Technical Specification Group Services and System Aspects TSGS#11(01)0208 replaces TSGS#11(01)0069

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Title: 3GPP TS 41.102:

GSM Release 4 Specifications

Document for: approval

Agenda Item: 10

Attached is the latest draft of this specification. It takes into account the decisions taken at TSGs#11. Note that the reference to GSM 01.04 in clause 3 is replaced by a reference to 3GPP TR 21.905.

3GPP TR 41.102 V2.1.0 (2001-03)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; GSM Release 4 specifications (Release 4)





The present document has been developed within the 3rd Generation Partnership Project (3GPP TM) and may be further elaborated for the purposes of 3GPP.

Keywords
GSM, architecture

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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

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

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document identifies the GSM system specifications for GSM Release 4.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TR 21.905: "3G vocabulary".
- [2] 3GPP TR 21.900: "3GPP working methods".

3 Abbreviations

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 apply.

4 General

GSM Release 4 consists of GSM-only specifications and common specifications developed for both GSM Release 4 and Release 4 of the 3rd Generation mobile system.

The present document identifies the GSM system set of specifications required to implement GSM Release 4.

Specifications for GSM-only Release 4 can be identified by the "**ab.cde''** numbering scheme where "ab" is in the range 41 to 52.

Specifications for both GSM Release 4 and Release 4 of the 3rd Generation mobile system are identified by the "**ab.cde''** numbering scheme where "ab" is in the range 21 to 35.

A more detailed description of the specification numbering scheme is given in 3GPP TR 21.900.

5 (void)

6 Specifications and Reports

The first column shows the prior-Release specification number, if any, corresponding to the spec number given in the second column.

| progenitor | Number | Title | WG prime | For pub- |
|------------|--------|-------|----------|----------|
| | | | | lication |

