Technical Specification Group Services and System Aspects**TSGS#19(03)0152**Meeting #19, Birmingham, UK, 17-20 March 2003

ITU	INTERNATIONAL TELECOMMUNICATION UNI	SSG - LS 15 - E
	TELECOMMUNICATION	
	STANDARDIZATION SECTOR	
	STUDY PERIOD 2001-2004	Original: English
Question(s):	Q.3/SSG	
	LIAISON STATEM	ENT
Source:	SSG	
Title:	Received comments to Rec. Q.1741.2 approval relevant to 3GPP	
	LIAISON STATEM	ENT
To:	3GPP SA and CN Chairmen	
Approval:	SSG by correspondence	
For:	Information	
Deadline:	N/A	
Contact:	Leslie Graf	Tel: +61 414 301468
	Ericsson Asiapacificlabs Australia	Fax: +61 3 98197607
	Australia	Email:
		Leslie.Graf@ericsson.com.au
Contact:	Ilka Hyvarinen	Email:
	Nokia - Finland	ilkka.hyvarinen@nokia.com

Dear Messrs. Andersen and Hayes,

During the approval process for our draft Recommendation Q.1741.2 (IMT 2000 References to Release 4 of GSM evolved UMTS Core Network with UTRAN Access Network) which references the specifications transposed by the SDOs which make up 3GPP, a formal comment was received from NEC (Japan.) We attach this comment for your consideration within your groups. This comment points out a number of misalignments between the definitions of abbreviations used in the specifications produced by your groups and the 3GPP TS on vocabulary.

We are resolving this matter in Recommendation Q.1741.2 by using the term as defined in the 3GPP vocabulary document and also indicating the term used in the referenced documents in parentheses. The details of our analysis and resolution are provided in the second attachment.

The nature of these comments was such that the SSG considered it appropriate to declare Rec. Q.1741.2 approved with typographical corrections.

We hope that your groups find this information of benefit.

Kind regards,

Attention: Some or all of the material attached to this liaison statement may be subject to ITU copyright. In such a case this will be indicated in the individual document.

Such a copyright does not prevent the use of the material for its intended purpose, but it prevents the reproduction of all or part of it in a publication without the authorization of ITU.

- 2 -SSG - LS - E

Leslie Graf (SSG Vice Chairman)

Ilka Hyvarinen (Rapporteur Q.3/SSG)

Q.3/SSG Rapporteur's observations on the Last Call comments of Q.1741.2 by NEC Corporation December 2002.

Dear Reader,

Please see below my observations on the Last Call comments on draft new Rec. Q.1741.2 sent by NEC Corporation in December 2002. I have noticed that 3GPP documents have differences in the expansions of some abbreviations.

My observations –starting with "Rapporteur's Comment" are inserted into the original proposals by NEC. If no comment => proposal accepted. See details below.

Helsinki, 7 January 2003

Ilkka Hyvärinen

Rapporteur, Q.3/SSG

Ilkka.hyvarinen@nokia.com

Beginning of document

Editorial Comments:

• There are some wrong acronym descriptions and typos in section 4 "Abbreviations and acronyms" as follows.

Basically, these abbreviations and acronyms should be adapted to 3GPP's.

- ACELP: A hyphen is needed between "Code" and "Excited". And, a last word "Coder" is not needed.
- > AMR: A Hyphen is not needed between "Multi" and "Rate".

<u>Rapporteur's Comment:</u> There seems to be mismatching between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specifications quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: AMR Adaptive Multi Rate

In documents TS 26.071, TS 26.073, TS 26.074, TS 26.077, TS 26.090, TS 26.092, TS 26.101, TS 26.102 and TS 26.104 – directly quoted in Q.1741.2 - the term exists in in format: *Adaptive Multi-Rate (AMR)*

In documents TS 26.093 and TS 26.104 – directly quoted in Q.1741.2 - the term exists in both forms *Adaptive Multi-Rate* and *Adaptive Multi Rate*

Resolution: will appear in Rec. Q.1741.2 as:

AMR: Adaptive Multi Rate (also appears as "Adaptive Multi-Rate")

> **AoCC:** The round brackets are not needed.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: *AoCC* Advice of Charge Charging

Document TS 23.086 -quoted in Q.1741.2 - uses term: Advice of Charge (Charging) (AoCC)

Resolution: will appear in Rec. Q.1741.2 as:

AoCC: Advice of Charge Charging (also appears as "Advice of Charge (Charging)")

> **AoCI:** The round brackets are not needed.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: AoCI Advice of Charge Information

Document TS 23.086 -quoted in Q.1741.2 -uses term: Advice of Charge (Information)(AoCI)

Resolution: will appear in Rec. Q.1741.2 as:

AoCI: Advice of Charge Information (also appears as "Advice of Charge (Information)")

> **ARIB:** The last word "Business" should be plural.

