

**Technical Specification Group Core Network  
Meeting #12, Stockholm, 13 - 15 June 2001**

*TSGN#12(01)0334*

**Technical Specification Group Radio Access Network  
Meeting #12, Stockholm, 12 - 15 June 2001**

*TSGR#12(01)0445*

**Technical Specification Group Terminals  
Meeting #12, Stockholm, 13 - 15 June 2001**

*TSGT#12(01)0139*

**Technical Specification Group Services and System Aspects  
Meeting #12, Stockholm, 18 - 21 June 2001**

*TSGS#12(01)0276*

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**Source:**

**MCC**

<mailto:john.meredith@etsi.fr>

**Title:**

**CR 002 to 01.01 Release 1999: Correction to list of specifications**

**Document for:**

**CN: information**

**RAN: information**

**T: information**

**SA: approval**

**Agenda Item:**

**CN: 11**

**RAN: 12**

**T: 6**

**SA: 8.6**

The attached CR updates the specifications list according to the current (2001-06-10) status.

# CHANGE REQUEST

⌘ **01.01 CR 002** ⌘ ev **-** ⌘ Current version: **8.1.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Correction to list of specs				
<b>Source:</b>	⌘ MCC				
<b>Work item code:</b>	⌘ TEI		<b>Date:</b>	⌘ 2001-06-10	
<b>Category:</b>	⌘ <b>F</b>		<b>Release:</b>	⌘ R99	
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:		
	<b>F</b> (correction)		2 (GSM Phase 2)		
	<b>A</b> (corresponds to a correction in an earlier release)		R96 (Release 1996)		
	<b>B</b> (addition of feature),		R97 (Release 1997)		
	<b>C</b> (functional modification of feature)		R98 (Release 1998)		
	<b>D</b> (editorial modification)		R99 (Release 1999)		
	Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)		
			REL-5 (Release 5)		

<b>Reason for change:</b>	⌘ Update list of specs required for implementing GSM Release 1999
<b>Summary of change:</b>	⌘ Adds newly identified specs, deletes abandoned ones, corrects titles
<b>Consequences if not approved:</b>	⌘ FUD

<b>Clauses affected:</b>	⌘ 6															
<b>Other specs affected:</b>	<table style="width: 100%;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td>Other core specifications</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Test specifications</td> <td></td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>O&amp;M Specifications</td> <td></td> <td></td> <td></td> </tr> </table>	<input type="checkbox"/>	Other core specifications				<input type="checkbox"/>	Test specifications				<input type="checkbox"/>	O&M Specifications			
<input type="checkbox"/>	Other core specifications															
<input type="checkbox"/>	Test specifications															
<input type="checkbox"/>	O&M Specifications															
<b>Other comments:</b>	<p>⌘ The structure of the list of specs has been aligned with that of 21.101, 21.102, 21.103, ... and 41.102, 41.103 ... . This makes it difficult to detect the technical changes to the list of specs; these are therefore summarized below:</p> <p style="margin-left: 20px;">Specs added:</p> <p style="margin-left: 20px;">01.00 02.43 04.12 10.56 10.59 10.89</p> <p style="margin-left: 20px;">Specs deleted:</p> <p style="margin-left: 20px;">01.02 01.48 01.48 01.56 01.60 02.06 02.07</p>															

02.40  
02.63  
03.01  
03.04  
03.43  
03.47  
03.49  
03.70  
03.79 (replaced by 23.079)  
04.30  
05.14  
07.07 (replaced by 27.007)  
07.08  
09.03  
09.04  
09.05  
09.06  
09.09  
09.12  
09.14  
11.10-2 (thought to be covered by 51.010-2, Release 4)  
11.10-3 (thought to be covered by 51.010-3, Release 4)  
11.10-4 (thought to be covered by 51.010-4, Release 4)  
11.17  
11.19  
11.23  
11.24  
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11.31  
11.32  
12.00  
12.01  
12.06  
12.08  
12.11  
22.140  
23.046  
24.012

Regulatory test specifications removed (since now the responsibility of ETSI TC MSG).