| | 21.801 | 3GPP drafting rules | SP | Yes |
|-------|--------|--|----|-----|
| | 22.121 | Provision of Services in UMTS - The Virtual Home Environment ; Stage 1 | S1 | Yes |
| | 23.221 | Architectural requirements | S2 | Yes |
| | 23.908 | Technical report on Pre-Paging | N4 | Yes |
| | 23.909 | Technical report on the Gateway Location Register | N4 | Yes |
| | 23.911 | Technical report on Out-of-band transcoder control | N4 | Yes |
| | 23.912 | Technical report on Super-Charger | N4 | Yes |
| | 23.923 | Combined GSM and Mobile IP mobility handling in UMTS IP CN | S2 | Yes |
| | 23.925 | UMTS Core network based ATM transport | S2 | Yes |
| | 25.842 | Smart antenna | R1 | No |
| | 43.051 | GSM/EDGE Radio Access Network (GERAN) overall description; Stage 2 | G1 | Yes |
| | 41.102 | GSM Release 4 Specifications | SP | Yes |
| 01.31 | 41.031 | Fraud Information Gathering System (FIGS); Service requirements; Stage 0 | S3 | Yes |
| 01.33 | 41.033 | Lawful Interception requirements for GSM | S3 | Yes |
| 01.61 | 41.061 | General Packet Radio Service (GPRS); GPRS ciphering algorithm requirements | S3 | Yes |
| 02.01 | 22.001 | Principles of circuit telecommunication services supported by a Public Land Mobile | S1 | Yes |
| | | Network (PLMN) | | |
| 02.02 | 22.002 | Circuit Bearer Services Supported by a PLMN | S1 | Yes |
| 02.03 | 22.003 | Circuit Teleservices supported by a Public Land Mobile Network (PLMN) | S1 | Yes |
| 02.04 | 22.004 | General on Supplementary Services | S1 | Yes |
| 02.09 | 42.009 | Security Aspects | S3 | Yes |
| 02.11 | 22.011 | Service accessibility | S1 | Yes |
| 02.15 | 22.115 | Service Aspects Charging and billing | S1 | Yes |
| 02.17 | 42.017 | Subscriber Identity Modules, Functional Characteristics | T3 | Yes |
| 02.22 | 22.022 | Personalisation of GSM ME Mobile functionality specification ; Stage 1 | S3 | Yes |
| 02.24 | 22.024 | Description of Charge Advice Information (CAI) | S1 | Yes |
| 02.29 | 22.129 | Handover Requirements between UMTS and GSM or other Radio Systems | S1 | Yes |
| 02.30 | 22.030 | Man-Machine Interface (MMI) of the Mobile Station (MS) | S1 | Yes |
| 02.31 | 42.031 | Fraud Information Gathering System (FIGS) Service description ; Stage 1 | S3 | Yes |
| 02.32 | 42.032 | Immediate Service Termination (IST); Service description; Stage 1 | S3 | Yes |
| 02.33 | 42.033 | Lawful Interception; Stage 1 | S3 | Yes |
| 02.34 | 22.034 | High Speed Circuit Switched Data (HSCSD) ; Stage 1 | S1 | Yes |
| 02.38 | 22.038 | SIM application toolkit (SAT); Stage 1 | S1 | Yes |
| 02.41 | 22.041 | Operator Determined Call Barring | S1 | Yes |
| 02.42 | 22.042 | Network Identity and Time Zone (NITZ), stage 1 | S1 | Yes |
| 02.43 | 42.043 | Support of Localised Service Area (SoLSA); Stage 1 | S1 | Yes |
| 02.48 | 42.048 | Security mechanisms for the SIM Application Toolkit; Stage 1 | T3 | Yes |
| 02.56 | 42.056 | GSM Cordless Telephony System (CTS), Phase 1; Service description; Stage 1 | S1 | Yes |
| 02.57 | 22.057 | Mobile Station Application Execution Environment (MExE); Stage 1 | S1 | Yes |
| 02.60 | 22.060 | General Packet Radio Service (GPRS); Stage 1 | S1 | Yes |
| 02.66 | 22.066 | Support of Mobile Number Portability (MNP); Stage 1 | S1 | Yes |
| 02.67 | 22.067 | enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 1 | S1 | Yes |
| 02.68 | 42.068 | Voice Group Call Service (VGCS); Stage 1 | S1 | Yes |
| 02.69 | 42.069 | Voice Broadcast Service (VBS) ; Stage 1 | S1 | Yes |
| 02.71 | 22.071 | Location Services (LCS); Stage 1 | S1 | Yes |
| 02.71 | 22.072 | Call Deflection (CD); Stage 1 | S1 | Yes |
| 02.72 | 22.072 | Noise Suppression for the AMR | S4 | Yes |
| | | 11 | | Yes |
| 02.78 | 22.078 | CAMEL; Stage 1 | S1 | |
| 02.79 | 22.079 | Support of Optimal Routing; Stage 1 | S1 | Yes |
| 02.81 | 22.081 | Line Identification Supplementary Services; Stage 1 | S1 | Yes |
| 02.82 | 22.082 | Call Forwarding (CF) Supplementary Services; Stage 1 | S1 | Yes |
| 02.83 | 22.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Services; Stage 1 | S1 | Yes |
| 02.84 | 22.084 | MultiParty (MPTY) Supplementary Service; Stage 1 | S1 | Yes |
| 02.85 | 22.085 | Closed User Group (CUG) Supplementary Services; Stage 1 | S1 | Yes |
| 02.86 | 22.086 | Advice of Charge (AoC) Supplementary Services; Stage 1 | S1 | Yes |
| 02.87 | 22.087 | User-to-user signalling (UUS); Stage 1 | S1 | Yes |