BAIC: It should be put "supplementary service" at last part.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: BAIC Barring of All Incoming Calls supplementary service

Document TS 23.088 -quoted in Q.1741.2 - uses term Barring of all incoming calls (BAIC)

Resolution: will appear in Rec. Q.1741.2 as:

BAIC: Barring of All Incoming Calls supplementary service (also appears without "supplementary service")

BAOC: It should be put "supplementary service" at last part.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specifications quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: BAOC Barring of All Outgoing Calls supplementary service

Document TS 23.088 -quoted in Q.1741.2 - uses term: Barring of all outgoing calls (BAOC)

Resolution: will appear in Rec. Q.1741.2 as:

BAOC: Barring of All Outgoing Calls supplementary service (also appears without "supplementary service")

- **BSC:** "Controller" is correct, not "Control".
- **BSSMAP:** "Subsystem" is correct, not "System".

Rapporteur's Comment:

TR 21.905 v 4.4.0 defines term: *BSSMAP* as *Base Station System Management Application Part*, and also document TS 23.009 –quoted in Q.1741.2 – defines term *BSS* as *Base Station System*, which is the term used in the current Q.1741.2.

Resolution: no change made in Rec. Q.1741.2.

CCBS: The order of words is different from using in 3GPP.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3GPP documents:

TR 21.905 v 4.4.0 uses term: *CCBS* Completion of Calls to Busy Subscriber, which is also term used by documents TS 23.093 and TS 24.093 (quoted in Q.1741.2)

Document TS 23.088 -quoted in Q.1741.2 - use term: *the Call Completion to Busy Subscriber* (CCBS) service

Resolution: will appear in Rec. Q.1741.2 as:

CCBS: Completion of Calls to Busy Subscriber (also appears as "Call Completion to Busy Subscriber")

> **CFNRc:** It should be put "supplementary service" at last part.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specifications quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: *CFNRc* supplementary service *Call Forwarding on mobile subscriber Not Reachable*

Documents TS 23.082 and TS 24.082 quoted in Q.1741.2 use term: *Call forwarding on mobile* subscriber not reachable (CFNRc)

Resolution: will appear in Rec. Q.1741.2 as:

CFNRc: Call Forwarding on mobile subscriber Not Reachable supplementary service (also appears without "supplementary service")

> **CFNRy:** It should be put "supplementary service" at last part.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specifications quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: CFNRy Call Forwarding on No Reply supplementary service

Documents TS 23.082 and TS 24.082 -quoted in Q.1741.2 - use term: *Call forwarding on no reply* (*CFNRy*)

<u>Resolution:</u> will appear in Rec. Q.1741.2 as:

CFNRy: Call Forwarding on No Reply supplementary service (also appears without "supplementary service")

DTMF: "Multiple" is correct in general.

But TS23.014 of 3GPP also used "Multi" instead of "Multiple". It seems 3GPP also has included typo. Therefore, we need to discuss and decide about this issue whether should be correct or same as 3GPP.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification referenced in Q.1741.2:

TR 21.905 v 4.4.0 uses term: DTMF Dual Tone Multiple Frequency

Document TS 23.014 -referenced in Q.1741.2- uses term: Dual Tone Multi Frequency (DTMF)

<u>Resolution:</u> proposed change agreed and made in Rec. Q.1741.2.

> **eMLPP:** The last word "service" should be removed.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specifications referenced in Q.1741.2:

TR 21.905 v 4.4.0 uses term: *eMLPP* enhanced Multi-Level Precedence and Pre-emption

Documents TS 22.067, TS 23.067 and TS24.067.082 use term: *enhanced Multi-Level Precedence* and Pre-emption service (*eMLPP*)

<u>Resolution:</u> will appear in Rec. Q.1741.2 as:

eMLPP: enhanced Multi-Level Precedence and Pre-emption (also appears as "enhanced Multi-Level Precedence and Pre-emption service")

- **ETSI:** There is a typo in word "Institute".
- **GERAN:** The slash is needed between "GSM" and "EDGE".
- **GSN:** "Node" should be plural.
- ➢ IC: "Circuits" should be singular.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: IC Integrated Circuit

Documents TS 31.110 –directly quoted in Q.1741.2- uses term: Integrated Circuits (IC)

Resolution: will appear in Rec. Q.1741.2 as:

IC: Integrated Circuit (also appears as "Integrated Circuits")

▶ IMSI: "Subscriber" is correct, not "Station".