13.01  
13.01-1  
13.01-2  
13.02  
13.11  
13.21  
13.34  
13.55  
13.56  
13.60  
13.67  
13.68

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: [http://www.3gpp.org/3G\\_Specs/CRs.htm](http://www.3gpp.org/3G_Specs/CRs.htm). Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be

downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 6 Specifications and Reports

### 6.1 GSM Only

<b>Number</b>	<b>Title</b>
01.01	GSM Release 1999 Specifications
01.02	General Description of a GSM Public Land Mobile Network (PLMN)
01.04	Abbreviations and Acronyms
01.31	Fraud Information Gathering System (FIGS); Service requirements; Stage 0
01.33	Lawful Interception requirements for GSM
01.48	ISDN based DECT/GSM interworking; Feasibility Study
01.56	GSM Cordless Telephony System (CTS) (Phase 1); CTS Authentication and Key Generation Algorithms Requirements
01.60	GPRS requirements
01.61	General Packet Radio Service (GPRS); GPRS ciphering algorithm requirements
02.06	Types of Mobile Stations (MS)
02.07	Mobile Station (MS) Features
02.09	Security aspects
02.17	Subscriber Identity Modules, Functional Characteristics
02.19	Subscriber Identity Module Application Programming Interface (SIM API); Service description; Stage 1
02.31	Fraud Information Gathering System (FIGS) Service description; Stage 1
02.32	Immediate Service Termination (IST); Service description; Stage 1
02.33	Lawful interception; Stage 1
02.40	Procedures for Call Progress Indications
02.48	Security mechanisms for the SIM Application Toolkit; Stage 1
02.53	Tandem Free Operation (TFO); Service description; Stage 1
02.56	GSM Cordless Telephony System (CTS), Phase 1; Service description; Stage 1
02.63	Packet Data on Signalling channels Service (PDS); Stage 1
02.68	Voice Group Call Service (VGCS); Stage 1
02.69	Voice Broadcast Service (VBS); Stage 1
02.76	Noise Suppression for the AMR
02.94	Follow Me Service description; Stage 1
02.95	Digital cellular telecommunications system (Phase 2+); Support of Private Numbering Plan (SPNP); Service description, Stage 1

- 03.01 — Network Functions
- 03.04 — Signalling requirements relating to routing of calls to mobile subscribers
- 03.05 — Technical performance objectives
- 03.10 — GSM Public Land Mobile Network (PLMN) Connection Types
- 03.13 — Discontinuous Reception (DRX) in the GSM System
- 03.19 — GSM API for SIM toolkit stage 2
- 03.20 — Security related Network Functions
- 03.22 — Functions related to Mobile Station (MS) in idle mode
- 03.26 — Multiband operation of GSM/DCS 1800 by a single operator
- 03.30 — Radio Network Planning Aspects
- 03.31 — Fraud Information Gathering System (FIGS); Service description; Stage 2
- 03.33 — Lawful Interception; Stage 2
- 03.35 — Immediate Service Termination (IST); Stage 2
- 03.43 — Support of Videotext
- 03.44 — Support of Teletex in a GSM Public Land Mobile Network (PLMN)
- 03.45 — Technical realization of facsimile Group 3 service — transparent
- 03.46 — Technical realization of facsimile group 3 service — non transparent
- 03.47 — Example Protocol Stacks for Interconnecting Service Centre(s) (SC) and Mobile Services Switching Centre(s) (MSC)
- 03.48 — Security Mechanisms for SIM Toolkit Application; Stage 2
- 03.49 — Example Protocol Stacks for Interconnecting Cell Broadcast Centre (CBC) and Base Station Controller (BSC)
- 03.50 — Transmission Planning Aspects of the Speech Service in the GSM Public Land Mobile Network (PLMN) System
- 03.52 — Lower layers of the GSM Cordless Telephony System (CTS) radio interface; Stage 2
- 03.53 — Tandem Free Operation (TFO); Service description; Stage 2
- 03.55 — Dual Transfer Mode (DTM); Stage 2
- 03.56 — GSM Cordless Telephony System (CTS), Phase 1; CTS Architecture Description; Stage 2
- 03.58 — Characterization, test methods and quality assessment for handsfree Mobile Stations (MSs)
- 03.63 — Packet Data on Signalling channels service (PDS) Service description; Stage 2
- 03.64 — Overall description of the GPRS radio interface; Stage 2
- 03.68 — Voice Group Call Service (VGCS); Stage 2
- 03.69 — Voice Broadcast service (VBS); Stage 2
- 03.70 — Routing of calls to/from Public Data Networks (PDN)
- 03.71 — Location Services (LCS); Stage 2
- 03.79 — Support of Optimal Routing phase 1; Stage 2