| 02.88 | 22.088 | Call Barring (CB) Supplementary Services; Stage 1 | S1 | Yes |
|-------|--------|--|----|-----|
| 02.90 | 22.090 | Unstructured Supplementary Service Data (USSD); Stage 1 | S1 | Yes |
| 02.91 | 22.091 | Explicit Call Transfer (ECT) Supplementary Service; Stage 1 | S1 | Yes |
| 02.93 | 22.093 | Call Completion to Busy Subscriber (CCBS); Stage 1 | S1 | Yes |
| 02.96 | 22.096 | Calling Name Presentation (CNAP); Stage 1 (T1P1) | S1 | Yes |
| 02.97 | 22.097 | Multiple Subscriber Profile (MSP); Stage 1 | S1 | Yes |
| 03.02 | 23.002 | Network Architecture | S2 | Yes |
| 03.03 | 23.003 | Numbering, Addressing and Identification | N4 | Yes |
| 03.05 | 43.005 | Technical performance objectives | NP | Yes |
| 03.07 | 23.007 | Restoration procedures | N4 | Yes |
| 03.08 | 23.008 | Organisation of subscriber data | N4 | Yes |
| 03.08 | 23.108 | Mobile Radio Interface Layer 3 specification Core Network Protocols stage 2 (structured procedures) | N1 | Yes |
| 03.09 | 23.009 | Handover procedures | N1 | Yes |
| 03.10 | 23.110 | UMTS Access Stratum Services and Functions | S2 | Yes |
| 03.10 | 43.010 | GSM Public Land Mobile Network (PLMN) Connection Types | N3 | Yes |
| 03.11 | 23.011 | Technical Realization of Supplementary Services - General Aspects | N4 | Yes |
| 03.12 | 23.012 | Location management procedures | N4 | Yes |
| 03.13 | 43.013 | Discontinuous Reception (DRX) in the GSM System | GP | Yes |
| 03.14 | 23.014 | Support of Dual Tone Multi Frequency (DTMF) signalling | N1 | Yes |
| 03.15 | 23.015 | Technical realisation of Operator Determined Barring (ODB) | N4 | Yes |
| 03.16 | 23.016 | Subscriber data management ; Stage 2 | N4 | Yes |
| 03.16 | 23.116 | Super Charger ; Stage 2 | N4 | Yes |
| 03.18 | 23.018 | Basic Call Handling - Technical realisation | N4 | Yes |
| 03.19 | 23.119 | Gateway Location Register (GLR); Stage2 | N4 | Yes |
| 03.19 | 43.019 | GSM API for SIM toolkit stage 2 | T3 | Yes |
| 03.20 | 43.020 | Security-related Network Functions | S3 | Yes |
| 03.22 | 43.022 | Functions Related to Mobile Station (MS) in Idle Mode | G1 | Yes |
| 03.26 | 43.026 | Multiband operation of GSM/DCS 1800 by a single operator | GP | Yes |
| 03.30 | 43.030 | Radio Network Planning Aspects | GP | Yes |
| 03.31 | 43.031 | Fraud Information Gathering System (FIGS); Service description; Stage 2 | S3 | Yes |
| 03.32 | 23.032 | Universal Geographical Area Description (GAD) | S2 | Yes |
| 03.33 | 43.033 | Lawful Interception; Stage 2 | S3 | Yes |
| 03.34 | 23.034 | High Speed Circuit Switched Data (HSCSD) ; Stage 2 | N1 | Yes |
| 03.35 | 43.035 | Immediate Service Termination (IST); Stage 2 | S3 | Yes |
| 03.38 | 23.038 | Alphabets & Language | T2 | Yes |
| 03.39 | 23.039 | Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs) | T2 | Yes |
| 03.40 | 23.040 | Technical realisation of Short Message Service | T2 | Yes |
| 03.40 | 23.140 | Multimedia Messaging Service (MMS) | T2 | Yes |
| 03.41 | 23.041 | Technical Realization of Cell Broadcast Service | T2 | Yes |
| 03.42 | 23.042 | Compression algorithm for SMS | T2 | Yes |
| 03.45 | 43.045 | Technical Realization of Facsimile Group 3 Service - transparent | N3 | Yes |
| 03.48 | 43.048 | Security Mechanisms for SIM Toolkit Application ; Stage 2 | T3 | Yes |
| 03.50 | 43.050 | Transmission Planning Aspects of the Speech Service in the GSM Public Land Mobile Network (PLMN) System | S4 | Yes |
| 03.52 | 43.052 | Lower layers of the GSM Cordless Telephony System (CTS) radio interface ; Stage 2 | GP | Yes |
| 03.55 | 43.055 | Dual Transfer Mode (DTM); Stage 2 | G1 | Yes |
| 03.57 | 23.057 | Mobile Station Application Execution Environment (MExE) | T2 | Yes |
| 03.58 | 43.058 | Characterisation, test methods and quality assessment for handsfree Mobile Stations (MSs) | S4 | Yes |
| 03.59 | 43.059 | Location services (LCS) GERAN; Stage 2 | GP | Yes |
| 03.60 | 23.060 | General Packet Radio Service (GPRS) Service description; Stage 2 | S2 | Yes |
| 03.63 | 43.063 | Packet Data on Signalling channels service (PDS) Service description, Stage 2 | N1 | Yes |
| 03.64 | 43.064 | Overall description of the GPRS radio interface; Stage 2 | G1 | Yes |
| 03.66 | 23.066 | Support of GSM Mobile Number Portability (MNP) stage 2 | N4 | Yes |
| 03.67 | 23.067 | Enhanced Multi-Level Precedence and Preemption Service (EMLPP); Stage 2 | N4 | Yes |

