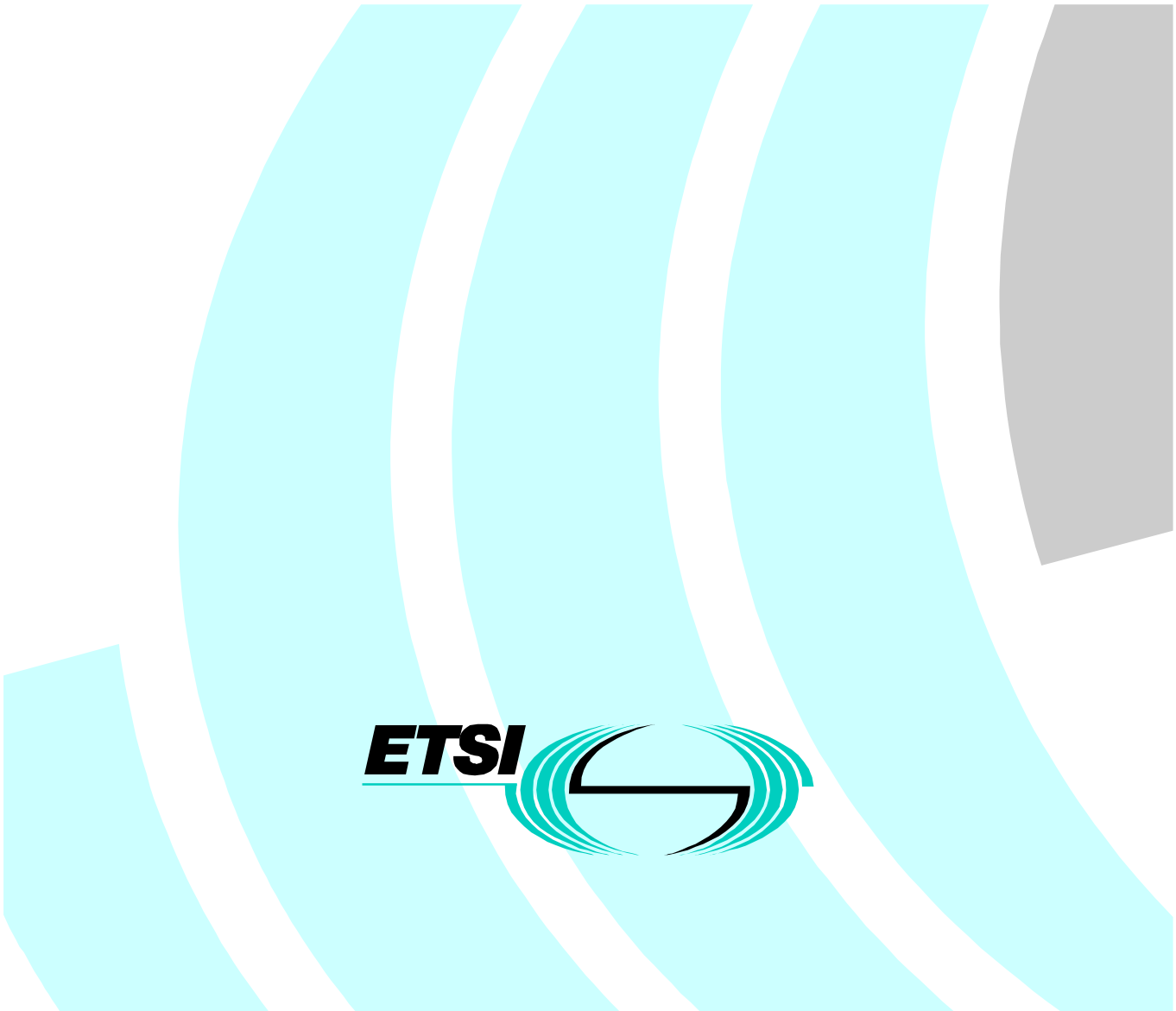
# ETSI TS 101 377-1-1 V1.1.1 (2001-03)

*Technical Specification*

**GEO-Mobile Radio Interface Specifications;**
**Part 1: General specifications;**
**Sub-part 1: Abbreviations and Acronyms;**
**GMR-2 01.004**



Reference
DTS/SES-002-01004

Keywords
GMR, GSM, GSO, iterface, MES, mobile, MSS,
radio, satellite, S-PCN

***ETSI***

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

# Contents

Intellectual Property Rights ..... 4
Foreword ..... 6
Introduction ..... 6
1 Scope ..... 8
2 References ..... 8
3 Abbreviations ..... 8
**Annex A (informative): Terminology translator ..... 26**
History ..... 27

# Intellectual Property Rights

The information pertaining to essential IPRs is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://www.etsi.org/ipr).

The attention of ETSI has been drawn to the Intellectual Property Rights (IPRs) listed below which are, or may be, or may become, Essential to the present document. The IPR owner has undertaken to grant irrevocable licences, on fair, reasonable and non-discriminatory terms and conditions under these IPRs pursuant to the ETSI IPR Policy. Further details pertaining to these IPRs can be obtained directly from the IPR owner.

The present IPR information has been submitted to ETSI and pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

**IPRs:**

| Project | Company | Title | Country of Origin | Patent n° | Countries Applicable |
|---|---|---|---|---|---|
| TS 101 377 V1.1.1 | Digital Voice Systems Inc | | US | US 5,715,365 | US |
| TS 101 377 V1.1.1 | Digital Voice Systems Inc | | US | US 5,754,974 | US |
| TS 101 377 V1.1.1 | Digital Voice Systems Inc | | US | US 5,226,084 | US |
| TS 101 377 V1.1.1 | Digital Voice Systems Inc | | US | US 5,701,390 | US |
| TS 101 377 V1.1.1 | Digital Voice Systems Inc | | US | US 5,826,222 | US |

IPR Owner: Digital Voice Systems Inc
One Van de Graaff Drive Burlington,
MA 01803
USA

Contact: John C. Hardwick
Tel.: +1 781 270 1030
Fax: +1 781 270 0166

| Project | Company | Title | Country of Origin | Patent n° | Countries Applicable |
|---|---|---|---|---|---|
| TS 101 377 V1.1.1 | Ericsson Mobile Communication | Improvements in, or in relation to, equalisers | GB | GB 2 215 567 | GB |
| TS 101 377 V1.1.1 | Ericsson Mobile Communication | Power Booster | GB | GB 2 251 768 | GB |
| TS 101 377 V1.1.1 | Ericsson Mobile Communication | Receiver Gain | GB | GB 2 233 846 | GB |
| TS 101 377 V1.1.1 | Ericsson Mobile Communication | Transmitter Power Control for Radio Telephone System | GB | GB 2 233 517 | GB |

IPR Owner: Ericsson Mobile Communications (UK) Limited
The Keytech Centre, Ashwood Way
Basingstoke
Hampshire RG23 8BG
United Kingdom