- 04.01 Mobile Station Base Station System (MS BSS) Interface General Aspects and Principles
- 04.03 Mobile Station Base Station System (MS BSS) Interface Channel Structures and Access Capabilities
- 04.04 Layer 1 General Requirements
- 04.05 Data Link (DL) Layer General Aspects
- 04.06 Mobile Station Base Stations System (MS BSS) Interface Data Link (DL) Layer Specification
- 04.08 Mobile radio interface layer 3 specification
- 04.13 Performance Requirements on Mobile Radio Interface
- 04.14 Individual equipment type requirements and interworking; Special conformance testing functions
- 04.18 Mobile radio interface layer 3 specification; Radio Resource Control Protocol
- 04.21 Rate Adaption on the Mobile Station Base Station System (MS BSS) Interface
- 04.30 Location Services (LCS); Mobile radio interface layer 3 supplementary services specification; Mobile Originating Location Request (MO LR).
- 04.31 Location Services (LCS); Mobile Station (MS) Serving Mobile Location Centre (SMLC); Radio Resource LCS Protocol (RRLP)
- 04.35 Location Services (LCS); Broadcast Network Assistance for Enhanced Observed Time Difference (E-OTD) and Global Positioning System (GPS) Positioning Methods
- 04.56 GSM Cordless Telephony System (CTS), (Phase 1) CTS Radio Interface Layer 3 Specification
- 04.57 GSM Cordless Telephony System (CTS), (Phase 1) CTS supervising system Layer 3 Specification
- 04.60 General Packet Radio Service (GPRS); Mobile Station (MS) Base Station System (BSS) interface; Radio Link Control/ Medium Access Control (RLC/MAC) protocol
- 04.63 Packet Data on Signalling channels Service (PDS) Service Description, Stage 3
- 04.64 Mobile Station Serving GPRS Support Node (MS SGSN) Logical Link Control (LLC) Layer Specification
- 04.65 Mobile Station (MS) Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNDCP)
- 04.68 Group Call Control (GCC) protocol
- 04.69 Broadcast Call Control (BCC) protocol
- 04.71 Location Services (LCS); Mobile radio interface layer 3 Location Services (LCS) specification
- 05.01 Physical Layer on the Radio Path (General Description)
- 05.02 Multiplexing and Multiple Access on the Radio Path
- 05.03 Channel Coding
- 05.04 Modulation
- 05.05 Radio Transmission and Reception
- 05.08 Radio Subsystem Link Control
- 05.09 Link Adaptation
- 05.10 Radio Subsystem Synchronization
- 05.14 Release independent frequency bands; Implementation guidelines

