

## GSM TECHNICAL SPECIFICATION

**GSM 01.04** 

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# Digital cellular telecommunications system (Phase 2+); Abbreviations and acronyms (GSM 01.04)

#### **ETSI**

European Telecommunications Standards Institute

#### **ETSI Secretariat**

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - Internet: secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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#### **Foreword**

This Global System for Mobile communications Technical Specification (GTS) has been produced by the Special Mobile Group (SMG) Technical Committee (TC) of the European Telecommunications Standards Institute (ETSI).

This GTS provides the abbreviations and acronyms to be used throughout the GSM Phase 2/Phase 2+.

This GTS is a TC-SMG approved GSM technical specification version 5, which contains GSM Phase 2+ enhancements/features to the version 4 GSM technical specification. The ETS from which this Phase 2+ GTS has evolved is Phase 2 GSM ETR 100 Edition 3 (GSM 01.04 version 4.1.2).

GTS are produced by TC-SMG to enable the GSM Phase 2+ specifications to become publicly available, prior to submission for the formal ETSI standards approval procedure to become European Telecommunications Standards (ETS). This ensures the earliest possible access to GSM Phase 2+ specifications for all Manufacturers, Network operators and implementors of the Global System for Mobile communications.

The contents of this GTS are subject to continuing work within TC-SMG and may change following formal TC-SMG approval. Should TC-SMG modify the contents of this GTS it will then be republished by ETSI with an identifying change of release date and an increase in version number as follows:

Version 5.x.y

#### where:

- y the third digit is incremented when editorial only changes have been incorporated in the specification;
- x the second digit is incremented for all other types of changes, i.e. technical enhancements, corrections, updates, etc.

The specification from which this GTS has been derived was originally based on CEPT documentation, hence the presentation of this GTS may not be entirely in accordance with the ETSI rules.

Reference is made within this GTS to GSM-TSs (note).

NOTE:

TC-SMG has produced documents which give the technical specifications for the implementation of the digital cellular telecommunications system. Historically, these documents have been identified as GSM Technical Specifications (GSM-TSs). These TSs may have subsequently become I-ETSs (Phase 1), or ETSs/ETSI Technical Reports (ETRs) (Phase 2). TC-SMG has also produced ETSI GSM TSs which give the technical specifications for the implementation of Phase 2+ enhancements of the digital cellular telecommunications system. These version 5.x.x GSM Technical Specifications may be referred to as GTSs.

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#### 1 Scope

This GTS provides the abbreviations and acronyms to be used throughout the GSM specifications.

All abbreviations are presented in the singular, but are equally applicable to the plural.

#### 2 References

This GTS has no normative references.

#### 3 Abbreviations and acronyms

#### Δ

AuC

AUT(H)

A3	Authentication algorithm A3
A38	A single algorithm performing the functions of A3 and A8
A5/1	Encryption algorithm A5/1
A5/2	Encryption algorithm A5/2
A5/X	Encryption algorithm A5/0-7
A8	Ciphering key generating algorithm A8
AB	Access Burst
AC	- Access Class (C0 to C15)
	- Application Context
ACC	Automatic Congestion Control
ACCH	Associated Control CHannel
ACK	ACKnowledgement
ACM	- Accumulated Call Meter
	<ul> <li>Address Complete Message</li> </ul>
ACU	Antenna Combining Unit
ADC	<ul> <li>ADministration Centre</li> </ul>
	<ul> <li>Analogue to Digital Converter</li> </ul>
ADN	Abbreviated Dialling Number
ADPCM	Adaptive Differential Pulse Code Modulation
AE	Application Entity
AEC	Acoustic Echo Control
AEF	Additional Elementary Functions
AGCH	Access Grant CHannel
Ai	Action indicator
AoC	Advice of Charge
AoCC	Advice of Charge Charging supplementary service
AoCl	Advice of Charge Information supplementary service
ASE	Application Service Element
ASN.1	Abstract Syntax Notation One
ARFCN	Absolute Radio Frequency Channel Number
ARQ	Automatic ReQuest for retransmission
ATT (flag)	ATTach
AU	Access Unit

**Authentication Centre** 

**AUThentication** 

#### В

BA BCCH Allocation

BAIC Barring of All Incoming Calls supplementary service
BAOC Barring of All Outgoing Calls supplementary service
BCC Base Transceiver Station (BTS) Colour Code