| 03.68 | 43.068 | Voice Group Call Service (VGCS); Stage 2 | N1 | Yes |
|-------|--------|--|----|-----|
| 03.69 | 43.069 | Voice Broadcast service (VBS); Stage 2 | N1 | Yes |
| 03.71 | 43.071 | Location services (LCS); Stage 2 | S2 | Yes |
| 03.72 | 23.072 | Call Deflection Supplementary Service ; Stage 2 | N4 | Yes |
| 03.73 | 23.073 | Support of Localised Service Area (SoLSA); Stage 2 | N4 | Yes |
| 03.78 | 23.078 | Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 - Stage 2 | N2 | Yes |
| 03.79 | 23.079 | Support of Optimal Routeing - Phase 1; Stage 2 | N4 | Yes |
| 03.81 | 23.081 | Line Identification Supplementary Services ; Stage 2 | N4 | Yes |
| 03.82 | 23.082 | Call Forwarding (CF) Supplementary Services ; Stage 2 | N4 | Yes |
| 03.83 | 23.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 2 | N4 | Yes |
| 03.84 | 23.084 | MultiParty (MPTY) Supplementary Service ; Stage 2 | N4 | Yes |
| 03.85 | 23.085 | Closed User Group (CUG) Supplementary Service ; Stage 2 | N4 | Yes |
| 03.86 | 23.086 | Advice of Charge (AoC) Supplementary Service ; Stage 2 | N4 | Yes |
| 03.87 | 23.087 | User-to-User Signalling (UUS) ; Stage 2 | N4 | Yes |
| 03.88 | 23.088 | Call Barring (CB) Supplementary Service ; Stage 2 | N4 | Yes |
| 03.90 | 23.090 | Unstructured Supplementary Service Data (USSD); Stage 2 | N4 | Yes |
| 03.91 | 23.091 | Explicit Call Transfer (ECT) Supplementary Service ; Stage 2 | N4 | Yes |
| 03.93 | 23.093 | Call Completion to Busy Subscriber (CCBS) ; Stage 2 | N4 | Yes |
| 03.94 | 23.094 | Follow Me Stage 2 | N4 | Yes |
| 03.96 | 23.096 | Name Identification Supplementary Service ; Stage 2 | N4 | Yes |
| 03.97 | 23.097 | Multiple Subscriber Profile (MSP); Stage 2 | N4 | Yes |
| 04.01 | 44.001 | Mobile Station - Base Station System (MS - BSS) Interface General Aspects and Principles | N1 | Yes |
| 04.02 | 24.002 | GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration | N1 | Yes |
| 04.03 | 44.003 | Mobile Station - Base Station System (MS - BSS) Interface Channel Structures and Access Capabilities | G2 | Yes |
| 04.04 | 24.004 | Layer 1 - General Requirements | G2 | Yes |
| 04.04 | 44.004 | Layer 1 - General Requirements | G2 | Yes |
| 04.05 | 44.005 | Data Link (DL) Layer General Aspects | G2 | Yes |
| 04.06 | 44.006 | Mobile Station - Base Stations System (MS - BSS) Interface Data Link (DL) Layer Specification | G2 | Yes |
| 04.07 | 24.007 | Mobile Radio Interface Signalling Layer 3 - General Aspects | N1 | Yes |
| 04.08 | 24.008 | Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3 | N1 | Yes |
| 04.08 | 44.008 | Mobile radio interface layer 3 specification | N1 | Yes |
| 04.10 | 24.010 | Mobile Radio Interface Layer 3 - Supplementary Services Specification - General Aspects | N4 | Yes |
| 04.11 | 24.011 | Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface | N1 | Yes |
| 04.12 | 24.012 | Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface | G2 | Yes |
| 04.13 | 44.013 | Performance Requirements on Mobile Radio Interface | N1 | Yes |
| 04.14 | 44.014 | Individual equipment type requirements and interworking; Special conformance testing functions | G2 | Yes |
| 04.18 | 44.018 | Mobile Radio Interface - Layer 3 Specification RR part | G2 | Yes |
| 04.21 | 44.021 | Rate Adaption on the Mobile Station - Base Station System (MS-BSS) Interface | N3 | Yes |
| 04.22 | 24.022 | Radio Link Protocol (RLP) for Data and Telematic Services on the (MS-BSS) Interface and the Base Station System - Mobile-services Switching Centre (BSS-MSC) Interface | N3 | Yes |
| 04.31 | 44.031 | Location Services LCS RR LCS Protocol | G2 | Yes |
| 04.35 | 44.035 | Location Services LCS Stage 3 E-OTD Enhanced Observed | G2 | Yes |
| 04.56 | 44.056 | GSM Cordless Telephony System (CTS), (Phase 1) CTS Radio Interface Layer 3 Specification | N1 | Yes |
| 04.57 | 44.057 | GSM Cordless Telephony System (CTS), (Phase 1) CTS CTS supervising system Layer 3 Specification | N1 | Yes |
| 04.60 | 44.060 | | G2 | Yes |
| 04.63 | 44.063 | Packet Data on Signalling channels Service (PDS) Service Description, Stage 3 | N1 | Yes |
| 04.64 | 44.064 | Mobile Station - Serving GPRS Support Node (MS-SGSN) Logical Link Control (LLC) Layer Specification | N1 | Yes |
| 04.65 | 44.065 | Mobile Station (MS) - Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNDCP) | N1 | Yes |
| 04.67 | 24.067 | Enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 3 | N4 | Yes |