05.22	Radio link management in hierarchical networks
05.50	Background for RF Requirements
05.56	CTS FP Radio Sub-system
06.01	Full Rate Speech Processing Functions
06.02	Half Rate Speech Processing Functions
06.06	Half Rate Speech; ANSI C Code for GSM Half Rate Speech Codec
06.07	Half Rate Speech; Test Sequence for GSM Half Rate Speech Codec
06.08	Half Rate Speech; Performance Characterization of the GSM half rate speech codec
06.10	Full Rate Speech Transcoding
06.11	Substitution and Muting of Lost Frames for Full Rate Speech Channels
06.12	Comfort Noise Aspects for Full Rate Speech Traffic Channels
06.20	Half Rate Speech Transcoding
06.21	Half rate speech; Substitution and muting of lost frames for half rate speech traffic channels
06.22	Comfort Noise Aspects for Half Rate Speech Traffic Channels
06.31	Discontinuous Transmission (DTX) for Full Rate Speech Traffic Channels
06.32	Voice Activity Detection (VAD)
06.41	Discontinuous Transmission (DTX) for Half Rate Speech Traffic Channels
06.42	Voice Activity Detection (VAD) for Half Rate Speech Traffic Channels
06.51	Enhanced full rate speech processing functions: General description
06.53	ANSI C code for the enhanced full rate speech codec
06.54	Test sequences for the GSM Enhanced Full Rate (EFR)
06.55	Performance characterization of the GSM EFR Speech Codec
06.60	Enhanced full rate speech transcoding
06.61	Substitution and muting of lost frames for enhanced full rate speech traffic channels
06.62	Comfort noise aspects for Enhanced Full Rate (EFR) speech traffic channels
06.76	Adaptive Multi Rate (AMR) speech codec; Study phase report
06.77	Minimum Performance Requirements for Noise Suppressor Application to the AMR Speech Encoder
06.78	Results of the AMR noise suppression selection phase
06.81	Discontinuous Transmission (DTX) for enhanced full rate speech traffic channels
06.82	Voice Activity Detection (VAD) for enhanced full rate speech traffic channels
06.85	Subjective tests on the interoperability of the HR/FR/EFR speech codecs; single, tandem and tandem-free operation
07.07	AT Command set for GSM Mobile Equipment (ME)
07.08	GSM Application Programming Interface
08.01	General Aspects on the BSS-MSC Interface



- 08.02 ~~Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface – Interface Principles~~
- 08.04 ~~Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface Layer 1 Specification~~
- 08.06 ~~Signalling Transport Mechanism Specification for the Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface~~
- 08.08 ~~Mobile Switching Centre – Base Station system (MSC-BSS) Interface Layer 3 Specification~~
- 08.14 ~~General Packet Radio Service (GPRS); Base Station System (BSS) – Serving GPRS Support Node (SGSN) interface; Gb Interface Layer 1~~
- 08.16 ~~General Packet Radio Service (GPRS); Base Station System (BSS) – Serving GPRS Support Node (SGSN) Interface; Network Service~~
- 08.18 ~~General Packet Radio Service (GPRS); Base Station System (BSS) – Serving GPRS Support Node (SGSN); BSS GPRS Protocol~~
- 08.20 ~~Rate Adaptation on the BSS-MSC Interface~~
- 08.31 ~~Location Services (LCS); Serving Mobile Location Centre (SMLC) – Serving Mobile Location Centre (SMLC); SMLC Peer Protocol (SMLCPP) Location Centre (SMLC); Radio Resource LCS Protocol (RRLP)~~
- 08.51 ~~Base Station Controller – Base Transceiver Station (BSC-BTS) Interface General Aspects~~
- 08.52 ~~Base Station Controller – Base Transceiver Station (BSC-BTS) Interface – Interface Principles~~
- 08.54 ~~Base Station Controller – Base Transceiver Station (BSC-BTS) Interface Layer 1 Structure of Physical Circuits~~
- 08.56 ~~Base Station Controller – Base Transceiver Station (BSC-BTS) Interface – Layer 2 Specification~~
- 08.58 ~~Base Station Controller – Base Transceiver Station (BSC-BTS) Interface Layer 3 Specification~~
- 08.59 ~~BSC-BTS O&M Signalling Transport~~
- 08.60 ~~Inband Control of Remote Transcoders and Rate Adaptors for EFR/FR~~
- 08.61 ~~Inband Control of Remote Transcoder and Rate Adaptors;(Half Rate)~~
- 08.62 ~~Inband Tandem Free Operation (TFRO) of speech codecs, Service description, stage 3~~
- 08.71 ~~Location services (LCS) SMLC-BSS interface L 3~~
- 09.01 ~~General Network Interworking Scenarios~~
- 09.09 ~~General Network Interworking scenarios~~
- 09.03 ~~Signalling Requirements on Interworking between the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN) and the Public Land Mobile Network (PLMN)~~
- 09.04 ~~Interworking between the Public Land Mobile Network and the CSPDN~~
- 09.05 ~~Interworking between PLMN and PAD access~~
- 09.06 ~~Interworking between PLMN and a Packet Switched Public Data Network/Integrated Services digital Network (PSPDN/ISDN) for Support of Packet Switched Data Transmission Services~~
- 09.08 ~~Application of the Base Station System Application Part (BSSAP) on the E-Interface~~
- 09.09 ~~Detailed Signalling Interworking within the PLMN with the PSTN/ISDN~~
- 09.12 ~~Application of ISUP Version 2 for the ISDN-PLMN (GSM) signalling~~
- 09.14 ~~Application of ISUP Version 3 for the ISDN-PLMN Signalling~~