Contact: John Watson
Tel.: +44 1256 864 821

| Project | Company | Title | Country of Origin | Patent n° | Countries Applicable |
|---|---|---|---|---|---|
| TS 101 377 V1.1.1 | Hughes Network Systems | | US | Pending | US |

IPR Owner: Hughes Network Systems
11717 Exploration Lane
Germantown, Maryland 20876
USA

Contact: John T. Whelan
Tel: +1 301 428 7172
Fax: +1 301 428 2802

| Project | Company | Title | Country of Origin | Patent n° | Countries Applicable |
|---|---|---|---|---|---|
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | 2.4-to-3 KBPS Rate Adaptation Apparatus for Use in Narrowband Data and Facsimile Communication Systems | US | US 6,108,348 | US |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Cellular Spacecraft TDMA Communications System with Call Interrupt Coding System for Maximizing Traffic ThroughputCellular Spacecraft TDMA Communications System with Call Interrupt Coding System for Maximizing Traffic Throughput | US | US 5,717,686 | US |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Enhanced Access Burst for Random Access Channels in TDMA Mobile Satellite System | US | US 5,875,182 | |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Spacecraft Cellular Communication System | US | US 5,974,314 | US |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Spacecraft Cellular Communication System | US | US 5,974,315 | US |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Spacecraft Cellular Communication System with Mutual Offset High-argin Forward Control Signals | US | US 6,072,985 | US |
| TS 101 377 V1.1.1 | Lockheed Martin Global Telecommunic. Inc | Spacecraft Cellular Communication System with Spot Beam Pairing for Reduced Updates | US | US 6,118,998 | US |

IPR Owner: Lockheed Martin Global Telecommunications, Inc.
900 Forge Road
Norristown, PA. 19403
USA

Contact: R.F. Franciose
Tel.: +1 610 354 2535
Fax: +1 610 354 7244

# Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Satellite Earth Stations and Systems (SES).

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

Version 1.m.n

where:

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

The present document is part 1, sub-part 1 of a multi-part deliverable covering the GEO-Mobile Radio Interface Specifications, as identified below:

**Part 1: "General specifications";**

**Sub-part 1: "Abbreviations and Acronyms; GMR-2 01.004";**

Sub-part 2: "Introduction to the GMR-2 family of specifications; GMR-2 01.201";

Sub-part 3: "GMR-2 General System Requirements; GMR-2 01.202";

Part 2: "Service specifications";

Part 3: "Network specifications";

Part 4: "Radio interface protocol specifications";

Part 5: "Radio interface physical layer specifications";

Part 6: "Speech coding specifications".

# Introduction

GMR stands for GEO (Geostationary Earth Orbit) Mobile Radio interface, which is used for mobile satellite services (MSS) utilising geostationary satellite(s). GMR is derived from the terrestrial digital cellular standard GSM and supports access to GSM core networks.

Due to the differences between terrestrial and satellite channels, some modifications to the GSM standard are necessary. Some GSM specifications are directly applicable, whereas others are applicable with modifications. Similarly, some GSM specifications do not apply, while some GMR specifications have no corresponding GSM specification.

Since GMR is derived from GSM, the organization of the GMR specifications closely follows that of GSM. The GMR numbers have been designed to correspond to the GSM numbering system. All GMR specifications are allocated a unique GMR number as follows:

GMR-n xx.zyy

where:

- xx.0yy (z = 0) is used for GMR specifications that have a corresponding GSM specification. In this case, the numbers xx and yy correspond to the GSM numbering scheme.
- xx.2yy (z = 2) is used for GMR specifications that do not correspond to a GSM specification. In this case, only the number xx corresponds to the GSM numbering scheme and the number yy is allocated by GMR.
- n denotes the first (n = 1) or second (n = 2) family of GMR specifications.

A GMR system is defined by the combination of a family of GMR specifications and GSM specifications as follows:

- If a GMR specification exists it takes precedence over the corresponding GSM specification (if any). This precedence rule applies to any references in the corresponding GSM specifications.

NOTE: Any references to GSM specifications within the GMR specifications are not subject to this precedence rule. For example, a GMR specification may contain specific references to the corresponding GSM specification.

- If a GMR specification does not exist the corresponding GSM specification may or may not apply. The applicability of the GSM specifications are defined in GMR-n 01.201.

# 1 Scope

The present document provides the abbreviations and acronyms to be used throughout the GMR-2 system.

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

Annex A provides a GSM/GMR-2 Terminology Translator.

# 2 References

The present document has no references.

# 3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

**A**

| | |
|---|---|
| A3 | Authentication Algorithm GMR2-A3 |
| A5/1 | Encryption Algorithm GMR2-A5/1 |
| A5/2 | Encryption Algorithm GMR2-A5/2 |
| A5/X | Encryption Algorithm GMR2-A5/0-7 |
| A8 | Ciphering Key Generating Algorithm A8 |
| AB | Access Burst |
| Abis | Interface between MSC and BSC |
| AC | Access Class (C0 to C15)<br>Application Context |
| ACC | Automatic Congestion Control |
| ACCH | Associated Control Channel |
| ACI | Adjacent Channel Interference |
| ACK | Acknowledge/Acknowledgement |
| ACM | Accumulated Call Meter<br>Address Complete Message |
| ACR | Absolute Category Rating |
| ACS | Attitude Control Subsystem |
| ACS-CELP | Algebraic Conjugate Structure Code-Excited Linear Predictive |
| ACU | Antenna Combining Unit<br>Antenna Control Unit |
| A/D | Analog to Digital |
| ADC | Administration Centre<br>Analog to Digital Converter |
| ADCS | Attitude Determination and Control Subsystem |
| ADN | Abbreviated Dialling Number |
| ADPCM | Adaptive Differential Pulse Code Modulation |
| ADPE | Automated Data Processing Equipment |
| AE | Application Entity |
| AEC | Acoustic Echo Control |
| AEF | Additional Elementary Functions |
| AEIRP | Aggregate Effective Isotropic Radiated Power |
| AFC | Automatic Frequency Control |
| AGC | Automatic Gain Control |
| AGCH | Access Grant Channel |
| AI | Action Indicator<br>Action Item |
| AIM | Active Intermodulation |
| AIT | Assembly, Integration and Test |

| | |
|---|---|
| AKM | Apogee Kick Motor |
| ALC | Automatic Level Control |
| AMA | Automatic Message Accounting |
| AMPS | American Mobile Phone System |
| AoCC | Advice of Charge Charging (Supplementary Service) |
| AoCI | Advice of Charge Information (Supplementary Service) |
| APS | Auxiliary Propulsion Subsystem |
| ARFCN | Absolute Radio Frequency Channel Number |
| ARQ | Automatic Request for Retransmission |
| ASE | Application Service Element |
| ASEAN | Association of South East Asian Nations |
| ASN.1 | Abstract Syntax Notation One |
| ASO | Automatic Service Observation |
| ASOC | Astro Satellite Operations Centre |
| ATDF | Artificial Traffic Directing Facility |
| ATT (flag) | Attach |
| AU | Access Unit |
| AuC | Authentication Centre |
| AUT(H) | Authentication |
| AVC | Automatic Volume Control |
| AVE | Aerospace (flight) Vehicle Equipment |
| AWL | Average Weighted Level |