| 04.68 | 44.068 | Group Call Control (GCC) Protocol | N1 | Yes |
|-------|--------|--|----|-----|
| 04.69 | 44.069 | Broadcast Call Control (BCC) protocol | N1 | Yes |
| 04.71 | 44.071 | Location services (LCS) stage 3 | G2 | Yes |
| 04.72 | 24.072 | Call Deflection Supplementary Service ; Stage 3 | N4 | Yes |
| 04.80 | 24.080 | Mobile radio Layer 3 Supplementary Service specification - Formats and coding | N4 | Yes |
| 04.81 | 24.081 | Line Identification Supplementary Service ; Stage 3 | N4 | Yes |
| 04.82 | 24.082 | Call Forwarding Supplementary Service ; Stage 3 | N4 | Yes |
| 04.83 | 24.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 3 | N4 | Yes |
| 04.84 | 24.084 | MultiParty (MPTY) Supplementary Service ; Stage 3 | N4 | Yes |
| 04.85 | 24.085 | Closed User Group (CUG) Supplementary Service ; Stage 3 | N4 | Yes |
| 04.86 | 24.086 | Advice of Charge (AoC) Supplementary Service ; Stage 3 | N4 | Yes |
| 04.87 | 24.087 | User-to-User Signalling (UUS) ; Stage 3 | N4 | Yes |
| 04.88 | 24.088 | Call Barring (CB) Supplementary Service ; Stage 3 | N4 | Yes |
| 04.90 | 24.090 | Unstructured Supplementary Service Data (USSD); Stage 3 | N4 | Yes |
| 04.91 | 24.091 | Explicit Call Transfer (ECT) Supplementary Service ; Stage 3 | N4 | Yes |
| 04.93 | 24.093 | Call Completion to Busy Subscriber (CCBS) ; Stage 3 | N4 | Yes |
| 04.96 | 24.096 | Name Identification Supplementary Service ; Stage 3 | N4 | Yes |
| 05.01 | 45.001 | Physical Layer on the Radio Path (General Description) | G1 | Yes |
| 05.02 | 45.002 | Multiplexing and Multiple Access on the Radio Path | G1 | Yes |
| 05.03 | 45.003 | Channel coding | G1 | Yes |
| 05.05 | 45.005 | Radio transmission and reception | G1 | Yes |
| 05.08 | 45.008 | Radio subsystem link control | G1 | Yes |
| 05.09 | 45.009 | Link adaptation | G1 | Yes |
| 05.10 | 45.010 | Radio subsystem synchronization | G1 | Yes |
| 05.22 | 45.022 | Radio link management in hierarchical networks | GP | Yes |
| 05.50 | 45.050 | Background for RF Requirements | GP | Yes |
| 05.56 | 45.056 | CTS-FP Radio Sub-system | GP | Yes |
| 06.01 | 46.001 | Full Rate Speech Processing Functions | S4 | Yes |
| 06.02 | 46.002 | Half Rate Speech Processing Functions | S4 | Yes |
| 06.06 | 46.006 | Half Rate Speech: ANSI-C Code for GSM Half Rate Speech Codec | S4 | Yes |