- 09.31 Location Services (LCS); Base Station System Application Part LCS Extension (BSSAP-LE)
- 09.90 Interworking between Phase 1 Infrastructure and Phase 2 Mobile Stations (MS)
- 09.91 Interworking Aspects of the SIM/ME Interface Between Phase 1 and Phase 2
- 11.10.1 Mobile station (MS) conformance specification; Part 1: Conformance specification
- 11.10.2 Mobile Station (MS) Conformance Specification, Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification
- 11.10.3 Mobile Station (MS) Conformance Specification; Part 3 : Layer3 (L3) Abstract Test Suite (ATS)
- 11.10.4 Mobile Station (MS) Conformance Specification; Part 4: SIM Application Toolkit conformance Specification
- Note: The 11.10 series specifications do not contain tests for Release 1999. Such tests will be contained in the Release 4 specifications (51.010 series).
- 11.11 Specification of the Subscriber Identity Module Mobile Equipment (SIM-ME) Interface
- 11.14 Phase 2+ SIM Application Tool kit
- 11.17 SIM test specification
- 11.19 CTS SIM Fixed Part
- 11.21 GSM Radio Aspects Base Station System Equipment Specification
- 11.23 GSM Signalling Aspects Base Station System equipment Specification
- 11.24 GSM transcoding and rate adaptation: Base station
- 11.26 GSM Repeater Equipment Specification
- 11.30 Mobile Services Switching Centre
- 11.31 Home Location Register specification
- 11.32 Visitor Location Register specification
- 12.00 Objectives and structure of GSM Public Land Mobile Network (PLMN) management
- 12.01 Common Aspects of Public Land Mobile Network (PLMN) Management
- 12.02 Subscriber, Mobile Equipment (ME) and Services Data Administration
- 12.03 Security Management
- 12.04 Performance Management and Measurements for a GSM Public Land Mobile Network (PLMN)
- 12.06 Network Configuration Management and Administration
- 12.08 Subscriber and Equipment trace
- 12.11 Fault management of the Base Station System (BSS)
- 12.71 Location Services (LCS); Location services management
- 13.01 Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Access
- 13.01.1 Attachment requirements for Global System for Mobile communications (GSM) mobile stations; Access

- 13.01.2 Attachment requirements for mobile stations in the DCS 1800 band and additional GSM 900 band; Access
- 13.02 Attachment requirements for mobile stations in the DCS 1800 band and additional GSM 900 band; Access
- 13.11 Terminal essential requirements (RTTE)
- 13.34 Attachment requirements for Global System for Mobile communications (GSM); High Speed Circuit Switched Data (HSCSD) Multislot Mobile Stations; Access
- 13.55 Attachment requirements for Cordless Telephony System Fixed Part (CTS FP); Access
- 13.56 Cordless Telephony System Mobile Stations (CTS MS); Access
- 13.60 Attachment requirements for Global System for Mobile communications (GSM); General Packet Radio Service (GPRS); Mobile stations; Access
- 13.67 Attachment requirements for Global System for Mobile communications (GSM); Railways Band (R-GSM); Mobile Stations; Access
- 13.68 Attachment requirements for Global System for Mobile communications (GSM); Advanced Speech Call Items (GSM-ASCI) Mobile Stations; Access
- 13.21 BSS Radio aspects requirements (RTTE)

