X			



Table 4 JT-Q.713, SCCP Formats and Codes

References		C	N	P	Comments
1.10	International message types and parameters	X			
2.	Coding of the general parts	-			
2.1	Coding of the message type	X			
2.1	Coding of the length indicator	X			
2.3	Coding of the pointers	X			
3.	SCCP parameters	-			
3.1	End of optional parameters	X			
3.2	Destination local reference	-			Note 1
3.3	Source local reference	-			Note 1
3.4	Called party address	X			
3.4.1	Address indicator	X			
3.4.2	Address	X			
3.4.2.1	Signaling point code	X			
3.4.2.2	Subsystem number	X			
3.4.2.3	Global title	X			
3.4.2.3.1	Global title indicator = 0001	X			
3.4.2.3.2	Global title indicator = 0010	X			
3.4.2.3.3	Global title indicator = 0011	X			
3.4.2.3.4	Global title indicator = 0100	X			
3.5	Calling party address	X			
3.6	Protocol class	X			
3.7	Segmenting/reassembling	-			Note 1
3.8	Receive sequence number	-			Note 1
3.9	Sequencing/segmenting	-			Note 1
3.10	Credit	-			Note 1
3.11	Release cause	-			Note 1
3.12	Return cause	X			
3.13	Reset cause	-			Note 1
3.14	Error cause	-			Note 1
3.15	Refusal cause	-			Note 1
3.16	Data	X			

Table 4 JT-Q.713, SCCP Formats and Codes

References		C	N	P	Comments
3.17	Segmentation	X			
3.18	Hop counter	X			
3.19	Importance	-			Note 1
3.20	Long data	-			Note 1
4.	SCCP messages and codes	-			
4.1	General	-			
4.1.1		X			
4.1.2		X			
4.1.3		X			
4.1.4		X			
4.2	Connection request (CR)	-			Note 1
4.3	Connection confirm (CC)	-			Note 1
4.4	Connection refused (CREF)	-			Note 1
4.5	Released (RLSD)	-			Note 1
4.6	Release complete (RLC)	-			Note 1
4.7	Data form 1 (DT1)	-			Note 1
4.8	Data form 2 (DT2)	-			Note 1
4.9	Data acknowledgement (AK)	-			Note 1
4.10	Unitdata (UDT)	X			
4.11	Unitdata service (UDTS)	X			
4.12	Expedited data (ED)	-			Note 1
4.13	Expedited data acknowledgement (EA)	-			Note 1
4.14	Reset request (RSR)	-			Note 1
4.15	Reset confirm (RSC)	-			Note 1
4.16	Protocol data unit error (ERR)	-			Note 1
4.17	Inactivity test (IT)	-			Note 1
4.18	Extended unitdata (XUDT)	X			
4.19	Extended unitdata service (XUDTS)	X			
4.20	Long unitdata (LUDT)	-			Note 1



Table 4 JT-Q.713, SCCP Formats and Codes

References		C	N	P	Comments
4.21	Long unitdata service (LUDTS)	-			Note 1
5	SCCP Management messages and codes	-			Note 1, Note 4
5.1	General	-			Note 1
5.1.1	SCMG format identifier	-			Note 1
5.1.2	Formatting principles	-			Note 1
5.2	SCMG message parameters	-			Note 1
5.2.1	Affected SSN	-			Note 1
5.2.2	Affected PC	-			Note 1
5.2.3	Subsystem multiplicity indicator	-			Note 1
5.2.4	SCCP congestion level	-			Note 1
5.3	SCMG messages	-			Note 1, Note 4
6.	References	-			
6.1	Normative References	-			
6.2	Informative References	-			
Annex A:		-			
A.1	Introduction	-			Note 1
A.2	Connection refusal	-			Note 1
A.3	Connection release	-			Note 1
A.4	Connection reset	-			Note 1
A.5	Return cause	-			Note 1
Annex B:		-			
B.1	Introduction	X			
B.2	Guidelines on using SCCP addressing information elements in the international network	X			
B.3	GT routing specification of international services	X			
B.4	International GT routing specification	-			
B.4.1	Translation selector: TT=17, NP=1, NAI=4	X			
B4.1.1	Format of address indicator and address	X			