| 06.07 | 46.007 | Half Rate Speech: Test Sequence for GSM Half Rate Speech Codec | S4 | Yes |
| 06.08 | 46.008 | Half Rate Speech; Performance Characterization of the GSM Half Rate speech codec | S4 | Yes |
| 06.10 | 46.010 | Full Rate Speech Transcoding | S4 | Yes |
| 06.11 | 46.011 | Substitution and Muting of Lost Frames for Full Rate Speech Channels | S4 | Yes |
| 06.12 | 46.012 | Comfort Noise Aspects for Full Rate Speech Traffic Channels | S4 | Yes |
| 06.20 | 46.020 | Half Rate Speech Transcoding | S4 | Yes |
| 06.21 | 46.021 | Half rate speech; Substitution and muting of lost frames for half rate speech traffic channels | S4 | Yes |
| 06.22 | 46.022 | Comfort Noise Aspects for Half Rate Speech Traffic Channels | S4 | Yes |
| 06.31 | 46.031 | Discontinuous Transmission (DTX) for Full Rate Speech Traffic Channels | S4 | Yes |
| 06.32 | 46.032 | Voice Activity Detection (VAD) | S4 | Yes |
| 06.41 | 46.041 | Discontinuous Transmission (DTX) for Half Rate Speech Traffic Channels | S4 | Yes |
| 06.42 | 46.042 | Voice Activity Detection (VAD) for Half Rate Speech Traffic Channels | S4 | Yes |
| 06.51 | 46.051 | GSM Enhanced full rate speech processing functions: General description | S4 | Yes |
| 06.53 | 46.053 | ANSI-C code for the GSM Enhanced full rate speech codec | S4 | Yes |
| 06.54 | 46.054 | Test sequences for the GSM Enhanced Full Rate (EFR) | S4 | Yes |
| 06.55 | 46.055 | Performance characterisation of the GSM EFR Speech Codec | S4 | Yes |
| 06.60 | 46.060 | Enhanced full rate speech transcoding | S4 | Yes |
| 06.61 | 46.061 | Substitution and muting of lost frames for encanced full rate speech traffic channels | S4 | Yes |
| 06.62 | 46.062 | Comfort noise aspects for Enhanced Full Rate (EFR) speech traffic channels | S4 | Yes |
| 06.76 | 46.076 | Adaptive Multi-Rate (AMR) speech codec; Study phase report | S4 | Yes |
| 06.77 | 26.077 | Minimum Performance Requirements for Noise Suppresser Application to the AMR Speech Encoder | S4 | Yes |
| 06.78 | 46.078 | Results of the AMR noise suppression selection phase | S4 | Yes |
| 06.81 | 46.081 | Discontinuous Transmission (DTX) for encanced full rate speech traffic channels | S4 | Yes |
| 06.82 | 46.082 | Voice Activity Detection (VAD) for encanced full rate speech traffic channels | S4 | Yes |