## 6.2 Common GSM and UMTS

- | <b>Number</b> | <b>Title</b>  |
|---------------|---|
| 21.978        | Feasibility Technical Report CAMEL Control of VoIP Services                                       |
| 22.001        | Principles of Circuit Telecommunication Services Supported by a Public Land Mobile Network (PLMN) |
| 22.002        | Bearer Services Supported by a GSM PLMN   |
| 22.003        | Circuit Teleservices supported by a PLMN  |
| 22.004        | General on Supplementary Services   |
| 22.011        | Service accessibility   |
| 22.016        | International Mobile Equipment Identities (IMEI)  |
| 22.022        | Personalisation of Mobile Equipment (ME); Mobile functionality specification                      |
| 22.024        | Description of Charge Advice Information (CAI)  |
| 22.030        | Man Machine Interface (MMI) of the Mobile Station (MS)  |
| 22.034        | High Speed Circuit Switched Data (HSCSD); Stage 1   |
| 22.038        | SIM application toolkit (SAT); Stage 1  |
| 22.041        | Operator Determined Call Barring  |
| 22.042        | Network Identity and Time Zone (NITZ); stage 1  |
| 22.043        | Support of Localized Service Area (SoLSA); Stage 1  |
| 22.057        | Mobile Station Application Execution Environment (MEExE); Stage 1                                 |
| 22.060        | General Packet Radio Service (GPRS); Stage 1  |
| 22.066        | Support of Mobile Number Portability (MNP); Stage 1   |

- 22.067 ——— enhanced Multi Level Precedence and Pre-emption service (eMLPP); Stage 1
- 22.071 ——— Location Services (LCS); Stage 1 (T1P1)
- 22.072 ——— Call Deflection (CD); Stage 1
- 22.078 ——— CAMEL phase 3; Stage 1
- 22.079 ——— Support of Optimal routing; Stage 1
- 22.081 ——— Line Identification Supplementary Services; Stage 1
- 22.082 ——— Call Forwarding (CF) Supplementary Services; Stage 1
- 22.083 ——— Call Waiting (CW) and Call Hold (HOLD) Supplementary Services; Stage 1
- 22.084 ——— MultiParty (MPY) Supplementary Service; Stage 1
- 22.085 ——— Closed User Group (CUG) Supplementary Services; Stage 1
- 22.086 ——— Advice of Charge (AoC) Supplementary Services; Stage 1
- 22.087 ——— User to user signalling (UUS); Stage 1
- 22.088 ——— Call Barring (CB) Supplementary Services; Stage 1
- 22.090 ——— Unstructured Supplementary Service Data (USSD); Stage 1
- 22.091 ——— Explicit Call Transfer (ECT) Supplementary Service; Stage 1
- 22.093 ——— Call Completion to Busy Subscriber (CCBS); Stage 1
- 22.096 ——— Calling Name Presentation (CNAP); Stage 1 (T1P1)
- 22.097 ——— Multiple Subscriber Profile (MSP); Stage 1
- 22.115 ——— Service Aspects Charging and billing
- 22.121 ——— Provision of Services in UMTS — The Virtual Home Environment
- 22.129 ——— Handover Requirements between UMTS and GSM or other Radio Systems
- 22.140 ——— Service aspects; Stage 1; Multimedia Messaging Service
- 22.945 ——— Study of provision of fax service in GSM and UMTS
- 23.002 ——— Network Architecture
- 23.003 ——— Numbering, Addressing and Identification
- 23.007 ——— Restoration procedures
- 23.008 ——— organization of subscriber data
- 23.009 ——— Handover procedures
- 23.011 ——— Technical Realization of Supplementary Services — General Aspects
- 23.012 ——— Location management procedures
- 23.014 ——— Support of Dual Tone Multi Frequency (DTMF) signalling
- 23.015 ——— Technical realization of Operator Determined Barring (ODB)
- 23.016 ——— Subscriber data management; Stage 2
- 23.018 ——— Basic Call Handling — Technical realization
- 23.032 ——— Universal Geographical Area Description (GAD)