BCCH Broadcast Control CHannel
BCD Binary Coded Decimal
BCF Base station Control Function

BCIE Bearer Capability Information Element

BER Bit Error Rate
BFI Bad Frame Indication

BI all Barring of Incoming call supplementary services

BIC-Roam Barring of Incoming Calls when Roaming outside the home PLMN country

supplementary service

Bm Full-rate traffic channel

BN Bit Number

BO all Barring of Outgoing call supplementary services

BOIC Barring of Outgoing International Calls supplementary service

BOIC-exHC Barring of Outgoing International Calls except those directed to the Home PLMN

Country supplementary service

BS - Basic Service (group)

- Bearer Service Basic Service Group

BSC Base Station Controller

BSIC Base transceiver Station Identity Code

BSIC-NCELL BSIC of an adjacent cell BSS Base Station System

BSSAP Base Station System Application Part

BSSMAP Base Station System Management Application Part

BSSOMAP Base Station System Operation and Maintenance Application Part

BTS Base Transceiver Station

#### C

BSG

C Conditional CA Cell Allocation

CAI Charge Advice Information

CB Cell Broadcast
CBC Cell Broadcast Centre
CBCH Cell Broadcast CHannel

CBMI Cell Broadcast Message Identifier

CC - Country Code - Call Control

CCBS Completion of Calls to Busy Subscriber supplementary service

CCCH Common Control CHannel CCF Conditional Call Forwarding

CCH Control CHannel

CCITT Comité Consultatif International Télégraphique et Téléphonique (The

International Telegraph and Telephone Consultative Committee)

CCM Current Call Meter

CCP Capability/Configuration Parameter
CCPE Control Channel Protocol Entity

Cct Circuit

CDUR Chargeable DURation CED called station identifier

CEIR Central Equipment Identity Register

CEND end of charge point

CEPT Conférence des administrations Européennes des Postes et

Telecommunications

CF - Conversion Facility

- all Call Forwarding services

CFB Call Forwarding on mobile subscriber Busy supplementary service

CFNRc Call Forwarding on mobile subscriber Not Reachable supplementary service

CFNRy Call Forwarding on No Reply supplementary service
CFU Call Forwarding Unconditional supplementary service

CHP CHarging Point

CHV Card Holder Verification information

CI - Cell Identity - CUG Index

CIR Carrier to Interference Ratio
CKSN Ciphering Key Sequence Number

CLI Calling Line Identity

CLIP Calling Line Identification Presentation supplementary service
CLIR Calling Line Identification Restriction supplementary service

CM Connection Management

CMD CoMmanD

CMM Channel Mode Modify

CNG CalliNG tone

COLI COnnected Line Identity

COLP COnnected Line identification Presentation supplementary service COLR COnnected Line identification Restriction supplementary service

COM COMplete

CONNACK

CONNect ACKnowledgement

C/R

Command/Response field bit

CRC

Cyclic Redundancy Check (3 bit)

CRE

Call RE-establishment procedure

CSPDN

Circuit Switched Public Data Network

CT

- Call Transfer supplementary service

Channel TesterChannel Type

CTR Common Technical Regulation

CUG Closed User Group supplementary service

CW Call Waiting supplementary service

#### D

DAC Digital to Analogue Converter

DB Dummy Burst

DCCH Dedicated Control CHannel

DCE Data Circuit terminating Equipment
DCF Data Communication Function
DCN Data Communication Network
DCS1800 Digital Cellular System at 1800MHz

DET DETach
DISC DISConnect
DL Data Link (layer)

DLCI Data Link Connection Identifier

DLD Data Link Discriminator

Dm Control channel (ISDN terminology applied to mobile service)

DMR Digital Mobile Radio
DNIC Data network identifier
DP Dial/Dialled Pulse

DRX Discontinuous reception (mechanism)

DSE Data Switching Exchange
DSI Digital Speech Interpolation
DSS1 Digital Subscriber Signalling No1
DTAP Direct Transfer Application Part
DTE Data Terminal Equipment

DTMF Dual Tone Multi-Frequency (signalling)
DTX Discontinuous transmission (mechanism)

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#### Ε

EA External Alarms

EBSG Elementary Basic Service Group ECM Error Correction Mode (facsimile)