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: IMSI International Mobile Subscriber Identity

Document TS 23.002 –directly quoted in Q.1741.2- uses both the terms: the International Mobile Station Identity (IMSI) and the International Mobile Subscriber Identity (IMSI)

Resolution: will appear in Rec. Q.1741.2 as:

IMSI: International Mobile Subscriber Identity (also appears as "International Mobile Station Identity")

- ▶ **ISDN:** "Digital" is correct, not "Data".
- **LR:** "Registration" is correct, not "Request".
- MIME: "Multi purpose" should be one word "Multipurpose". And "Extension" should be plural.
- > **MO-LR:** "Originating" is correct, not "Originated".
- > MSISDN: "Subscriber" is correct, not "Station". And "International" is not needed.

There is a sentence "The Mobile Station International ISDN number (MSISDN)" in section 7.2.3 "Visitor Location Register (VLR)". This is different from the abbreviation in 3GPP TR21.905 V6.0.0. We will need to confirm and discuss about this issue.

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: *MSISDN Mobile Subscriber ISDN Number*. (Also TR 21.905 v.6.0.0 uses term *MSISDN Mobile Subscriber ISDN Number*, but this document is for 3GPP Release 6, not for Release 4)

Document TS 23.002 –directly quoted in Q.1741.2- uses term: *Mobile Station International ISDN number(s) (MSISDN)*

Resolution: will appear in Rec. Q.1741.2 as:

MSISDN: Mobile Subscriber ISDN Number (also appears as "Mobile Station International ISDN Number(s)")

- > NM: "Manager" is correct, not "Management".
- > **OSI:** "Interconnection" should be singular.
- > **PSTN:** "Switched" is correct, not "Switching".
- **RNS:** "Subsystem" is correct, not "System".

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: RNS Radio Network Subsystem

Document TS 23.041 -directly quoted in Q.1741.2- uses term: Radio Network System (RNS)

Resolution: will appear in Rec. Q.1741.2 as:

RNS: Radio Network Subsystem (also appears as "Radio Network System")

- SM-RL: "Layer" should be put at the end.
- > **TMSI:** "Subscriber" is correct, not "Station".

<u>Rapporteur's Comment:</u> There seems to be a mismatch between 3G Vocabulary TR 21.905 v4.4.0 and actual 3GPP specification quoted in Q.1741.2:

TR 21.905 v 4.4.0 uses term: TMSI Temporary Mobile Subscriber Identity

Document TS 23.002 –directly quoted in Q.1741.2- uses term: Temporary Mobile Station Identity (TMSI)

Resolution: will appear in Rec. Q.1741.2 as:

TMSI: Temporary Mobile Subscriber Identity (also appears as "Temporary Mobile Station Identity")

- **TTC:** "The" is not needed.
- > XML: A Hyphen is not needed between "Mark" and "up".

Many wrong abbreviations like as above are used not only in section 4, but also in the other sections of this recommendation. Therefore it needs to confirm wrong abbreviations throughout this recommendation regarding above words at least.

Marked up and clean version of section 4 of Draft Rec. Q.1741.2 are attached reflecting the changes indicated above to assist in the comment resolution and editing process.

End of document

Editorial Comments:

• There are some wrong acronym descriptions and typos in section 4 "Abbreviations and acronyms" as follows.

Basically, these abbreviations and acronyms should be adapted to 3GPP's.

- ACELP: A hyphen is needed between "Code" and "Excited". And, a last word "Coder" is not needed.
- > **AMR:** A Hyphen is not needed between "Multi" and "Rate".
- > AoCC: The round brackets are not needed.
- > **AoCI:** The round brackets are not needed.
- > **ARIB:** The last word "Business" should be plural.
- **BAIC:** It should be put "supplementary service" at last part.
- **BAOC:** It should be put "supplementary service" at last part.
- **BSC:** "Controller" is correct, not "Control".
- **BSSMAP:** "Subsystem" is correct, not "System".
- **CCBS:** The order of words is different from using in 3GPP.
- **CFNRc:** It should be put "supplementary service" at last part.
- > **CFNRy:** It should be put "supplementary service" at last part.
- **DTMF:** "Multiple" is correct in general.