**B**

| | |
|---|---|
| BA | BCCH Allocation |
| BAIC | Barring All Incoming Calls (Supplementary Service) |
| BAIC-exHC | Barring All Incoming Calls except Directed to the Home Country (Supplementary Service) |
| BAOC | Barring All Outgoing Calls (Supplementary Service) |
| BBP | Baseband Processor |
| 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 |
| BCS | Beam Congruency System |
| BER | Bit Error Rate |
| BFI | Bad Frame Indication |
| BFN | Beam Forming Network |
| BHCA | Busy Hour Call Attempt |
| Bl | All Barring of Incoming Call Supplementary Services |
| BlC-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 All Outgoing International Calls (Supplementary Service) |
| BOlC-exHC | Barring of Outgoing International Calls except those Directed to the Home PLMN Country (Supplementary Service) |
| BOL | Beginning of Life |
| BPF | Bandpass Filter |
| bps | Bits per Second |
| BPSK | Binary Phase Shift Keyed |
| BRT | Beacon Receive Terminal |
| BS | Basic Service (group)<br>Bearer Service |
| BSC | Base Station Controller |
| BSG | Basic Service Group |
| 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 |
| BW | Bandwidth |

**C**

| | |
|---|---|
| C | Conditional |
| CA | Call Announcement |
| | Cell Allocation |
| CAB | Corrective Action Board |
| CAD | Computer Aided Design |
| CAI | Charge Advice Information |
| CAR | Call Arrival Rate |
| C-Band | 4GHz to 6 GHz nominal frequency band |
| CBC | Cell Broadcast Centre |
| CBCH | Cell Broadcast Channel |
| CC | Call Control |
| | Country Code |
| CCB | Configuration Control Board |
| CCBS | Completion of Calls to Busy Subscriber (Supplementary Service) |
| CCCH | Common Control Channel |
| CCF | Conditional Call Forwarding |
| CCH | Control Channel |
| CCI | Co-Channel Interference |
| CCITT | Comité Consultatif International Télégraphique et Téléphonique |
| CCM | Current Call Meter |
| CCOM | Channel Communications Manager |
| CCPE | Control Channel Protocol Entity |
| CCS | Common Channel Signalling |
| Cct | Circuit |
| CDMA | Code Division Multiple Access |
| CDR | Call Detail Records |
| | Critical Design Review |
| CDRL | Contract Data Requirements List |
| CDUR | Chargeable Duration |
| CE | Communication Equipment |
| CED | Called Station Identifier |
| CEI | Contract End Item |
| CEIR | Central Equipment Identity Register |
| CEND | End of Charge Point |
| CEPT | Conference des Administrations Européennes des Postes et Télécommunications |
| CES | Channel Equipment Subsystem |
| CF | Conversion Facility |
| | All Call Forwarding Supplementary Services |
| CFB | Call Forwarding on Mobile Subscriber Busy (Supplementary Service) |
| CFE | Customer Furnished Equipment |
| CFNRc | Call Forwarding on Mobile Subscriber Not Reachable (Supplementary Service) |
| CFNRy | Call Forwarding on No Reply (Supplementary Service) |
| CFRP | Composite Fiber Reinforced Plastic |
| CFU | Call Forwarding Unconditional (Supplementary Service) |
| CHP | Charging Point |
| CHV | Card Holder Verification |
| CI | Cell Identity |
| | Configuration Item |
| C/I | Carrier to Interference Ratio |
| CICP | Critical Items Control Plan |
| CIR | Carrier to Interference Ratio |
| CKSN | Ciphering Key Sequence Number |
| CLA | Coupled Load Analysis |
| CLI | Calling Line Identity |

| | |
|---|---|
| CLIP | Calling Line Identification Presentation (Supplementary Service) |
| CLIR | Calling Line Identification Restriction (Supplementary Service) |
| cm | Centimetre (2,54 cm = 1 inch) |
| CM | Configuration Management |
| | Connection Management |
| CMD | Command |
| CMF/CMV | Configuration Management Facility/Vision |
| CMIS | Customer Management Information System |
| CMM | Channel Mode Modify |
| CMS | Code Management System |
| C/N | Carrier to Noise Ratio |
| C/Nd | Carrier to Noise Density |
| CNG | Calling Tone |
| CNR | Carrier to Noise Ratio |
| COLI | Connected Line Identity |
| COLP | Connected Line Identification Presentation (Supplementary Service) |
| COLR | Connected Line Identification Restriction (Supplementary Service) |
| COMDEC | Command Decoder |
| COMPL | Complete |
| CONNACK | Connect Acknowledgement |
| CONUS | Contiguous United States |
| COTS | Commercial Off the Shelf |
| CP | Communication Processor |
| CPB | Channel Processing Board |
| CPM | Cycles per Minute |
| CPSK | Coherent Phase Shift Keyed |
| CPU | Central Processing Unit |
| C/R | Command/Response Field Bit |
| CRB | Change Review Board |
| CRC | Cyclic Redundancy Check (3 bit) |
| CRE | Call Re-establishment Procedure |
| CRR | Call Release Rate |
| CRTS | Command, Range and Telemetry Software |
| CSA | Configuration Status Accounting |
| CSCI | Computer Software Configuration Item |
| CSEL | Variable Slope Extended (encoded) Linear Prediction |
| CSPDN | Circuit Switched Public Data Network |
| CSU | Channel Service Unit |
| | Computer Software Units |
| CTA | Coarse Timing Advance |
| CT | Call Transfer (Supplementary Service) |
| | Channel Tester |
| | Channel Type |
| CT&R | Command, Telemetry and Ranging |
| CTR | Common Technical Regulation |
| CTU | Central Telecommand Unit |
| CUG | Index (Supplementary Service) |
| | Closed User Group |
| CV | Command Verification |
| CW | Call Waiting (Supplementary Service) |

