

# INAP ETSI

## Statement of Compliance

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### STATEMENT OF COMPLIANCE

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# 1 General

## 1.1 Introduction

Ericsson Signaling SS7 INAP is compliant with

- ETSI Intelligent Network (IN); Intelligent Network Capability Set 1 (CS1), Core Intelligent Network Application Protocol (INAP) Part 1: Protocol Specification, ETS 300 374-1, September 1994
- CS2 operation Execute, described in, Interface Recommendation for intelligent network Capability Set 2: Part 1
- CAMEL Application Part (CAP) specification; GSM 09.78 version 7.1.0 Release 1998
- CAMEL Application Part (CAP) Phase 3 specification; 3GPP TS 29.078 version 4.8.0, March 2003
- CAMEL Application Part (CAP) Phase 4 specification; 3GPP TS 29.078 version 7.4.0, September 2007
- CAMEL Application Part (CAP) Phase 4 specification; 3GPP TS 29.078 version 9.2.0, July 2010

according to the tables in this document.

## 1.2 Concept

The terms that are used are:

- **C** - Module complies with the specified paragraph in the standard.
- **N** - Module does not comply with the specified paragraph in the standard.
- **P** - Module complies partly with the specified paragraph in the standard.
- - - There is nothing to implement in the referred paragraph (used in column "C").





## 2 Compliance Lists

### 2.1 ETSI Intelligent Network (IN); Intelligent Network Capability Set 1 (CS1), Core Intelligent Network Application Protocol (INAP) Part 1: Protocol Specification, ETS 300 374-1, September 1994

ETSI Intelligent Network (IN); Intelligent Network Capability Set 1 (CS1), Core Intelligent Network Application Protocol (INAP) Part 1: Protocol Specification, ETS 300 374-1, September 1994

*Table 1 ETS 300 374-1 Compliance*

References	C	N	P	Comments
Scope	-			
Normative references	-			
Definitions and abbreviations	-			
General	-			
Definition methodology	-			
Example physical scenarios	-			
INAP protocol architecture	-			
INAP signalling congestion control for Signalling System No. 7		X		
Inap addressing	X			
Relationship between ITU-T Recommendation Q.1214 and this ETS	-			

Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
Compatibility mechanisms used for INAP	-			
Introduction	-			
Definition of ETSI INAP compatibility mechanisms	-			
Compatibility mechanism for interworking of ETSI INAP and ITU-T Q.1218 INAP			X	Note 1
Procedures for major additions to ETSI INAP	X			
Procedures for minor additions to ETSI INAP		X		
Procedures for inclusion of network specific additions to ETSI INAP	X			
Single/Multiple Association Control Function	-			
Reflection of TCAP Application Context	X			
Sequential/parallel execution of operations	X			
Abstract syntax of the CS1 INAP	X			
IN CS1 operation types			X	Note 1
IN CS1 error types			X	Note 1





Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
IN CS1 data types			X	Note 1
IN CS1 application protocol (operation and error codes)			X	Note 1
IN CS1 application contexts			X	Note 1
Application entity procedures	-			
SSF application entity procedures		X		Note 1
SCF application entity procedures	-			
General			X	Note 2 Note 3
7.2.2 - 7.2.5.4.1			X	Note 3
SRF application entity procedures	-			
General			X	Note 2 Note 3
Model and interfaces			X	Note 2 Note 3 Note 4
Relationship between the SRF FSM and maintenance functions/bearer connection handling			X	Note 3 Note 4
SRF call state model			X	Note 3