| 06.85 | 46.085 | Subjective tests on the interoperability of the HR/FR/EFR speech codecs; single, tandem and tandem free operation | S4 | Yes |
|-------|------------------|--|----------|------------|
| 07.01 | 27.001 | General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS) | N3 | Yes |
| 07.02 | 27.002 | Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities | N3 | Yes |
| 07.03 | 27.003 | Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities | N3 | Yes |
| 07.03 | 27.103 | Wide Area Network Synchronisation | T2 | Yes |
| 07.05 | 27.005 | Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS) | T2 | Yes |
| 07.07 | 27.007 | AT command set for 3G User Equipment (UE) | T2 | Yes |
| 07.10 | 27.010 | Terminal Equipment to User Equipment (TE-UE) multiplexer protocol User Equipment (UE) | T2 | Yes |
| 07.60 | 27.060 | GPRS Mobile Stations supporting GPRS | N3 | Yes |
| 08.01 | 48.001 | General Aspects on the BSS-MSC Interface | G2 | Yes |
| 08.02 | 48.002 | Base Station System - Mobile Services Switching Centre (BSS-MSC) Interface - Interface Principles | G2 | Yes |
| 08.04 | 48.004 | Base Station System - Mobile Services Switching Centre (BSS-MSC) Interface Layer 1 Specification | G2 | Yes |
| 08.06 | 48.006 | Signalling Transport Mechanism Specification for the Base Station System - Mobile Services Switching Centre (BSS-MSC) Interface | | Yes |
| 80.80 | 48.008 | Mobile Switching Centre - Base Station system (MSC-BSS) Interface Layer 3 Specification | G2 | Yes |
| 08.14 | 48.014 | General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN) interface; Gb Interface Layer 1 | G2 | Yes |
| 08.16 | 48.016 | General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN) Interface; Network Service | G2 | Yes |
| 08.18 | 48.018 | General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN); BSS GPRS Protocol | G2 | Yes |
| 08.20 | 48.020 | Rate Adaptation on the Base Station System - Mobile Service Switching Centre (BSS-MSC) Interface | N3 | Yes |
| 08.31 | 48.031 | Location Services LCS: Serving Mobile Location Centre - Serving Mobile Location Centre (SMLC - SMLC); SMLCPP specification | G2 | Yes |
| 08.51 | 48.051 | Base Station Controller - Base Tranceiver Station (BSC-BTS) Interface General Aspects | G2 | Yes |
| 08.52 | 48.052 | Base Station Controller - Base Tranceiver Station (BSC-BTS) Interface - Interface Principles | G2 | Yes |
| 08.54 | 48.054 | BSC-BTS : Layer 1 Structure of Physical Circuits | G2 | Yes |
| 08.56 | 48.056 | BSC-BTS Layer 2 Specification | G2 | Yes |
| 08.58 | 48.058 | Base Station Controler - Base Transceiver Station (BCS-BTS) Interface Layer 3 Specification | G2 | Yes |
| 08.60 | 48.060 | Inband Control of Remote Transcoders and Rate Adaptors for EFR/FR | GP | Yes |
| 08.61 | 48.061 48.062 | Inband Control of Remote Transcoder and Rate Adaptors;(Half Rate) Inband Tandem Free Operation (TFO) of Speech Codecs; Service Description; | GP S4 | Yes Yes |
| 08.71 | 48.071 | Stage 3 Location services (LCS) SMLC-BSS interface L 3 | G2 | Yes |
| 09.01 | 49.001 | General Network Interworking Scenarios | N4 | |
| | | Mobile Application Part (MAP) | N4 | Yes |
| 09.02 | 29.002 29.007 | General requirements on Interworking between the PLMN and the ISDN or PSTN | N3 | Yes Yes |
| 09.07 | 49.008 | Application of the Base Station System Application Part (BSSAP) on the E- | N1 | Yes |
| 09.10 | 29.010 | Interface Information Element Mapping between Mobile Station - Base Station System (MS - BSS) and Base Station System - Mobile-services Switching Centre (BSS - MCS) Signalling Procedures and the Mobile Application Part (MAP) | N4 | Yes |
| 09.11 | 29.011 | Signalling Interworking for Supplementary Services | N4 | Yes |
| 09.13 | 29.013 | Signalling interworking between ISDN supplementary services Application Service Element (ASE) and Mobile Application Part (MAP) protocols | N4 | Yes |
| 09.16 | 29.016 | Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Network Service Specification | N1 | Yes |
| 09.18 | 29.018 | Serving GPRS Support Node SGSN - Visitors Location Register (VLR); Gs Interface Layer 3 Specification | N1 | Yes |
| 09.31 | 49.031 | Location Services LCS Extension (BSSAP-LE) | G2 | Yes |
| 09.60 | 29.060 | GPRS Tunnelling protocol (GTP) across the Gn and Gp interface | N4 | Yes |
| 09.61 | 29.061 | General Packet Radio Service (GPRS); Interworking between the Public Land Mobile Network (PLMN) supporting GPRS and Packet | N3 | Yes |
| 09.78 | 29.078 | CAMEL; Stage 3 | N2 | Yes |
| 10.43 | 50.043 | Support of Localised Service Area (SoLSA); Work Item Status | S1 | No |