But TS23.014 of 3GPP also used "Multi" instead of "Multiple". It seems 3GPP also has included typo. Therefore, we need to discuss and decide about this issue whether should be correct or same as 3GPP.

- > **eMLPP:** The last word "service" should be removed.
- **ETSI:** There is a typo in word "Institute".
- **GERAN:** The slash is needed between "GSM" and "EDGE".
- ➢ GSN: "Node" should be plural.
- > IC: "Circuits" should be singular.
- > **IMSI:** "Subscriber" is correct, not "Station".
- ▶ **ISDN:** "Digital" is correct, not "Data".
- **LR:** "Registration" is correct, not "Request".
- MIME: "Multi purpose" should be one word "Multipurpose". And "Extension" should be plural.
- > **MO-LR:** "Originating" is correct, not "Originated".
- MSISDN: "Subscriber" is correct, not "Station". And "International" is not needed.

There is a sentence "The Mobile Station International ISDN number (MSISDN)" in section 7.2.3 "Visitor Location Register (VLR)". This is different from the abbreviation in 3GPP TR21.905 V6.0.0. We will need to confirm and discuss about this issue.

- > NM: "Manager" is correct, not "Management".
- > **OSI:** "Interconnection" should be singular.
- > **PSTN:** "Switched" is correct, not "Switching".
- **RNS:** "Subsystem" is correct, not "System".
- SM-RL: "Layer" should be put at the end.
- > TMSI: "Subscriber" is correct, not "Station".
- **TTC:** "The" is not needed.
- **XML:** A Hyphen is not needed between "Mark" and "up".

Many wrong abbreviations like as above are used not only in section 4, but also in the other sections of this recommendation. Therefore it needs to confirm wrong abbreviations throughout this recommendation regarding above words at least.

Marked up and clean versions of section 4 of Draft Rec. Q.1741.2 are attached reflecting the changes indicated above to assist in the comment resolution and editing process.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

2G	Second Generation
3G	Third Generation
3GMS	Third Generation Mobile Communication System
3GPP	Third Generation Partnership Project
AAL2	ATM Adaptation Layer type 2
ACELP	Algebraic Code-Code-Excited Linear Prediction-Coder
AES	Advanced Encryption Standard
AID	Application IDentifier
AMF	Authentication Management Field
AMR	Adaptive Multi-Rate
ANSI	American National Standards Institute
AoC	Advice of Charge
AoCC	Advice of Charge (Charging)
AoCI	Advice of Charge (Information)
API	Application Programming Interface
ARIB	Association of Radio Industries and Businesses
ASE	Application Service Element
AT-command	ATtension Command
ATM	Asynchronous Transfer Mode
AuC	Authentication Centre
BAIC	Barring of All Incoming Calls supplementary service
BAOC	Barring of All Outgoing Calls supplementary service
BICC	Bearer Independent Call Control
BIC-Roam	Barring of Incoming Calls when Roaming outside the home PLMN country
BOIC	Barring of Outgoing International Calls
BOIC-exHC	Barring of Outgoing International Calls except those directed to the Home PLMN Country
BS	Base Station
BS	Bearer Service
BSC	Base Station Controller
BSS	Base Station System
BSSMAP	Base Station System Subsystem Management Application Part

BTS	Base Transceiver Station
CAI	Charge Advise Information
CAMEL	Customised Applications for Mobile network Enhanced Logic
CAP	CAMEL Application Part
CB	Call Barring
CBC	Cell Broadcast Centre
CBS	Cell Broadcast Service
CC	Call Control
CCBS	Call-Completion of Calls to Busy Subscriber
CD	Call Deflection
CDR	Charging Data Record
CF	Call Forwarding
CFB	Call Forwarding on mobile subscriber Busy
CFNRc	Call Forwarding on mobile subscriber Not Reachable supplementary service
CFNRy	Call Forwarding on No Reply supplementary service
CFU	Call Forwarding Unconditional
CGF	Charging Gateway Function
CLI	Calling Line Identity
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
СМ	Configuration Management
CMIP	Common Management Information Protocol
CN	Core Network
CNAP	Calling Name Presentation
COLP	Connected Line identification Presentation
COLR	Connected Line identification Restriction
CORBA	Common Object Request Broker Architecture
CS	Circuit Switched
CSE	CAMEL Service Environment
CS-MGW	Circuit Switched Media GateWay
CUG	Closed User Group
CW	Call Waiting
CWTS	China Wireless Telecommunication Standard Group
DCE	Data Circuit terminating Equipment