**D**

| | |
|---|---|
| D/A | Digital to Analog |
| DAC | Digital to Analog Converter |
| DAM | Diagnostic Acceptability Measure |
| DAMA | Demand Assignment Multiple Access |
| DAPL | Division Approved Parts List |
| DASD | Direct Access Storage Device |
| DB | Dummy Burst |
| dB | Decibel |
| dBi | Decibels antenna gain above isotropic |

| | |
|---|---|
| dBm0 | Decibels relative to one milliwatt referred to a port of zero transmission level |
| dBm | Decibels above one milliwatt |
| dBw | Decibels above one watt |
| DCCH | Dedicated Control Channel |
| DCE | Data Circuit Terminating Equipment |
| DCF | Data Communication Function |
| DCME | Digital Circuit Multiplications Equipment |
| DCN | Data Communication Network |
| DCR | Degradation Category Rating |
| DCS1 800 | Digital Cellular System at 1 800 MHz |
| DEMUX | Demultiplexer |
| DET | Detach |
| | Direct Energy Transfer |
| 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 |
| DMT | Destination Module Terminal |
| DNIC | Data Network Identifier |
| DOC | Documentation Folder |
| Doppler | Frequency shift due to relative velocity |
| DP | Dial/Dialled Pulse |
| DPSK | Differential Phase Shift Keyed |
| DR | Discrepancy/Deficiency Report |
| DRC | Data Records Centre |
| | Design Records Control |
| DRT | Diagnostics Rhyme Test |
| DRX | Discontinuous Reception |
| DSB | Double Sideband Suppressed Carrier |
| DSE | Data Switching Exchange |
| DSI | Digital Speech Interpolation |
| DSP | Digital Signal Processor |
| DSS | Dynamic Spacecraft Simulator Software |
| DSS1 | Digital Subscriber Signalling Number 1 |
| DSU | Data Service Unit |
| DTC | Design to Cost |
| DTAP | Direct Transfer Application Part |
| DTE | Data Terminal Equipment |
| DTM | Development Test Model |
| DTMF | Dual Tone Multi-Frequency |
| DTS | Deployable Truss Structure (reflector) |
| DTX | Discontinuous Transmission |

**E**

| | |
|---|---|
| EA | External Alarms |
| EAG | Electrical Aerospace Ground Support Equipment |
| Eb/No | Bit Energy-to-Noise Ratio |
| EBSG | Elementary Basic Service Group |
| EC | Error Correcting |
| ECELP | Enhanced Codebook Excited Linear Predictor |
| ECM | Error Correction Mode (facsimile) |
| ECN | Engineering Change Notice |
| Ec/No | Ratio of Energy per Modulating Bit to the Noise Spectral Density |
| ECP | Engineering Change Proposal |
| ECT | Explicit Call Transfer (Supplementary Service) |
| EDI | Electronic Data Interchange |
| EDP | Engineering Development Plan |
| EEL | Electric Echo Loss |
| EEPROM | Electrically Erasable Programmable Read Only Memory |

| | |
|---|---|
| EGSE | Electronics Ground Support Equipment |
| EHF | Extremely High Frequency (30 Ghz to 300 Ghz nominal frequency band) |
| EIR | Equipment Identity Register |
| EIRP | Effective Isotropic Radiated Power |
| EL | Echo Loss |
| ELV | Expendable Launch Vehicle |
| EM | Engineering Model |
| EMC | Electromagnetic (interference) Compatibility |
| EMI | Electromagnetic Interference |
| EMMI | Electrical Man Machine Interface |
| EMMQ | Engineering, Manufacturing, Materials Quality |
| ENP | Nulling Processor |
| EOC | Edge of Coverage |
| EOL | End of Life |
| EP&D | Electrical Power and Distribution |
| EPC | Electrical Power Conditioner |
| EPM | Engineering Program Manager |
| EPROM | Electrically Programmable Read-Only Memory |
| EPS | Electrical Power Subsystem |
| EQM | Engineering Qualification Model |
| ERB | Engineering Review Board |
| ERP | Ear Reference Point<br>Effective/Equivalent Radiated Power |
| ERR | Error |
| ESD | Electrostatic Discharge |
| ESS | Earth/Sun Sensor Assembly |
| ETM | Engineering Test Model |
| ETR | ETSI Technical Report<br>Equality Threshold Rating |
| ETS | European Telecommunication Standard |
| ETSI | European Telecommunications Standards Institute |

**F**

| | |
|---|---|
| FA | Fax Adapter<br>Full Allocation |
| 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 |
| FASC | Forward Assignment Signalling Channel |
| FB | Frequency Correction Burst |
| FBA | Fuse Board Assembly |
| FBFN | Forward Beam Forming Network |
| FBP | Forward Bit Period |
| FBRT | Field Beam Congruency System Remote Terminal |
| FCCH (FCH) | Frequency Correction Channel |
| FCS | Frame Check Sequence |
| FCSC | Forward Common Signalling Channel |
| Fd | Fold down |
| FDM | Frequency Division Multiple |
| FDMA | Frequency Division Multiple Access |
| FEC | Forward Error Correction |
| FED | Forward Epoch Delay |
| FER | Frame Erasure Ratio |
| FFT | Fast Forward Transfer |
| FGE | Frequency Generator Equipment |
| FGU | Frequency Generator Unit |
| FH | Frequency Hopping |
| FIR | Finite Impulse Response |
| FMEA | Failure Modes and Effects Analysis |
| FMECA | Failure Modes Effects & Critical Analysis |

| | |
|---|---|
| FN | Frame Number |
| FOC | Final Operational Capability |
| FP | Frame Period |
| FR | Full Rate |
| FRR | Flight Readiness Review |
| FSG | Forward Stagger Group |
| FSK | Frequency Shift Keyed |
| FSP | Forward Slot Period |
| FSTB | Flight Software Test Bed |
| FTA | Fine Timing Advance |
| ftn | Forwarded-to Number |
| Fu | Fold up |
| FWHM | Full Width at Half Maximum |
| FWU | Firmware Units |

**G**

| | |
|---|---|
| GaAs | Gallium Arsenide (solar array) |
| GAT | Ground Acceptance Test |
| GCMIS | Gateway Customer Management Information System |
| GCN | Ground Control Network |
| GDA | Gimballed Dish Antenna |
| GDS | Gateway Digital Switch |
| GHz | Gigahertz (109 Hz) |
| GIDEP | Government and Industry Data Exchange Program |
| GMAC | Ground Monitor and Control |
| GMC | Ground (Equipment) Monitor and Control |
| GMSC | Gateway Mobile Services Switching Centre |
| GMSK | Gaussian Minimum Shift Keying |
| GMT | Greenwich Mean Time (ZULU) |
| GOS | Grade of Service |
| GPA | GSM PLMN Area |
| GPS | Global Positioning System |
| GRFOU | Gateway Remote Facility Outdoor Unit |
| GSA | GSM System Area |
| GSC | Gateway Station Control |
| GSM | Global System for Mobile Communications<br>Group Special Mobile |
| GSM MS | GSM Mobile Station |
| GSM PLMN | GSM Public Land Mobile Network |
| GSS | Ground Station Software |
| GT | Global Title |
| G/T | Antenna Gain/Temperature (Antenna Gain/System Noise Temperature) |
| G/W | Gateway |
| GWS | Gateway Subsystem |

