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## **Foreword**

This ETSI Technical Report (ETR) has been produced by the Special Mobile Group (SMG) Technical Committee (TC) of the European Telecommunications Standards Institute (ETSI). This ETR describes the abbreviations and acronyms used within the European Telecommunication Standards (ETSS) related to the European digital cellular telecommunications system (Phase 2).

This ETR is an informative document resulting from SMG studies which are related to the European digital cellular telecommunications system (Phase 2). This ETR is used to publish material which is of an informative nature, relating to the use or the application of ETSS and is not suitable for formal adoption as an ETS.

This ETR 100 third edition corresponds to GSM technical specification, GSM 01.04, Phase 2, version 4.1.2.

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

Reference is made within this ETR to GSM Technical Specifications (GSM-TS) (NOTE).

NOTE: TC-SMG has produced documents which give the technical specifications for the implementation of the European digital cellular telecommunications system. Historically, these documents have been identified as GSM Technical Specifications (GSM-TS). These TSs may have subsequently become I-ETSS (Phase 1), or ETSS (Phase 2), whilst others may become ETSI Technical Reports (ETRs). GSM-TSs are, for editorial reasons, still referred to in this ETR.

## **Introduction**

This ETR consists primarily of those acronyms and abbreviations that are considered essential to the understanding and application of the principles of a GSM PLMN.

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## 1 Scope

This ETR 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 ETR has no normative references.

## 3 Abbreviations and acronyms

### A

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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 - Address Complete Message
ACU	Antenna Combining Unit
ADC	- ADministration Centre - Analogue to Digital Converter
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
AoCI	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
AuC	Authentication Centre
AUT(H)	AUThentication

### B

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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
BSG	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

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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
CEID	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	COConnected Line Identity
COLP	COConnected Line identification Presentation supplementary service
COLR	COConnected 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 Tester - Channel Type
CTR	Common Technical Regulation
CUG	Closed User Group supplementary service
CW	Call Waiting supplementary service

## D

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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)

## E

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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

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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
FCCH	Frequency Correction CHannel
FCS	Frame Check Sequence
FDM	Frequency Division Multiplex
FDN	Fixed Dialling Number
FEC	Forward Error Correction
FER	Frame Erasure Ratio
FH	Frequency Hopping
FN	Frame Number
FR	Full Rate
ftn	forwarded-to number

## G

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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

## H

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HANDO	HANDOver
HDLC	High level Data Link Control
HLC	High Layer Compatibility
HLR	Home Location Register
HOLD	Call hold supplementary service
HPLMN	Home PLMN
HPU	Hand Portable Unit
HR	Half Rate
HSN	Hopping Sequence Number
HU	Home Units

## I

---

I	Information frames (RLP)
IA	Incoming Access (closed user group SS)
IAM	Initial Address Message
IC	Interlock Code (CUG SS)
ICB	Incoming Calls Barred (within the CUG)
ICC	Integrated Circuit(s) Card
IC(pref)	Interlock Code of the preferential CUG

ICM	In-Call Modification
ID	IDentification/IDentity/IDentifier
IDN	Integrated Digital Network
IE	(signalling) Information Element
IEC	International Electrotechnical Commission
IEI	Information Element Identifier
I-ETS	Interim European Telecommunications Standard
IMEI	International Mobile station Equipment Identity
IMSI	International Mobile Subscriber Identity
IN	Interrogating Node
ISC	International Switching Centre
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
ISUP	ISDN User Part (of signalling system No.7)
ITC	Information Transfer Capability
ITU	International Telecommunication Union
IWF	InterWorking Function
IWMSC	InterWorking MSC
IWU	InterWorking Unit

## K

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k	Windows size
K	Constraint length of the convolutional code
Kc	Ciphering key
Ki	Individual subscriber authentication key

## L

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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 Dialed
LPLMN	Local PLMN
LR	Location Register
LSTR	Listener SideTone Rating
LTE	Local Terminal Emulator
LU	- Local Units - Location Update
LV	Length and Value

## M

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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
MME	Mobile Management Entity
MMI	Man Machine Interface
MNC	Mobile Network Code
MO	Mobile Originated
MoU	Memorandum of Understanding
MPH	(mobile) Management (entity) - PHysical (layer) [primitive]
MPTY	MultiParTY (Multi ParTY) supplementary service
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 Termination
MTM	Mobile-To-Mobile (call)
MTP	Message Transfer Part
MU	Mark Up
MUMS	Multi User Mobile Station

## N

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N/W	Network
NB	Normal Burst
NBIN	A parameter in the hopping sequence
NCC	Network (PLMN) Colour Code
NCELL	Neighbouring (of current serving) Cell
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 Identifier
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

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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

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PABX Private Automatic Branch eXchange  
PAD Packet Assembly/Disassembly facility  
PCH Paging CHannel  
PCM Pulse Code Modulation  
PD - Protocol Discriminator  
- Public Data  
PDN Public Data Networks  
PH - Packet Handler  
- PHysical (layer)  
PHI Packet Handler Interface  
PI Presentation Indicator  
PICS Protocol Implementation 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 Primitive 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

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

## R

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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

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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=Supplemenatary Information A)
SID	SIlence 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

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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 ( $\mu$ 2,4kbit/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 ( $\mu$ 2,4kbit/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
TSC	Training Sequence Code
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**

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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**

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V	Value only
VAD	Voice Activity Detection
VAP	Videotex Access Point
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**

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WS	Work Station
WPA	Wrong Password Attempts (counter)

**X**

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XID	eXchange IDentifier
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**Z**

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ZC	Zone Code
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## History

Document history	
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