DTE	Data Terminal Equipment
DTMF	Dual Tone Multi <u>ple</u> Frequency
DTX	Discontinuous Transmission
ECT	Explicit Call Transfer supplementary service
EF	Elementary Files
EGPRS	Enhanced GPRS
EIR	Equipment Identity Register
EM	Element Manager
eMLPP	Enhanced Multi-Level Precedence and Pre-emption-service
EN	European Norm
EP	Elementary Procedure
ETSI	European Telecommunications Standards Institute
FDD	Frequency Division Duplex
FM	Fault Management
GAD	Geographical Area Description
GBS	General Bearer Services
GERAN	GSM-GSM/EDGE Radio Access Network
GGSN	Gateway GPRS Support Node
GLR	Gateway Location Register
GMLC	Gateway Mobile Location Centre
GMSC	Gateway MSC
GPRS	General Packet Radio Service
gprsSSF	GPRS Service Switching Function
GPS	Global Positioning System
GSM	Global System for Mobile communications
GSM-EFR	GSM Enhanced Full Rate speech Codec
gsmSCF	GSM Service Control Function
gsmSRF	GSM Specialised Resource Function
gsmSSF	GSM Service Switching Function
GSN	GPRS Support Nodes
GT	Global Title
GTP	GPRS Tunnelling Protocol
HDLC	High Level Data Link Control
HE	Home Environment

HLR	Home Location Register
HPLMN	Home Public Land Mobile Network
HSCSD	High Speed Circuit Switched Data
IC	Integrated Circuits
ICC	Integrated Circuit Card
IDL	Interface Definition Language
IETF	Internet Engineering Task Force
IMEI	International Mobile Equipment Identity
IM-GSN	Intermediate GPRS Serving Node
IM-MGW	Intermediate Media GateWay
IM-MSC	Intermediate Mobile-services Switching Centre
IMSI	International Mobile Station Subscriber Identity
IN	Intelligent Network
INAP	Intelligent Network Application Protocol
IP	Internet Protocol
IPDL	Idle Period Downlink
IPLMN	Interrogating PLMN
IrDA	Infrared Data Association
IRP	Integration Reference Point
IS	Information Service
ISDN	Integrated Services Data Digital Network
ISO	International Organisation for Standardisation
ISUP	ISDN User Part
Itf-N	Interface N
IWF	Interworking Function
Κ	Subscriber key
LAN	Local Area Network
LCS	Location Services
LMSI	Local Mobile Station Identity
LMU	Location Measurement Unit
LR	Location Request Registration
MAP	Mobile Application Part
MC	Multicall
ME	Mobile Equipment

MExE	Mobile station application Execution Environment
MGC	Media Gateway Controller
MGW	Media GateWay
MIM	Management Information Model
MIME	Multi-purpose Internet Mail Extensions
MLC	Mobile Location Centre
MM	Mobility Management
MMI	Man-Machine Interface
MMS	Multimedia Messaging Service
MNP	Mobile Number Portability
МО	Mobile Originated
MO-LR	Mobile Originated Originating Location Request
MPTY	MultiParty
MR	Multi Rate
MS	Mobile Station
MSC	Mobile Switching Centre
MSISDN	Mobile Station-Subscriber International-ISDN number
MSP	Multiple Subscriber Profile
MSRN	Mobile Station Roaming Number
MT	Mobile Terminal
MT	Mobile Termination
MTP	Message Transfer Part
NE	Network Element
NITZ	Network Identity and Time Zone
NM	Network ManagementManager
NRM	Network Resource Model
NW	Network
OACSU	Off-Air Call Set-Up
ODB	Operator Determined Barring
OoBTC	Out of Band Transcoder Control
OP	OPerator
OS	Operations System
OSA	Open Service Architecture
OSI	Open Systems Interconnections

OTDOA	Observed Time Difference Of Arrival
PBX	Private Branch eXchange
PCM	Pulse Code Modulation
PDC	Personal Digital Communication
PDC-EFR	ARIB PDC-EFR 6.7 kBit/s speech Codec
PDN	Public Data Network
PDP	Packet Data Protocol
PDU	Protocol Data Unit
PI	Presentation Indicator
PIX	Proprietary application Identifier eXtension
PLMN	Public Land Mobile Network
PM	Performance Management
PP	Point-to-Point
PS	Packet Switched
PSE	Personal Service Environment
PSS	Packet-switched Streaming Service
PSTN	Public Switching Switched Telephone Network
QoS	Quality of Service
RANAP	Radio Access Network Application Part
RAND	RANDom number (used for authentication)
RID	Registered application provider Identifier
RLC/MAC	Radio Link Control/ Medium Access Control
RLP	Radio Link Protocol
RNC	Radio Network Controller
RNS	Radio Network SystemSubsystem
RR	Radio Resources
RTP	Real Time Protocol
SAGE	Security Algorithms Group of Experts
SAT	SIM Application Toolkit
SC	Service Centre (used for SMS)
SCCP	Signalling Connection Control Part
SCF	Service Control Function (IN context), Service Capability Feature (VHE/OSA context)
SCR	Source Controlled Rate
SCTP	Stream Control Transmission Protocol