**H**

| | |
|---|---|
| HANDO | Handover |
| HDLC | High Level Data Link Control |
| HF | Harmonic Filter<br>High Frequency |
| HLC | High Layer Compatibility |
| HLR | Home Location Register |
| HM-SMS | High Margin - Short Message Service |
| HOLD | Call Hold (Supplementary Service) |
| HPA | High Penetration Alert<br>High Power Amplifier |
| HPLMN | Home PLMN |
| HPU | Hand Portable Unit |
| HR | Half Rate |

| | |
|---|---|
| HSN | Hopping Sequence Number |
| HU | Home Units |
| H/W | Hardware |
| HWCI | Hardware Configuration Item |
| Hz | Hertz (cycles per second) |

**I**

| | |
|---|---|
| I | Information Frames (RLP) |
| IA | Incoming Access (CUG Supplementary Service) |
| IAM | Initial Address Message |
| IC | Interlock Code (CUG Supplementary Service) |
| IC (pref) | Interlock Code of the Preferential CUG |
| ICB | Incoming Calls Barred (within the CUG) |
| ICM | In-Call Modification |
| IC&T | Installation, Checkout and Test |
| ICD | Interface Control Document |
| | Interface Control Drawing |
| ID | Identify/Identification/Identity |
| IDD | Interface Design Document |
| IDN | Integrated Digital Network |
| IE | Information Element |
| IEI | Information Element Identifier |
| l-ETS | Interim European Telecommunications Standard |
| IF | Intermediate Frequency |
| ILS | Integrated Logistics Support |
| IM | Intermodulation |
| IMEI | International Mobile Station Equipment Identity |
| IMSI | International Mobile Subscriber Identifier |
| IMU | Inertial Measurement Unit |
| IN | Interrogating Node |
| INET | Input Network |
| IOC | Initial Operating Capability |
| IOT | In-Orbit Test |
| IR&D | Independent Research and Development |
| ISC | International Switching Centre |
| ISDN | Integrated Services Digital Network |
| ISI | Intersymbol Interference |
| ISO | International Standard Organization |
| ISP | Image and Signal Processor |
| ISUP | ISDN User Part (of signalling system No. 7) |
| ITAD | International Toll Access Detail |
| | International Traffic Accounting Data |
| ITC | Information Transfer Capability |
| ITU | International Telecommunications Union (formerly CCITT) |
| IWF | Interworking Function |
| IWMSC | Interworking MSC |
| IWU | Interworking Unit |

**J**

| | |
|---|---|
| JIG | Joint Implementation Guide |

**K**

| | |
|---|---|
| k | Kilo ($10^3$) |
| | Windows Size |
| K | Constraint Length of the Convolutional Code |
| Kbps | Kilobits per Second |
| Kc | Cyper Key |
| Ki | Individual Subscriber Authentication Key |

**L**

| | |
|---|---|
| L1 | Layer 1 |
| L2 | Layer 2 |
| L2ML | Layer 2 Management Link |
| L2R | Layer 2 Relay |
| L2R BOP | L2R Bit Oriented Protocol |
| L2R COP | L2R Character Oriented Protocol |
| L3 | Layer 3 |
| LA | Location Area |
| LAC | Location Area Code |
| LAE | Liquid Apogee Engine |
| LAI | Location Area Identity |
| LAMMR | Large Antenna Multi-Channel Microwave Radiometer |
| LAN | Local Area Network |
| LAPB | Link Access Protocol Balanced |
| LAPDm | Link Access Protocol on the Dm Channel |
| L-Band | 1,5 Ghz nominal frequency band |
| LCN | Local Communication Network |
| LCP | Left Circular Polarization |
| LE | Local Exchange |
| LED | Light Emitting Diode |
| LHC | Left Hand Circular (polarization) |
| LI | Length Indicator |
| | Line Identity |
| LLC | Low Layer Compatibility |
| Lm | Traffic channel with capacity lower than a Bm |
| LMSI | Local Mobile Station Identity |
| LNA | Low Noise Amplifier |
| LNR | Low Noise Receiver |
| LO | Local Oscillator |
| LOC | Lines of Code |
| LORA | Level of Repair Analysis |
| LOS | Line of Sight |
| | Loss of Signal |
| LPLMN | Local PLMN |
| LPSS | Large Area Pulsed Sun Simulator |
| LR | Location Register |
| LRU | Line Replaceable Unit |
| LSPT | Launch Site Preparation Test |
| LSST | Large Space Structure Technology |
| LSTR | Listener Side Tone Rating |
| LTE | Local Terminal Emulator |
| LU | Local Units |
| | Location Update |
| LV | Length and Value |

**M**

| | |
|---|---|
| m | Meter (1 m = 39,37 inch) |
| M | Mandatory |
| M&C | Monitor and Control |
| M/S | Milestone |
| MA | Mobile Allocation |
| MACN | Mobile Allocation Channel Number |
| MAF | Mobile Additional Function |
| MAGE | Mechanical Aerospace Ground Support Equipment |
| MAH | Mobile Access Hunting (Supplementary Service) |
| MAI | Mobile Allocation Index |
| MAIO | Mobile Allocation Index Offset |
| MAP | Mobile Application Part |
| MAS | Mission Analysis Software |

| | |
|---|---|
| MBM | Multiple Beam Mobile |
| MCC | Mission Control Centre |
| | Mobile Country Code |
| MCFA | Mission Critical Functional Analysis |
| MCI | Malicious Call Identification (Supplementary Service) |
| MCS | Mobile Switch Centre |
| MCT | Metrics Collection Tool |
| MD | Mediation Device |
| MDB | Manufacturing Data Base |
| MDL | Mobile Management (entity) - Data Link (layer) |
| ME | Maintenance Entity |
| | Mobile Equipment |
| MEF | Maintenance Entity Function |
| MF | Multi-Frame |
| MGSE | Mechanical Ground Support Equipment |
| MHS | Message Handling System |
| MHz | Megahertz (106 Hz) |
| MIC | Mobile Interface Controller |
| mm | Millimetre (25,4 mm = 1 inch) |
| MM | Man Machine |
| | Mobility Management |
| MMA | Multi-Matrix Amplifier |
| Mmax | Maximum Corrective Maintenance Time |
| MME | Mobile Management Entity |
| MMI | Man Machine Interface |
| MNC | Mobile Network Code |
| MNS | Mobile Network Signalling |
| MO | Mobile Originated |
| MOR | (Senior) Management OPS Review |
| MOS | Mean Opinion Score |
| | Mode of Service |
| MoU | Memorandum of Understanding |
| MPA | Multi-Port Amplifier |
| MPH | Mobile Management (entity) - Physical (layer) [primitive] |
| MPP | Materials, Processes and Control Plan |
| MPS | Modular Power Subsystem |
| MPTY | Multi-Party (Supplementary Service) |
| MRB | Material Review Board |
| MRP | Mouth Reference Point |
| MRR | Manufacturing Readiness Review |
| MS | Mobile Station (GSM) |
| MSC | Mobile Switching Centre |
| | Mobile Switch Controller |
| | Mobile Services Switching Centre |
| MSCM | Mobile Station Class Mark |
| MSCU | Mobile Station Control Unit |
| MSISDN | Mobile Station International ISDN Number |
| MSRN | Mobile Station Roaming Number |
| MSS | Mobile Satellite Service |
| MSSC | Mobile Satellite Switching Centre |
| MT-MT | Mobile-to-Mobile Terminal |
| MT | Mobile Terminated |
| MT (0, 1, 2) | Mobile Termination |
| MTA | Microwave Transistor Amplifier |
| MTBF | Mean Time Between Failure |
| MTF | Modulation Transfer Function |
| MTM | Mobile-To-Mobile (call) |
| MTP | Message Transfer Part |
| MTS | Mobile Telephone Service |
| | Mobile Transceiver Station |
| MTTF | Mean Time to Failure |
| MTTR | Mean Time To Repair |

| | |
|---|---|
| MU | Mark Up |
| MUMS | Multi-User Mobile Station |
| MUX | Multiplexer |
| mW | Milliwatt ($10^{-3}$ Watt) |