*Table 1 ETS 300 374-1 Compliance*

<b>References</b>	<b>C</b>	<b>N</b>	<b>P</b>	<b>Comments</b>
7.3.4.1 - 7.3.4.3			X	Note 3 Note 4
Example SRF control procedures	-			
SRF connect procedures			X	Note 1 Note 3 Note 4 Note 5 Note 12
SRF end user interaction procedures	X			Note 3
Play Announcement/Prompt and Collect user information (PA/P&C)			X	Note 1
SRF disconnection procedures			X	Note 1 Note 4
SRF initiated disconnect			X	Note 1 Note 4
SCF initiated disconnect			X	Note 1 Note 4
Examples illustrating complete user interaction sequences			X	Note 1 Note 4 Note 5
Message sequences for service assist			X	Note 1 Note 4 Note 5



Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
Message sequences for hand-off			X	Note 1 Note 4 Note 5
Error procedures	-			
Operation related error procedures	-			
(This chapter does not exist in [E1] .)				
Cancelled			X	Note 3
CancelFailed			X	Note 3
ETCFailed			X	Note 1 Note 3
ImproperCallerResponse			X	Note 3
MissingCustomerRecord			X	Note 1 Note 3
MissingParameter			X	Note 1 Note 3
ParameterOutOfRange			X	Note 1 Note 3
RequestedInfoError			X	Note 1 Note 3
SystemFailure			X	Note 1 Note 3
TaskRefused			X	Note 1 Note 3
UnavailableResource			X	Note 3
UnexpectedComponentSequence			X	Note 1 Note 3

Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
UnexpectedData Value			X	Note 1 Note 3
UnexpectedParameter			X	Note 1 Note 3
UnknownLegID			X	Note 1 Note 3
Entity related procedures	-			
Expiration of TSSF			X	Note 1 Note 3 Note 4
Expiration of TSRF	X			
Detailed operation procedures	-			
9.1 - 9.29			X	Note 1 Note 3 Note 4
Services assumed from TCAP	-			
Normal procedures			X	Note 1
SSF-to-SCF messages	-			
SSF FSM related messages			X	Note 1 Note 3
Assisting/hand-off SSF FSM related messages		X		Note 1
SSME FSM related messages			X	Note 1



Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
SCF-to-SSF messages	-			
SCSM FSM related messages	X			Note 3
SCME FSM related messages	X			Note 3
SCF-to/from-SRF messages			X	Note 1
Abnormal procedures			X	Note 1 Note 3
SCF-to-SSF/SRF messages			X	Note 1 Note 3
SSF/SRF-to-SCF messages			X	Note 1 Note 3
Dialogue establishment	X			Note 6
Sending of a TC-BEGIN request primitive	X			Note 3
Receipt of a TC-BEGIN indication	X			Note 3
Receipt of the first TC-CONTINUE indication	X			Note 3
Receipt of a TC-END indication	X			Note 3
Receipt of a TC-ABORT indication	X			Note 3
Receipt of a TC-P-ABORT indication	X			Note 3
Dialogue continuation	X			Note 3
Sending entity			X	Note 7

*Table 1 ETS 300 374-1 Compliance*

References	C	N	P	Comments
Receiving entity			X	Note 7
Dialogue termination			X	Note 8
Sending of TC-END request			X	Note 7 Note 8 Note 9
Receipt of a TC-END indication			X	Note 7
User Abort	X			
Provider Abort	X			
Procedures for INAP operations	-			
Operation invocation	X			Note 3
Operation invocation receipt	X			Note 3
Operation response	X			Note 3
Receipt of a response	-			
Receipt of a TC-RESULT-NL indication	X			Note 3
Receipt of a TC-RESULT-L indication	X			Note 3
Receipt of a TC-U-ERROR indication	X			Note 3
Receipt of a TC-U-REJECT indication	X			Note 3
Receipt of a TC-L-REJECT indication	X			Note 3



Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
Receipt of a TC-L-CANCEL indication	X			Note 3
Other events	-			
Receipt of a TC-U-REJECT			X	Note 1 Note 11
Receipt of a TC-R-REJECT indication			X	Note 1 Note 11
Receipt of a TC-L-REJECT indication			X	Note 1 Note 11
Receipt of a TC-NOTICE indication			X	Note 1 Note 11
Mapping onto TC services	-			
Dialogue Control	X			
Destination address	X			
Origination address	X			
Dialogue ID	X			
Application-cont ext-name			X	Note 1
User information	X			
Component present	X			
Termination			X	Note 1 Note 3
Quality of service	X			
Operation procedures	-			
Invoke ID	X			
Linked ID	X			
Dialogue ID	X			