SDL	Specification Description Language
SDO	Standards Development Organisation
SGSN	Serving GPRS Support Node
SGW	Signalling GateWay
SID	Silence Descriptor
SIM	GSM Subscriber Identity Module
SIWFS	Shared Inter Working Function Server
SM	Session Management
SMC	Short Message Control
SMIL	Synchronised Multimedia Integration Language
SM-RL	Short Message Relay Layer
SMLC	Serving Mobile Location Centre
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SP	Service Provider
SP	Switching Point
SQN	Sequence number
SOR	Support of Optimal Routing
SRNC	Serving Radio Network Controller
SRNS	Serving RNS
SS	Supplementary Service
SS	Solution Set
SS7	Signalling System No 7
SSAP	Supplementary Service Application Part
SSF	Service Switching Function
T1	Standards Committee T1 Telecommunications
ТА	Terminal Adaptation
TAF	Terminal Adaptation Function
T-BCSM	Terminating Basic Call State Model
TCAP	Transaction Capabilities
TCH/F	A full rate Traffic CHannel
TDD	Time Division Duplex
TDMA	Time Division Multiple Access
TDMA_EFR	TIA IS-641 Enhanced speech Codec

TDMA_USI	TIA TDMA-US1 (12.2 kBit/s Codec, similar to GSM-EFR)
TE	Terminal Equipment
TFO	Tandem Free Operation
TIA	Telecommunications Industry Association
TMSI	Temporary Mobile Station-Subscriber Identity
TrFO	Transcoder Free Operation
TS	Technical Specification
TSG	Technical Specification Group
TTA	Telecommunications Technology Association
TTC	The-Telecommunication Technology Committee
TUP	Telephone User Part (SS7)
UDP	User Datagram Protocol
UE	User Equipment
UI	User Interface
UICC	Universal IC Card
UIM	User Identity Module
UMTS	Universal Mobile Telecommunications System
USAT	USIM Application Toolkit
USIM	Universal Subscriber Identity Module
USSD	Unstructured Supplementary Service Data
UTRA	Universal Terrestrial Radio Access
UTRA-FDD	Universal Terrestrial Radio Access- Frequency Division Duplex
UTRAN	Universal Terrestrial Radio Access Network
UTRA-TDD	Universal Terrestrial Radio Access- Time Division Duplex
UUS	User-to-User Signalling
VAD	Voice Activity Detector
VBS	Voice Broadcast Service
VGCS	Voice Group Call Service
VHE	Virtual Home Environment
VLR	Visitor Location Register
VMSC	Visited Mobile Switching Centre
VPLMN	Visited Public Land Mobile Network
XML	Extensible Mark-up Language
WAP	Wireless Application Protocol



4 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

2G	Second Generation
3G	Third Generation
3GMS	Third Generation Mobile Communication System
3GPP	Third Generation Partnership Project
AAL2	ATM Adaptation Layer type 2
ACELP	Algebraic Code-Excited Linear Prediction
AES	Advanced Encryption Standard
AID	Application IDentifier
AMF	Authentication Management Field
AMR	Adaptive Multi Rate
ANSI	American National Standards Institute
AoC	Advice of Charge
AoCC	Advice of Charge Charging
AoCI	Advice of Charge Information
API	Application Programming Interface
ARIB	Association of Radio Industries and Businesses
ASE	Application Service Element
AT-command	ATtension Command
ATM	Asynchronous Transfer Mode
AuC	Authentication Centre
BAIC	Barring of All Incoming Calls supplementary service
BAOC	Barring of All Outgoing Calls supplementary service
BICC	Bearer Independent Call Control
BIC-Roam	Barring of Incoming Calls when Roaming outside the home PLMN country
BOIC	Barring of Outgoing International Calls
BOIC-exHC	Barring of Outgoing International Calls except those directed to the Home PLMN Country
BS	Base Station
BS	Bearer Service
BSC	Base Station Controller
BSS	Base Station System
BSSMAP	Base Station Subsystem Management Application Part