**N**

| | |
|---|---|
| NB | Normal Burst |
| NBIN | A parameter in the (GSM) hopping sequence |
| NCC | Network Colour Code |
| | Network Control Centre |
| NCELL | Neighbouring (of current serving) Cell |
| NCM | Non-Conforming Material |
| NDC | National Destination Code |
| NDUB | Network Determined User Busy |
| NE | Network Element |
| NEF | Network Element Function |
| NEP | Noise Equivalent Power |
| NET | Norme Européenne de Telecommunications |
| NF | Network Function |
| NFD | Nominal Flux Density |
| NFFF | Near Field/Far Field |
| NGES | National Gateway Earth Stations |
| NIC | Network Independent Clocking |
| NiH2 | Nickel Hydrogen (Batteries) |
| NIST | National Institute of Standards and Technology |
| NM | Network Management |
| NMC | Network Management Centre |
| NMSI | National Mobile Station Identification Number |
| NPI | Number Plan Identifier |
| NPR | Noise Power Ratio |
| N/S | North/South |
| NSAP | Network Service Access Point |
| N(SD) | Send Sequence Number |
| NSMAR | Non-Standard Material Approval Request |
| NT | Network Termination |
| | Non-Transparent |
| NTAAB | New Type Approval Advisory Board |
| NUA | Network User Access |
| NUI | Network User Identification |
| NUP | National User Part (SS7) |
| N/W | Network |
| NW | Network |
| NWC | Nulling Weight and Combine |

**O**

| | |
|---|---|
| O | Optional |
| O&M | Operation and Maintenance |
| OA | Outgoing Access (CUG Supplementary Service) |
| OA&M | Operations, Administration and Maintenance |
| OACSU | Off-Air Call Set-Up |
| OBC | On-Board Computer |
| OCB | Outgoing Calls Barred within the CUG |
| OCD | OPS Concept Document |
| ODTC | Office of Defence Trades Control |
| OHA | Operating Hazard Analysis |
| OLR | Overall Loudness Rating |
| OMC | Operations and Maintenance Centre |
| (or OMC-I) | |
| OML | Operations and Maintenance Link |

| | |
|---|---|
| OMT | Originator Mobile Terminal |
| OMUX | Output Multiplexer |
| ONET | Output Network |
| OS | Operating System |
| OSI | Open System Interconnection |
| OSI RM | OSI Reference Model |
| OSPS | Operation Services Position System |
| OSR | Optical Solar Reflector |
| OSS | On-Site Support |

**P**

| | |
|---|---|
| PA | Power Amplifier |
| | Product Assurance |
| PABX | Private Automatic Branch Exchange |
| PAD | Packet Assembly/Disassembly Facility |
| PAM | Pulse Amplitude Modulation: Phase Modulation |
| PAP | Product Assurance Procedure |
| PBX | Private Branch Exchange |
| PC | Personal Computer |
| | Production Control |
| PCB | Printed Circuit Board |
| PCH | Paging Channel |
| PCM | Pulse Code Modulation |
| PCU | Polarization Control Unit |
| | Power Conditioning Unit |
| PD | Program Directive |
| | Protocol Discriminator |
| | Public Data |
| PDN | Public Data Network |
| PDR | Preliminary Design or Delta Review |
| PDS | (Solar) Panel Deployment System |
| PFFT | Precision Fast Fourier Transform |
| PH | Packet Handler |
| | Physical (layer) |
| PHA | Preliminary Hazard Analysis |
| PHI | Packet Handler Interface |
| PI | Presentation Indicator |
| PICS | Protocol Implementation Conformance Statement |
| PIM | Passive Intermodulation |
| PIMS | Passive Intermodulation Products |
| PIN | Personal Identification Number |
| PIXT | Protocol Implementation Extra Information for Testing |
| PLL | Phase Lock Loop |
| PLMN | Public Land Mobile Network |
| PMB | Performance Measurement Baseline |
| PMO | Program Management Office |
| PMP | Program Master Plan |
| PMPCB | Parts, Material and Process Control Board |
| PN | Private Networks |
| PNE | Présentation des Normes Européennes |
| POI | Point of Interconnection (with PSTN) |
| POTTS | Power and Thermal Test Software |
| PP | Planning Package |
| | Point-to-Point |
| PPE | Primitive Procedure Entity |
| PPI | Program Planning Instruction |
| PPM | Pages per Minute |
| | Pulse Position Modulation |
| PPS | Pulses per Second |
| PRA | Pryo Relay Assembly |
| Pref CUG | Preferential CUG |

| | |
|---|---|
| PRF | Pulse Repetition Frequency |
| PRI | Pulse Repetition Interval |
| PRN | Pseudo-Random Noise |
| PRR | Process Readiness Review<br>Pulse Repetition Rate |
| PRU | Power Regulation Unit |
| Ps | Location Probability |
| PSAM | Pilot Symbol Assisted Modulation |
| PSK | Phase Shift Keyed |
| PSMN | Public Satellite Mobile Network |
| PSPDN | Packet Switched Public Data Network |
| PSTN | Public Switched Telephone Network |
| PTT | Public Telephone Telegraph |
| PUCT | Price per Unit Currency Table |
| PW | Password |

**Q**

| | |
|---|---|
| QA | Q (Interface) - Adapter |
| QAF | Q - Adapter Function |
| QOS | Quality Of Service |
| QPSK | Quadrate Phase Shift Keying |
| QSP | Quality System Procedures |