- 23.034 High Speed Circuit Switched Data (HSCSD); Stage 2
- 23.038 Alphabets & Language
- 23.039 Interface Protocols for the Connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)
- 23.040 Technical realization of SMS Point to Point
- 23.041 Technical Realization of Short Message Service Cell Broadcast (SMSCB)
- 23.042 Compression algorithm for SMS
- 23.046 Technical realization of facsimile Group 3 service non transparent
- 23.054 Shared Interworking Functions; Stage 2
- 23.057 Mobile Station Application Execution Environment (MExE)
- 23.060 General Packet Radio Service (GPRS) Service description; Stage 2
- 23.066 Support of GSM Mobile Number Portability (MNP) stage 2
- 23.067 Enhanced Multi Level Precedence and Pre-emption Service (EMLPP); Stage 2
- 23.072 Call Deflection Supplementary Service; Stage 2
- 23.073 Support of localized Service Area (SoLSA); Stage 2
- 23.078 Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3 Stage 2
- 23.079 Support of Optical Routeing Phase 1; Stage 2
- 23.081 Line Identification Supplementary Services; Stage 2
- 23.082 Call Forwarding (CF) Supplementary Services; Stage 2
- 23.083 Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 2
- 23.084 MultiParty (MPTY) Supplementary Service; Stage 2
- 23.085 Closed User Group (CUG) Supplementary Service; Stage 2
- 23.086 Advice of Charge (AoC) Supplementary Service; Stage 2
- 23.087 User to User Signalling (UUS); Stage 2
- 23.088 Call Barring (CB) Supplementary Service; Stage 2
- 23.090 Unstructured Supplementary Service Data (USSD); Stage 2
- 23.091 Explicit Call Transfer (ECT) Supplementary Service; Stage 2
- 23.093 Call Completion to Busy Subscriber (CCBS); Stage 2
- 23.094 Follow Me; Stage 2
- 23.096 Name Identification Supplementary Service; Stage 2
- 23.097 Multiple Subscriber Profile (MSP); Stage 2
- 23.108 Mobile Radio Interface Layer 3 specification Core Network Protocols; Stage 2
- 23.110 UMTS Access Stratum Services and Functions
- 23.116 Super Charger ; Stage 2
- 23.119 Gateway Location Register (GLR); Stage 2

- 23.121 Architecture Requirements for release 99
- 23.140 Multimedia Messaging Service (MMS)
- 23.908 Technical report on Pre-Paging
- 23.909 Technical report on the Gateway Location Register
- 23.911 Technical report on Out-of-band transcoder control
- 23.912 Technical report on Super-Charger
- 23.923 Combined GSM and Mobile IP mobility handling in UMTS IP-CN
- 23.925 UMTS Core network based ATM transport
- 24.002 GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration
- 24.007 Mobile Radio Interface Signalling Layer 3 – General Aspects
- 24.008 Mobile Radio Interface Layer 3 specification; Core Network Protocols Stage 3
- 24.010 Mobile Radio Interface Layer 3 – Supplementary Services Specification – General Aspects
- 24.011 Point-to-Point (PP) Short Message Service (SMS) Support on Mobile Radio Interface
- 24.012 Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface?
- 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?
- 24.067 Enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 3
- 24.072 Call Deflection Supplementary Service; Stage 3
- 24.080 Mobile radio Layer 3 Supplementary Service specification – Formats and coding
- 24.081 Line Identification Supplementary Service; Stage 3
- 24.082 Call Forwarding Supplementary Service; Stage 3
- 24.083 Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 3
- 24.084 MultiParty (MPTY) Supplementary Service; Stage 3
- 24.085 Closed User Group (CUG) Supplementary Service; Stage 3
- 24.086 Advice of Charge (AoC) Supplementary Service; Stage 3
- 24.087 User-to-User Signalling (UUS); Stage 3
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- 24.090 Unstructured Supplementary Service Data (USSD); Stage 3
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<u>29.061</u>	<u>General Packet Radio Service (GPRS); Interworking between the Public Land Mobile Network (PLMN) supporting GPRS and Packet</u>	<u>N3</u>
<u>29.078</u>	<u>Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification</u>	<u>N2</u>