| 10.56 | 50.056 | Project scheduling and open issues: GSM Cordless Telephony System CTS, Phase 1 | S2 | No |
|---------|----------|--|----|-----|
| 10.59 | 50.059 | Project scheduling and open issues for EDGE | GP | No |
| 10.89 | 50.089 | GSM to other Systems Handover and Cell Selection/Reselection; Project scheduling and open issues; | GP | No |
| 10.99 | 50.099 | GERAN project plan and open issues | GP | No |
| 11.10-1 | 51.010-1 | Conformance Specification | G4 | Yes |
| 11.10-2 | 51.010-2 | Mobile station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification | G4 | Yes |
| 11.10-3 | 51.010-3 | Layer3 (L3) Abstract Test Suite (ATS) | G4 | Yes |
| 11.10-4 | 51.010-4 | Mobile Station (MS) Conformance Specification; Part 4: SIM Application Toolkit conformance specification | G4 | Yes |
| 11.11 | 51.011 | Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) Interface | T3 | Yes |
| 11.13 | 51.013 | Test specification for SIM API for Java card | T3 | Yes |
| 11.14 | 51.014 | Specification of Subscriber Identity Module - Mobile Equipment (SIM - ME) Interface for SIM Application Toolkit | Т3 | Yes |
| 11.21 | 51.021 | GSM Radio Aspects Base Station System Equipment Specification | G3 | Yes |
| 11.26 | 51.026 | GSM Repeater Equipment Specification | G3 | Yes |
| 12.71 | 52.071 | Location Services (LCS); Location services management | S5 | Yes |

Annex A (informative): Document change history

| Change history | | | | | | | |
|----------------|-----------------------------|-------------------------------------|----|-----|---|-------|-------|
| Date | TSG# | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
| 2000-10-17 | | | | | Derived from 01.01 v8.0.0 | | 0.0.0 |
| 2000-10-19 | | | | | Minor editorials | | 0.0.1 |
| 2000-11-16 | | | | | Addition of recently created specs | | 0.0.2 |
| 2000-12-08 | CN#10 T#10 RAN #10 | NP-000627 TP-000230 RP-000600 | | | Presentation to TSGs | | 1.0.0 |
| 2000-12-08 | SA#10 | SP-000614 | | | Change of spec number from 41.001 | | 1.0.1 |
| 2001-03-07 | SA#11 | SP-010067 | | | Update of specs list | 1.0.1 | 2.0.0 |
| 2001-03-21 | SA#11 | SP-010208 | | | Update of specs list; replacement of reference to GSM 01.04 with reference to 3GPP TR 21.905. | 2.0.0 | 2.1.0 |