**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 |
| RAM | Requirements Allocation Memorandum |
| RAND | Random Number |
| RAR | Requirements Allocation Review |
| RASC | Random Access Signalling Channel |
| RBER | Residual Bit Error Ratio |
| RBFN | Return Beam Forming Network |
| RBP | Return Bit Period |
| RCS | Reaction Control Subsystem<br>Real Time Closed Loop Simulator |
| RDB | Relational Data Base |
| RDI | Restricted Digital Information |
| REA | Reaction Engine Assembly |
| REC | Recommendation |
| REJ | Reject(ion) |
| REL | Release |
| REQ | Request |
| RF | Radio Frequency |
| RFC | Request for Change |
| RFCH | Radio Frequency Channel |
| RFI | Radio Frequency Interference |
| RFN | Reduced TDMA Frame Number |
| RHC | Right Hand Circular (polarization) |
| RIU | Remote Interface Unit |
| RLP | Radio Link Protocol |
| RLR | Receiver Loudness Rating |
| RMA | Reliability, Maintainability, Availability |
| RMS | Root Mean Square |
| RNTABLE | Table of 128 integers in the (GSM) hopping sequence |
| R/O | Receive Only |
| ROM | Read Only Memory |

| | |
|---|---|
| | Rough Order of Magnitude |
| R/PA | Receiver/Processor Assembly |
| RPOA | Recognized Private Operating Agency |
| RR | Radio Resource Management |
| RRB | Risk Review Board |
| RSC | Response Signalling Channel |
| RSE | Radio System Entity |
| RSL | Radio Signalling Link |
| RSP | Response |
| RSS | Received Signal Strength |
| | Root Sum Square |
| | Radio Subsystem |
| RSSi | Receive Signal Strength |
| RSZI | Regional Subscription Zone Identity |
| RTE | Remote Terminal Emulator |
| RTM | Requirements Traceability Management |
| RTP | Range Tone Processor |
| RTS | Real Time Software |
| RTU | Remote Terminal Unit |
| RVTM | Requirements and Verification Traceability Matrix |
| RWA | Reaction Wheel Assembly |
| Rx (or RX) | Receiver |
| RXLEV | Received Signal Level |
| RXQUAL | Received Signal Quality |

**S**

| | |
|---|---|
| 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 |
| SAD | Solar Array Drive |
| S-AGCH | Satellite-Access Grant Channel |
| SAP | Service Access Point |
| SAPI | Service Access Point Indicator |
| SAT | Stand-Alone Test |
| SAW | Surface Acoustic Wave |
| SB | Synchronization Burst |
| S-Band | 1 500 MHz to 5 200 MHz nominal frequency band |
| SBC | Single Board Computer |
| S-BCCH | Satellite-Broadcast Control Channel |
| SC | Service Centre (used for SMS) |
| | Service Code |
| SCC | Satellite Control Centre |
| SCCP | Signalling Connection Control Part |
| SCH | Synchronization Channel |
| SCN | Subchannel Number |
| SCPC | Single Carrier per Channel |
| SCS | Spacecraft Checkout Station |
| SCSI | Small Computer System Interface |
| SDCCH | Stand-Alone Dedicated Control Channel |
| S-DCCH | Satellite Dedicated Control Channel |
| SDD | Software Design Document |
| SDL | Specification Description Language |
| SDT | SDL Development Tool |
| SDU | Service Data Unit |
| SE | Support Entity |
| SE&I | System Engineering and Integration |
| SEC | Secondary Electron Conduction |

| | |
|---|---|
| SEF | Support Entity Function |
| SEU | Single Event Upset |
| S-FACCH/E | Satellite-Fast Associated Control Channel/Eighth Rate |
| S-FACCH/F | Satellite-Fast Associated Control Channel/Full Rate |
| S-FACCH/H | Satellite-Fast Associated Control Channel/Half Rate |
| S-FACCH/Q | Satellite-Fast Associated Control Channel/Quarter Rate |
| SFH | Slow Frequency Hopping |
| SHA | System Hazard Analysis |
| SHF | Super High Frequency (3Ghz to 30 Ghz nominal frequency band) |
| S-HMSCH | Satellite-High Margin Synchronization Channel |
| SHOT | Short Holding Time |
| S-HPACH | Satellite-High Power Alerting Channel |
| Sl | Screening Indicator |
| | Service Interworking |
| | Supplementary Information |
| SlA | Supplementary Information A |
| SID | Silence Descriptor |
| SILC | Selective Incoming Load Control |
| SIM | Subscriber Identity Module |
| SLR | Send Loudness Rating |
| SLT | Segment Level Test |
| SLTM | Signalling Link Test Message |
| SME | Short Message Entity |
| SMG | Special Mobile Group |
| SMS | Short Message Service |
| | Station Management Subsystem |
| SMSCB | Short Message Service Cell Broadcast |
| SMS/PP | Short Message Service/Point-to-Point |
| SMS-SC | Short Message Service - Service Centre |
| SMT | Short Message Terminal |
| SN | Subscriber Number |
| S/N | Signal to Noise Ratio |
| SNMP | Simple Network Management Protocol |
| SNR | Serial Number |
| | Signal to Noise Ratio |
| | Space Navigation Receiver |
| SO | Service Observation |
| SOA | Suppress Outgoing Access (CUG Supplementary Service) |
| SOCD | Systems Operational Concept Document |
| SP | Service Provider |
| | Signalling Point |
| | Spare |
| SPC | Signalling Point Code |
| | Suppress Preferential CUG |
| S-PCH | Satellite-Paging Channel |
| SPDR | System Preliminary Design Review |
| SPR | Software Problem Reports |
| SPT | System Performance Test |
| SPW | Signal Processing Workstation |
| SQA | Supplier Quality Assurance |
| SQEG | Speech Quality Experts Group |
| SQS | Supplier Quality System |
| S-RACH | Satellite-Random Access Channel |
| SRAM | Static Random Access Memory |
| SRES | Signed Response (authentication) |
| SRR | Shipment Readiness Review |
| | System Requirements Review |
| SRS | Software Requirements Specification |
| SS7 | Signalling System Number 7 |
| SS | Supplementary Service |
| | System Simulator |
| SSPA | Solid State Power Amplifier |

| | |
|---|---|
| S-SACCH/CE | Satellite-Slow, S-SDCCH/E Associated, Control Channel |
| S-SACCH/CF | Satellite-Slow, S-SDCCH/F Associated, Control Channel |
| S-SACCH/CH | Satellite-Slow, S-SDCCH/H Associated, Control Channel |
| S-SACCH/CQ | Satellite-Slow, S-SDCCH/Q Associated, Control Channel |
| S-SACCH/TE | Satellite-Slow, S-TCH/E Associated, Control Channel |
| S-SACCH/TF | Satellite-Slow, S-TCH/F Associated, Control Channel |
| S-SACCH/TH | Satellite-Slow, S-TCH/H Associated, Control Channel |
| S-SACCH/TQ | Satellite-Slow, S-TCH/Q Associated, Control Channel |
| SSC | Supplementary Service Control String |
| S-SCH | Satellite-Synchronization Channel |
| S-SDCCH | Satellite Stand Alone Dedicated Control Channel |
| S-SDCCH/E | Satellite-Standalone Dedicated Control Channel/Eighth Rate |
| SSMA | Spread Spectrum Multiple Access |
| SSN | Subsystem Number |
| SSO | Semi-Automatic Service Observation |
| SSPA | Solid State Power Amplifier |
| SSS | Static Spacecraft Simulator Software |
| S-TCH | Satellite-Traffic Channel |
| S-TCH/ELS | Satellite-Traffic Channel/Eighth Rate Low Rate Speech |
| S-TCH/HES | Satellite-Traffic Channel/Half Rate Enhanced Speech |
| S-TCH/HRS | Satellite-Traffic Channel/Half Rate Robust Speech |
| S-TCH/QBS | Satellite-Traffic Channel/Quarter Rate Basic Speech |
| STMR | Side Tone Masking Rating |
| STP | Signalling Transfer Point |
| | Software Test Plan |
| SVN | Software Version Number |
| SVP | System Validation Plan |
| S/W | Software |
| SWQA | Software Quality Assurance |
| SWR | Standing Wave Ratio |