Table 1 ETS 300 374-1 Compliance

References	C	N	P	Comments
Class			X	Note 1
Operation			X	Note 1
Error			X	Note 1
Parameters			X	Note 1 Note 3
Time out			X	Note 1
Last component	X			Note 13
Problem code	X			Note 7

## 2.2 Interface Recommendation for Intelligent Network Capability Set 2:Part 1. Q.1228 Fascile 1/5 (09/97)

Interface Recommendation for Intelligent Network Capability Set 2:Part 1. Q.1228 Fascile 1/5 (09/97)

Only the CS2 operation Execute is implemented and supported.

## 2.3 GSM 09.78 (TS 101 046) "Digital Cellular Telecommunications System (Phase 2+); Customised Applications for Mobile Network Enhanced Logic (CAMEL); CAMEL Application Part (CAP) Specification (GSM 09.78 Version 7.1.0 Release 1998)"

GSM 09.78 (TS 101 046) "Digital Cellular Telecommunications System (Phase 2+); Customised Applications for Mobile Network Enhanced Logic (CAMEL); CAMEL Application Part (CAP) Specification (GSM 09.78 Version 7.1.0 Release 1998)"

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
1 Scope	-			
2 References	-			
3 Abbreviations	-			
4 General	-			
4.1 Definition methodology	-			





Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
4.2 Example physical scenarios	-			
4.3 CAP protocol architecture			X	Note 6
4.4 CAP addressing	X			
4.4.1 Sub-System Number (SSN)	X			
4.4.2 Quality of service parameters	X			
4.4.3 SCCP addressing	X			Note 14
4.5 Definition And Usage Of LegID	-			
4.5.1 Definition Of LegID	X			
4.5.2 Allocation Of LegID	X			
4.6 Compatibility Mechanisms Used For CAP	-			
4.6.1 Introduction	-			
4.6.2 Definition of CAP compatibility mechanisms	-			
4.6.2.1 Interworking of CAP with ETSI CS1 Core INAP and ITU-T Q.1218 INAP			X	Note 15
4.6.2.2 Procedures for major additions to CAP	X			
4.6.2.3 Procedures for minor additions to CAP	X			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
4.6.2.4 Procedures for inclusion of network specific additions to CAP	X			
5 Single/Multiple Association Control Function (SACF/MACF) rules	-			
5.1 Reflection of TCAP Application Context (AC)			X	Note 6
5.2 Sequential/parallel execution of operations	X			
6 Abstract syntax of the CAP	X			
6.1 Operation types			X	Note 15 , Note 18
6.2 Error types	-			
6.3 Data types			X	Note 15 , Note 18
6.4 Operation and error codes			X	Note 16
6.5 Application Service Elements			X	Note 17
6.6 Application contexts			X	Note 18
6.7 Classes		X		
7 Application entity procedures	-			
8 Error procedures	-			
8.1 Operation related error procedures	-			
8.1.1 Spare	-			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.2 Cancelled	-			
8.1.2.1 General description	-			
8.1.2.1.1 Error description	X			
8.1.2.2 Operations gsmSCF->gsmSRF		X		
8.1.3 CancelFailed	-			
8.1.3.1 General description	-			
8.1.3.1.1 Error description	X			
8.1.3.1.2 Argument description	X			
8.1.3.2 Operations gsmSCF->gsmSRF		X		
8.1.4 ETCFailed	-			
8.1.4.1 General description	-			
8.1.4.1.1 Error description	X			
8.1.4.2 Operations gsmSCF->gsmSSF		X		
8.1.5 ImproperCallerResponse	-			
8.1.5.1 General description	-			
8.1.5.1.1 Error description		X		
8.1.5.2 Operations gsmSCF>gsmSRF		X		
8.1.6 MissingCustomerRecord	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.6.1 General description	-			
8.1.6.1.1 Error description	-			
8.1.6.2 Operations gsmSSF->gsmSCF		X		
8.1.6.3 Operations SRF->SCF		X		
8.1.7 MissingParameter	-			
8.1.7.1 General description	-			
8.1.7.1.1 Error description	-			
8.1.7.2 Operations gsmSCF->gsmSSF	X			
8.1.7.3 Operations gsmSSF->gsmSCF	X			
8.1.7.4 Operations gsmSCF->gsmSRF		X		
8.1.7.5 Operations SRF->SCF		X		
8.1.8 Parameter OutOfRange	-			
8.1.8.1 General description	-			
8.1.8.1.1 Error description	-			
8.1.8.2 Operations gsmSCF->gsmSSF	X			
8.1.8.3 Operations gsmSSF->gsmSCF	X			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.9 Requested InfoError	-			
8.1.9.1 General description	-			
8.1.9.1.1 Error description	-			
8.1.9.1.2 Argument description	X			
8.1.9.2 Operations gsmSCF->gsmSSF	X			
8.1.10 SystemFailure	-			
8.1.10.1 General description	-			
8.1.10.1.1 Error description	-			
8.1.10.1.2 Argument description		X		
8.1.10.2 Operations gsmSCF->gsmSSF	X			
8.1.10.3 Operations gsmSSF->gsmSCF	X			
8.1.10.4 Operations gsmSCF->gsmSRF		X		
8.1.11 TaskRefused	-			
8.1.11.1 General introduction	-			
8.1.11.1.1 Error description	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.11.1.2 Argument description	X			
8.1.11.2 Operations gsmSCF->gs mSSF	X			
8.1.11.3 Operations gsmSSF->gs mSCF	X			
8.1.11.4 Operations gsmSCF->gs mSRF		X		
8.1.11.5 Operations SRF->SCF		X		
8.1.12 Unavailab leResource	-			
8.1.12.1 General description	-			
8.1.12.1.1 Error description	-			
8.1.12.2 Operations gsmSCF->gs mSRF		X		
8.1.13 Unexpect edComponentSe quence	-			
8.1.13.1 General description	-			
8.1.13.1.1 Error description	-			
8.1.13.2 Operations gsmSCF->gs mSSF	X			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.13.3 Operations gsmSSF->gs mSCF	X			
8.1.13.4 Operations SCF->SRF (only applicable for direct SCF-SRF case)		X		
8.1.13.5 Operations SRF->SCF		X		
8.1.14 Unexpect edDataValue	-			
8.1.14.1 General description	-			
8.1.14.1.1 Error description	-			
8.1.14.2 Operations gsmSCF->gs mSSF	X			
8.1.14.3 Operations gsmSSF->gs mSCF	X			
8.1.14.4 Operations gsmSCF->gs mSRF		X		
8.1.14.5 Operations SRF->SCF		X		
8.1.15 Unexpect edParameter	-			
8.1.15.1 General description	-			
8.1.15.1.1 Error description	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.1.15.2 Operations gsmSCF->gs mSSF	X			
8.1.15.3 Operations gsmSSF->gs mSCF	X			
8.1.15.4 Operations gsmSCF->gs mSRF		X		
8.1.15.5 Operations SRF->SCF		X		
8.1.16 Unknown LegID	-			
8.1.16.1 General description	-			
8.1.16.1.1 Error description	-			
8.1.16.2 Operations gsmSCF->gs mSSF	X			
8.2 Entity related error procedures	-			
8.2.1 Expiration of TSSF	-			
8.2.1.1 General description	-			
8.2.1.1.1 Error description	-			
8.2.1.2 Procedur es gsmSSF->gs mSCF		X		
8.2.2 Expiration of TSRF	-			
8.2.2.1 General description	-			





Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
8.2.2.1.1 Error description		X		
8.2.2.2 Procedures description		X		
9 Detailed operation procedures	-			
9.1 Spare	-			
9.2 ActivityTest procedure	-			
9.2.1 General description	X			
9.2.1.1 Parameters	-			
9.2.2 Spare	-			
9.2.3 Responding entity (gsmSSF, gsmSRF or assistSSF)	-			
9.2.3.1 Normal procedure	X			
9.2.3.2 Error handling	-			
9.3 ApplyCharging procedure	-			
9.3.1 General description	-			
9.3.1.1 Parameters	X			
9.3.2 Spare	-			
9.3.3 Responding entity (gsmSSF)	-			
9.3.3.1 Normal procedure	-			
9.3.3.2 Error handling	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.4 ApplyChargingReport procedure	-			
9.4.1 General description	X			
9.4.1.1 Parameters	X			
9.4.2 Invoking entity (gsmSSF)	-			
9.4.2.1 Normal procedure	-			
9.4.2.2 Error handling	-			
9.5 AssistRequestInstructions procedure	-			
9.5.1 General description		X		
9.5.1.1 Parameters		X		
9.5.2 Invoking entity (gsmSSF/gsmSRF)	-			
9.5.2.1 Normal procedure	-			
9.5.2.2 Error handling	-			
9.6 Spare	-			
9.7 CallInformationReport procedure	-			
9.7.1 General description	X			
9.7.1.1 Parameters	X			
9.7.2 Invoking entity (gsmSSF)	-			
9.7.2.1 Normal procedure	-			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.7.2.2 Error handling	-			
9.7.3 Spare	-			
9.8 CallInformationRequest procedure	-			
9.8.1 General description	X			
9.8.1.1 Parameters	X			
9.8.2 Spare	-			
9.8.3 Responding entity (gsmSSF)	-			
9.8.3.1 Normal procedure	-			
9.8.3.2 Error handling	-			
9.9 Cancel procedure	-			
9.9.1 General description	X			
9.9.1.1 Parameters	X			
9.9.2 Spare	-			
9.9.3 Responding entity (gsmSRF)	-			
9.9.3.1 Normal procedure	-			
9.9.3.2 Error handling	-			
9.9.4 Responding entity (gsmSSF)	-			
9.9.4.1 Normal procedure	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.9.4.2 Error handling	-			
9.10 Spare	-			
9.11 Connect procedure	-			
9.11.1 General description	X			
9.11.1.1 Parameters	X			
9.11.2 Spare	-			
9.11.3 Resp onding entity (gsmSSF)	-			
9.11.3.1 Normal procedure	-			
9.11.3.2 Error handling	-			
9.12 Connec tToResource procedure	-			
9.12.1 General description	X			
9.12.1.1 Parameters	X			
9.12.3 Resp onding entity (gsmSSF)	-			
9.12.3.1 Normal procedure	-			
9.12.3.2 Error handling	-			
9.13 Continue procedure	-			
9.13.1 General description	-			
9.13.1.1 Parameters	-			
9.13.2 Spare	-			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.13.3 Responding entity (gsmSSF)	-			
9.13.3.1 Normal procedure	-			
9.13.3.2 Error handling	-			
9.14 Disconnect ForwardConnection procedure	-			
9.14.1 General description	X			
9.14.1.1 Parameters	X			
9.14.2 Spare	-			
9.14.3 Responding entity (gsmSSF)	-			
9.14.3.1 Normal procedure	-			
9.14.3.2 Error handling	-			
9.15 EstablishTemporaryConnection procedure	-			
9.15.1 General description	X			
9.15.1.1 Parameters	X			
9.15.2 Spare	-			
9.15.3 Responding entity (gsmSSF)	-			
9.15.3.1 Normal procedure	-			
9.15.3.2 Error handling	-			
9.16 Spare	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.17 EventReportBCSM procedure	-			
9.17.1 General description	X			
9.17.1.1 Parameters	X			
9.17.2 Invoking entity (gsmSSF)	-			
9.17.2.1 Normal procedure	-			
9.17.2.2 Error handling	-			
9.18 FurnishChargingInformation procedure	-			
9.18.1 General description	X			
9.18.1.1 Parameters	X			
9.18.2 Spare	-			
9.18.3 Responding entity (gsmSSF)	-			
9.18.3.1 Normal procedure	-			
9.18.3.2 Error handling	-			
9.19 InitialDP procedure	-			
9.19.1 General description	X			
9.19.1.1 Parameters	X			
9.19.2 Invoking entity (gsmSSF)	-			
9.19.2.1 Normal procedure	-			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.19.2.2 Error handling	-			
9.19.3 Spare	-			
9.20 Spare	-			
9.21 PlayAnnouncement procedure	-			
9.21.1 General description	X	X		
9.21.1.1 Parameters	X	X		
9.21.2 Spare	-			
9.21.3 Responding entity (gsmSRF)	-			
9.21.3.1 Normal procedure	-			
9.21.3.2 Error handling	-			
9.22 PromptAndCollectUserInformation procedure	-			
9.22.1 General description	X			
9.22.1.1 Parameters	X			
9.22.2 Spare	-			
9.22.3 Responding entity (gsmSRF)	-			
9.22.3.1 Normal procedure	-			
9.22.3.2 Error handling	-			
9.23 ReleaseCall procedure	-			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.23.1 General description	X			
9.23.1.1 Parameters	X			
9.23.2 Spare	-			
9.23.3 Responding entity (gsmSSF)	-			
9.23.3.1 Normal procedure	-			
9.23.3.2 Error handling	-			
9.24 Spare	-			
9.25 RequestReportBCSMEvent procedure	-			
9.25.1 General description	X			
9.25.1.1 Parameters	X			
9.25.2 Spare	-			
9.25.3 Responding entity (gsmSSF)	-			
9.25.3.1 Normal procedure	-			
9.25.3.2 Error handling	-			
9.26 ResetTimer procedure	-			
9.26.1 General description	X			
9.26.1.1 Parameters	X			
9.26.2 Spare	-			
9.26.3 Responding entity (gsmSSF)	-			





Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
9.26.3.1 Normal procedure	-			
9.26.3.2 Error handling	-			
9.27 SendChargingInformation procedure	-			
9.27.1 General description	X			
9.27.1.1 Parameters	X			
9.27.2 Spare	-			
9.27.3 Responding entity (gsmSSF)	-			
9.27.3.1 Normal procedure	-			
9.27.3.2 Error handling	-			
9.28 Spare	-			
9.29 Specialized ResourceReport procedure	-			
9.29.1 General description	X			
9.29.1.1 Parameters	X			
9.29.2 Invoking entity (gsmSRF)	-			
9.29.2.1 Normal procedure		X		
9.29.2.2 Error handling		X		
10 Services assumed from TCAP	-			
10.1 Normal procedures	X			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
10.1.1 gsmSS F-to-gsmSCF messages	-			
10.1.1.1 gsmSSF related messages	X			
10.1.1.2 Spare	-			
10.1.1.3 SSME FSM related messages	X			
10.1.2 gsmSC F-to-gsmSSF messages	-			
10.1.2.1 SCSM FSM related messages	X			
10.1.2.2 SCME FSM related messages	X			
10.1.3 gsmSCF- to/from-gsmSRF messages	X			
10.2 Abnormal procedures	X			
10.2.1 gsmSCF- to-gsmSSF/relay gsmSRF messages	X			
10.2.2 gsmSSF/ gsmSRF-to-gsm SCF messages		X		
10.3 Dialogue establishment	X			
10.3.1 Sending of a TC-BEGIN request primitive	X			
10.3.2 Receipt of a TC-BEGIN indication	X			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
10.3.3 Receipt of the first TC-CONTINUE indication	X			
10.3.4 Receipt of a TC-END indication	X			
10.3.5 Receipt of a TC-U-ABORT indication			X	Note 6
10.3.6 Receipt of a TC-P-ABORT indication	X			
10.4 Dialogue continuation	X			
10.4.1 Sending entity	X			
10.4.2 Receiving entity	X			
10.5 Dialogue termination	X			
10.5.1 Sending of TC-END request	X			
10.5.2 Receipt of a TC-END indication	X			
10.6 User Abort	X			
10.6.1 Sending of TC-U-ABORT request	X			
10.6.2 Receipt of a TC-U-ABORT indication	X			
10.7 Provider Abort	X			
10.7.1 Receipt of a TC-P-ABORT indication	X			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
10.8 Procedures for CAP operations	-			
10.8.1 Operation invocation	X			
10.8.2 Operation invocation receipt	X			
10.8.3 Operation response	X			
10.8.4 Receipt of a response	-			
10.8.4.1 Receipt of TC-RESULT-NL indication	X			
10.8.4.2 Receipt of TC-RESULT-L indication	X			
10.8.4.3 Receipt of TC-U-ERROR indication	X			
10.8.4.4 Receipt of TC-U-REJECT indication	X			
10.8.4.5 Receipt of a TC-L-REJECT indication	X			
10.8.4.6 Receipt of a TC-L-CANCEL indication	X			
10.8.5 Other events	-			
10.8.5.1 Receipt of a TC-U-REJECT	X			
10.8.5.2 Receipt of a TC-R-REJECT indication	X			



Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
10.8.5.3 Receipt of a TC-L-REJECT indication	X			
10.8.5.4 Receipt of a TC-NOTICE indication	X			
10.9 Mapping on to TC services	-			
10.9.1 Dialogue control	X			
10.9.1.1 Destination address	X			
10.9.1.2 Originating address	X			
10.9.1.3 Dialogue ID	X			
10.9.1.4 Application-co ncontext-name	X			
10.9.1.5 User information	X			
10.9.1.6 Component present	X			
10.9.1.7 Termination	X			
10.9.1.8 Quality of service	X			
10.9.2 Operation procedures	-			
10.9.2.1 Invoke ID	X			
10.9.2.2 Linked ID	X			
10.9.2.3 Dialogue ID	X			
10.9.2.4 Class	X			

Table 2 GSM 09.78 Compliance

References	C	N	P	Comments
10.9.2.5 Operation	X			
10.9.2.6 Error	X			
10.9.2.7 Parameters	X			
10.9.2.8 Time out	X			
10.9.2.9 Last component	X			
10.9.2.10 Problem code	X			

## 2.4 3GPP TS 29.078 V4.8.0 (2003-03); 3rd Generation Partnership Project; Technical Specification Group Core Network; Customised Applications for Mobile Network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) Specification (Release 4)

3GPP TS 29.078 V4.8.0 (2003-03); 3rd Generation Partnership Project; Technical Specification Group Core Network; Customised Applications for Mobile Network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) Specification (Release 4)

Only the SSF node side of the CAP 3 SMS operations is implemented and supported.

## 2.5 3GPP TS 29.078 v7.4.0 (2007–10); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (Release 7)

3GPP TS 29.078 v7.4.0 (2007–10); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (Release 7)

Only the SSF node side of the CAP 4 SMS operations is implemented and supported.



## 2.6 3GPP TS 29.078 v9.2.0 (2010–07); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (3GPP TS 29.078 version 9.2.0 Release 9)

3GPP TS 29.078 v9.2.0 (2010–07); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (3GPP TS 29.078 version 9.2.0 Release 9)

The following Application Contexts are supported:

- capssf-scfGenericAC

The following operations are supported for Application Context capssf-scfGenericAC:

- InitialDP
- ContinueWithArgument







### 3 Notes and Comments

Note 1: SSF functionality is partially implemented.