Table 4 JT-Q.713, SCCP Formats and Codes

References	C	N	P	Comments
B4.1.2 Translation rules		X		
B4.2 Translation selector: TT=1, NP=0, NAI=4	X			
B4.2.1 Format of address indicator and address	X			
B4.2.2 Translation rules		X		
B4.3 Translation selector: TT=2, NP=2, NAI=4	X			
B4.3.1 Format of address indicator and address	X			
B4.3.2 Translation rules		X		
B4.4 Translation selector: TT=0, NP=1, NAI=4	X			
B4.4.1 Format of address indicator and address	X			
B4.4.2 Translation rules		X		
B4.5 Translation selector: TT=3, NP=1, NAI=4	X			
B4.5.1 Format of address indicator and address	X			
B4.5.2 Translation rules		X		

2.4 JT-Q.714, SCCP Procedures

Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
1.	Introduction	-			
1.1	General characteristics of signaling connection control procedures	-			
1.1.1	Purpose	X			
1.1.2	Protocol classes	X			
1.1.2.1	Protocol class 0	X			
1.1.2.2	Protocol class 1	X			
1.1.2.3	Protocol class 2	-			Note 1



Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
1.1.2.4	Protocol class 3	-			Note 1
1.1.3	Signaling connections	-			Note 1
1.1.4	Compatibility and handling of unrecognized information	-			
1.1.4.1	Rules for forward compatibility	X			
1.1.4.2	Handling of unrecognized messages or parameters	X			
1.1.4.3	Handling of non-mandatory, unsupported parameter values	X			
1.1.4.4	Treatment of spare fields	X			
1.4.4.5	Handling of gaps	X			
1.2	Overview of procedures for connection-oriented services	-			Note 1
1.2.1	Connection establishment	-			Note 1
1.2.2	Data transfer	-			Note 1
1.2.3	Connection release	-			Note 1
1.3	Overview of procedures for connectionless services	-			Note 1
1.3.1	General	X			Note 2
1.3.2	Segmentation/reassembly	X			
1.4	Structure of the SCCP and contents of specification	X			
2.	Addressing and routing	-			
2.1	SCCP addressing	X			
2.1	SCCP routing principles	X			
2.2.1	Receipt of SCCP message transferred by a MTP	X			
2.2.2	Messages from connection-oriented or connectionless control to SCCP routing control	X			Note 3
2.2.2.1	DPC present	X			
2.2.2.2	DPC not present	X			
2.3	SCCP routing	X			

Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
2.3.1	Receipt of SCCP message transferred by the MTP	X			Note 3
2.3.2	Messages from connectionless or connection-oriented control to SCCP routing control	X			Note 3
2.4	Global Title Translation	-			
2.4.1	General characteristics of the GTT	X			
2.4.2	Terminology definitions	-			
2.4.2.1	GT information	X			
2.4.2.2	Other definitions used in the GTT function	X			
2.4.3	Input of the GTT function	-			
2.4.3.1	Local information (mandatory input)	X			
2.4.3.2	GT information (mandatory input)	X			
2.4.3.3	SSN (mandatory input if present)	X			
2.4.3.3	Loadsharing information	X			
2.4.4	Output of the GTT function	X			
2.4.5	Global title translation function	X			
2.5	Compatibility test	X			Note 2
2.6	Traffic limitation mechanism	-			
2.6.1	General	-			Note 4
2.6.2	Importance of a message	X			
2.6.3	Handling of messages to a congested node	X			
2.7	Calling party address treatment	-			
2.7.1	Address indicator	X			
2.7.2	Calling party address in the international network	X			
2.7.3	Routing indicator	X			
2.7.4	Screening			X	Note 12



Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
2.7.5	Inclusion of OPC in the calling party address	-			
2.7.5.1	LU DT or XU DT or UD T message	X			Note 2.
2.7.5.2	CR message	-			Note 1
2.8	Routing failures	X			
2.8.1	No translation for an address of such nature	X			
2.8.2	No translation for this specific address	X			
2.8.3	MTP/SCCP/subsystem failure	X			
2.8.4	MTP/SCCP/system congestion	X			
2.8.5	Unequipped user	X			
2.8.6	Hop counter violation	X			
3.	Connection-oriented procedures	-			
3.1	Connection establishment	-			
3.1.1	General	-			Note 1
3.1.2	Local reference numbers	-			Note 1
3.1.3	Negotiation procedures	-			Note 1
3.1.3.1	Protocol class negotiation	-			Note 1
3.1.3.2	Flow control credit negotiation	-			Note 1
3.1.4	Actions at the origination node	-			Note 1
3.1.4.1	Initial actions	-			Note 1
3.1.4.2	Subsequent actions	-			Note 1
3.1.5	Actions at a relay node with coupling	-			Note 1
3.1.5.1	Initial actions	-			Note 1
3.1.5.2	Subsequent actions	-			Note 1
3.1.6	Actions at destination node	-			Note 1
3.1.6.1	Initial actions	-			Note 1
3.1.6.2	Subsequent actions	-			Note 1
3.2	Connection refusal	-			Note 1

Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
3.2.1	Actions at node initiating connection refusal	-			Note 1
3.2.1.1	Initiating connection refusal at the destination node	-			Note 1
3.2.1.2	Initiating connection refusal at the relay node	-			Note 1
3.2.1.3	Initiating connection refusal at the originating node	-			Note 1
3.2.2	Actions at relay node not initiating connection refusal	-			Note 1
3.2.3	Actions at the origination node not initiating connection refusal	-			Note 1
3.3	Connection release	-			Note 1
3.3.1	General	-			Note 1
3.3.2	Frozen reference	-			Note 1
3.3.3	Actions at an end node initiating connection release	-			Note 1
3.3.3.1	Initial actions	-			Note 1
3.3.3.2	Subsequent actions	-			Note 1
3.3.4	Actions at a relay node	-			Note 1
3.3.4.1	Initial actions	-			Note 1
3.3.4.2	Subsequent actions	-			Note 1
3.3.5	Actions at an end node not initiating connection release	-			Note 1
3.4	Inactivity control	-			Note 1
3.5	Data transfer	-			Note 1
3.5.1	General	-			Note 1
3.5.1.1	Actions at the originating node	-			Note 1
3.5.1.2	Actions at a relay node	-			Note 1
3.5.1.3	Actions at the destination node	-			Note 1
3.5.2	Flow control	-			Note 1
3.5.2.1	General	-			Note 1
3.5.2.2	Sequence numbering	-			Note 1



Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
3.5.2.3	Flow control window	-			Note 1
3.5.2.4	Flow control procedures	-			Note 1
3.5.2.4.1	Transfer of DT2 messages	-			Note 1
3.5.2.4.2	Transfer of AK messages	-			Note 1
3.5.2.4.3	Reception of a Data or AK message	-			Note 1
3.5.3	Segmenting and reassembly	-			Note 1
3.6	Expedited data transfer	-			Note 1
3.6.1	General	-			Note 1
3.6.2	Actions at the originating node	-			Note 1
3.6.3	Actions at a relay node	-			Note 1
3.6.4	Actions at destination node	-			Note 1
3.7	Reset	-			Note 1
3.7.1	General	-			Note 1
3.7.2	Action at the initiating node	-			Note 1
3.7.2.1	Initial actions	-			Note 1
3.7.3.2	Subsequent actions	-			Note 1
3.7.3	Actions at a relay node	-			Note 1
3.7.3.1	Initial actions	-			Note 1
3.7.3.2	Subsequent actions	-			Note 1
3.7.4	Actions at an end node not initiating the reset procedure	-			Note 1
3.7.5	Handling of messages during the reset procedures	-			Note 1
3.8	Restart	-			Note 1
3.8.1	General	-			Note 1
3.8.2	Actions at the recovered node	-			Note 1
3.8.2.1	Initial actions	-			Note 1
3.8.2.2	Subsequent actions	-			Note 1
3.8.3	Actions at the non-failed far end node	-			Note 1
3.8.3.1	Permanent signaling connections	-			Note 1
3.8.3.2	Abnormalities	-			Note 1

Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
3.8.3.3	General	-			Note 1
3.8.4	Syntax error	-			Note 1
3.8.5	Action tables	-			Note 1
3.8.6	Actions upon the reception of an ERR message	-			Note 1
4.	Connectionless procedures	X			Note 2
4.1	Data transfer	X			Note 2
4.1.1	Segmentation/reassembly	-			
4.1.1.1	Segmentation	-			
4.1.1.1.1	General	X			
4.1.1.1.2	Normal procedures	X			
4.1.1.1.3	Message return procedure	X			
4.1.1.1.3.1	Segmentation not supported	X			
4.1.1.1.3.2	Segmentation failed	X			
4.1.1.2	Reassembly	-			
4.1.1.3	General	X			
4.1.1.2.2	Normal procedures	X			
4.1.1.2.3	Message return procedure	X			
4.1.1.2.3.1	Destination cannot perform reassembly	X			
4.1.1.2.3.2	Error in message transport	X			
4.1.1.2.3.3	Error in local processing	X			
4.1.1.2.3.4	No buffer space to perform reassembly	X			
4.1.2	Message change	X			
4.2	Message return procedure	X			
4.3	Syntax error	X			
5.	SCCP management procedures	-			
5.1	General	-			Note 4
5.2	Signaling point status management	-			
5.2.1	General	X			Note 4, Note 5, Note 11
5.2.2	Signaling point prohibited	X			Note 4, Note 11



Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
5.2.3	Signaling point allowed	X			Note 4, Note 8, Note 11
5.2.4	Signaling point congested	X			Note 4, Note 11
5.2.5	Local MTP network availability	X			Note 4, Note 8, Note 11
5.2.6	Local MTP network unavailability	-			
5.2.7	SCCP reports of SCCP and nodal congestion	-			Note 1
5.2.7.1	Actions in the congested SCCP node	-			Note 1
5.2.7.2	Actions in a relay node or originating node	-			Note 1
5.2.8	Inter- and Intra- SCMG congestion reports procedure	X			Note 1, Note 11
5.3	Subsystem status management	-			Note 1
5.3.1	General	-			Note 1
5.3.2	Subsystem prohibited	-			Note 1
5.3.2.1	Receipt of messages for a prohibited subsystem (response method)	-			Note 1
5.3.2.2	Receipt of subsystem prohibited message or N-STATE REQUEST primitive or local user failed	-			Note 1
5.3.3	Subsystem allowed	-			Note 1
5.3.4	Subsystem status test	-			Note 1
5.3.4.1	General	-			Note 1
5.3.4.2	Actions at the initiating node	-			Note 1
5.3.4.3	Actions at the receiving node	-			Note 1
5.3.5	Coordinated state change	-			Note 1
5.3.5.1	General	-			Note 1
5.3.5.2	Actions at the requesting node	-			Note 1
5.3.5.3	Actions at the requested node	-			Note 1
5.3.6	Local broadcast	-			Note 1
5.3.6.1	General	-			Note 1

Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
5.3.6.2	User-out-of-service			X	Note 5, Note 11
5.3.6.3	User-in-service			X	Note 5, Note 11
5.3.6.4	Signaling point inaccessible			X	Note 8, Note 9, Note 10
5.3.6.5	Signaling point remote SCCP accessible			X	Note 8, Note 9, Note 10
5.3.6.6	Restricted importance level reporting	-			Note 1
5.3.7	Broadcast	-			Note 1
5.3.7.1	General	-			Note 1
5.3.7.2	Subsystem prohibited	-			Note 1
5.3.7.3	Subsystem allowed	-			Note 1
5.4	MTP/SCMG restart	X			Note 8
6.	References	-			
6.1	Normative References	-			
6.2	Informative References	-			
Annex A		-			
A.1	Introduction	-			Note 1
A.2	Symbol definition of the state diagrams at the message interface	-			Note 1
A.3	Symbol definition of the state diagrams	-			Note 1
Annex B		-			
B.1	Introduction	-			Note 1
B.2	Symbol definition of the action tables	-			Note 1
B.3	Table of contents	-			Note 1
Annex C		-			
C.1	General	-			Note 1
C.2	Drafting conventions	-			Note 1
C.3	Figures	-			Note 1
C.4	Abbreviations and timers	-			Note 1
Annex D		-			
D.1	General	-			Note 1



Table 5 JT-Q.714, SCCP Procedures

References		C	N	P	Comments
D.2	Drafting conventions	-			Note 1
D.3	Figures	-			Note 1
D.4	Abbreviations and timers	-			Note 1





3 Notes and Comments

- Note 1** This functionality of the ITU-T recommendation have been deleted and/or are out-of-scope for the TTC standard. The functionality may however be available in this implementation using ITU-T behavior. For a detailed compliance if these functions are supported or not refer to SCCP ITU 07/96 statement of compliance.
- Note 2** LUDT messages are not part of the TTC standards but the SCCP is able to receive, but not send, LUDT messages. When received, an LUDT message may upon relay be sequenced in several XUDT or UDT messages.
- Note 3** Connection-oriented services are not part of the TTC standard but are supported by this SCCP. For a detailed compliance of these functions refer to SCCP ITU 07/96 statement of compliance.
- Note 4** SCCP Management are supported for TTC in this version of SCCP. For TTC compliance there is a configurable entry in the configuration file to turn the management messages off. For a detailed compliance of SCCP management functions refer to SCCP ITU 07/96 statement of compliance.
- Note 5** The proprietary N_BIND_req and N_UNBIND_req used to implement behavior of N-STATE Request and register local subsystems with the SCCP.
- Note 6** The “Affected Point Code ” is included as a part of the N-STATE which is used instead of the PC-STATE for signaling point status and remote SCCP status. Refer also to Note 9 and Note 10.
- Note 7** The SCCP are only compliant with Table 1 and Table 2 for supported messages and parameters according to this statement of compliance for clause 1 and 2 of JT-Q.712.
- Note 8** It is a configurable option if all remote SSN shall be considered allowed at the reception of a MTP-RESUME indication or if the subsystem shall be marked “prohibited ” and subsystem test procedure should be used to audit the remote subsystem state. The parameter should be set to disable the subsystem test procedure in order to be TTC compliant.
- Note 9** N_STATE with SSN=1 used instead of N_PCSTATE to inform the upper layer of the “Signaling Point Status ”.



- Note 10** N_STATE with SSN=1 used instead of N_PCSTATE to inform the upper layer of the “Remote SCCP status”. The values remote SCCP unavailable, unequipped and inaccessible are all mapped to a calculated congestion level (value 0-3) that is presented in the User Status parameter of the N_STATE primitive.
- Note 11** SCCP management is not a part of the TTC standard but this implementation uses the N_STATE indication primitive to inform SCCP users of the remote point code and subsystem status. Refer also to Note 6, Note 9, Note 10.
- Note 12** Restrictions on GT subparts combinations are not included in International screening functionality.



Reference List

TTC standards

- [1] JT-Q.711 version 2 April 23 1997
- [2] JT-Q.712 version 3 April 23 1997
- [3] JT-Q.713 version 8 April 20 2000
- [4] JT-Q.714 version 3 April 23 1997