BTS	Base Transceiver Station
CAI	Charge Advise Information
CAMEL	Customised Applications for Mobile network Enhanced Logic
CAP	CAMEL Application Part
CB	Call Barring
CBC	Cell Broadcast Centre
CBS	Cell Broadcast Service
CC	Call Control
CCBS	Completion of Calls to Busy Subscriber
CD	Call Deflection
CDR	Charging Data Record
CF	Call Forwarding
CFB	Call Forwarding on mobile subscriber Busy
CFNRc	Call Forwarding on mobile subscriber Not Reachable supplementary service
CFNRy	Call Forwarding on No Reply supplementary service
CFU	Call Forwarding Unconditional
CGF	Charging Gateway Function
CLI	Calling Line Identity
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction
СМ	Configuration Management
CMIP	Common Management Information Protocol
CN	Core Network
CNAP	Calling Name Presentation
COLP	Connected Line identification Presentation
COLR	Connected Line identification Restriction
CORBA	Common Object Request Broker Architecture
CS	Circuit Switched
CSE	CAMEL Service Environment
CS-MGW	Circuit Switched Media GateWay
CUG	Closed User Group
CW	Call Waiting
CWTS	China Wireless Telecommunication Standard Group
DCE	Data Circuit terminating Equipment

DTE	Data Terminal Equipment
DTMF	Dual Tone Multiple Frequency
DTX	Discontinuous Transmission
ECT	Explicit Call Transfer supplementary service
EF	Elementary Files
EGPRS	Enhanced GPRS
EIR	Equipment Identity Register
EM	Element Manager
eMLPP	Enhanced Multi-Level Precedence and Pre-emption
EN	European Norm
EP	Elementary Procedure
ETSI	European Telecommunications Standards Institute
FDD	Frequency Division Duplex
FM	Fault Management
GAD	Geographical Area Description
GBS	General Bearer Services
GERAN	GSM/EDGE Radio Access Network
GGSN	Gateway GPRS Support Node
GLR	Gateway Location Register
GMLC	Gateway Mobile Location Centre
GMSC	Gateway MSC
GPRS	General Packet Radio Service
gprsSSF	GPRS Service Switching Function
GPS	Global Positioning System
GSM	Global System for Mobile communications
GSM-EFR	GSM Enhanced Full Rate speech Codec
gsmSCF	GSM Service Control Function
gsmSRF	GSM Specialised Resource Function
gsmSSF	GSM Service Switching Function
GSN	GPRS Support Nodes
GT	Global Title
GTP	GPRS Tunnelling Protocol
HDLC	High Level Data Link Control
HE	Home Environment

HLR	Home Location Register
HPLMN	Home Public Land Mobile Network
HSCSD	High Speed Circuit Switched Data
IC	Integrated Circuit
ICC	Integrated Circuit Card
IDL	Interface Definition Language
IETF	Internet Engineering Task Force
IMEI	International Mobile Equipment Identity
IM-GSN	Intermediate GPRS Serving Node
IM-MGW	Intermediate Media GateWay
IM-MSC	Intermediate Mobile-services Switching Centre
IMSI	International Mobile Subscriber Identity
IN	Intelligent Network
INAP	Intelligent Network Application Protocol
IP	Internet Protocol
IPDL	Idle Period Downlink
IPLMN	Interrogating PLMN
IrDA	Infrared Data Association
IRP	Integration Reference Point
IS	Information Service
ISDN	Integrated Services Digital Network
ISO	International Organisation for Standardisation
ISUP	ISDN User Part
Itf-N	Interface N
IWF	Interworking Function
K	Subscriber key
LAN	Local Area Network
LCS	Location Services
LMSI	Local Mobile Station Identity
LMU	Location Measurement Unit
LR	Location Registration
MAP	Mobile Application Part
MC	Multicall
ME	Mobile Equipment

MExE	Mobile station application Execution Environment
MGC	Media Gateway Controller
MGW	Media GateWay
MIM	Management Information Model
MIME	Multipurpose Internet Mail Extensions
MLC	Mobile Location Centre
MM	Mobility Management
MMI	Man-Machine Interface
MMS	Multimedia Messaging Service
MNP	Mobile Number Portability
МО	Mobile Originated
MO-LR	Mobile Originating Location Request
MPTY	MultiParty
MR	Multi Rate
MS	Mobile Station
MSC	Mobile Switching Centre
MSISDN	Mobile Subscriber ISDN number
MSP	Multiple Subscriber Profile
MSRN	Mobile Station Roaming Number
MT	Mobile Terminal
MT	Mobile Termination
MTP	Message Transfer Part
NE	Network Element
NITZ	Network Identity and Time Zone
NM	Network Manager
NRM	Network Resource Model
NW	Network
OACSU	Off-Air Call Set-Up
ODB	Operator Determined Barring
OoBTC	Out of Band Transcoder Control
OP	OPerator
OS	Operations System
OSA	Open Service Architecture
OSI	Open Systems Interconnection