Application Context supported for SSF: INAP-CS1-SSP-to-SCP-AC.

Operation supported:

```
InitialDP
ApplyCharging
ApplyChargingReport
CallGap
CallInformationRequest
CallInformationReport
CollectInformation
Connect
ConnectToResource
Continue
DisconnectForwardConnection
EstablishTemporaryConnection
EventNotificationCharging
EventReportBCSM
FurnishChargingInformation
ReleaseCall
RequestNotificationChargingEvent
RequestReportBCSMEvent
ResetTimer
SendChargingInformation
```

Note 2: Only Signalling System No. 7 may be used.

Note 3: The INAP module relies on the application to do its part. The INAP module handles message coding, message decoding and validation.

Note 4: Bearer control signalling is left to the application to handle.

Note 5: DSS1 is not supported by INAP.

Note 6: In case of receiving T\_BEGIN\_ind with unknown AC INAP sends INAP\_BEGIN\_ind to the user and discards any operations in this dialogue. The user is then only allowed to issue an INAP\_ABORT\_req to provide the other side with alternative AC.

Note 7: See statement for subclause 10.8 as well (including subclauses)

Note 8: See statement for subclauses 10.1 and 10.2 as well (including subclauses).

Note 9: See statement for subclauses 10.3.1 and 10.3.2 as well.

Note 11: See statement for subclause 10.2 as well (including subclauses).

Note 12: CCF functionality is not implemented.

Note 13: The INAP uses a different user interface so the last component parameter becomes implicit.

Note 14: The INAP user is responsible for coding of SCCP addresses.

Note 15: Current INAP implementation supports CAP functionality for an SSF and SCF nodes only.

Note 16: Current INAP implementation only supports operation for ASEs are listed in Note 17

Note 17: The following CAP ASEs are supported:

- GSM-SCF-activation-ASE,
- Assist-connection-establishment-ASE,
- Non-assisted-connection-establishment-ASE,
- Generic-disconnect-resource-ASE,
- Connect-ASE,
- Call-handling-ASE,
- BCSM-event-handling-ASE,
- Charging-ASE,
- GSM-SSF-call-processing-ASE,
- Timer-ASE,
- Billing-ASE,
- Call-report-ASE,
- Signalling-control-ASE,
- Specialized-resource-control-ASE,
- Cancel-ASE,
- Activity-test-ASE

Note 18: Only CAP-v2-gsmSSF-to-gsmSCF-AC is supported.



## Reference List

### ETSI and 3GPP

- [1] *ETSI Intelligent Network (IN); Intelligent Network Capability Set 1 (CS1), Core Intelligent Network Application Protocol (INAP) Part 1: Protocol Specification, ETS 300 374-1, September 1994*
- [2] *GSM 09.78 (TS 101 046) "Digital Cellular Telecommunications System (Phase 2+); Customised Applications for Mobile Network Enhanced Logic (CAMEL); CAMEL Application Part (CAP) Specification (GSM 09.78 Version 7.1.0 Release 1998)"*
- [3] *3GPP TS 29.078 V4.8.0 (2003-03); 3rd Generation Partnership Project; Technical Specification Group Core Network; Customised Applications for Mobile Network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) Specification (Release 4)*
- [4] *3GPP TS 29.078 v7.4.0 (2007-10); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (Release 7)*
- [5] *3GPP TS 29.078 v9.2.0 (2010-07); Digital Cellular Telecommunications System (Phase 2+); Universal Mobile Telecommunications System (UMTS); Customized Applications for Mobile Network Enhanced Logic (CAMEL) Phase X; CAMEL Application Part (CAP) Specification (3GPP TS 29.078 version 9.2.0 Release 9)*

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