

**Technical Specification Group Core Network  
Meeting #11, Palm Springs, USA, 14 – 16 March 2001**  
**Technical Specification Group Radio Access Network  
Meeting #11, Palm Springs, USA, 13 – 16 March 2001**  
**Technical Specification Group Terminals  
Meeting #11, Palm Springs, USA, 14 – 16 March 2001**  
**Technical Specification Group Services and System Aspects  
Meeting #11, Palm Springs, USA, 19 – 22 March 2001**

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*TSGN#11(01)0029*

*TSGR#11(01)0181*

*TSGT#11(01)0054*

*TSGS#11(01)0069*

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**Title:** **3GPP TS 41.102:  
GSM Release 4 Specifications**

**Document for:** **CN: information  
RAN: information  
T: information  
SA: approval**

**Agenda Item:** **CN: 11  
RAN: 10  
T: 7  
SA: 10**

Attached is the latest draft of this specification. Note that it does not yet include the specifications which are expected to be approved at the present meeting. These are listed in a separate contribution. It is envisaged that a version 2.1.0 of 41.102 will be produced including those, towards the end of the TSG-SA#11 meeting.

# 3GPP TR 41.102 V1.0.1 (2000-12)

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*Technical Specification*

## **3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; GSM specification set (Release 4)**



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

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Keywords

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GSM, architecture

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# Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> 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.

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## 1 Scope

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

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## 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] GSM 01.04: "Abbreviations and acronyms".

[2] 3GPP TR 21.900: "3GPP working methods".

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## 3 Abbreviations

For the purposes of the present document, the terms and definitions given in GSM 01.04 apply.

**Editor's note:** It is envisaged that 01.04 will be replaced by 21.905 for Release 4.

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## 4 General

GSM Release 4 consists of GSM-only specifications and common specifications developed for both GSM Release 4 and Release 1999 of the 3<sup>rd</sup> 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 3<sup>rd</sup> 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.

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## 5 (void)

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## 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.

| <i>pro-genitor</i> | Number | Title  | WG prime | For publication |
|--------------------|--------|--|----------|-----------------|
|                    | 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             |
|                    | 25.842 | Smart antenna  | R1       | No              |
|                    | 43.051 | GSM/EDGE Radio Access Network (GERAN) overall description; Stage 2   | G1       | Yes             |
| 01.02              | 41.102 | GSM Release 4 Specifications   | SP       | Yes             |
| 02.01              | 22.001 | Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)  | S1       | Yes             |
| 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             |
| 02.11              | 22.011 | Service accessibility  | S1       | Yes             |
| 02.29              | 22.129 | Handover Requirements between UMTS and GSM or other Radio Systems  | S1       | Yes             |
| 02.38              | 22.038 | SIM application toolkit (SAT); Stage 1   | S1       | Yes             |
| 02.41              | 22.041 | Operator Determined Call Barring   | S1       | Yes             |
| 02.57              | 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             |
| 02.67              | 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             |
| 02.78              | 22.078 | CAMEL; Stage 1   | S1       | Yes             |
| 03.02              | 23.002 | Network Architecture   | S2       | Yes             |
| 03.10              | 43.010 | GSM Public Land Mobile Network (PLMN) Connection Types   | N3       | Yes             |
| 03.18              | 23.018 | Basic Call Handling - Technical realisation  | N4       | 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             |
| 03.30              | 43.030 | Radio Network Planning Aspects   | GP       | Yes             |
| 03.38              | 23.038 | Alphabets & Language   | T2       | Yes             |
| 03.40              | 23.040 | Technical realisation of Short Message Service   | T2       | Yes             |
| 03.40              | 23.140 | Multimedia Messaging Service (MMS)   | T2       | Yes             |
| 03.57              | 23.057 | Mobile Station Application Execution Environment (MExE)  | T2       | Yes             |
| 03.59              | 43.059 | Location services (LCS) GERAN; Stage 2   | GP       | Yes             |
| 03.64              | 43.064 | Overall description of the GPRS radio interface; Stage 2   | G1       | 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             |
| 03.79              | 23.079 | Support of Optimal Routeing - Phase 1 ; Stage 2  | N4       | Yes             |
| 03.83              | 23.083 | Call Waiting (CW) and Call Hold (HOLD) Supplementary Service ; Stage 2   | N4       | Yes             |
| 03.93              | 23.093 | Call Completion to Busy Subscriber (CCBS) ; Stage 2  | N4       | Yes             |
| 04.08              | 24.008 | Mobile Radio Interface Layer 3 specification; Core Network Protocols ; Stage 3   | N1       | 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             |
| 04.60              | 44.060 | General Packet Radio Service (GPRS); Mobile Station (MS) - Base Station System (BSS) interface; Radio Link Control/ Medium Access Control (RLC/MAC) protocol | G2       | Yes             |
| 04.65              | 44.065 | Mobile Station (MS) - Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNDCP)  | N1       | Yes             |
| 04.68              | 44.068 | Group Call Control (GCC) Protocol  | N1       | Yes             |
| 04.69              | 44.069 | Broadcast Call Control (BCC) protocol  | N1       | 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             |
| 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             |

| <i>pro-genitor</i> | Number   | Title  | WG prime | For publication |
|--------------------|----------|--|----------|-----------------|
| 07.03              | 27.003   | Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities   | N3       | Yes             |
| 07.07              | 27.007   | AT command set for 3G User Equipment (UE)  | T2       | Yes             |
| 08.08              | 48.008   | Mobile Switching Centre - Base Station system (MSC-BSS) Interface Layer 3 Specification  | 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             |
| 09.02              | 29.002   | Mobile Application Part (MAP)  | N4       | Yes             |
| 09.07              | 29.007   | General requirements on Interworking between the PLMN and the ISDN or PSTN   | N3       | Yes             |
| 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             |



## 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<br>T#10<br>RAN<br>#10 | NP-000627<br>TP-000230<br>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                       |                                     |    |     | Update of specs list               | 1.0.1 | 2.0.0 |