Ec/No Ratio of energy per modulating bit to the noise spectral density

ECT Explicit Call Transfer supplementary service

EEL Electric Echo Loss

EIR Equipment Identity Register

EL Echo Loss

EMC ElectroMagnetic Compatibility

eMLPP enhanced Multi-Level Precedence and Pre-emption service

EMMI Electrical Man Machine Interface

EPROM Erasable Programmable Read Only Memory

ERP - Ear Reference Point

Equivalent Radiated Power

ERR ERRor

ETR ETSI Technical Report

ETS European Telecommunication Standard

ETSI European Telecommunications Standards Institute

#### F

FA - Full Allocation

Fax Adaptor

FAC Final Assembly Code

FACCH Fast Associated Control CHannel

FACCH/F Fast Associated Control Channel/Full rate FACCH/H Fast Associated Control Channel/Half rate

FB Frequency correction Burst Frequency Correction CHannel **FCCH FCS** Frame Check Sequence FDM Frequency Division Multiplex Fixed Dialling Number **FDN** Forward Error Correction **FEC FER** Frame Erasure Ratio FΗ Frequency Hopping FΝ Frame Number

FR Full Rate

ftn forwarded-to number

#### G

GCR Group Call Register

GMSC Gateway Mobile-services Switching Centre
GMSK Gaussian Minimum Shift Keying (modulation)

GPA GSM PLMN Area

GPRS General Packet Radio Service

GSA GSM System Area

GSM Global System for Mobile communications

GSM MS GSM Mobile Station

GSM PLMN GSM Public Land Mobile Network

GT Global Title

#### Н

**HANDO HANDOver** 

**HDLC** High level Data Link Control HLC High Layer Compatibility Home Location Register HLR **HOLD** 

Call hold supplementary service

Home PLMN **HPLMN** HPU Hand Portable Unit

HR Half Rate

**HSN** Hopping Sequence Number

HU Home Units

ī Information frames (RLP)

IΑ Incoming Access (closed user group SS)

IAM Initial Address Message Interlock Code (CUG SS) IC

Incoming Calls Barred (within the CUG) **ICB** 

**ICC** Integrated Circuit(s) Card

IC(pref) Interlock Code of the preferential CUG

In-Call Modification **ICM** 

IDentification/IDentity/IDentifier ID IDN Integrated Digital Network ΙE (signalling) Information Element

International Electrotechnical Commission IEC

Information Element Identifier ΙΕΙ

I-ETS Interim European Telecommunications Standard IMEI International Mobile station Equipment Identity

**IMSI** International Mobile Subscriber Identity

IN Interrogating Node

International Switching Centre **ISC ISDN** Integrated Services Digital Network

ISO International Organization for Standardization **ISUP** ISDN User Part (of signalling system No.7)

Information Transfer Capability **ITC** 

International Telecommunication Union ITU

**IWF** InterWorking Function **IWMSC** InterWorking MSC IWU InterWorking Unit

#### K

k Windows size

Κ Constraint length of the convolutional code

Kc Ciphering key

Κi Individual subscriber authentication key

#### ı

L1 Layer 1

L2ML Layer 2 Management Link

L2R Layer 2 Relay

L2R BOP L2R Bit Orientated Protocol
L2R COP L2R Character Orientated Protocol

L3 Layer 3
LA Location Area
LAC Location Area Code
LAI Location Area Identity
LAN Local Area Network

LAPB Link Access Protocol Balanced

LAPDm Link Access Protocol on the Dm channel

LCN Local Communication Network

LE Local Exchange
LI - Length Indicator
- Line Identity

LLC Low Layer Compatibility

Lm Traffic channel with capacity lower than a Bm LMSI Local Mobile Station Identity

LND Last Number Dialled
LPLMN Local PLMN

LR Location Register
LSTR Listener SideTone Rating
LTE Local Terminal Emulator
LU - Local Units

LU - Local Units - Location Update
LV Length and Value

#### M

MME

MMI

MNC

MO

M Mandatory
MA Mobile Allocation

MACN Mobile Allocation Channel Number

MAF Mobile Additional Function

MAH Mobile Access Hunting supplementary service MAI Mobile Allocation Index

MAIO Mobile Allocation Index Offset
MAP Mobile Application Part
MCC Mobile Country Code

MCI Malicious Call Identification supplementary service

MD Mediation Device

MDL (mobile) Management (entity) - Data Link (layer)