OTDOA	Observed Time Difference Of Arrival
PBX	Private Branch eXchange
РСМ	Pulse Code Modulation
PDC	Personal Digital Communication
PDC-EFR	ARIB PDC-EFR 6.7 kBit/s speech Codec
PDN	Public Data Network
PDP	Packet Data Protocol
PDU	Protocol Data Unit
PI	Presentation Indicator
PIX	Proprietary application Identifier eXtension
PLMN	Public Land Mobile Network
PM	Performance Management
PP	Point-to-Point
PS	Packet Switched
PSE	Personal Service Environment
PSS	Packet-switched Streaming Service
PSTN	Public Switched Telephone Network
QoS	Quality of Service
RANAP	Radio Access Network Application Part
RAND	RANDom number (used for authentication)
RID	Registered application provider Identifier
RLC/MAC	Radio Link Control/ Medium Access Control
RLP	Radio Link Protocol
RNC	Radio Network Controller
RNS	Radio Network Subsystem
RR	Radio Resources
RTP	Real Time Protocol
SAGE	Security Algorithms Group of Experts
SAT	SIM Application Toolkit
SC	Service Centre (used for SMS)
SCCP	Signalling Connection Control Part
SCF	Service Control Function (IN context), Service Capability Feature (VHE/OSA context)
SCR	Source Controlled Rate
SCTP	Stream Control Transmission Protocol

SDL	Specification Description Language
SDO	Standards Development Organisation
SGSN	Serving GPRS Support Node
SGW	Signalling GateWay
SID	Silence Descriptor
SIM	GSM Subscriber Identity Module
SIWFS	Shared Inter Working Function Server
SM	Session Management
SMC	Short Message Control
SMIL	Synchronised Multimedia Integration Language
SM-RL	Short Message Relay Layer
SMLC	Serving Mobile Location Centre
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SP	Service Provider
SP	Switching Point
SQN	Sequence number
SOR	Support of Optimal Routing
SRNC	Serving Radio Network Controller
SRNS	Serving RNS
SS	Supplementary Service
SS	Solution Set
SS7	Signalling System No 7
SSAP	Supplementary Service Application Part
SSF	Service Switching Function
T1	Standards Committee T1 Telecommunications
ТА	Terminal Adaptation
TAF	Terminal Adaptation Function
T-BCSM	Terminating Basic Call State Model
TCAP	Transaction Capabilities
TCH/F	A full rate Traffic CHannel
TDD	Time Division Duplex
TDMA	Time Division Multiple Access
TDMA_EFR	TIA IS-641 Enhanced speech Codec

TDMA_USI	TIA TDMA-US1 (12.2 kBit/s Codec, similar to GSM-EFR)
TE	Terminal Equipment
TFO	Tandem Free Operation
TIA	Telecommunications Industry Association
TMSI	Temporary Mobile Subscriber Identity
TrFO	Transcoder Free Operation
TS	Technical Specification
TSG	Technical Specification Group
TTA	Telecommunications Technology Association
TTC	Telecommunication Technology Committee
TUP	Telephone User Part (SS7)
UDP	User Datagram Protocol
UE	User Equipment
UI	User Interface
UICC	Universal IC Card
UIM	User Identity Module
UMTS	Universal Mobile Telecommunications System
USAT	USIM Application Toolkit
USIM	Universal Subscriber Identity Module
USSD	Unstructured Supplementary Service Data
UTRA	Universal Terrestrial Radio Access
UTRA-FDD	Universal Terrestrial Radio Access- Frequency Division Duplex
UTRAN	Universal Terrestrial Radio Access Network
UTRA-TDD	Universal Terrestrial Radio Access- Time Division Duplex
UUS	User-to-User Signalling
VAD	Voice Activity Detector
VBS	Voice Broadcast Service
VGCS	Voice Group Call Service
VHE	Virtual Home Environment
VLR	Visitor Location Register
VMSC	Visited Mobile Switching Centre
VPLMN	Visited Public Land Mobile Network
XML	Extensible Markup Language
WAP	Wireless Application Protocol