**T**

| | |
|---|---|
| T | Timer |
| | Transparent |
| | Type Only |
| T-1 Line | Standard 1,544 Mbs Digital Transmission Line |
| TA | Terminal Adapter |
| TAC | Type Approval Code |
| TAF | Terminal Adaptation Function |
| TASI | Time Assigned Speech Interpolation |
| TBD | To Be Determined |
| TBR | Technical Basis for Regulation |
| | To Be Resolved |
| TC | Transaction Capabilities |
| TCE | Traffic Channel Equipment |
| TCH | Traffic Channel |
| TCH/F | Traffic Channel/Full Rate |
| TCH/F2.4 | Traffic Channel/Full Rate Data (up to 2,4 Kbps) |
| TCH/F4.8 | Traffic Channel/Full Rate Data (4,8 Kbps) |
| TCH/F9.6 | Traffic Channel/Full Rate Data (9,6 Kbps) |
| TCH/FACCH | Traffic Channel/Fast Associated Control Channel |
| TCH/FS | Traffic Channel/Full Rate Speech |
| TCH/H | Traffic Channel/Half Rate |
| TCH/H2.4 | Traffic Channel/Half Rate Data (up to 2,4 Kbps) |
| TCH/H4.8 | Traffic Channel/Half Rate Data (4,8 Kbps) |
| TCH/HS | Traffic Channel/Half Rate Speech |
| TCI | Transceiver Control Interface |
| TCR | Telemetry, Command and Ranging |
| TCS | Thermal Control Subsystem |
| TC-TR | Technical Committee Technical Report |
| TCU | Traffic Control Unit |

| | |
|---|---|
| TDM | Time Division Multiplex |
| TDMA | Time Division Multiple Access |
| TDP | Technology Development Program |
| TDR | Test Discrepancy Report |
| TDRSS | Tracking and Data Relay Satellite System |
| TE | Terminal Equipment |
| TED | Threshold Extension Demodulator |
| TEI | Terminal Endpoint Identifier |
| TEM | Technical Exchange Meeting |
| TERA | Trunk Error Analysis |
| TFA | Transfer Allowed |
| TFP | Transfer Prohibited |
| TI | Transaction Identifier |
| TIA | Telecommunication Industry Association |
| TID | Test Interconnecting Devices |
| TIE | Trunk Intermittent Error |
| TLT | Test Loop Translator |
| TLV | Type, Length and Value |
| TML | Total Mass Loss |
| TMN | Telecommunications Management Network |
| TMSI | Temporary Mobile Subscriber Identifier |
| TN | Timeslot Number |
| TPM | Technical Performance Measure |
| TON | Type of Number |
| TOS | Transfer Orbit Stage |
| TRR | Test Readiness Review |
| TRX | Transceiver |
| TS | Technical Specification<br>Teleservice<br>Time Slot |
| TSC | Training Sequence Code |
| TSDI | Transceiver Speech and Data Interface |
| TTA | True Timing Advance |
| TT&C | Telemetry, Tracking and Control |
| TTCN | Tree and Tabular Combined Notation |
| TUP | Telephone User Part (SS7) |
| TV | Type and Value |
| TVP | Technology Validation Program |
| TWTA | Travelling Wave Tube Assembly (amplifier) |
| Tx (or TX) | Transmit |
| TXPWR | Transmit Power, Tx power level in the MS_TXPWR_REQUEST and MS_TXPWR_CONF parameters |

**U**

| | |
|---|---|
| UA | Unavailable<br>Unnumbered Acknowledge |
| UDI | Unrestricted Digital Information |
| UDUB | User Determined User Busy |
| UHF | Ultra High Frequency (300 MHz to 3 000 MHz nominal frequency band) |
| Ul | Unnumbered Information (Frame) |
| UIC | Union Internationale des Chemins de Fer |
| Um | Air interface between the User Terminal and the ACeS Network |
| UPCMI | Uniform PCM Interface (13-bit) |
| UPD | Up to Date |
| UPS | Uninterruptable Power Supply |
| USSD | Unstructured Supplementary Service Data |
| UT | User Terminal |
| UTC | Universal Time Coordinated |
| UUS | User-to-User Signalling (Supplementary Service) |
| UUT | Unit Under Test |

**V**

| | |
|---|---|
| V | Value Only |
| VAD | Voice Activity Detection |
| VCORD | Voice Switch Coordination Manager |
| VCOS | VLSI Chips on Silicon |
| VDU | Video Display Unit |
| VFH | Very High Frequency (30 MHz to 300 MHz nominal frequency band) |
| VLR | Visitor Location Register |
| VLSI | Very Large Scale Integration |
| VMSC | Visited MSC |
| VPLMN | Visited PLMN |
| V(SD) | Send State Variable |
| VSDM | Variable Slope Delta Modulation |
| VSWR | Voltage Standing Wave Ratio |

**W**

| | |
|---|---|
| WDS | Workstation Display Software |
| WPA | Wrong Password Attempt |
| WS | Workstation |
| WB | Wide Beam |
| WWB | Watt Wide Band |

**X**

| | |
|---|---|
| XID | Exchange Identifier |
| XMTC | Transmitter |
| XPNDR | Transponder |

**Z**

| | |
|---|---|
| ZC | Zone Code |

# Annex A (informative): Terminology translator

**Table A.1: GSM/GMR-2 system terminology translator**

| Existing GSM Acronym | Equivalent GMR-2 Acronym and Meaning |
|---|---|
| BTS | GTS = Gateway Transceiver Subsystem<br>This comprises the Gateway Antenna and Radio (GAR) subsystem and the Traffic Channel Equipment (TCE) |
| BSC | GSC = Gateway Station Controller |
| BSS (= BTS + BSC) | GWS = GateWay Subsystem |
| MSC | MSC |
| BSS + MSC | GW = GateWay (GWS + MSC) |
| PLMN | PSMN = Public Satellite Mobile Network.<br>In practice the PSMN is the part of the core network that links the Gateway (GW) to the Public Land Mobile Network (PLMN). |
| MS | MES = Mobile Earth Station |

# History

| Document history | | |
|---|---|---|
| V1.1.1 | March 2001 | Publication |
| | | |
| | | |
| | | |
| | | |