ME - Maintenance Entity - Mobile Equipment

MEF Maintenance Entity Function

MF MultiFrame

MHS Message Handling System
MIC Mobile Interface Controller
MM - Man Machine

 Mobility Management Mobile Management Entity Man Machine Interface Mobile Network Code

MoU Memorandum of Understanding

MPH (mobile) Management (entity) - PHysical (layer) [primitive]

MPTY MultiParTY (Multi ParTY) supplementary service

Mobile Originated

MRP Mouth Reference Point

MS Mobile Station

MSC Mobile-services Switching Centre, Mobile Switching Centre

MSCM Mobile Station Class Mark MSCU Mobile Station Control Unit

MSISDN Mobile Station International ISDN Number

MSRN Mobile Station Roaming Number MT - Mobile Terminated

MT (0,1,2) - Mobile Terminated
MTM Mobile-To-Mobile (call)
MTP Message Transfer Part

MU Mark Up

MUMS Multi User Mobile Station

#### Ν

N/W Network NB Normal Burst

NBIN A parameter in the hopping sequence

NCC Network (PLMN) Colour Code

NCELL Neighbouring (of current serving) Cell

NCH Notification CHannel
NDC National Destination Code
NDUB Network Determined User Busy

NE Network Element

NEF Network Element Function

NET Norme Europeenne de Télécommunications

NF Network Function

NIC Network Independent Clocking

NM Network Management

NMC Network Management Centre

NMSI National Mobile Station Identification number

NPI Number Plan Indentifier
NSAP Network Service Access Point
NT - Network Termination

Non Transparent

NTAAB New Type Approval Advisory Board

NUA Network User Access
NUI Network User Identification
NUP National User Part (SS7)

#### O

O Optional

OA Outgoing Access (CUG SS)
O&M Operations & Maintenance
OACSU Off-Air-Call-Set-Up

OCB Outgoing Calls Barred within the CUG

OD Optional for operators to implement for their aim

OLR Overall Loudness Rating

OMC Operations & Maintenance Centre
OML Operations and Maintenance Link

OS Operating System

OSI Open System Interconnection

OSI RM OSI Reference Model

#### P

PABX Private Automatic Branch eXchange PAD Packet Assembly/Disassembly facility

PCH Paging CHannel
PCM Pulse Code Modulation
PD - Protocol Discriminator

PDN Public Data
Public Data Networks
PH - Packet Handler
- PHysical (layer)

PHI Packet Handler Interface
PI Presentation Indicator

PICS Protocol Implement0ation Conformance Statement

PIN Personal Identification Number

PIXT Protocol Implementation eXtra information for Testing

PLMN Public Lands Mobile Network

PNE Présentation des Normes Européennes
POI Point Of Interconnection (with PSTN)

PP Point-to-Point

PPE Primative Procedure Entity

Pref CUG Preferential CUG
Ps Location probability

PSPDN Packet Switched Public Data Network
PSTN Public Switched Telephone Network
PUCT Price per Unit Currency Table

PW Pass Word

#### Q

QA Q (Interface) - Adapter
QAF Q - Adapter Function
QOS Quality Of Service

#### R

R Value of Reduction of the MS transmitted RF power relative to the maximum

allowed output power of the highest power class of MS (A)

RA RAndom mode request information field

RAB Random Access Burst RACH Random Access CHannel

RAND RANDom number (used for authentication)

RBER Residual Bit Error Ratio
RDI Restricted Digital Information

REC RECommendation
REJ REJect(ion)
REL RELease
REQ REQuest
RF Radio Frequency

RFC Radio Frequency Channel
RFCH Radio Frequency CHannel
RFN Reduced TDMA Frame Number

RFU Reserved for Future Use
RLP Radio Link Protocol
RLR Receiver Loudness Rating
RMS Root Mean Square (value)

RNTABLE Table of 128 integers in the hopping sequence

RPOA Recognised Private Operating Agency

RR Radio Resource
RSE Radio System Entity
RSL Radio Signalling Link

RSZI Regional Subscription Zone Identity

RTE Remote Terminal Emulator
RXLEV Received signal level
RXQUAL Received Signal Quality

#### S

S/W SoftWare

SABM Set Asynchronous Balanced Mode SACCH Slow Associated Control CHannel

SACCH/C4 Slow Associated Control CHannel/SDCCH/4
SACCH/C8 Slow Associated Control CHannel/SDCCH/8
SACCH/T Slow Associated Control CHannel/Traffic channel

SACCH/TF Slow Associated Control CHannel/Traffic channel Full rate SACCH/TH Slow Associated Control CHannel/Traffic channel Half rate

SAP Service Access Point

SAPI Service Access Point Indicator

SB Synchronization Burst

SC - Service Centre (used for SMS)

- Service Code

SCCP Signalling Connection Control Part

SCH Synchronization CHannel SCN Sub-Channel Number

SDCCH Stand-alone Dedicated Control CHannel SDL Specification Description Language

SDT SDL Development Tool
SDU Service Data Unit
SE Support Entity

SEF Support Entity Function
SFH Slow Frequency Hopping
SI - Screening Indicator
- Service Interworking

Supplementary Information (SIA=Supplementary Information A)

SID Sllence Descriptor

SIM Subscriber Identity Module
SLR Send Loudness Rating
SLTM Signalling Link Test Message

SME Short Message Entity
SMG Special Mobile Group
SMS Short Message Service

SMSCB Short Message Service Cell Broadcast
SMS-SC Short Message Service - Service Centre
SMS/PP Short Message Service/Point-to-Point

Smt Short message terminal SN Subscriber Number SNR Serial Number

SOA Suppress Outgoing Access (CUG SS)

SP - Service Provider

Signalling Point

- SPare

SPC Signalling Point Code
SPC Suppress Preferential CUG
SRES Signed RESponse (authentication)
SS - Supplementary Service

System Simulator

SSC Supplementary Service Control string

SSN Sub-System Number
SS7 Signalling System No. 7
STMR SideTone Masking Rating
STP Signalling Transfer Point
SVN Software Version Number

#### T

T - Timer - Transparent - Type only

TA Terminal Adaptor
TAC Type Approval Code

TAF Terminal Adaptation Function
TBR Technical Basis for Regulation
TC Transaction Capabilities

TCH Traffic CHannel TCH/F A full rate TCH

TCH/F2,4 A full rate data TCH (µ2,4kbit/s)
TCH/F4,8 A full rate date TCH (4,8kbit/s)
TCH/F9,6 A full rate data TCH (9,6kbit/s)
TCH/FS A full rate Speech TCH

TCH/H A half rate TCH

TCH/H2,4 A half rate data TCH (µ2,4kbit/s)
TCH/H4,8 A half rate data TCH (4,8kbit/s)
TCH/HS A half rate Speech TCH
TCI Transceiver Control Interface

TC-TR Technical Committee Technical Report

TDMA Time Division Multiple Access

TE Terminal Equipment
Tei Terminal endpoint identifier

TFA TransFer Allowed
TFP TransFer Prohibited
TI Transaction Identifier
TLV Type, Length and Value

TMN Telecommunications Management Network
TMSI Temporary Mobile Subscriber Identity

TN Timeslot Number
TON Type Of Number
TRX Transceiver
TS - Time Slot

Technical Specification

TeleService
 Training Sequence Code

TSC Training Sequence Code
TSDI Transceiver Speech & Da

TSDI Transceiver Speech & Data Interface TTCN Tree and Tabular Combined Notation

TUP Telephone User Part (SS7)

TV Type and Value

TXPWR Transmit PoWeR; Tx power level in the MS\_TXPWR\_REQUEST and

MS\_TXPWR\_CONF parameters

#### u

UDI Unrestricted Digital Information
UDUB User Determined User Busy
UI Unnumbered Information (Frame)

UIC Union Internationale des Chemins de Fer

UPCMI Uniform PCM Interface (13-bit)

UPD Up to date

USSD Unstructured Supplementary Service Data
UUS User-to-User Signalling supplementary service

#### V

V Value only

VAD Voice Activity Detection VAP Videotex Access Point

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VBS Voice Broadcast Service
VGCS Voice Group Call Service
VLR Visitor Location Register

VMSC Visited MSC, (recommendation not to be used)

VPLMN Visited PLMN

VSC Videotex Service Centre V(SD) Send state variable

VTX host The components dedicated to Videotex service

W

WS Work Station

WPA Wrong Password Attempts (counter)

X

XID eXchange IDentifier

Ζ

ZC Zone Code

### History

Change history							
SMG No.	TDoc. No.	CR. No.	Section affected	New version	Subject/Comments		
SMG#17	52/96	A004	Various	5.0.0	Addition for VBS, VGCS and eMLPP		

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February 1996	Creation of Version 5.0.0 (A004)					
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